

Bonfiglioli Riduttori

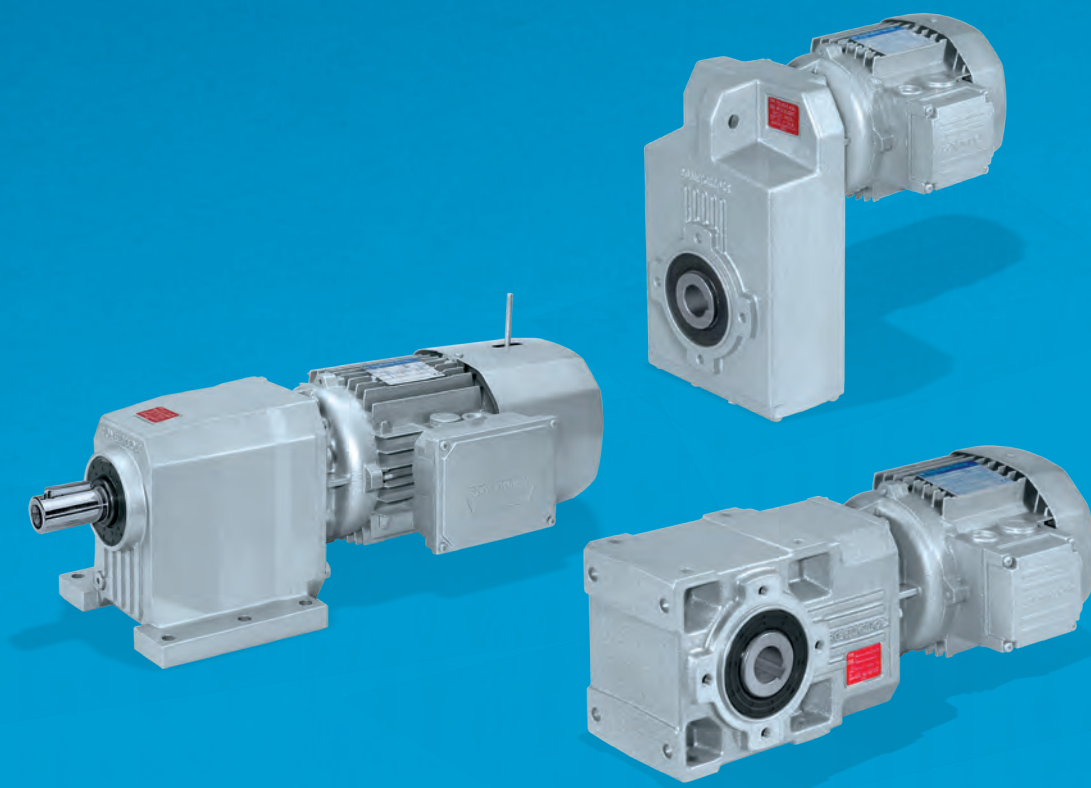
C-A-F series

Helical gear units C

Helical bevel gear units A

Shaft mounted gear units F

NORTH AMERICA EDITION





Chapter	Description	Page	Chapter	Description	Page
GENERAL INFORMATION		2	SHAFT MOUNTED GEAR UNITS SERIES F		416
1	Symbols and units of measure	2	46	Design features	416
2	Allowed temperature limits	4	47	Versions	417
3	Torque	5	48	Designation	418
4	Power	5	49	Mounting position and terminal box angular position	423
5	Thermal capacity	5	50	Overhung loads	425
6	Efficiency	7	51	Thrust loads	428
7	Gear ratio	8	52	Gearmotor rating charts	429
8	Angular velocity	8	53	Gearbox rating charts	458
9	Moment of inertia	8	54	Motor availability	468
10	Service factor	9	55	Moment of inertia	472
11	Lubrication	13	56	Exact ratios	499
12	Selection	15	57	Dimensions	500
13	Verification	18	58	Accessories	594
14	Installation	19	59	Customer' shaft	596
15	Installation instructions	20	ELECTRIC MOTORS		600
16	Storage	21	M1	Symbols and units of measurement	600
17	Conditions of supply	21	M2	Introduction	601
18	Paint specifications	21	M3	General characteristics	603
HELICAL GEAR UNITS SERIES C		22	M4	Variants and Options	605
19	Design features	22	M5	Mechanical features	607
20	Versions	23	M6	Electrical characteristics	611
21	Designation	24	M7	Asynchronous brake motors	620
22	Mounting position and terminal box orientation	29	M8	DC brake motors type BN_FD and M_FD	621
23	Overhung loads	32	M9	AC brake motors type BN_FA and M_FA	625
24	Thrust loads	34	M10	Brake release systems	628
25	Gearmotor rating charts	35	M11	Options	629
26	Gearbox rating charts	73	M12	Motor rating charts BE-ME	640
27	Motor availability	84	M13	Motors dimensions BE-ME	646
28	Moment of inertia	88	M14	Motor rating charts BN-M	650
29	Exact ratios	118	M15	Motors dimensions BN-M	662
30	Dimensions	120			
HELICAL BEVEL GEAR UNITS SERIES A		202			
31	Design features	202			
32	Versions	203			
33	Designation	204			
34	Mounting position and terminal box angular position	210			
35	Overhung loads	212			
36	Thrust loads	215			
37	Shafts arrangement	215			
38	Gearmotor rating charts	216			
39	Gearbox rating charts	247			
40	Motor availability	258			
41	Moment of inertia	262			
42	Exact ratios	295			
43	Dimensions	296			
44	Accessories	407			
45	Customer' shaft	410			

Revisions

Refer to page 674 for the catalogue revision index. Visit www.bonfiglioli.com to search for catalogues with up-to-date revisions.

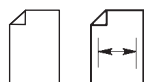


GENERAL INFORMATION

1 SYMBOLS AND UNITS OF MEASURE

Symbols	Units of Measure	Description	Symbols	Units of Measure	Description
$A_{N 1, 2}$	[lbs]	Permissible axial force	$P_{1, 2}$	[hp]	Power
f_s	—	Service factor	$P_{N 1, 2}$	[hp]	Rated power
f_T	—	Thermal factor	$P_{R 1, 2}$	[hp]	Power demand
f_{TP}	—	Temperature factor	$R_{C 1, 2}$	[lbs]	Calculated radial force
i	—	Gear ratio	$R_{N 1, 2}$	[lbs]	Permissible overhung load
I	—	Cyclic duration factor	S	—	Safety factor
J_C	[lb·ft ²]	Mass moment of inertia to be driven	t_a	[°C/°F]	Ambient temperature
J_M	[lb·ft ²]	Motor mass moment of inertia	t_s	[°C/°F]	Surface temperature
J_R	[lb·ft ²]	Mass moment of inertia for the gear unit	t_o	[°C/°F]	Oil temperature
K	—	Mass acceleration factor	t_f	[min]	Work time under constant load
K_r	—	Transmission element factor	t_r	[min]	Rest time
$T_{1, 2}$ $M_{1, 2}$	[lb·in] [Nm]	Torque	η_d	—	Dynamic efficiency
$T_{c 1, 2}$ $M_{c 1, 2}$	[lb·in] [Nm]	Calculated torque	η_s	—	Static efficiency
$T_{n 1, 2}$ $M_{n 1, 2}$	[lb·in] [Nm]	Rated torque	φ	[°]	Output shaft angular backlash (with locked input shaft)
$T_{r 1, 2}$ $M_{r 1, 2}$	[lb·in] [Nm]	Torque demand			
$n_{1, 2}$	[rpm]	Speed			

₁ value applies to input shaft
₂ value applies to output shaft



The symbol shows the page the information can be sorted from.



This symbol refers to the angle the overhung load applies (viewing from drive end).



IMPORTANT
This symbol indicates important technical information.



Symbol refers to weight of gearmotors and speed reducers.
Figure for gearmotors incorporates the weight of the 4-pole motor and for life lubricated units, where applicable, the weight of the oil.

Series C	Series A	Series F	
			Gearmotor with compact motor.
			Gearmotor with IEC motor.
			Gear unit with IEC motor interface.
			Gear unit with NEMA motor interface.
			Gear unit with servomotor input adapter.
			Speed reducer with solid input shaft.



2 ALLOWED TEMPERATURE LIMITS

Symbols	Description / Condition	Value (*)	
		Synthetic Oil	Mineral Oil
t_a	Ambient temperature		
$t_{au \text{ min}}$	Minimum operating ambient temperature	- 30°C [-22°F]	-10°C [+14°F]
$t_{au \text{ Max}}$	Maximum operating ambient temperature	+50°C [+122°F]	+40°C [+104°F]
$t_{as \text{ min}}$	Minimum storage ambient temperature	-40°C [-40°F]	-10°C [+14°F]
$t_{as \text{ Max}}$	Maximum storage ambient temperature	+50°C [+122°F]	+50°C [+122°F]
t_s	Surface temperature		
$t_{s \text{ min}}$	Minimum gearbox surface temperature starting with partial load (#)	-25°C [-13°F]	-10°C [+14°F]
$t_{sc \text{ min}}$	Minimum gearbox surface temperature starting with full load	-10°C [+14°F]	-5°C [+23°F]
$t_{s \text{ Max}}$	Maximum casing surface temperature during continuous operation (measured next to the gearbox input)	+100°C [+212°F]	+100°C (@) [+212°F]
t_o	Oil temperature		
$t_{o \text{ Max}}$	Maximum oil temperature during continuous operation	+95°C [+203°F]	+95°C (@) [+203°F]

(*) = Refer to the table "Selection of the optimal oil viscosity" for further information about minimum and maximum values of different oil viscosity. For values of $t_a < -20^\circ\text{C}$ [+70°F] and $t_s, t_o > 80^\circ\text{C}$ [+176°F], choose (as permitted in the product configuration stage) the sealing type of the most suitable material to the type of application. If needed contact Bonfiglioli Technical Service.

(@) = Continuous operation it is not advised if t_s and t_o range is 80°C [+176°F] to 95°C [+203°F].

(#) = For full load start-up it is recommended to ramp-up and provide for greater absorption of the motor. If needed, contact Bonfiglioli Technical Service.



3 TORQUE

3.1 Rated torque T_{n2} [lb•in]

The torque that can be transmitted continuously through the output shaft, with the gear unit operated under a service factor $f_s = 1$.

Rating is speed sensitive.

3.2 Required torque T_{r2} [lb•in]

The torque demand based on application requirement.

It must always be equal to or less than torque T_{n2} the gearbox under study is rated for.

3.3 Calculated torque T_{c2} [lb•in]

Computational torque value to be used when selecting the gearbox. It is calculated considering the required torque T_{r2} and service factor f_s , as per the equation here after:

$$T_{c2} = T_{r2} \cdot f_s < T_{n2} \quad (1)$$

4 POWER

4.1 Rated power P_{n1} [hp]

In the gearbox selection charts this is the power applicable to input shaft, based on input speed n_1 and corresponding to service factor $f_s = 1$.

5 THERMAL CAPACITY P_t [hp]

P_t is the power that can be transmitted through the gear unit, under a continuous duty and an ambient temperature of 20 °C [70 °F], without resulting into damage of the inner parts or degradation of the lubricant properties. Refer to chart (A1) for specific hp ratings.

In case of intermittent duty, or an operating ambient temperature other than the rated 20°C [70 °F], the P_t value should be adjusted through the factor f_t , obtained from chart (A2), as per the following equation: $P_t' = P_t \times f_t$



Gear units featuring more than 2 reductions and/or a gear ratio greater than $i = 45$ do not normally require the thermal limit to be checked as in these cases the thermal rating usually exceeds the mechanical rating.

(A 1)

P_t [hp] 20 °C [70 °F]		
	$n_1 = 1200$ rpm	$n_1 = 1800$ rpm
C 05 2	—	—
C 12 2	—	—
C 22 2	—	—
C 32 2	—	6.9
C 36 2	8.7	8.1
C 41 2	10.7	9.9
C 51 2	14.8	13.6
C 61 2	18.8	17.3
C 70 2	28	26
C 80 2	43	40
C 90 2	58	54
C 100 2	79	72

P_t [hp] 20 °C [70 °F]		
	$n_1 = 1200$ rpm	$n_1 = 1800$ rpm
A 05 2	2.7	2.5
A 10 2	2.8	2.6
A 20 2	8.0	7.8
A 30 2	10.7	10.2
A 35 2	12.7	12.2
A 41 2	15.4	14.7
A 50 2	27	26
A 55 2	28	27
A 60 2	36	35
A 70 3	42	39
A 80 3	59	55
A 90 3	86	80

P_t [hp] 20 °C [70 °F]		
	$n_1 = 1200$ rpm	$n_1 = 1800$ rpm
F 10 2	5.1	4.7
F 20 2	12.2	11.2
F 25 2	13.7	12.6
F 31 2	15.7	14.5
F 41 2	19.2	17.7
F 51 2	29	26
F 60 3	35	32
F 70 3	49	45
F 80 3	70	64
F 90 3	101	92

(A 2)

f_t					
t_a °C [°F]	Continuous duty	Intermittent duty			
		Degree of intermittence [I]			
		80%	60%	40%	20%
40 [105]	0.80	1.1	1.3	1.5	1.6
30 [85]	0.85	1.3	1.5	1.6	1.8
20 [70]	1.0	1.5	1.6	1.8	2.0
10 [50]	1.15	1.6	1.8	2.0	2.3

Where cyclic duration factor (I)% is the relationship of operating time under load t_f to total time ($t_f + t_r$) expressed as a percentage.

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (2)$$

The condition to be verified is:

$$P_{r1} \leq P_t \times f_t \quad (3)$$

6 EFFICIENCY

6.1 Dynamic efficiency η_d

Obtained from the relationship of delivered power P_2 to input power P_1 , according to the following equation:

$$\eta_d = \frac{P_2}{P_1} \cdot 100 \quad [\%] \quad (4)$$

(A 3)

	2 x 	3 x 	4 x 
η_d	95%	93%	90%

	2 x 	3 x 	4 x 
η_d	94%	91%	89%

	2 x 	3 x 	4 x 
η_d	95%	93%	90%



7 GEAR RATIO i

The value for the gear ratio is referred to with the letter $[i]$ and calculated through the relationship of the input speed n_1 to the output speed n_2 :

$$i = \frac{n_1}{n_2} \quad (5)$$

The gear ratio is usually a decimal number which in this catalogue is truncated at one digit after the comma (no decimals for $i > 1000$).

If interested in knowing the exact value see also chapters "EXACT RATIOS".

8 ANGULAR VELOCITY

8.1 Input speed n_1 [rpm]

The speed is related to the prime mover selected. Catalogue values refer to speed of single speed motors that are common in the industry.

If the gearbox is driven by an external transmission it is recommended to operate it with a speed of 1800 rpm, or lower, in order to optimise operating conditions and lifetime.

Higher input speeds are permitted, however in this case consider that torque rating T_{n2} is affected adversely.

Please consult a Bonfiglioli representative.

8.2 Output speed n_2 [rpm]

The output speed value n_2 is calculated from the relationship of input speed n_1 to the gear ratio i , as per the following equation:

$$n_2 = \frac{n_1}{i} \quad (6)$$

9 MOMENT OF INERTIA J_r [lb•ft²]

Moments of inertia specified in the catalogue refer to the gear unit input axis.

They are therefore related to motor speed, in the case of direct motor mounting.



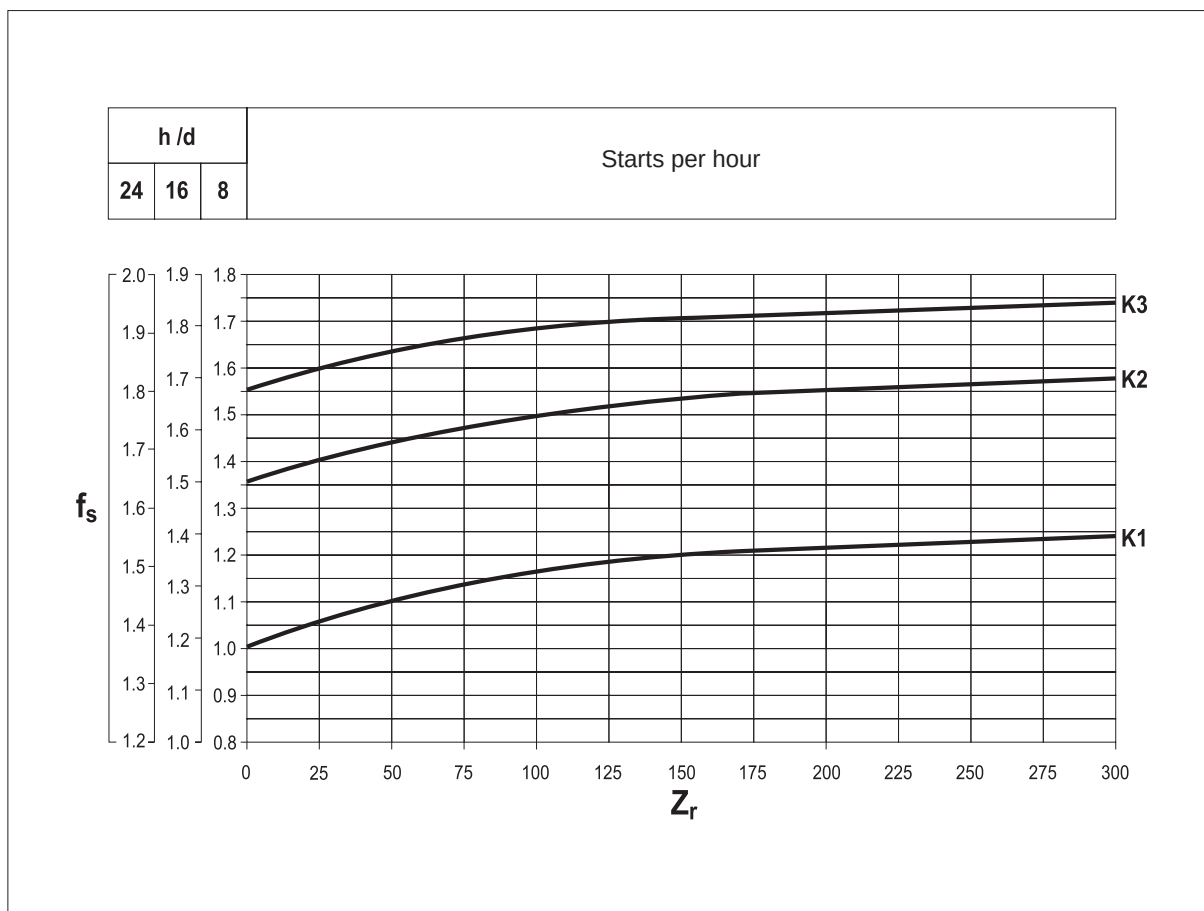
This factor is the numeric value describing reducer service duty. It takes into consideration, with unavoidable approximation, daily operating conditions, load variations and overloads connected with reducer application.

In the graph (A4) below, after selecting proper "daily working hours" column, the service factor is given by intersecting the number of starts per hour and one of the K1, K2 or K3 curves.

K_ curves are linked with the service nature (approximately: uniform, medium and heavy) through the acceleration factor of masses K, connected to the ratio between driven masses and motor inertia values.

Regardless of the value given for the service factor, we would like to remind that in some applications, which for example involve lifting of parts, failure of the reducer may expose the operators to the risk of injuries. If in doubt, please contact our Technical Service Department.

(A 4)





Service factors listed here under are empirical values based on AGMA and ISO specifications as well as our experience for use in common applications. They apply for state of the art-designed driven machines and normal operating conditions.

Application	≤ 10 hours/day	> 10 hours/day
AGITATORS, MIXERS		
Pure liquids	1.25	1.50
Liquids and solids	1.25	1.50
Liquids - variable density	1.50	1.75
BLOWERS		
Centrifugal	1.00	1.25
Lobe	1.25	1.50
Vane	1.25	1.50
CLARIFIERS	1.00	1.25
CLAY WORKING MACHINERY		
Brick press	1.75	2.00
Briquette machine	1.75	2.00
Pug mill	1.25	1.50
COMPACTORS	2.00	2.00
COMPRESSORS		
Centrifugal	1.25	1.50
Lobe	1.25	1.50
Reciprocating, multi-cylinder	1.50	1.75
Reciprocating, single-cylinder	1.75	2.00
CONVEYORS - GENERAL PURPOSE		
Uniformly loaded or fed	1.15	1.25
- Heavy duty		
Not uniformly fed	1.25	1.50
- Reciprocating or shaker	1.75	2.00
CRANES (*)		
Dry dock		
Main hoist	2.50	2.50
Auxiliary hoist	2.50	3.00
Boom hoist	2.50	3.00
Slewing Drive	2.50	3.00
Traction Drive	3.00	3.00

Application	≤ 10 hours/day	> 10 hours/day
Trolley Drive		
Gantry Drive	3.00	3.00
Traction Drive	2.00	2.00
Industrial duty		
Main hoist	2.50	3.00
Auxiliary hoist	2.50	3.00
Bridge and	3.00	3.00
Trolley travel	3.00	3.00
CRUSHER		
Stone or ore	2.00	2.00
DREDGES		
Conveyors	1.25	1.50
Cutter head drives	2.00	2.00
Screen drives	1.75	2.00
Stackers	1.25	1.50
Winches	1.25	1.50
ELEVATORS		
Bucket	1.25	1.50
Centrifugal discharge	1.15	1.25
Escalators	1.15	1.25
Freight	1.25	1.50
Gravity discharge	1.15	1.25
EXTRUDERS		
General	1.50	1.50
Plastics		
Variable speed drive	1.50	1.50
Fixed speed drive	1.75	1.75
Rubber		
Continuous screw operation	1.75	1.75
Intermittent screw operation	1.75	1.75
FANS		
Centrifugal	1.00	1.25
Cooling towers	2.00	2.00

(*) - Indication of service factor based on FEM 1.001 classification available upon request. Consult factory.

- Hoists for passengers lift: charted **values not applicable**. Consult factory.



Application	≤ 10 hours/day	> 10 hours/day
Forced draft	1.25	1.25
Induced draft	1.50	1.50
Industrial and mine	1.50	1.50
FEEDERS		
Apron	1.25	1.50
Belt	1.15	1.50
Disc	1.00	1.25
Reciprocating	1.75	2.00
Screw	1.25	1.50
FOOD INDUSTRY		
Dough mixer	1.25	1.50
Meat grinders	1.25	1.50
Slicers	1.25	1.50
GENERATORS AND EXCITERS	1.00	1.25
HAMMER MILLS	1.75	2.00
HOISTS (*)		
Heavy duty	1.75	2.00
Medium duty	1.25	1.50
Skip hoist	1.25	1.50
LUMBER INDUSTRY		
Barkers - spindle feed	1.25	1.50
Main drive	1.75	1.75
Conveyors - burner	1.25	1.50
Main or heavy duty	1.50	1.50
Main log	1.75	2.00
Re-saw, merry-go-round	1.25	1.50
Conveyors		
Slab	1.75	2.00
Transfer	1.25	1.50
Chains		
Floor	1.50	1.50
Green	1.50	1.75
Cut-off saws		
Chain	1.50	1.75
Drag	1.50	1.75
Debarking drums	1.75	2.00
Feeds		
Edger	1.25	1.50
Gang	1.75	1.75
Trimmer	1.25	1.50
Log deck	1.75	1.75

Application	≤ 10 hours/day	> 10 hours/day
Log hauls - incline - weel type	1.75	1.75
Log turning devices	1.75	1.75
Planer feed	1.25	1.50
Planer tilting hoists	1.50	1.50
Rolls - live-off brg. - roll cases	1.75	1.75
Sorting table	1.25	1.50
Tipple hoist	1.25	1.50
Transfers		
Chain	1.50	1.75
Craneways	1.50	1.75
Tray drives	1.25	1.50
Veneer lathe drives	1.25	1.50
METAL MILLS		
Slab pushers	1.50	1.50
Shears	2.00	2.00
Wire drawing	1.25	1.50
Wire winding machine	1.50	1.50
MILLS, ROTARY TYPE		
Ball and rod	2.00	2.00
Spur ring gear	2.00	2.00
Helical ring gear	1.50	1.50
Direct connected	2.00	2.00
Cement kilns	1.50	1.50
Dryers and coolers	1.50	1.50
MIXERS		
Concrete	1.50	1.75
PAPER MILLS		
Agitator (mixer)	1.50	1.50
Agitator for pure liquors	1.25	1.25
Barking drums	2.00	2.00
Barkers - mechanical	2.00	2.00
Beater	1.50	1.50
Breaker stack	1.25	1.25
Calendar	1.25	1.25
Chipper	2.00	2.00
Chip feeder	1.50	1.50
Coating rolls	1.25	1.25
Conveyors		
Chip, bark, chemical	1.25	1.25
Log (including slab)	2.00	2.00

(*) - Indication of service factor based on FEM 1.001 classification available upon request. Consult factory.

- Hoists for passengers lift: charted **values not applicable**. Consult factory.



Application	≤ 10 hours/day	> 10 hours/day
Couch rolls	1.25	1.25
Cutter	2.00	2.00
Cylinder molds	1.25	1.25
Dryers		
Paper machine	1.25	1.25
Conveyors type	1.25	1.25
Embosser	1.25	1.25
Extruder	1.50	1.50
Jordan	1.50	1.50
Kiln drive	1.50	1.50
Paper rolls	1.25	1.25
Platter	1.50	1.50
Presses - felt and suction	1.25	1.25
Pulper	2.00	2.00
Pumps - vacuum	1.50	1.50
Reel (surface type)	1.25	1.25
Screens		
Chip	1.50	1.50
Rotary	1.50	1.50
Vibrating	2.00	2.00
Size press	1.25	1.25
Super calendar	1.25	1.25
Thickener (AC motor)	1.50	1.50
Thickener (DC motor)	1.25	1.25
Washer (AC motor)	1.50	1.50
Washer (DC motor)	1.25	1.25
Wind and unwind stand	1.25	1.50
Winders (surface type)	1.25	1.25
Yankee dryers	1.25	1.25
PLASTICS INDUSTRY		
Batch mixers	1.75	1.75
Continuous mixers	1.50	1.50
Compounding mill	1.25	1.25
Calendars	1.50	1.50
Secondary processing		
Blow molders	1.50	1.50
Coating	1.25	1.25
Film	1.25	1.25
Pre-plasticizers	1.50	1.50
Rods	1.25	1.25

Application	≤ 10 hours/day	> 10 hours/day
Sheet	1.25	1.25
Tubing	1.25	1.50
PUMPS		
Centrifugal	1.15	1.25
Reciprocating		
Single acting, three or more cylinders	1.25	1.50
Double acting, two or more cylinders	1.25	1.50
Rotary		
Gear type	1.15	1.25
Lobe	1.15	1.25
Vane	1.15	1.25
RUBBER INDUSTRY		
Intensive internal mixer		
Batch mixers	1.75	1.75
Continuous mixers	1.50	1.50
Refiner - two rolls	1.50	1.50
Calendars	1.50	1.50
SAND MULLER	1.25	1.50
SEWAGE DISPOSAL EQUIPMENT		
Aerators	2.00	2.00
Chemical feeders	1.25	1.25
Dewatering screens	1.50	1.50
Scum breakers	1.50	1.50
Slow or rapid mixers	1.50	1.50
Sludge collectors	1.25	1.25
Thickeners	1.50	1.50
Vacuum filters	1.50	1.50
SCREENS		
Air washing	1.00	1.25
Rotary - stone or gravel	1.25	1.50
Travelling water intake	1.00	1.25
SUGAR INDUSTRY		
Beet slicer	2.00	2.00
Cane knives	1.50	1.50
Crushers	1.50	1.50
Mills (low speed end)	1.75	1.75
TEXTILE MACHINERY	1.25	1.50

10.1 Acceleration factor of masses K

This parameter serves for selecting the right curve for the type of load.
The value is given by the following ratio:

(A 5)

$K = \frac{J_c}{J_m}$	$\rightarrow$	$J_c =$ Moment of inertia of driven masses referred to motor drive shaft	$K \leq 0.25$	$\rightarrow$ K1	Uniform load
		$J_m =$ Motor moment of inertia	$0.25 < K \leq 3$	$\rightarrow$ K2	Moderate shock load
			$3 < K \leq 10$	$\rightarrow$ K3	Heavy shock load
			$K > 10$	$\rightarrow$	Please consult Bonfiglioli Technical Service

11 LUBRICATION

Life lubricated gearboxes do not require any periodical oil changes.

Refer to the User's Manual available at www.bonfiglioli.com for indications about checking the oil level and its replacement for other types of gearboxes. Do not mix mineral oils with synthetic oils and/or different brands. However, oil level should be checked at regular intervals and topped up as required. Check monthly if unit operates under intermittent duty, more frequently if duty is continuous.

11.1 Selection of the optimal oil viscosity (data relating to Shell Oils)

(A 6)

		Operating ambient temperature																	
		C°	-40	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40
		F°	-40	-31	-22	-13	-4	+5	+14	+23	+32	+41	+50	+59	+70	+77	+86	+95	+104
		suitability seals check					standard seals provided in the catalog												
Splash lubrication	Mineral oil	150 VG								*									
		220 VG	—	☎						*									☎
		320 VG								*									
		460 VG								*									
	Synthetic oil (PAG)	150 VG			*														☎
		220 VG	—	☎	*														
		320 VG			*														
	Synthetic oil (PAO)	150 VG			*														☎
		220 VG	—	☎	*														
		320 VG			*														

☐ Recommended operating limits

☐ Allowed operating limits. ☎

— Forbidden operating limits.

* = It is recommended to ramp-up and to provide for greater absorption of the motor.

If needed and in the event of impulse loads, contact Bonfiglioli Technical Service. ☎



11.2 Lubrication for C, A, F, S series gearboxes

The inner parts of Bonfiglioli gear units are oil-bath and splash lubricated.

Frame sizes C 05...C 41, A 05...A 41, F 10...F 41 are supplied by the factory, or by the authorized dealers, already filled with oil.

Unless otherwise specified, units size C 51, A 50, F 51 and larger are usually supplied unlubricated at it will be the customer care to fill them with oil prior to putting them into operation.

In both cases, depending on the version, prior to putting the gear unit into operation may need to replace the closed plug used for transportation purposes with breather plug supplied with.

For the reference charts of oil plugs placement and quantity of lubricant, refer to the Installation, Operation and Maintenance Manual (available on www.bonfiglioli.com).

The “long life” polyglycol-based lubricant supplied by the factory, in the absence of contamination, does not require periodical oil changes throughout the lifetime of the gear unit.

12 SELECTION



Some fundamental data are necessary to assist the correct selection of a gearbox or gearmotor. The table below (A7) briefly sums up this information.

To simplify selection, fill in the table and send a copy to our Technical Service which will select the most suitable drive unit for your application.

(A 7)

Type of application	A_{c1} Thrust load on input shaft (+/-)(***)
P_{r2} Output power at n_2 max	J_c Moment of inertia of the load
P_{r2}' Output power at n_2 min	t_a Ambient temperatureC° [°F]
T_{r2} Output torque at n_2 max	Altitude above sea level
n₂ Max.output speed	Duty type to IEC norms S...../.....%
n₂' Min.output speed	Z Starting frequency1/h
n₁ Max.input speed	Motor voltage
n₁' Min.input speed	Brake voltage
R_{c2} Radial load on output shaft	Frequency
x₂ Load application distance (*)	T_b Brake torquelb-in
Load orientation at output 	Motor protection degree IP.....
Output shaft rotation direction (CW-CCW) (**)	Insulation class
R_{c1} Radial load on input shaft	
x₁ Load application distance (*)	
Load orientation at input 	
Input shaft rotation direction (CW-CCW) (**)	
A_{c2} Thrust load on output shaft (+/-)(***)	

(*) Distance x1-2 is between force application point and shaft shoulder (if not indicated the force acting at mid-point of the shaft extension will be considered).

(**) CW = clockwise;
CCW = counterclockwise

(***) + = push
- = pull



12.1 Selection of a gearmotor

- a) Determine service factor f_s according to type of duty (factor K), number of starts per hour Z_r and hours of operation.
- b) From values of torque T_{r2} , speed n_2 and efficiency η_d the required input power can be calculated from the equation:

$$P_{r1} = \frac{T_{r2} \cdot n_2}{63,025 \cdot \eta_d} \text{ [hp]} \quad (7)$$

Value of η_d for the captioned gear unit can be sorted out from paragraph 6.

- c) Consult the gearmotor selection charts and locate the table corresponding to normalised power P_n :

$$P_n \geq P_{r1} \quad (8)$$

Unless otherwise specified, power P_n of motors indicated in the catalogue refers to continuous duty S1. For motors used in conditions other than S1, the type of duty required by reference to CEI 2-3/IEC 34-1 Standards must be mentioned.

For duties from S2 to S8 in particular and for motor frame 132 or smaller, extra power output can be obtained with respect to continuous duty.

Accordingly the following condition must be satisfied:

$$P_n \geq \frac{P_{r1}}{f_m} \quad (9)$$

The adjusting factor f_m can be obtained from table (A9).

12.2 Intermittence ratio

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (10)$$

t_f = work time at constant load

t_r = rest time



(A 8)

	DUTY					
	S2			S3*		
	Cycle duration [min]			Cyclic duration factor (I)		
	10	30	60	25%	40%	60%
f_m	1.35	1.15	1.05	1.25	1.15	1.1

* Cycle duration, in any event, must be 10 minutes or less. If it is longer, please contact our Technical Service.

Next, refer to the appropriate P_n section within the gearmotor selection charts and locate the unit that features the desired output speed n_2 , or closest to, along with a safety factor S that meets or exceeds the applicable service factor f_s .

The safety factor is so defined:

$$S = \frac{T_{n2}}{T_2} = \frac{P_{n1}}{P_1} \quad (11)$$

As standard, gear and motor combinations are implemented with 2, 4 and 6 pole motors, 60 Hz supplied.

Should the drive speed be different from 3600, 1800 or 1200 rpm, base the selection on the gear unit nominal rating.

12.3 Selection of speed reducer and gearbox with a motor adapter

a) Determine service factor f_s .

b) Assuming the required output torque for the application T_{r2} is known, the calculation torque can be then defined as:

$$T_{c2} = T_{r2} \cdot f_s \quad (12)$$

c) The gear ratio is calculated according to requested output speed n_2 and drive speed n_1 :

$$i = \frac{n_1}{n_2} \quad (13)$$



Once values for T_{c2} and i are known consult the rating charts under the appropriate input speed n_1 and locate the gear unit that features the gear ratio closest to $[i]$ and at same time offers a rated torque value T_{n2} so that:

$$T_{n2} \geq T_{c2} \quad (14)$$

If a NEMA or IEC normalized motor flange must be fitted check geometrical compatibility with the gear unit at paragraph "MOTOR AVAILABILITY".

13 VERIFICATION

After the selection of the speed reducer, or gearmotor, is complete it is recommended that the following verifications are conducted:

a) Thermal capacity

Make sure that the thermal capacity of the gearbox is equal to or greater than the power required by the application according to equation (3) on page 7.

If this condition is not verified, select a larger gearbox or apply a forced cooling system.

b) Maximum torque

The maximum torque (intended as instantaneous peak load) applicable to the gearbox must not, in general, exceed 200% of rated torque T_{n2} . Therefore, check that this limit is not exceeded, using suitable torque limiting devices, if necessary.

For three-phase double speed motors, it is important to pay attention to the switching torque which is generated when switching from high to low speed, because it could be significantly higher than maximum torque.

A simple, economical way to minimize overloading is to power only two phases of the motor during switch-over (power-up time on two phases can be controlled with a time-relay):

$$T_{g2} = 0.5 \cdot T_{g3}$$

T_{g2} = Switching torque with two-phase power-up

T_{g3} = Switching torque with three-phase power-up

We recommend, in any event, to contact our Technical Service.

c) Radial loads

Make sure that radial forces applying on input and/or output shaft are within permittend catalogue values.

If they were higher consider designing a different bearing arrangement before switching to a larger gear unit.

Catalogue values for rated overhung loads refer to mid-point of shaft under study.

Should application point of the overhung load be localised further out the revised loading capability must be adjusted as per instructions given in this manual.

Please refer to the paragraphs relating to radial loads.



d) Thrust loads

Actual thrust load must be found within 20% of the equivalent overhung load capacity.

Should an extremely high, or a combination of radial and axial load apply, consult Bonfiglioli Technical Service.

e) Starts per hour

For duties featuring a high number of switches the actual starting capability in loaded condition [Z] must be calculated.

Actual number of starts per hour must be lower than value so calculated.

14 INSTALLATION

The following installation instructions must be observed:

a) Make sure that the gearbox is correctly secured to avoid vibrations.

If shocks or overloads are expected, install hydraulic couplings, clutches, torque limiters, etc.

b) Before being paint coated, the machined surfaces and the outer face of the oil seals must be protected to prevent paint drying out the rubber and jeopardising the sealing function.

c) Parts fitted on the gearbox output shaft must be machined to ISO H7 tolerance to prevent interference fits that could damage the gearbox itself.

Further, to mount or remove such parts, use suitable pullers or extraction devices using the tapped hole located at the top of the shaft extension.

d) Mating surfaces must be cleaned and treated with suitable protective products before mounting to avoid oxidation and, as a result, seizure of parts.

e) Prior to putting the gear unit into operation make sure that the equipment that incorporates the same complies with the current revision of the Machines Directive 2006/42/EC.

f) Before starting up the machine, make sure that oil level conforms to the mounting position specified for the gear unit and the viscosity is adequate (refer to the User's Manual available at www.bonfiglioli.com).

g) For outdoor installation provide adequate guards in order to protect the drive from rainfalls as well as direct sun radiation.



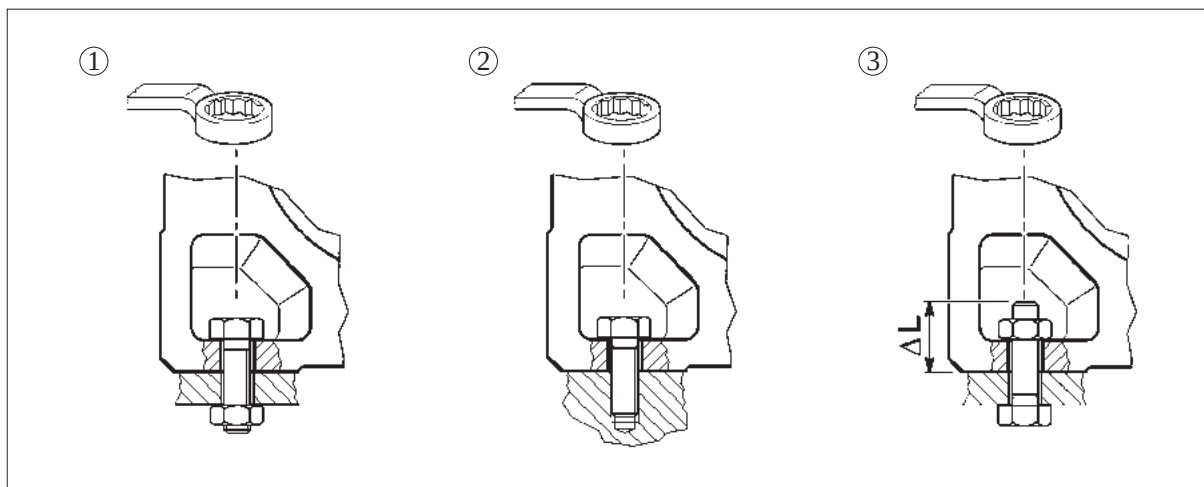
14.1 Fitting servomotors to gear heads featuring a clamping device (adapter type SC)

Turn the clamping device until its slot is aligned to those that are milled on the reducer input shaft. If the motor shaft features a key, this must be removed and the relevant keyway must also be aligned with the slots of clamping device and gear head input shaft, prior to inserting the servomotor into site. The keyway must be sitting on the same side as the locking screw. Tighten the bolts that hold the servomotor to the gear head, insert a torque wrench through the hole on the side of the flange and tighten the locking screw of the clamping device to the torque that is specified in the drawing section for the given adapter.

15 INSTALLATION INSTRUCTIONS

Schemes in table (A10) show the 3 possible installation patterns for A gear units to the machine frame. For each of these circumstances, table (A11) indicates exagonal head screw sizes to be used. Besides, to facilitate the installation, we suggest to use a wrench of the type shown in table (A10).

(A 9)



(A 10)

	Bolt type			
	①	②	③	ΔL [mm / in]
A 05	M8x22	M8x20	M8x ...	22 / 0.866
A 10	M8x25	M8x20	M8x ...	20 / 0.787
A 20	M8x25	M8x20	M8x ...	20 / 0.787
A 30	M10x30	M10x25	M10x ...	25 / 0.984
A 35	M10x30	M10x25	M10x ...	25 / 0.984
A 41	M12x35	M12x30	M12x ...	30 / 1.181

	Bolt type			
	①	②	③	ΔL [mm / in]
A 50	M14x45	M14x40	M14x ...	35 / 1.378
A 55	M14x40	M14x40	M14x ...	35 / 1.378
A 60	M16x50	M16x45	M16x ...	40 / 1.575
A 70	M20x60	M20x55	M20x ...	45 / 1.772
A 80	M24x70	M24x65	M24x ...	55 / 2.165
A 90	M24x90	M24x80	M24x ...	65 / 2.559



16 STORAGE

Observe the following instructions to ensure correct storage of the products:

- a) Do not store outdoors, in areas exposed to weather or with excessive humidity.
- b) Always place boards, wood or other material between the products and the floor. The gearboxes should not have direct contact with the floor.
- c) In case of long-term storage all machined surfaces such as flanges, shafts and couplings must be coated with a suitable rust inhibiting product (Mobilarma 248 or equivalent).

Furthermore gear units must be placed with the fill plug in the highest position and filled up with oil. Before putting the units into operation the appropriate quantity, and type, of oil must be restored (refer to the User's Manual available at www.bonfiglioli.com).

17 CONDITIONS OF SUPPLY

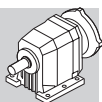
Gear units are supplied as follows:

- a) configured for installation in the mounting position specified when ordering;
- b) tested to manufacturer specifications;
- c) mating machined surfaces come unpainted;
- d) nuts and bolts for mounting motors are provided;
- e) shafts are protected during transportation by plastic caps;
- f) supplied with lifting lug (where applicable).

18 PAINT SPECIFICATIONS

Specifications for paint applied to gearboxes (where applicable) may be obtained from the branches or dealers that supplied the units.

HELICAL GEAR UNITS SERIES C

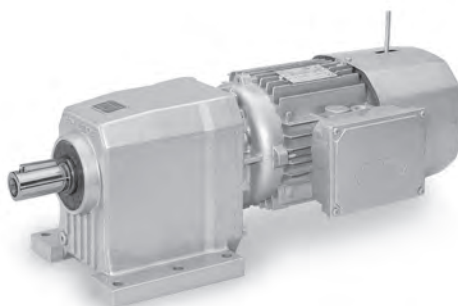
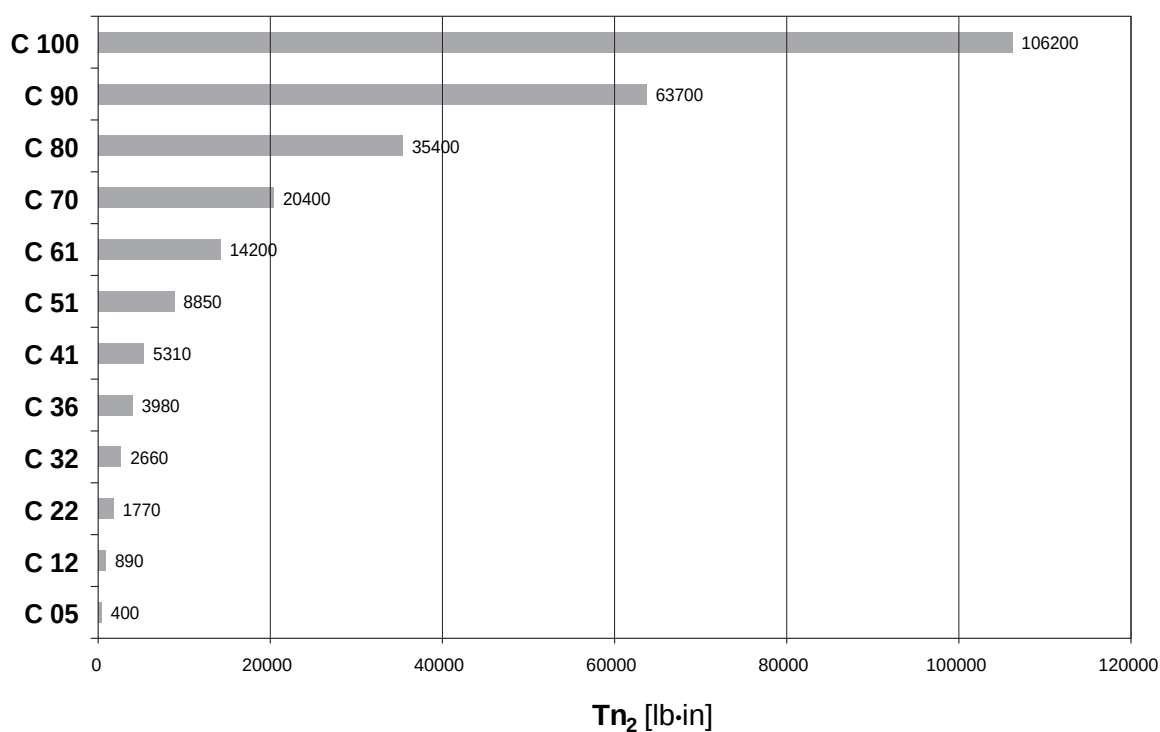


19 DESIGN FEATURES

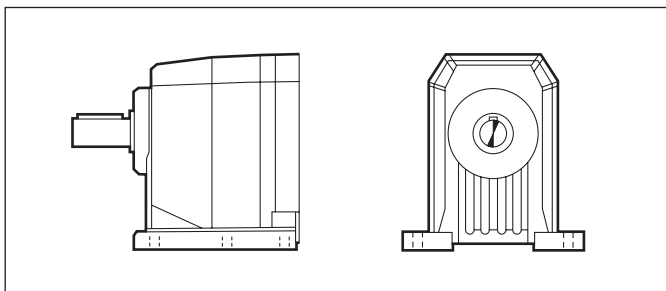
The main design characteristics are:

- modularity
 - space effective
 - universal mounting
 - high efficiency
 - quiet operation
 - gears in hardened and case-hardened steel
 - bare aluminium housing for sizes 05, 12, 22 and 32.
- Larger frame sizes come in sturdy cast iron housings
- input and output shafts from high grade steel.

(B 11)



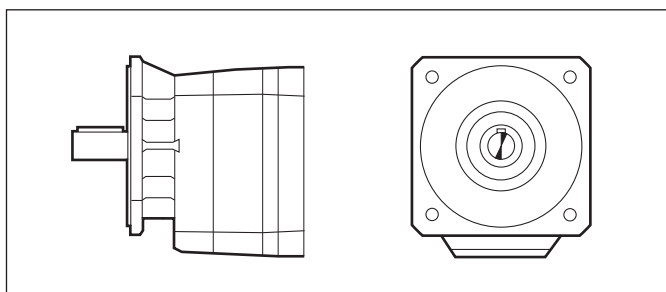
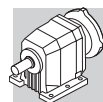
20 VERSIONS



P - NP

Foot mount

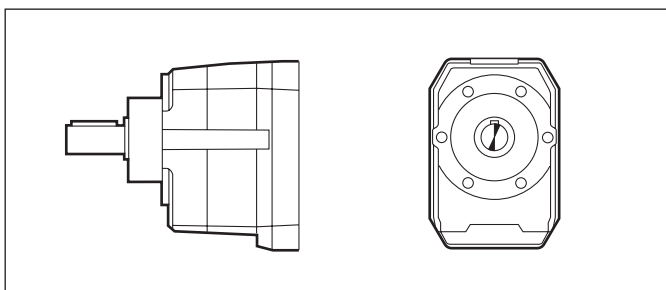
C 05 ... C 100



F - NF

Flange mount

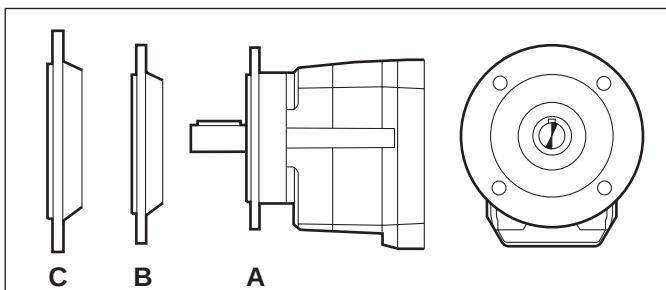
C 05 ... C 32
C 70 ... C 100



U - NU

UNIBOX- universal housing

C 12 ... C 61

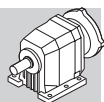


UF - NUF

UNIBOX bolt-on flange

C 12 ... C 61

21 DESIGNATION



GEAR UNIT

C 32 2 NF 52.4 S1 B5

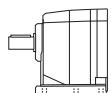
OPTIONS

MOUNTING POSITION

C...P: **B3** (Standard), B6, B7, B8, V5, V6

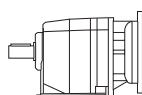
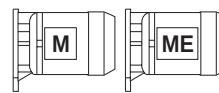
C...F/U/UF: **B5** (Standard), B51, B53, B52, V1, V3

INPUT CONFIGURATION



S05 ... S5

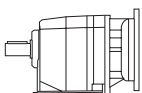
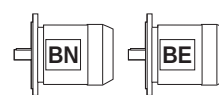
(C05...C100)



IEC

P63 ... P180

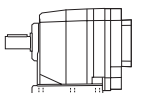
(C12...C100)



NEMA

N56C ... N320TC

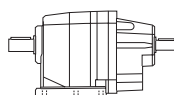
(C12...C100)



SK

SC

(C12...C61)



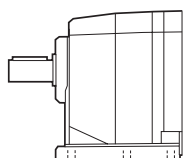
HS

NHS

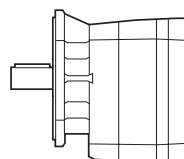
(C12...C100)

GEAR RATIO

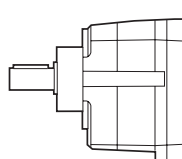
VERSION



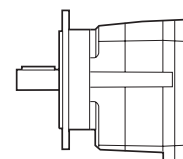
P - NP
(C05...C100)



F - NF
(C05...C32)
(C70...C100)



U - NU
(C12...C61)



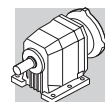
UFA - NUFA
UFB - NUFB
UFC - NUFC
(C12...C61)

REDUCTIONS
2, 3, 4

GEAR FRAME SIZE

05, 12, 22, 32, 36, 41, 51, 61, 70, 80, 90, 100

TYPE: **C** = helical in-line gear units



MOTOR							BRAKE			
M	1 LA	4	230/400-60	IP54	CLF		W	FD	7.5 R	SB 220 SA
										OPTIONS
										BRAKE SUPPLY
										RECTIFIER TYPE AC/DC NB, SB, NBR, SBR
										BRAKE HAND RELEASE R, RM
										BRAKE TORQUE (specify Nm!) [1 ft·lb = 1.356 Nm]
										BRAKE TYPE FD (d.c. brake) FA (a.c. brake)
										TERMINAL BOX POSITION W (default), N, E, S
										MOTOR MOUNTING — (compact motor) B5 (IEC - motor)
										INSULATION CLASS CL F standard CL H option
										DEGREE OF PROTECTION IP55 standard (IP56 option) IP54, IP55 brake motor
										VOLTAGE - FREQUENCY
										POLE NUMBER 2, 4, 6
										MOTOR SIZE 0B ... 5LA (compact motor) 63A ... 280M (IEC motor)

MOTOR TYPE

ME = compact 3-phase, class IE2 **M** = compact 3-phase
BE = IEC 3-phase, class IE2 **BN** = IEC 3-phase

NEMA motors to be specified thru their ordering numbers

21.1 Gearbox options

SO

Gear units C05, C12, C22, C32, C36, C41, usually factory filled with oil, to be supplied unlubricated.

LO

Gearboxes C51, C61, C70, C80, C90, C100 usually supplied without oil, to be supplied with synthetic oil currently used by BONFIGLIOLI RIDUTTORI and filled according to the mounting position specified.

DL

The output shaft features a dual oil seal.

DV

Dual oil seals on input shaft. (Only available for integral gearmotors).

VV

Fluoro elastomer oil seal on input shaft.

PV

Both input and output shafts feature Fluoro elastomer oil seals.

RB

Gear units C12, C22, C32, C36, C41, C51 and C61, usually supplied with standard values of angular backlash, are, in this case, supplied with reduced angular backlash values.

The following table specifies the corresponding figures of angular backlash.

(B 12)

		standard			RB	
C 05	i =	5.5 ; 9.3 ; 15.6 ; 27.1	6.7 ; 7.4 ; 11.2 ; 12.5 ; 18.9 ; 21.0 ; 32.8 ; 44.7		—	
	φ [°]	34	29			
C 12	i =	2.8 6.2	7.6 66.2		2.8 6.2	7.6 66.2
	φ [°]	55	29		—	13
C 22	i =	2.7 6.1	7.1 261.0		2.7 6.1	7.1 261.0
	φ [°]	47	25		—	12
C 32	i =	2.9 6.3	7.2 274.7		2.9 6.3	7.2 274.7
	φ [°]	39	21		—	11
C 36	i =	2.7 5.8	6.8 19.0	22.1 848.5	2.7 5.8	6.8 848.5
	φ [°]	37	20	17	—	10
C 41 2	i =	2.7 6.0	6.4 44.8	—	2.7 6.0	6.4 44.8
	φ [°]	34	17	—	—	9
C 41 3/4	i =	—	—	28.5 855.5	—	28.5 855.5
	φ [°]	—	—	15	—	9
C 51 2	i =	2.6 5.6	7.0 57.0	—	2.6 5.6	7.0 57.0
	φ [°]	32	15	—	—	8
C 51 3/4	i =	—	—	21.8 884.9	—	21.8 884.9
	φ [°]	—	—	13	—	8
C 61 2	i =	2.8 6.0	6.7 38.0	—	2.8 6.0	6.7 38.0
	φ [°]	27	13	—	12	7
C 61 3/4	i =	—	—	26.8 796.1	—	26.8 796.1
	φ [°]	—	—	11	—	7
C 70	i =	4.6 34.7	41.3 1476		—	
	φ [°]	18	20			
C 80	i =	5.6 39.1	43.5 1481		—	
	φ [°]	16	18			
C 90	i =	5.2 35.1	39.4 1240		—	
	φ [°]	16	18			
C 100	i =	4.9 29.6	34.3 1081		—	
	φ [°]	14	16			

For the delivery timeframe contact the Bonfiglioli's sales network

SURFACE PROTECTION

When no specific protection class is requested, the painted (ferrous) surfaces of gearboxes are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, gearboxes can be delivered with **C3** and **C4** surface protection, obtained by painting the complete gearbox.



(B 13)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C [248 F°]	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C [248 F°]	C4

Gearboxes with optional protection to class **C3** or **C4** are available in a choice of colours. If no specific colour is requested (see the “PAINTING” option) gearboxes are finished in RAL 7042. Gearboxes can also be supplied with surface protection for corrosivity class **C5** according to UNI EN ISO 12944-2. Contact our Technical Service for further details.

PAINTING

Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(B 14)

PAINTING	Colour	RAL number
RAL7042*	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010

* Gearboxes are supplied in this standard colour if no other colour is specified.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.

CERTIFICATES

AC - Certificate of compliance

The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

CC - Inspection certificate

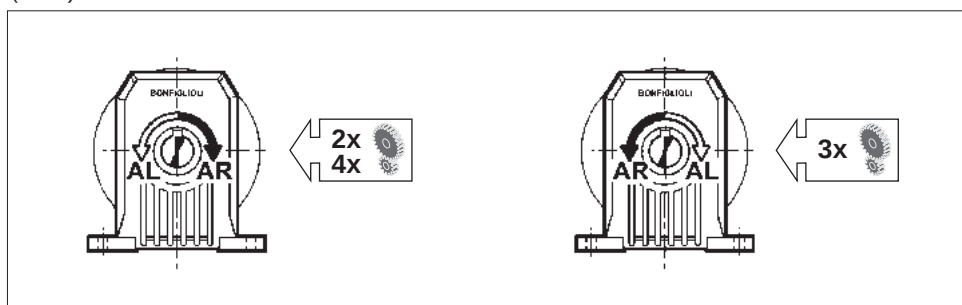
The document entails checking on order compliance, the visual inspection of external conditions and of mating dimensions. Checking on main functional parameters in unloaded conditions is also performed along with oil seal proofing, both in static and in running conditions. Units inspected are sampled within the shipping batch and marked individually.

21.2 Motor options

AL, AR

A backstop device on the motor itself, as described in the electric motors section of this catalogue, is available for gearmotors with integral M and ME Series motors. The following table shows the direction of free rotation of the gearbox, on the basis of which the correct option must be selected.

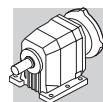
(B 15)



For further information on options, consult the electric motors section.

22 MOUNTING POSITION AND TERMINAL BOX ORIENTATION

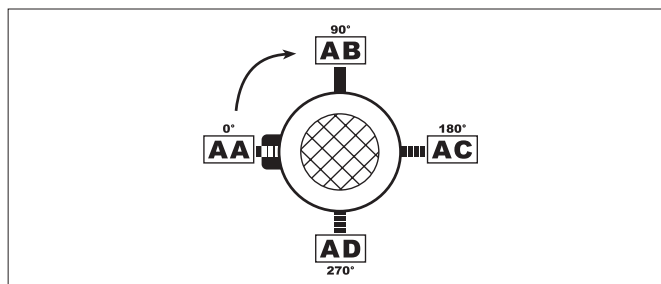
Location of motor terminal box can be specified by viewing the motor from the fan side; standard location is shown in black (W).



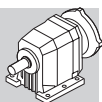
Angular position of the brake release lever.

Unless otherwise specified, brake motors have the manual device side located, 90° apart from terminal box. Different angles can be specified through the relevant options available.

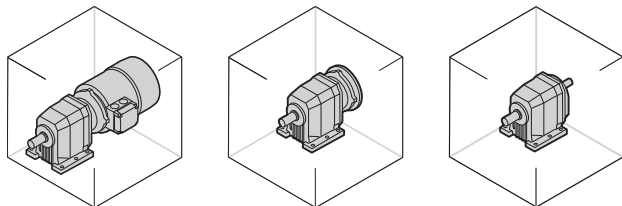
(B 16)



C ... P - NP



B3



_S

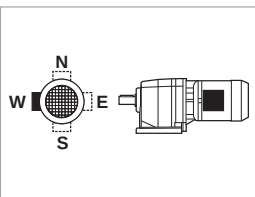
_P(IEC)

_N(NEMA)

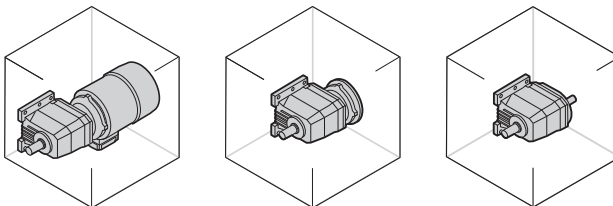
_SK / _SC

_HS

_NHS



B6



_S

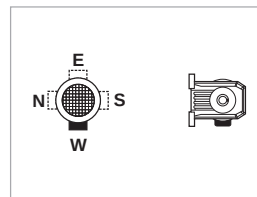
_P(IEC)

_N(NEMA)

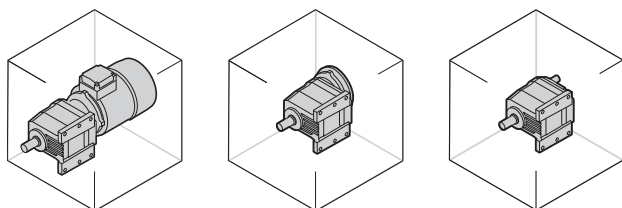
_SK / _SC

_HS

_NHS



B7



_S

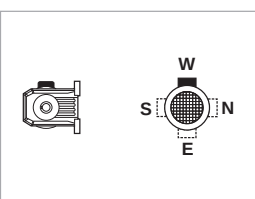
_P(IEC)

_N(NEMA)

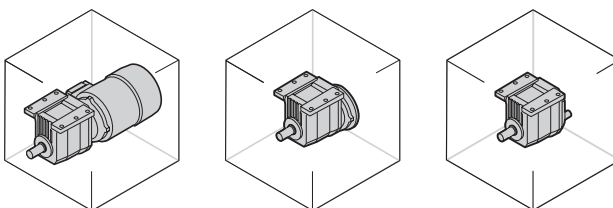
_SK / _SC

_HS

_NHS



B8



_S

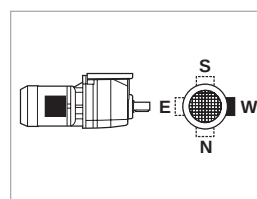
_P(IEC)

_N(NEMA)

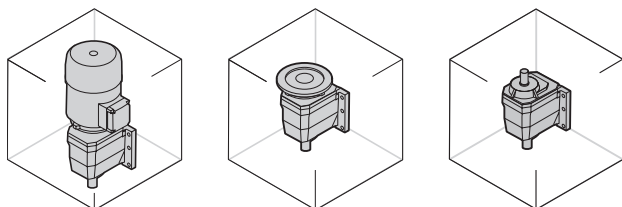
_SK / _SC

_HS

_NHS



V5



_S

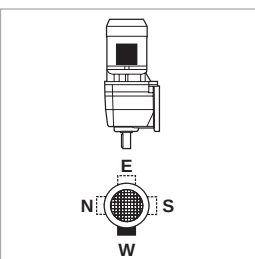
_P(IEC)

_N(NEMA)

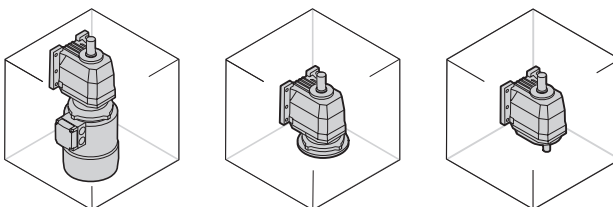
_SK / _SC

_HS

_NHS



V6



_S

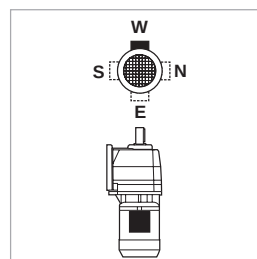
_P(IEC)

_N(NEMA)

_SK / _SC

_HS

_NHS



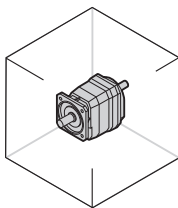
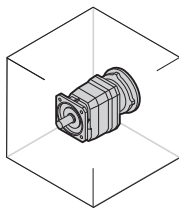
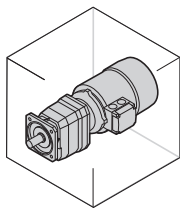
W = Default

C ... F - NF

C ... U - NU

C ... UF - NUF

B5



_S

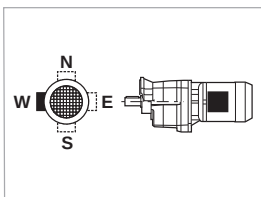
_P(IEC)

_N(NEMA)

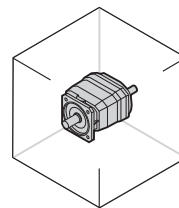
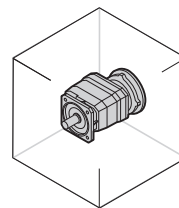
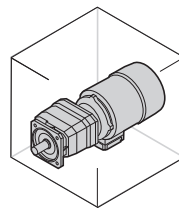
_SK / _SC

_HS

_NHS



B51



_S

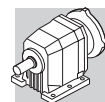
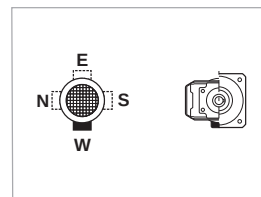
_P(IEC)

_N(NEMA)

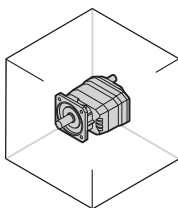
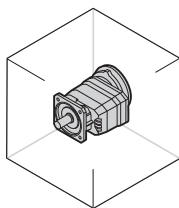
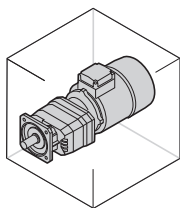
_SK / _SC

_HS

_NHS



B53



_S

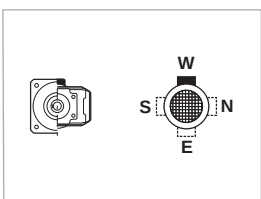
_P(IEC)

_N(NEMA)

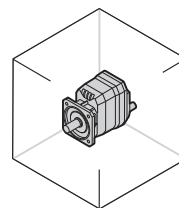
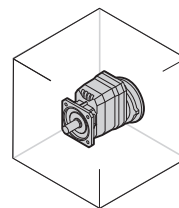
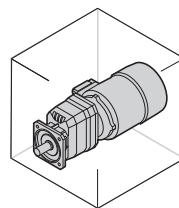
_SK / _SC

_HS

_NHS



B52



_S

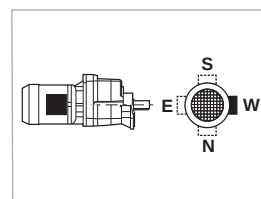
_P(IEC)

_N(NEMA)

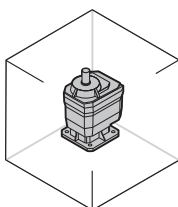
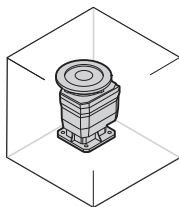
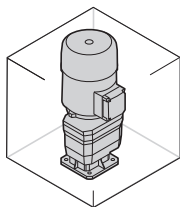
_SK / _SC

_HS

_NHS



V1



_S

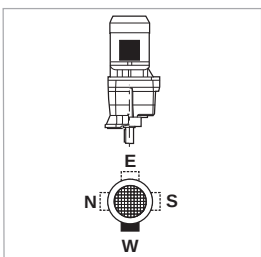
_P(IEC)

_N(NEMA)

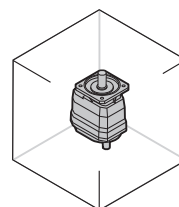
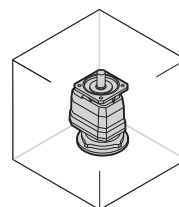
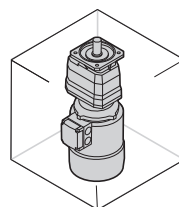
_SK / _SC

_HS

_NHS



V3



_S

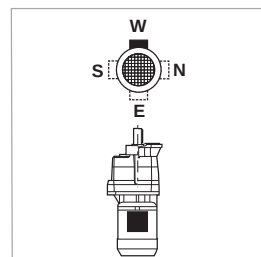
_P(IEC)

_N(NEMA)

_SK / _SC

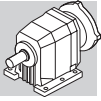
_HS

_NHS



W = Default

23 OVERHUNG LOADS



External transmissions keyed onto input and/or output shaft generate loads that act radially onto same shaft.

Resulting shaft loading must be compatible with both the bearing and the shaft capacity. Namely shaft loading (R_{c1} for input shaft, R_{c2} for output shaft), must be equal or lower than admissible overhung load capacity for shaft under study (R_{n1} for input shaft, R_{n2} for output shaft). OHL capability listed in the rating chart section.

In the formulas given below, index (1) applies to parameters relating to input shaft, whereas index (2) refers to output shaft.

The load generated by an external transmission can be calculated with close approximation by the following equations:

$$R_{c1} [\text{lbs}] = \frac{2 \cdot T_1 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad ; \quad R_{c2} [\text{lbs}] = \frac{2 \cdot T_2 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad (15)$$

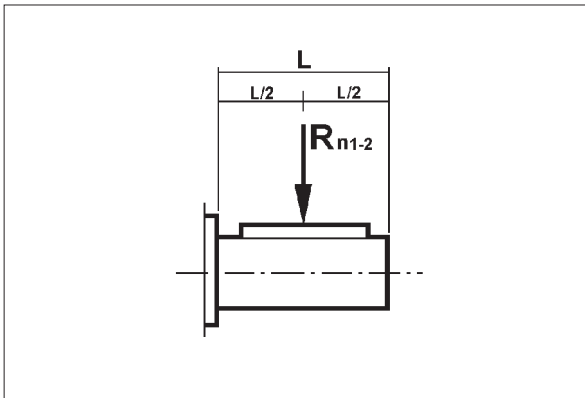
(B 17)

T_1 [lb·in]	Torque applied to input shaft
T_2 [lb·in]	Torque drawn at output shaft
d [in]	Pitch diameter of element keyed onto shaft
$K_r = 1$	Chain transmission

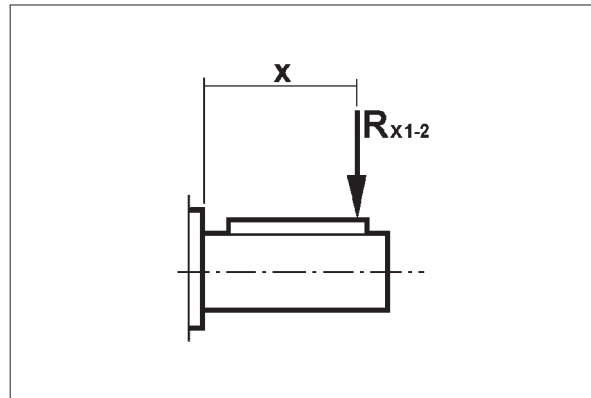
$K_r = 1.25$	Gear transmission
$K_r = 1.5$	V-belt transmission
$K_r = 2.0$	Flat belt transmission

Verification of OHL capability varies depending on whether load applies at midpoint of shaft or it is shifted further out:

(B 18)



(B 19)



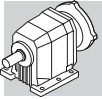
a) Load applied at midpoint of shaft, tab. (B18)

A comparison of shaft loading with catalogue OHL ratings should verify the following condition:

$$R_{c1} \leq R_{n1} \quad [\text{input shaft}]$$

or

$$R_{c2} \leq R_{n2} \quad [\text{output shaft}]$$



b) Load off the midpoint tab. (B19)

When load is shifted at an “x” distance from shaft shoulder, permissible load must be calculated for that distance.

Revised permissible overhung loads R_{x1} (input) and R_{x2} (output) are calculated respectively from original rated values R_{n1} and R_{n2} through factor:

$$\frac{a}{b+x} \quad (16)$$

(B 20)

	Load location factors [in]					
	Output shaft			Input shaft		
	a	b	c	a	b	c
C 05 2	1.5	0.7	9.8	—	—	—
C 12 2	1.8	1.0	17.7	0.8	0	11.8
C 22 2	2.1	1.1	21.7	1.6	0.8	13.8
C 22 3	2.1	1.1	21.7	0.8	0	11.8
C 32 2	2.4	1.2	29.5	1.6	0.8	13.8
C 32 3	2.4	1.2	29.5	0.8	0	11.8
C 36 2 - C 36 3	2.7	1.4	31.5	2.0	1.0	17.7
C 36 4	2.7	1.4	31.5	0.8	0	11.8
C 41 2 - C 41 3	2.7	1.4	33.5	2.0	1.0	17.7
C 41 4	2.7	1.4	33.5	1.6	0.8	13.8
C 51 2 - C 51 3	3.0	1.4	35.4	2.0	1.0	17.7
C 51 4	3.0	1.4	35.4	1.6	0.8	13.8
C 61 2 - C 61 3	3.8	1.8	39.4	2.3	1.1	17.7
C 61 4	3.8	1.8	39.4	2.0	1.0	17.7
C 70 2 - C 70 3	4.5	2.1	47.2	3.4	1.2	39.4
C 70 4	4.5	2.1	47.2	1.9	1.0	17.7
C 80 2 - C 80 3	5.2	2.4	59.1	3.4	1.2	39.4
C 80 4	5.2	2.4	59.1	1.9	1.0	17.7
C 90 2 - C 90 3	6.3	3.0	78.7	4.6	1.8	55.1
C 90 4	6.3	3.0	78.7	1.9	1.0	17.7
C 100 2 - C 100 3	6.4	2.3	98.4	4.6	1.8	55.1
C 100 4	6.4	2.3	98.4	1.9	1.0	17.7

Verification procedure is described here after.

INPUT SHAFT

1. Calculate:

$$R_{x1} = R_{n1} \cdot \frac{a}{b+x} \quad (17)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (18)$$

Finally, the following condition must be verified:

$$R_{c1} \leq R_{x1} \quad (19)$$

OUTPUT SHAFT

1. Calculate:

$$R_{x2} = R_{n2} \cdot \frac{a}{b+x} \quad (20)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (21)$$

Finally, the following condition must be verified:

$$R_{c2} \leq R_{x2} \quad (22)$$

24 THRUST LOADS, A_{n1} , A_{n2}

Permissible thrust loads on input [A_{n1}] and output [A_{n2}] shafts are obtained from the radial loading for the shaft under consideration [R_{n1}] and [R_{n2}] through the following equation:

$$\begin{aligned} A_{n1} &= R_{n1} \cdot 0.2 \\ A_{n2} &= R_{n2} \cdot 0.2 \end{aligned} \quad (23)$$

The thrust loads calculated through these formulas apply to thrust forces occurring at the same time as rated radial loads. In the only case that no overhung load acts on the shaft the value of the admissible thrust load [A_n] amounts to 50% of rated OHL [R_n] on same shaft.

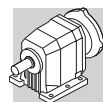
Where thrust loads exceed permissible value or largely prevail over radial loads, contact Bonfiglioli Riduttori for an in-depth analysis of the application.

25 GEARMOTOR RATING CHARTS



The selection of motors without brake takes into account the requirements of Regulation EC 640/2009 (see section **M** of this catalogue). When the motor rated power is below 0.75kW (1 HP), BN/M motors can be provided.

Considering that the Regulation EC 640/2009 shall not apply to the motors equipped with brake, the brakemotor selection takes into account BN/M motors only, without taking into account the rated power. BE/ME brakemotors are available on request.



0.12 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
37	192	2.1	44.7	240	C052_44.7	S0 + M0B4			120, 121
41	173	2.3	40.3	203	C052_40.3	S0 + M0B4			120, 121
46	156	2.6	36.4	201	C052_36.4	S0 + M0B4			120, 121
51	141	2.8	32.8	197	C052_32.8	S0 + M0B4			120, 121

0.16 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
1.1	7994	2.5	1475.8	5210	C704_1476		P63 + BN63A4	N56C	178...181
1.2	7379	2.8	1362.3	5210	C704_1362		P63 + BN63A4	N56C	178...181
1.9	4793	1.8	884.9	2050	C514_884.9		P63 + BN63A4	N56C	162...165
2.0	4634	1.1	855.5	1432	C414_855.5	S05 + M05A4	P63 + BN63A4	N56C	154...157
2.1	4377	2.0	796.1	3288	C614_796.1		P63 + BN63A4	N56C	170...173
2.2	4227	1.3	780.4	1432	C414_780.4	S05 + M05A4	P63 + BN63A4	N56C	154...157
2.2	4086	1.0	754.2	1336	C364_754.2	S05 + M05A4	P63 + BN63A4	N56C	146...149
2.3	3986	1.3	735.9	1432	C414_735.9	S05 + M05A4	P63 + BN63A4	N56C	154...157
2.4	3888	2.3	717.7	2050	C514_717.7		P63 + BN63A4	N56C	162...165
2.5	3637	1.5	671.3	1432	C414_671.3	S05 + M05A4	P63 + BN63A4	N56C	154...157
2.5	3607	1.1	665.9	1336	C364_665.9	S05 + M05A4	P63 + BN63A4	N56C	146...149
2.6	3550	2.5	655.4	2050	C514_655.4		P63 + BN63A4	N56C	162...165
2.8	3261	2.7	602.0	2050	C514_602.0		P63 + BN63A4	N56C	162...165
2.8	3227	1.6	595.8	1432	C414_595.8	S05 + M05A4	P63 + BN63A4	N56C	154...157
2.9	3113	1.3	574.7	1336	C364_574.7	S05 + M05A4	P63 + BN63A4	N56C	146...149
3.1	2978	3.0	549.7	2050	C514_549.7		P63 + BN63A4	N56C	162...165
3.1	2944	1.8	543.5	1432	C414_543.5	S05 + M05A4	P63 + BN63A4	N56C	154...157
3.3	2802	1.4	517.2	1336	C364_517.2	S05 + M05A4	P63 + BN63A4	N56C	146...149
3.4	2673	2.0	493.5	1432	C414_493.5	S05 + M05A4	P63 + BN63A4	N56C	154...157
3.7	2483	1.6	458.4	1336	C364_458.4	S05 + M05A4	P63 + BN63A4	N56C	146...149
3.8	2439	2.2	450.2	1432	C414_450.2	S05 + M05A4	P63 + BN63A4	N56C	154...157
4.0	2276	1.7	420.2	1336	C364_420.2	S05 + M05A4	P63 + BN63A4	N56C	146...149
4.0	2267	2.3	418.5	1432	C414_418.5	S05 + M05A4	P63 + BN63A4	N56C	154...157
4.4	2068	2.6	381.8	1432	C414_381.8	S05 + M05A4	P63 + BN63A4	N56C	154...157
4.5	2047	1.9	377.9	1336	C364_377.9	S05 + M05A4	P63 + BN63A4	N56C	146...149
4.9	1851	2.2	341.7	1336	C364_341.7	S05 + M05A4	P63 + BN63A4	N56C	146...149
5.1	1806	2.9	333.4	1432	C414_333.4	S05 + M05A4	P63 + BN63A4	N56C	154...157
5.3	1728	2.3	318.9	1336	C364_318.9	S05 + M05A4	P63 + BN63A4	N56C	146...149
5.8	1576	2.5	290.9	1336	C364_290.9	S05 + M05A4	P63 + BN63A4	N56C	146...149
6.2	1538	1.4	274.7	1134	C323_274.7	S05 + M05A4	P63 + BN63A4	N56C	138...141

0.16 hp

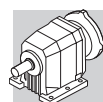
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
6.6	1381	2.9	255.0	1336	C364_255.0	S05 + M05A4	P63 + BN63A4	N56C	146...149
6.9	1367	1.6	244.2	1134	C323_244.2	S05 + M05A4	P63 + BN63A4	N56C	138...141
7.5	1264	1.2	225.8	1027	C223_225.8	S05 + M05A4	P63 + BN63A4	N56C	130...133
7.8	1207	2.2	215.6	1134	C323_215.6	S05 + M05A4	P63 + BN63A4	N56C	138...141
8.4	1123	1.4	200.7	1027	C223_200.7	S05 + M05A4	P63 + BN63A4	N56C	130...133
9.1	1041	2.5	186.0	1134	C323_186.0	S05 + M05A4	P63 + BN63A4	N56C	138...141
9.5	999	1.8	178.5	1027	C223_178.5	S05 + M05A4	P63 + BN63A4	N56C	130...133
10.1	937	2.8	167.4	1134	C323_167.4	S05 + M05A4	P63 + BN63A4	N56C	138...141
11.1	849	2.1	151.7	1027	C223_151.7	S05 + M05A4	P63 + BN63A4	N56C	130...133
12.4	764	2.3	136.5	1027	C223_136.5	S05 + M05A4	P63 + BN63A4	N56C	130...133
13.8	684	2.6	122.2	1027	C223_122.2	S05 + M05A4	P63 + BN63A4	N56C	130...133
15.1	627	2.8	112.0	1027	C223_112.0	S05 + M05A4	P63 + BN63A4	N56C	130...133
25.5	378	2.0	66.2	410	C122_66.2	S05 + M05A4	P63 + BN63A4	N56C	122...125
26.7	362	2.9	63.3	1027	C222_63.3	S05 + M05A4	P63 + BN63A4	N56C	130...133
31	315	2.5	55.2	410	C122_55.2	S05 + M05A4	P63 + BN63A4	N56C	122...125
36	272	2.8	47.6	410	C122_47.6	S05 + M05A4	P63 + BN63A4	N56C	122...125
38	256	1.6	44.7	207	C052_44.7	S05 + M05A4			120, 121
42	231	1.7	40.3	203	C052_40.3	S05 + M05A4			120, 121
46	208	1.9	36.4	201	C052_36.4	S05 + M05A4			120, 121
52	187	2.1	32.8	197	C052_32.8	S05 + M05A4			120, 121
62	155	2.6	27.1	190	C052_27.1	S05 + M05A4			120, 121

0.25 hp

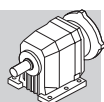
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
1.1	12508	2.8	1481.3	7286	C804_1481		P63 + BN63B4	N56C	184...187
1.1	12461	1.6	1475.8	5210	C704_1476		P63 + BN63B4	N56C	178...181
1.2	11503	1.8	1362.3	5210	C704_1362		P63 + BN63B4	N56C	178...181
1.4	9779	2.1	1158.1	5210	C704_1158		P63 + BN63B4	N56C	178...181
1.6	9027	2.3	1069.1	5210	C704_1069		P63 + BN63B4	N56C	178...181
1.7	8440	2.4	999.5	5210	C704_999.5		P63 + BN63B4	N56C	178...181
1.8	7790	2.6	922.6	5210	C704_922.6		P63 + BN63B4	N56C	178...181
1.9	7472	1.2	884.9	2050	C514_884.9		P63 + BN63B4	N56C	162...165
2.1	6822	1.3	808.0	2050	C514_808.0		P63 + BN63B4	N56C	162...165
2.1	6722	2.1	796.1	3288	C614_796.1		P63 + BN63B4	N56C	170...173
2.3	6133	2.3	726.3	3288	C614_726.3		P63 + BN63B4	N56C	170...173
2.3	6061	1.5	717.7	2050	C514_717.7		P63 + BN63B4	N56C	162...165
2.5	5669	0.9	671.3	1432	C414_671.3	S05 + M05B4	P63 + BN63B4	N56C	154...157
2.5	5647	2.5	668.8	3288	C614_668.8		P63 + BN63B4	N56C	170...173
2.5	5534	1.6	655.4	2050	C514_655.4		P63 + BN63B4	N56C	162...165
2.7	5152	2.7	610.1	3288	C614_610.1		P63 + BN63B4	N56C	170...173
2.8	5084	1.7	602.0	2050	C514_602.0		P63 + BN63B4	N56C	162...165
2.8	5031	1.1	595.8	1432	C414_595.8	S05 + M05B4	P63 + BN63B4	N56C	154...157
2.9	4823	2.9	571.2	3288	C614_571.2		P63 + BN63B4	N56C	170...173
3.0	4642	1.9	549.7	2050	C514_549.7		P63 + BN63B4	N56C	162...165
3.1	4590	1.2	543.5	1432	C414_543.5	S05 + M05B4	P63 + BN63B4	N56C	154...157
3.2	4367	0.9	517.2	1336	C364_517.2	S05 + M05B4	P63 + BN63B4	N56C	146...149
3.3	4290	2.1	508.0	2050	C514_508.0		P63 + BN63B4	N56C	162...165
3.4	4167	1.3	493.5	1432	C414_493.5	S05 + M05B4	P63 + BN63B4	N56C	154...157
3.6	3917	2.3	463.9	2050	C514_463.9		P63 + BN63B4	N56C	162...165
3.6	3871	1.0	458.4	1336	C364_458.4	S05 + M05B4	P63 + BN63B4	N56C	146...149
3.7	3802	1.4	450.2	1432	C414_450.2	S05 + M05B4	P63 + BN63B4	N56C	154...157
4.0	3548	1.1	420.2	1336	C364_420.2	S05 + M05B4	P63 + BN63B4	N56C	146...149
4.0	3534	1.5	418.5	1432	C414_418.5	S05 + M05B4	P63 + BN63B4	N56C	154...157
4.0	3510	2.5	415.7	2050	C514_415.7		P63 + BN63B4	N56C	162...165

0.25 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
4.4	3224	1.6	381.8	1432	C414 381.8	S05 + M05B4	P63 + BN63B4	N56C	154...157
4.4	3205	2.8	379.6	2050	C514 379.6		P63 + BN63B4	N56C	162...165
4.4	3191	1.2	377.9	1336	C364 377.9	S05 + M05B4	P63 + BN63B4	N56C	146...149
4.9	2885	1.4	341.7	1336	C364 341.7	S05 + M05B4	P63 + BN63B4	N56C	146...149
5.0	2816	1.9	333.4	1432	C414 333.4	S05 + M05B4	P63 + BN63B4	N56C	154...157
5.2	2693	1.5	318.9	1336	C364 318.9	S05 + M05B4	P63 + BN63B4	N56C	146...149
5.5	2569	2.1	304.2	1432	C414 304.2	S05 + M05B4	P63 + BN63B4	N56C	154...157
5.7	2456	1.6	290.9	1336	C364 290.9	S05 + M05B4	P63 + BN63B4	N56C	146...149
6.3	2221	2.4	263.0	1432	C414 263.0	S05 + M05B4	P63 + BN63B4	N56C	154...157
6.5	2153	1.8	255.0	1336	C364 255.0	S05 + M05B4	P63 + BN63B4	N56C	146...149
6.8	2131	1.0	244.2	1134	C323 244.2	S05 + M05B4	P63 + BN63B4	N56C	138...141
7.0	2026	2.6	239.9	1432	C414 239.9	S05 + M05B4	P63 + BN63B4	N56C	154...157
7.2	1950	2.0	230.9	1336	C364 230.9	S05 + M05B4	P63 + BN63B4	N56C	146...149
7.7	1881	1.4	215.6	1134	C323 215.6	S05 + M05B4	P63 + BN63B4	N56C	138...141
8.0	1825	2.9	209.1	1432	C413 209.1		P63 + BN63B4	N56C	154...157
8.1	1801	2.2	206.4	1336	C363 206.4	S05 + M05B4	P63 + BN63B4	N56C	146...149
9.0	1623	1.6	186.0	1134	C323 186.0	S05 + M05B4	P63 + BN63B4	N56C	138...141
9.1	1601	2.5	183.5	1336	C363 183.5	S05 + M05B4	P63 + BN63B4	N56C	146...149
9.4	1557	1.1	178.5	1027	C223 178.5	S05 + M05B4	P63 + BN63B4	N56C	130...133
10.0	1461	1.8	167.4	1134	C323 167.4	S05 + M05B4	P63 + BN63B4	N56C	138...141
10.3	1413	2.8	162.0	1336	C363 162.0	S05 + M05B4	P63 + BN63B4	N56C	146...149
11.0	1323	1.3	151.7	1027	C223 151.7	S05 + M05B4	P63 + BN63B4	N56C	130...133
11.3	1295	2.1	148.4	1134	C323 148.4	S05 + M05B4	P63 + BN63B4	N56C	138...141
12.2	1191	1.5	136.5	1027	C223 136.5	S05 + M05B4	P63 + BN63B4	N56C	130...133
12.3	1187	2.2	136.0	1134	C323 136.0	S05 + M05B4	P63 + BN63B4	N56C	138...141
13.6	1068	2.5	122.4	1134	C323 122.4	S05 + M05B4	P63 + BN63B4	N56C	138...141
13.7	1066	1.7	122.2	1027	C223 122.2	S05 + M05B4	P63 + BN63B4	N56C	130...133
14.9	977	1.8	112.0	1027	C223 112.0	S05 + M05B4	P63 + BN63B4	N56C	130...133
15.1	965	2.8	110.6	1134	C323 110.6	S05 + M05B4	P63 + BN63B4	N56C	138...141
16.2	901	2.9	103.3	1134	C323 103.3	S05 + M05B4	P63 + BN63B4	N56C	138...141
16.7	874	2.0	100.2	1027	C223 100.2	S05 + M05B4	P63 + BN63B4	N56C	130...133
18.9	772	2.3	88.5	1027	C223 88.5	S05 + M05B4	P63 + BN63B4	N56C	130...133
20.2	721	2.5	82.6	1027	C223 82.6	S05 + M05B4	P63 + BN63B4	N56C	130...133
22.3	653	2.7	74.8	1027	C223 74.8	S05 + M05B4	P63 + BN63B4	N56C	130...133
25.2	590	1.3	66.2	410	C122 66.2	S05 + M05B4	P63 + BN63B4	N56C	122...125
26.4	564	1.9	63.3	1027	C222 63.3	S05 + M05B4	P63 + BN63B4	N56C	130...133
30	492	1.6	55.2	410	C122 55.2	S05 + M05B4	P63 + BN63B4	N56C	122...125
31	488	2.6	54.7	1027	C222 54.7	S05 + M05B4	P63 + BN63B4	N56C	130...133
34	434	2.9	48.6	1027	C222 48.6	S05 + M05B4	P63 + BN63B4	N56C	130...133
35	424	1.8	47.6	410	C122 47.6	S05 + M05B4	P63 + BN63B4	N56C	122...125
37	399	1.0	44.7	174	C052 44.7	S05 + M05B4			120, 121
39	377	1.9	42.3	410	C122 42.3	S05 + M05B4	P63 + BN63B4	N56C	122...125
41	359	1.1	40.3	174	C052 40.3	S05 + M05B4			120, 121
45	330	2.2	37.0	410	C122 37.0	S05 + M05B4	P63 + BN63B4	N56C	122...125
46	324	1.2	36.4	174	C052 36.4	S05 + M05B4			120, 121
51	292	1.4	32.8	172	C052 32.8	S05 + M05B4			120, 121
51	292	2.5	32.8	410	C122 32.8	S05 + M05B4	P63 + BN63B4	N56C	122...125
57	263	2.8	29.5	410	C122 29.5	S05 + M05B4	P63 + BN63B4	N56C	122...125
62	242	1.6	27.1	168	C052 27.1	S05 + M05B4			120, 121
80	187	2.1	21.0	166	C052 21.0	S05 + M05B4			120, 121
88	168	1.9	18.9	162	C052 18.9	S05 + M05B4			120, 121
107	139	2.3	15.6	156	C052 15.6	S05 + M05B4			120, 121
134	111	2.9	12.5	152	C052 12.5	S05 + M05B4			120, 121
179	83	2.9	9.3	141	C052 9.3	S05 + M05B4			120, 121

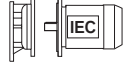


0.33 hp

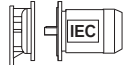


n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs				 NEMA	
1.1	16520	2.1	1481.3	7286	C804_1481		P71 + BN71A4	N56C	184...187
1.1	16459	1.2	1475.8	5210	C704_1476		P71 + BN71A4	N56C	178...181
1.2	15193	1.3	1362.3	5210	C704_1362		P71 + BN71A4	N56C	178...181
1.2	15143	2.3	1357.8	7286	C804_1358		P71 + BN71A4	N56C	184...187
1.3	14211	2.5	1274.2	7286	C804_1274		P71 + BN71A4	N56C	184...187
1.4	13026	2.7	1168.0	7286	C804_1168		P71 + BN71A4	N56C	184...187
1.4	12916	1.6	1158.1	5210	C704_1158		P71 + BN71A4	N56C	178...181
1.6	11923	1.7	1069.1	5210	C704_1069		P71 + BN71A4	N56C	178...181
1.7	11147	1.8	999.5	5210	C704_999.5		P71 + BN71A4	N56C	178...181
1.8	10289	2.0	922.6	5210	C704_922.6		P71 + BN71A4	N56C	178...181
2.1	9011	1.0	808.0	2050	C514_808.0		P71 + BN71A4	N56C	162...165
2.1	8892	2.3	797.3	5210	C704_797.3		P71 + BN71A4	N56C	178...181
2.1	8879	1.6	796.1	3288	C614_796.1		P71 + BN71A4	N56C	170...173
2.3	8208	2.5	736.0	5210	C704_736.0		P71 + BN71A4	N56C	178...181
2.3	8100	1.7	726.3	3288	C614_726.3		P71 + BN71A4	N56C	170...173
2.3	8005	1.1	717.7	2050	C514_717.7		P71 + BN71A4	N56C	162...165
2.5	7459	1.9	668.8	3288	C614_668.8		P71 + BN71A4	N56C	170...173
2.5	7331	2.8	657.3	5210	C704_657.3		P71 + BN71A4	N56C	178...181
2.5	7309	1.2	655.4	2050	C514_655.4		P71 + BN71A4	N56C	162...165
2.7	6804	2.1	610.1	3288	C614_610.1		P71 + BN71A4	N56C	170...173
2.8	6714	1.3	602.0	2050	C514_602.0		P71 + BN71A4	N56C	162...165
2.9	6370	2.2	571.2	3288	C614_571.2		P71 + BN71A4	N56C	170...173
3.0	6131	1.4	549.7	2050	C514_549.7		P71 + BN71A4	N56C	162...165
3.2	5812	2.4	521.1	3288	C614_521.1		P71 + BN71A4	N56C	170...173
3.3	5666	1.6	508.0	2050	C514_508.0		P71 + BN71A4	N56C	162...165
3.4	5504	1.0	493.5	1432	C414_493.5	S05 + M05C4	P71 + BN71A4	N56C	154...157
3.6	5173	1.7	463.9	2050	C514_463.9		P71 + BN71A4	N56C	162...165
3.6	5153	2.7	462.0	3288	C614_462.0		P71 + BN71A4	N56C	170...173
3.7	5021	1.1	450.2	1432	C414_450.2	S05 + M05C4	P71 + BN71A4	N56C	154...157
4.0	4668	1.1	418.5	1432	C414_418.5	S05 + M05C4	P71 + BN71A4	N56C	154...157
4.0	4636	1.9	415.7	2050	C514_415.7		P71 + BN71A4	N56C	162...165
4.4	4258	1.2	381.8	1432	C414_381.8	S05 + M05C4	P71 + BN71A4	N56C	154...157
4.4	4234	2.1	379.6	2050	C514_379.6		P71 + BN71A4	N56C	162...165
4.4	4215	0.9	377.9	1336	C364_377.9	S05 + M05C4	P71 + BN71A4	N56C	146...149
4.9	3811	1.0	341.7	1336	C364_341.7	S05 + M05C4	P71 + BN71A4	N56C	146...149
5.0	3719	1.4	333.4	1432	C414_333.4	S05 + M05C4	P71 + BN71A4	N56C	154...157
5.1	3637	2.4	326.1	2050	C514_326.1		P71 + BN71A4	N56C	162...165
5.2	3557	1.1	318.9	1336	C364_318.9	S05 + M05C4	P71 + BN71A4	N56C	146...149
5.5	3393	1.6	304.2	1432	C414_304.2	S05 + M05C4	P71 + BN71A4	N56C	154...157
5.6	3321	2.7	297.8	2050	C514_297.8		P71 + BN71A4	N56C	162...165
5.7	3244	1.2	290.9	1336	C364_290.9	S05 + M05C4	P71 + BN71A4	N56C	146...149
6.3	2933	1.8	263.0	1432	C414_263.0	S05 + M05C4	P71 + BN71A4	N56C	154...157
6.5	2844	1.4	255.0	1336	C364_255.0	S05 + M05C4	P71 + BN71A4	N56C	146...149
7.0	2676	2.0	239.9	1432	C414_239.9	S05 + M05C4	P71 + BN71A4	N56C	154...157
7.2	2575	1.5	230.9	1336	C364_230.9	S05 + M05C4	P71 + BN71A4	N56C	146...149
7.7	2484	1.1	215.6	1134	C323_215.6	S05 + M05C4	P71 + BN71A4	N56C	138...141
8.0	2410	2.2	209.1	1432	C413_209.1		P71 + BN71A4	N56C	154...157
8.1	2379	1.7	206.4	1336	C363_206.4		P71 + BN71A4	N56C	146...149
8.8	2198	2.4	190.8	1432	C413_190.8		P71 + BN71A4	N56C	154...157
9.0	2144	1.2	186.0	1134	C323_186.0	S05 + M05C4	P71 + BN71A4	N56C	138...141
9.1	2114	1.9	183.5	1336	C363_183.5		P71 + BN71A4	N56C	146...149
9.3	2073	2.6	179.9	1432	C413_179.9		P71 + BN71A4	N56C	154...157
10.0	1930	1.4	167.4	1134	C323_167.4	S05 + M05C4	P71 + BN71A4	N56C	138...141
10.2	1891	2.8	164.1	1432	C413_164.1		P71 + BN71A4	N56C	154...157
10.3	1867	2.1	162.0	1336	C363_162.0		P71 + BN71A4	N56C	146...149
11.0	1748	1.0	151.7	1027	C223_151.7	S05 + M05C4	P71 + BN71A4	N56C	130...133
11.3	1710	1.6	148.4	1134	C323_148.4	S05 + M05C4	P71 + BN71A4	N56C	138...141
11.9	1611	2.5	139.8	1336	C363_139.8		P71 + BN71A4	N56C	146...149
12.2	1573	1.1	136.5	1027	C223_136.5	S05 + M05C4	P71 + BN71A4	N56C	130...133
12.3	1568	1.7	136.0	1134	C323_136.0	S05 + M05C4	P71 + BN71A4	N56C	138...141

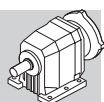
0.33 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
13.3	1450	2.7	125.8	1336	C363_125.8		P71 + BN71A4	N56C	146...149
13.6	1410	1.9	122.4	1134	C323_122.4	S05 + M05C4	P71 + BN71A4	N56C	138...141
13.7	1408	1.3	122.2	1027	C223_122.2	S05 + M05C4	P71 + BN71A4	N56C	130...133
14.9	1291	1.4	112.0	1027	C223_112.0	S05 + M05C4	P71 + BN71A4	N56C	130...133
15.1	1275	2.1	110.6	1134	C323_110.6	S05 + M05C4	P71 + BN71A4	N56C	138...141
16.2	1190	2.2	103.3	1134	C323_103.3	S05 + M05C4	P71 + BN71A4	N56C	138...141
16.7	1154	1.5	100.2	1027	C223_100.2	S05 + M05C4	P71 + BN71A4	N56C	130...133
17.7	1085	2.4	94.2	1134	C323_94.2	S05 + M05C4	P71 + BN71A4	N56C	138...141
18.9	1020	1.7	88.5	1027	C223_88.5	S05 + M05C4	P71 + BN71A4	N56C	130...133
20.2	952	1.9	82.6	1027	C223_82.6	S05 + M05C4	P71 + BN71A4	N56C	130...133
20.2	951	2.8	82.6	1134	C323_82.6	S05 + M05C4	P71 + BN71A4	N56C	138...141
22.3	862	2.1	74.8	1027	C223_74.8	S05 + M05C4	P71 + BN71A4	N56C	130...133
22.3	861	2.9	74.7	1134	C323_74.7	S05 + M05C4	P71 + BN71A4	N56C	138...141
25.0	787	2.3	66.8	1134	C322_66.8		P71 + BN71A4	N56C	138...141
25.2	779	1.0	66.2	410	C122_66.2	S05 + M05C4	P71 + BN71A4	N56C	122...125
25.6	753	2.4	65.3	1027	C223_65.3	S05 + M05C4	P71 + BN71A4	N56C	130...133
26.4	745	1.4	63.3	1027	C222_63.3	S05 + M05C4	P71 + BN71A4	N56C	130...133
27.8	691	2.3	60.0	1027	C223_60.0	S05 + M05C4	P71 + BN71A4	N56C	130...133
28.1	699	2.6	59.4	1134	C322_59.4		P71 + BN71A4	N56C	138...141
30	649	1.2	55.2	410	C122_55.2	S05 + M05C4	P71 + BN71A4	N56C	122...125
31	644	2.0	54.7	1027	C222_54.7	S05 + M05C4	P71 + BN71A4	N56C	130...133
34	573	2.2	48.6	1027	C222_48.6	S05 + M05C4	P71 + BN71A4	N56C	130...133
35	560	1.3	47.6	410	C122_47.6	S05 + M05C4	P71 + BN71A4	N56C	122...125
39	498	1.5	42.3	410	C122_42.3	S05 + M05C4	P71 + BN71A4	N56C	122...125
45	436	1.7	37.0	410	C122_37.0	S05 + M05C4	P71 + BN71A4	N56C	122...125
46	428	0.9	36.4	133	C052_36.4	S05 + M05C4			120, 121
51	386	1.0	32.8	139	C052_32.8	S05 + M05C4			120, 121
51	386	1.9	32.8	410	C122_32.8	S05 + M05C4	P71 + BN71A4	N56C	122...125
57	347	2.1	29.5	410	C122_29.5	S05 + M05C4	P71 + BN71A4	N56C	122...125
62	320	1.2	27.1	143	C052_27.1	S05 + M05C4			120, 121
66	298	2.4	25.4	410	C122_25.4	S05 + M05C4	P71 + BN71A4	N56C	122...125
72	274	2.5	23.2	410	C122_23.2	S05 + M05C4	P71 + BN71A4	N56C	122...125
80	247	1.6	21.0	147	C052_21.0	S05 + M05C4			120, 121
81	243	2.7	20.6	410	C122_20.6	S05 + M05C4	P71 + BN71A4	N56C	122...125
88	222	1.5	18.9	145	C052_18.9	S05 + M05C4			120, 121
91	216	2.9	18.4	410	C122_18.4	S05 + M05C4	P71 + BN71A4	N56C	122...125
107	184	1.8	15.6	143	C052_15.6	S05 + M05C4			120, 121
134	147	2.2	12.5	141	C052_12.5	S05 + M05C4			120, 121
149	132	2.5	11.2	137	C052_11.2	S05 + M05C4			120, 121
179	110	2.2	9.3	133	C052_9.3	S05 + M05C4			120, 121
225	87	2.8	7.4	127	C052_7.4	S05 + M05C4			120, 121

0.50 hp

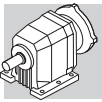
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.1	24662	1.4	1481.3	7286	C804_1481	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.3	22607	1.6	1357.8	7286	C804_1358	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.3	21214	1.7	1274.2	7286	C804_1274	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.5	19447	1.8	1168.0	7286	C804_1168	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.5	19282	1.1	1158.1	5210	C704_1158	S1 + M1SD4	P71 + BN71B4	N56C	178...181
1.6	17799	1.1	1069.1	5210	C704_1069	S1 + M1SD4	P71 + BN71B4	N56C	178...181
1.6	17176	2.1	1031.7	7286	C804_1032	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.7	16640	1.2	999.5	5210	C704_999.5	S1 + M1SD4	P71 + BN71B4	N56C	178...181
1.8	15745	2.2	945.7	7286	C804_945.7	S1 + M1SD4	P71 + BN71B4	N56C	184...187
1.8	15360	1.3	922.6	5210	C704_922.6	S1 + M1SD4	P71 + BN71B4	N56C	178...181
2.0	14228	2.5	854.6	7286	C804_854.6	S1 + M1SD4	P71 + BN71B4	N56C	184...187

0.50 hp



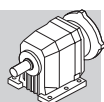
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
2.1	13274	1.5	797.3	5210	C704_797.3	S1 + M1SD4	P71 + BN71B4	N56C	178...181
2.1	13255	1.1	796.1	3288	C614_796.1	S1 + M1SD4	P71 + BN71B4	N56C	170...173
2.2	13042	2.7	783.4	7286	C804_783.4	S1 + M1SD4	P71 + BN71B4	N56C	184...187
2.3	12253	1.7	736.0	5210	C704_736.0	S1 + M1SD4	P71 + BN71B4	N56C	178...181
2.3	12092	1.2	726.3	3288	C614_726.3	S1 + M1SD4	P71 + BN71B4	N56C	170...173
2.3	12066	2.9	724.7	7286	C804_724.7	S1 + M1SD4	P71 + BN71B4	N56C	184...187
2.5	11135	1.3	668.8	3288	C614_668.8	S1 + M1SD4	P71 + BN71B4	N56C	170...173
2.6	10944	1.9	657.3	5210	C704_657.3	S1 + M1SD4	P71 + BN71B4	N56C	178...181
2.8	10158	1.4	610.1	3288	C614_610.1	S1 + M1SD4	P71 + BN71B4	N56C	170...173
2.8	10102	2.0	606.8	5210	C704_606.8	S1 + M1SD4	P71 + BN71B4	N56C	178...181
3.0	9510	1.5	571.2	3288	C614_571.2	S1 + M1SD4	P71 + BN71B4	N56C	170...173
3.1	9235	2.2	554.7	5210	C704_554.7	S1 + M1SD4	P71 + BN71B4	N56C	178...181
3.1	9152	1.0	549.7	2050	C514_549.7	S1 + M1SD4	P71 + BN71B4	N56C	162...165
3.3	8676	1.6	521.1	3288	C614_521.1	S1 + M1SD4	P71 + BN71B4	N56C	170...173
3.3	8525	2.4	512.0	5210	C704_512.0	S1 + M1SD4	P71 + BN71B4	N56C	178...181
3.3	8458	1.0	508.0	2050	C514_508.0	S1 + M1SD4	P71 + BN71B4	N56C	162...165
3.7	7723	1.1	463.9	2050	C514_463.9	S1 + M1SD4	P71 + BN71B4	N56C	162...165
3.7	7692	1.8	462.0	3288	C614_462.0	S1 + M1SD4	P71 + BN71B4	N56C	170...173
3.8	7384	2.8	443.5	5210	C704_443.5	S1 + M1SD4	P71 + BN71B4	N56C	178...181
4.0	7017	2.0	421.5	3288	C614_421.5	S1 + M1SD4	P71 + BN71B4	N56C	170...173
4.1	6922	1.3	415.7	2050	C514_415.7	S1 + M1SD4	P71 + BN71B4	N56C	162...165
4.2	6816	3.0	409.4	5210	C704_409.4	S1 + M1SD4	P71 + BN71B4	N56C	178...181
4.5	6320	1.4	379.6	2050	C514_379.6	S1 + M1SD4	P71 + BN71B4	N56C	162...165
4.6	6162	2.3	370.1	3288	C614_370.1	S1 + M1SD4	P71 + BN71B4	N56C	170...173
5.0	5622	2.5	337.7	3288	C614_337.7	S1 + M1SD4	P71 + BN71B4	N56C	170...173
5.1	5552	1.0	333.4	1432	C414_333.4	S1 + M1SD4	P71 + BN71B4	N56C	154...157
5.2	5429	1.6	326.1	2050	C514_326.1	S1 + M1SD4	P71 + BN71B4	N56C	162...165
5.6	5065	1.0	304.2	1432	C414_304.2	S1 + M1SD4	P71 + BN71B4	N56C	154...157
5.6	5024	2.8	301.7	3288	C614_301.7	S1 + M1SD4	P71 + BN71B4	N56C	170...173
5.7	4957	1.8	297.8	2050	C514_297.8	S1 + M1SD4	P71 + BN71B4	N56C	162...165
6.4	4392	2.0	263.8	2050	C514_263.8	S1 + M1SD4	P71 + BN71B4	N56C	162...165
6.5	4379	1.2	263.0	1432	C414_263.0	S1 + M1SD4	P71 + BN71B4	N56C	154...157
6.7	4246	0.9	255.0	1253	C364_255.0	S1 + M1SD4	P71 + BN71B4	N56C	146...149
7.1	4010	2.2	240.9	2050	C514_240.9	S1 + M1SD4	P71 + BN71B4	N56C	162...165
7.1	3995	1.3	239.9	1432	C414_239.9	S1 + M1SD4	P71 + BN71B4	N56C	154...157
7.4	3844	1.0	230.9	1295	C364_230.9	S1 + M1SD4	P71 + BN71B4	N56C	146...149
7.8	3728	2.4	216.7	2050	C513_216.7	S1 + M1SD4	P71 + BN71B4	N56C	162...165
8.1	3598	1.5	209.1	1432	C413_209.1	S1 + M1SD4	P71 + BN71B4	N56C	154...157
8.2	3551	1.1	206.4	1336	C363_206.4	S1 + M1SD4	P71 + BN71B4	N56C	146...149
8.6	3404	2.6	197.9	2050	C513_197.9	S1 + M1SD4	P71 + BN71B4	N56C	162...165
8.9	3282	1.6	190.8	1432	C413_190.8	S1 + M1SD4	P71 + BN71B4	N56C	154...157
9.3	3156	1.3	183.5	1336	C363_183.5	S1 + M1SD4	P71 + BN71B4	N56C	146...149
9.5	3095	1.7	179.9	1432	C413_179.9	S1 + M1SD4	P71 + BN71B4	N56C	154...157
9.7	3024	2.9	175.8	2050	C513_175.8	S1 + M1SD4	P71 + BN71B4	N56C	162...165
10.2	2881	0.9	167.4	1093	C323_167.4	S1 + M1SD4	P71 + BN71B4	N56C	138...141
10.4	2823	1.9	164.1	1432	C413_164.1	S1 + M1SD4	P71 + BN71B4	N56C	154...157
10.5	2787	1.4	162.0	1336	C363_162.0	S1 + M1SD4	P71 + BN71B4	N56C	146...149
11.5	2553	1.0	148.4	1134	C323_148.4	S1 + M1SD4	P71 + BN71B4	N56C	138...141
11.7	2506	2.1	145.6	1432	C413_145.6	S1 + M1SD4	P71 + BN71B4	N56C	154...157
12.2	2405	1.7	139.8	1336	C363_139.8	S1 + M1SD4	P71 + BN71B4	N56C	146...149
12.5	2340	1.1	136.0	1134	C323_136.0	S1 + M1SD4	P71 + BN71B4	N56C	138...141
12.8	2286	2.3	132.9	1432	C413_132.9	S1 + M1SD4	P71 + BN71B4	N56C	154...157
13.5	2164	1.8	125.8	1336	C363_125.8	S1 + M1SD4	P71 + BN71B4	N56C	146...149
13.9	2105	1.3	122.4	1134	C323_122.4	S1 + M1SD4	P71 + BN71B4	N56C	138...141
14.1	2076	2.6	120.6	1432	C413_120.6	S1 + M1SD4	P71 + BN71B4	N56C	154...157
15.2	1927	0.9	112.0	914	C223_112.0	S1 + M1SD4	P71 + BN71B4	N56C	130...133
15.2	1918	2.1	111.5	1336	C363_111.5	S1 + M1SD4	P71 + BN71B4	N56C	146...149
15.4	1903	1.4	110.6	1134	C323_110.6	S1 + M1SD4	P71 + BN71B4	N56C	138...141
15.4	1893	2.8	110.1	1432	C413_110.1	S1 + M1SD4	P71 + BN71B4	N56C	154...157
16.5	1776	1.5	103.3	1134	C323_103.3	S1 + M1SD4	P71 + BN71B4	N56C	138...141

0.50 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
16.6	1758	2.3	102.2	1336	C363_102.2	S1 + M1SD4	P71 + BN71B4	N56C	146...149
17.0	1723	1.0	100.2	955	C223_100.2	S1 + M1SD4	P71 + BN71B4	N56C	130...133
18.1	1620	1.6	94.2	1134	C323_94.2	S1 + M1SD4	P71 + BN71B4	N56C	138...141
18.5	1582	2.5	91.9	1336	C363_91.9	S1 + M1SD4	P71 + BN71B4	N56C	146...149
19.2	1523	1.2	88.5	997	C223_88.5	S1 + M1SD4	P71 + BN71B4	N56C	130...133
20.5	1430	2.8	83.1	1336	C363_83.1	S1 + M1SD4	P71 + BN71B4	N56C	146...149
20.6	1421	1.2	82.6	1027	C223_82.6	S1 + M1SD4	P71 + BN71B4	N56C	130...133
20.6	1420	1.9	82.6	1134	C323_82.6	S1 + M1SD4	P71 + BN71B4	N56C	138...141
21.9	1335	3.0	77.6	1336	C363_77.6	S1 + M1SD4	P71 + BN71B4	N56C	146...149
22.7	1287	1.4	74.8	1027	C223_74.8	S1 + M1SD4	P71 + BN71B4	N56C	130...133
22.7	1286	1.9	74.7	1134	C323_74.7	S1 + M1SD4	P71 + BN71B4	N56C	138...141
25.4	1174	1.5	66.8	1134	C322_66.8		P71 + BN71B4	N56C	138...141
26.0	1124	1.6	65.3	1027	C223_65.3	S1 + M1SD4	P71 + BN71B4	N56C	130...133
26.9	1112	1.0	63.3	997	C222_63.3	S1 + M1SD4	P71 + BN71B4	N56C	130...133
28.3	1032	1.5	60.0	1027	C223_60.0	S1 + M1SD4	P71 + BN71B4	N56C	130...133
28.6	1044	1.7	59.4	1134	C322_59.4		P71 + BN71B4	N56C	138...141
31	962	1.3	54.7	1027	C222_54.7		P71 + BN71B4	N56C	130...133
32	922	2.9	52.4	1134	C322_52.4	S1 + M1SD4	P71 + BN71B4	N56C	138...141
35	855	1.5	48.6	997			P71 + BN71B4	N56C	130...133
39	760	2.0	43.3	931	C222_43.3	S1 + M1SD4	P71 + BN71B4	N56C	130...133
40	744	1.0	42.3	410	C122_42.3		P71 + BN71B4	N56C	122...125
46	650	1.1	37.0	410	C122_37.0	S1 + M1SD4	P71 + BN71B4	N56C	122...125
46	646	2.5	36.8	896	C222_36.8	S1 + M1SD4	P71 + BN71B4	N56C	130...133
51	582	2.8	33.1	871	C222_33.1	S1 + M1SD4	P71 + BN71B4	N56C	130...133
52	576	1.3	32.8	410	C122_32.8	S1 + M1SD4	P71 + BN71B4	N56C	122...125
58	518	1.4	29.5	410	C122_29.5	S1 + M1SD4	P71 + BN71B4	N56C	122...125
67	446	1.6	25.4	410	C122_25.4	S1 + M1SD4	P71 + BN71B4	N56C	122...125
73	408	1.7	23.2	410	C122_23.2	S1 + M1SD4	P71 + BN71B4	N56C	122...125
81	368	1.1	21.0	115	C052_21.0	S1 + M1SD4			120, 121
82	363	1.8	20.6	410	C122_20.6	S1 + M1SD4	P71 + BN71B4	N56C	122...125
90	332	1.0	18.9	115	C052_18.9	S1 + M1SD4			120, 121
92	323	2.0	18.4	410	C122_18.4	S1 + M1SD4	P71 + BN71B4	N56C	122...125
99	302	2.0	17.2	410	C122_17.2	S1 + M1SD4	P71 + BN71B4	N56C	122...125
109	275	1.2	15.6	119	C052_15.6	S1 + M1SD4			120, 121
110	271	2.2	15.4	410	C122_15.4	S1 + M1SD4	P71 + BN71B4	N56C	122...125
127	236	2.4	13.4	410	C122_13.4	S1 + M1SD4	P71 + BN71B4	N56C	122...125
136	219	1.5	12.5	123	C052_12.5	S1 + M1SD4			120, 121
143	209	2.6	11.9	410	C122_11.9	S1 + M1SD4	P71 + BN71B4	N56C	122...125
151	197	1.6	11.2	121	C052_11.2	S1 + M1SD4			120, 121
169	177	2.9	10.1	395	C122_10.1	S1 + M1SD4	P71 + BN71B4	N56C	122...125
183	164	1.5	9.3	119	C052_9.3	S1 + M1SD4			120, 121
229	130	1.9	7.4	117	C052_7.4	S1 + M1SD4			120, 121
254	117	2.1	6.7	115	C052_6.7	S1 + M1SD4			120, 121
307	97	2.5	5.5	111	C052_5.5	S1 + M1SD4			120, 121



0.75 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.2	36816	1.0	1481.3	7286	C804_1481	S1 + M1LA4	P80 + BN80A4	N56C	184...187
1.3	33748	1.0	1357.8	7286	C804_1358	S1 + M1LA4	P80 + BN80A4	N56C	184...187
1.3	31669	1.1	1274.2	7286	C804_1274	S1 + M1LA4	P80 + BN80A4	N56C	184...187
1.4	30830	2.1	1240.4	12504	C904_1240	S1 + M1LA4	P80 + BN80A4	N56C	190...193
1.5	29030	1.2	1168.0	7286	C804_1168	S1 + M1LA4	P80 + BN80A4	N56C	184...187
1.5	28260	2.3	1137.1	12504	C904_1137	S1 + M1LA4	P80 + BN80A4	N56C	190...193
1.7	25641	1.4	1031.7	7286	C804_1032	S1 + M1LA4	P80 + BN80A4	N56C	184...187

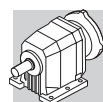
0.75 hp



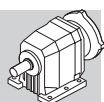
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
1.7	25007	2.5	1006.1	12504	C904_1006	S1 + M1LA4	P80 + BN80A4	N56C	190...193
1.8	23505	1.5	945.7	7286	C804_945.7	S1 + M1LA4	P80 + BN80A4	N56C	184...187
1.9	22923	2.8	922.3	12504	C904_922.3	S1 + M1LA4	P80 + BN80A4	N56C	190...193
2.0	21240	1.7	854.6	7286	C804_854.6	S1 + M1LA4	P80 + BN80A4	N56C	184...187
2.1	19816	1.0	797.3	5210	C704_797.3	S1 + M1LA4	P80 + BN80A4	N56C	178...181
2.2	19470	1.8	783.4	7286	C804_783.4	S1 + M1LA4	P80 + BN80A4	N56C	184...187
2.3	18292	1.1	736.0	5210	C704_736.0	S1 + M1LA4	P80 + BN80A4	N56C	178...181
2.4	18012	2.0	724.7	7286	C804_724.7	S1 + M1LA4	P80 + BN80A4	N56C	184...187
2.6	16511	2.1	664.3	7286	C804_664.3	S1 + M1LA4	P80 + BN80A4	N56C	184...187
2.6	16338	1.2	657.3	5210	C704_657.3	S1 + M1LA4	P80 + BN80A4	N56C	178...181
2.8	15164	0.9	610.1	3288	C614_610.1	S1 + M1LA4	P80 + BN80A4	N56C	170...173
2.8	15081	1.3	606.8	5210	C704_606.8	S1 + M1LA4	P80 + BN80A4	N56C	178...181
3.0	14350	2.5	577.4	7286	C804_577.4	S1 + M1LA4	P80 + BN80A4	N56C	184...187
3.0	14197	1.0	571.2	3288	C614_571.2	S1 + M1LA4	P80 + BN80A4	N56C	170...173
3.1	13787	1.5	554.7	5210	C704_554.7	S1 + M1LA4	P80 + BN80A4	N56C	178...181
3.2	13154	2.7	529.3	7286	C804_529.3	S1 + M1LA4	P80 + BN80A4	N56C	184...187
3.3	12952	1.1	521.1	3288	C614_521.1	S1 + M1LA4	P80 + BN80A4	N56C	170...173
3.3	12726	1.6	512.0	5210	C704_512.0	S1 + M1LA4	P80 + BN80A4	N56C	178...181
3.7	11483	1.2	462.0	3288	C614_462.0	S1 + M1LA4	P80 + BN80A4	N56C	170...173
3.9	11023	1.8	443.5	5210	C704_443.5	S1 + M1LA4	P80 + BN80A4	N56C	178...181
4.1	10476	1.4	421.5	3288	C614_421.5	S1 + M1LA4	P80 + BN80A4	N56C	170...173
4.2	10175	2.0	409.4	5210	C704_409.4	S1 + M1LA4	P80 + BN80A4	N56C	178...181
4.5	9435	0.9	379.6	2050	C514_379.6	S1 + M1LA4	P80 + BN80A4	N56C	162...165
4.6	9199	1.5	370.1	3288	C614_370.1	S1 + M1LA4	P80 + BN80A4	N56C	170...173
5.0	8558	2.4	344.3	5210	C704_344.3	S1 + M1LA4	P80 + BN80A4	N56C	178...181
5.1	8392	1.7	337.7	3288	C614_337.7	S1 + M1LA4	P80 + BN80A4	N56C	170...173
5.2	8105	1.1	326.1	2050	C514_326.1	S1 + M1LA4	P80 + BN80A4	N56C	162...165
5.4	7900	2.6	317.9	5210	C704_317.9	S1 + M1LA4	P80 + BN80A4	N56C	178...181
5.7	7500	1.9	301.7	3288	C614_301.7	S1 + M1LA4	P80 + BN80A4	N56C	170...173
5.7	7401	1.2	297.8	2050	C514_297.8	S1 + M1LA4	P80 + BN80A4	N56C	162...165
6.2	6842	2.1	275.3	3288	C614_275.3	S1 + M1LA4	P80 + BN80A4	N56C	170...173
6.5	6556	1.4	263.8	2050	C514_263.8	S1 + M1LA4	P80 + BN80A4	N56C	162...165
7.1	5986	1.5	240.9	2050	C514_240.9	S1 + M1LA4	P80 + BN80A4	N56C	162...165
7.2	5923	2.4	238.3	3288	C614_238.3	S1 + M1LA4	P80 + BN80A4	N56C	170...173
7.9	5403	2.6	217.4	3288	C614_217.4	S1 + M1LA4	P80 + BN80A4	N56C	170...173
7.9	5565	1.6	216.7	2050	C513_216.7	S1 + M1LA4	P80 + BN80A4	N56C	162...165
8.2	5371	1.0	209.1	1432	C413_209.1	S1 + M1LA4	P80 + BN80A4	N56C	154...157
8.6	5082	1.7	197.9	2050	C513_197.9	S1 + M1LA4	P80 + BN80A4	N56C	162...165
8.7	4866	2.9	195.8	3288	C613_195.8	S1 + M1LA4	P80 + BN80A4	N56C	170...173
9.0	4899	1.1	190.8	1432	C413_190.8	S1 + M1LA4	P80 + BN80A4	N56C	154...157
9.5	4620	1.1	179.9	1432	C413_179.9	S1 + M1LA4	P80 + BN80A4	N56C	154...157
9.7	4514	2.0	175.8	2050	C513_175.8	S1 + M1LA4	P80 + BN80A4	N56C	162...165
10.4	4215	1.3	164.1	1432	C413_164.1	S1 + M1LA4	P80 + BN80A4	N56C	154...157
10.6	4160	1.0	162.0	1336	C363_162.0	S1 + M1LA4	P80 + BN80A4	N56C	146...149
10.7	4122	2.1	160.5	2050	C513_160.5	S1 + M1LA4	P80 + BN80A4	N56C	162...165
11.6	3787	2.3	147.4	2050	C513_147.4	S1 + M1LA4	P80 + BN80A4	N56C	162...165
11.7	3740	1.4	145.6	1432	C413_145.6	S1 + M1LA4	P80 + BN80A4	N56C	154...157
12.2	3590	1.1	139.8	1336	C363_139.8	S1 + M1LA4	P80 + BN80A4	N56C	146...149
12.7	3458	2.6	134.6	2050	C513_134.6	S1 + M1LA4	P80 + BN80A4	N56C	162...165
12.9	3412	1.6	132.9	1432	C413_132.9	S1 + M1LA4	P80 + BN80A4	N56C	154...157
13.6	3231	1.2	125.8	1336	C363_125.8	S1 + M1LA4	P80 + BN80A4	N56C	146...149
13.7	3195	2.8	124.4	2050	C513_124.4	S1 + M1LA4	P80 + BN80A4	N56C	162...165
14.2	3098	1.7	120.6	1432	C413_120.6	S1 + M1LA4	P80 + BN80A4	N56C	154...157
15.3	2864	1.4	111.5	1336	C363_111.5	S1 + M1LA4	P80 + BN80A4	N56C	146...149
15.5	2841	0.9	110.6	1134	C323_110.6	S1 + M1LA4	P80 + BN80A4	N56C	138...141
15.5	2827	1.9	110.1	1432	C413_110.1	S1 + M1LA4	P80 + BN80A4	N56C	154...157
16.6	2652	1.0	103.3	1134	C323_103.3	S1 + M1LA4	P80 + BN80A4	N56C	138...141

0.75 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
16.7	2628	2.0	102.3	1432	C413_102.3	S1 + M1LA4	P80 + BN80A4	N56C	154...157
16.7	2625	1.5	102.2	1336	C363_102.2	S1 + M1LA4	P80 + BN80A4	N56C	146...149
18.2	2419	1.1	94.2	1134	C323_94.2	S1 + M1LA4	P80 + BN80A4	N56C	138...141
18.3	2397	2.2	93.3	1432	C413_93.3	S1 + M1LA4	P80 + BN80A4	N56C	154...157
18.6	2361	1.7	91.9	1336	C363_91.9	S1 + M1LA4	P80 + BN80A4	N56C	146...149
20.6	2135	1.9	83.1	1336	C363_83.1	S1 + M1LA4	P80 + BN80A4	N56C	146...149
20.7	2120	1.3	82.6	1134	C323_82.6	S1 + M1LA4	P80 + BN80A4	N56C	138...141
21.0	2093	2.5	81.5	1432	C413_81.5	S1 + M1LA4	P80 + BN80A4	N56C	154...157
22.0	1992	2.0	77.6	1336	C363_77.6	S1 + M1LA4	P80 + BN80A4	N56C	146...149
22.9	1921	0.9	74.8	896	C223_74.8	S1 + M1LA4	P80 + BN80A4	N56C	130...133
22.9	1920	1.3	74.7	1134	C323_74.7	S1 + M1LA4	P80 + BN80A4	N56C	138...141
23.0	1910	2.7	74.4	1432	C413_74.4	S1 + M1LA4	P80 + BN80A4	N56C	154...157
24.2	1817	2.2	70.8	1336	C363_70.8	S1 + M1LA4	P80 + BN80A4	N56C	146...149
25.6	1753	1.0	66.8	1134	C322_66.8	S1 + M1LA4	P80 + BN80A4	N56C	138...141
26.2	1678	1.1	65.3	888	C223_65.3	S1 + M1LA4	P80 + BN80A4	N56C	130...133
27.6	1593	2.5	62.0	1336	C363_62.0	S1 + M1LA4	P80 + BN80A4	N56C	146...149
28.5	1541	1.0	60.0	879	C223_60.0	S1 + M1LA4	P80 + BN80A4	N56C	130...133
28.8	1558	1.2	59.4	1134	C322_59.4	S1 + M1LA4	P80 + BN80A4	N56C	138...141
30	1442	2.8	56.2	1336	C363_56.2	S1 + M1LA4	P80 + BN80A4	N56C	146...149
33	1376	1.9	52.4	1134	C322_52.4	S1 + M1LA4	P80 + BN80A4	N56C	138...141
35	1276	1.0	48.6	822			P80 + BN80A4	N56C	130...133
38	1187	2.2	45.3	1134	C322_45.3	S1 + M1LA4	P80 + BN80A4	N56C	138...141
40	1135	1.4	43.3	861	C222_43.3	S1 + M1LA4	P80 + BN80A4	N56C	130...133
42	1068	2.4	40.7	1134	C322_40.7	S1 + M1LA4	P80 + BN80A4	N56C	138...141
47	965	1.7	36.8	836	C222_36.8	S1 + M1LA4	P80 + BN80A4	N56C	130...133
47	947	2.6	36.1	1134	C322_36.1	S1 + M1LA4	P80 + BN80A4	N56C	138...141
52	868	1.9	33.1	816	C222_33.1	S1 + M1LA4	P80 + BN80A4	N56C	130...133
52	868	2.8	33.1	1134	C322_33.1	S1 + M1LA4	P80 + BN80A4	N56C	138...141
58	777	2.1	29.6	799	C222_29.6	S1 + M1LA4	P80 + BN80A4	N56C	130...133
58	774	0.9	29.5	410	C122_29.5	S1 + M1LA4	P80 + BN80A4	N56C	122...125
63	712	2.3	27.2	793	C222_27.2	S1 + M1LA4	P80 + BN80A4	N56C	130...133
67	665	1.1	25.4	410	C122_25.4	S1 + M1LA4	P80 + BN80A4	N56C	122...125
70	637	2.6	24.3	764	C222_24.3	S1 + M1LA4	P80 + BN80A4	N56C	130...133
74	610	1.1	23.2	410	C122_23.2	S1 + M1LA4	P80 + BN80A4	N56C	122...125
80	563	2.8	21.5	760	C222_21.5	S1 + M1LA4	P80 + BN80A4	N56C	130...133
83	541	1.2	20.6	410	C122_20.6	S1 + M1LA4	P80 + BN80A4	N56C	122...125
85	525	2.9	20.0	731	C222_20.0	S1 + M1LA4	P80 + BN80A4	N56C	130...133
93	482	1.3	18.4	410	C122_18.4	S1 + M1LA4	P80 + BN80A4	N56C	122...125
100	450	1.4	17.2	410	C122_17.2	S1 + M1LA4	P80 + BN80A4	N56C	122...125
111	405	1.5	15.4	410	C122_15.4	S1 + M1LA4	P80 + BN80A4	N56C	122...125
128	352	1.6	13.4	408	C122_13.4	S1 + M1LA4	P80 + BN80A4	N56C	122...125
137	327	1.0	12.5	92	C052_12.5	S1 + M1LA4	P80 + BN80A4	N56C	120, 121
144	312	1.7	11.9	393	C122_11.9	S1 + M1LA4	P80 + BN80A4	N56C	122...125
152	295	1.1	11.2	98	C052_11.2	S1 + M1LA4	P80 + BN80A4	N56C	120, 121
170	264	1.9	10.1	379	C122_10.1	S1 + M1LA4	P80 + BN80A4	N56C	122...125
184	244	1.0	9.3	92	C052_9.3	S1 + M1LA4	P80 + BN80A4	N56C	120, 121
194	232	2.1	8.8	365	C122_8.8	S1 + M1LA4	P80 + BN80A4	N56C	122...125
224	200	2.3	7.6	352	C122_7.6	S1 + M1LA4	P80 + BN80A4	N56C	122...125
231	194	1.3	7.4	94	C052_7.4	S1 + M1LA4	P80 + BN80A4	N56C	120, 121
256	175	1.4	6.7	92	C052_6.7	S1 + M1LA4	P80 + BN80A4	N56C	120, 121
274	163	2.6	6.2	326	C122_6.2	S1 + M1LA4	P80 + BN80A4	N56C	122...125
305	147	2.8	5.6	315	C122_5.6	S1 + M1LA4	P80 + BN80A4	N56C	122...125
309	145	1.7	5.5	88	C052_5.5	S1 + M1LA4	P80 + BN80A4	N56C	120, 121

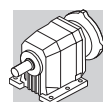


1 hp

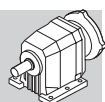


n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
1.4	40513	1.6	1240.4	12504	C904_1240	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
1.5	38149	0.9	1168.0	7286	C804_1168	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
1.5	37137	1.7	1137.1	12504	C904_1137	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
1.7	33696	1.1	1031.7	7286	C804_1032	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
1.7	32861	1.9	1006.1	12504	C904_1006	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
1.8	30888	1.1	945.7	7286	C804_945.7	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
1.9	30123	2.1	922.3	12504	C904_922.3	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
2.0	27911	1.3	854.6	7286	C804_854.6	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
2.1	27564	2.3	844.0	12504	C904_844.0	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
2.2	25585	1.4	783.4	7286	C804_783.4	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
2.3	25267	2.5	773.6	12504	C904_773.6	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
2.4	23670	1.5	724.7	7286	C804_724.7	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
2.5	23260	2.7	712.2	12504	C904_712.2	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
2.6	21697	1.6	664.3	7286	C804_664.3	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
2.7	21469	0.9	657.3	5210	C704_657.3	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
2.7	21322	3.0	652.8	12504	C904_652.8	S2 + ME2SB4	P80 + BE80B4	N56C	190...193
2.9	19818	1.0	606.8	5210	C704_606.8	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
3.0	18858	1.9	577.4	7286	C804_577.4	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
3.1	18117	1.1	554.7	5210	C704_554.7	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
3.3	17286	2.0	529.3	7286	C804_529.3	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
3.4	16723	1.2	512.0	5210	C704_512.0	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
3.8	15090	0.9	462.0	3288	C614_462.0	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
3.8	14875	2.4	455.4	7286	C804_455.4	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
3.9	14486	1.4	443.5	5210	C704_443.5	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
4.1	13766	1.0	421.5	3288	C614_421.5	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
4.2	13635	2.6	417.5	7286	C804_417.5	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
4.3	13371	1.5	409.4	5210	C704_409.4	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
4.7	12089	1.2	370.1	3288	C614_370.1	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
4.8	11910	3.0	364.7	7286	C804_364.7	S2 + ME2SB4	P80 + BE80B4	N56C	184...187
5.1	11247	1.8	344.3	5210	C704_344.3	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
5.2	11028	1.3	337.7	3288	C614_337.7	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
5.5	10382	2.0	317.9	5210	C704_317.9	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
5.8	9855	1.4	301.7	3288	C614_301.7	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
5.9	9725	0.9	297.8	2050	C514_297.8	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
6.3	8991	1.6	275.3	3288	C614_275.3	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
6.4	8891	2.3	272.2	5210	C704_272.2	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
6.6	8615	1.0	263.8	2050	C514_263.8	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
6.9	8207	2.5	251.3	5210	C704_251.3	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
7.2	7866	1.1	240.9	2050	C514_240.9	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
7.3	8077	2.5	239.3	5210	C703_239.3	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
7.3	7783	1.8	238.3	3288	C614_238.3	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
7.9	7456	2.7	220.9	5210	C703_220.9	S2 + ME2SB4	P80 + BE80B4	N56C	178...181
8.0	7101	2.0	217.4	3288	C614_217.4	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
8.1	7314	1.2	216.7	2050	C513_216.7	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
8.8	6678	1.3	197.9	2050	C513_197.9	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
8.9	6394	2.2	195.8	3288	C613_195.8	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
9.8	5833	2.4	178.6	3288	C613_178.6	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
9.9	5932	1.5	175.8	2050	C513_175.8	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
10.6	5371	2.6	164.5	3288	C613_164.5	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
10.6	5538	1.0	164.1	1432	C413_164.1	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
10.9	5417	1.6	160.5	2050	C513_160.5	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
11.6	4900	2.9	150.0	3288	C613_150.0	S2 + ME2SB4	P80 + BE80B4	N56C	170...173
11.8	4976	1.8	147.4	2050	C513_147.4	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
12.0	4915	1.1	145.6	1432	C413_145.6	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
13.0	4544	1.9	134.6	2050	C513_134.6	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
13.1	4484	1.2	132.9	1432	C413_132.9	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
13.9	4246	0.9	125.8	1336	C363_125.8	S2 + ME2SB4	P80 + BE80B4	N56C	146...149

1 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
14.0	4199	2.1	124.4	2050	C513_124.4	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
14.5	4072	1.3	120.6	1432	C413_120.6	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
15.4	3834	2.3	113.6	2050	C513_113.6	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
15.6	3763	1.1	111.5	1336	C363_111.5	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
15.9	3714	1.4	110.1	1432	C413_110.1	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
17.1	3453	1.5	102.3	1432	C413_102.3	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
17.1	3450	1.2	102.2	1336	C363_102.2	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
17.1	3436	2.6	101.8	2050	C513_101.8	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
18.7	3150	1.7	93.3	1432	C413_93.3	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
18.8	3138	2.8	93.0	2050	C513_93.0	S2 + ME2SB4	P80 + BE80B4	N56C	162...165
19.0	3103	1.3	91.9	1336	C363_91.9	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
21.0	2805	1.4	83.1	1336	C363_83.1	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
21.1	2786	1.0	82.6	1134	C323_82.6	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
21.4	2751	1.9	81.5	1432	C413_81.5	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
22.5	2618	1.5	77.6	1336	C363_77.6	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
23.3	2523	1.0	74.7	1134	C323_74.7	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
23.5	2510	2.1	74.4	1432	C413_74.4	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
24.7	2388	1.7	70.8	1336	C363_70.8	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
27.1	2170	2.3	64.3	1432	C413_64.3	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
28.1	2093	1.9	62.0	1336	C363_62.0	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
29.8	1980	2.5	58.7	1432	C413_58.7	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
31	1895	2.1	56.2	1336	C363_56.2	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
33	1808	1.5	52.4	1134	C322_52.4	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
34	1737	2.8	51.5	1432	C413_51.5	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
36	1625	2.5	48.2	1336	C363_48.2	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
39	1560	1.7	45.3	1134	C322_45.3	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
39	1543	2.9	44.8	1432	C412_44.8	S2 + ME2SB4	P80 + BE80B4	N56C	154...157
40	1467	2.7	43.5	1336	C363_43.5	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
40	1492	1.0	43.3	783	C222_43.3	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
43	1404	1.8	40.7	1134	C322_40.7	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
46	1285	3.0	38.1	1336	C363_38.1	S2 + ME2SB4	P80 + BE80B4	N56C	146...149
47	1268	1.3	36.8	771	C222_36.8	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
48	1245	2.0	36.1	1134	C322_36.1	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
53	1141	1.4	33.1	756	C222_33.1	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
53	1141	2.1	33.1	1134	C322_33.1	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
59	1026	2.4	29.8	1134	C322_29.8	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
59	1021	1.6	29.6	746	C222_29.6	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
64	936	1.7	27.2	740	C222_27.2	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
65	928	2.6	26.9	1134	C322_26.9	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
69	866	2.8	25.1	1126	C322_25.1	S2 + ME2SB4	P80 + BE80B4	N56C	138...141
72	837	1.9	24.3	721	C222_24.3	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
81	740	2.1	21.5	715	C222_21.5	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
85	711	0.9	20.6	371	C122_20.6	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
87	690	2.2	20.0	695	C222_20.0	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
95	634	1.0	18.4	358	C122_18.4	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
96	625	2.4	18.1	688	C222_18.1	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
102	592	1.0	17.2	358	C122_17.2	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
110	546	2.6	15.8	660	C222_15.8	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
113	532	1.1	15.4	393	C122_15.4	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
120	501	2.7	14.5	658	C222_14.5	S2 + ME2SB4	P80 + BE80B4	N56C	130...133
130	462	1.2	13.4	383	C122_13.4	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
147	409	1.3	11.9	365	C122_11.9	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
174	347	1.5	10.1	360	C122_10.1	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
198	305	1.6	8.8	348	C122_8.8	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
229	263	1.7	7.6	338	C122_7.6	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
280	215	2.0	6.2	313	C122_6.2	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
312	193	2.1	5.6	301	C122_5.6	S2 + ME2SB4	P80 + BE80B4	N56C	122...125

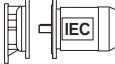


1 hp



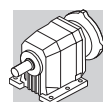
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
358	168	2.3	4.9	295	C122_4.9	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
405	149	2.5	4.3	281	C122_4.3	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
478	126	2.7	3.7	272	C122_3.7	S2 + ME2SB4	P80 + BE80B4	N56C	122...125
544	111	2.9	3.2	262	C122_3.2	S2 + ME2SB4	P80 + BE80B4	N56C	122...125

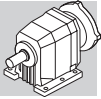
1.5 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
1.4	59288	1.1	1240.4	12504	C904_1240	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
1.5	54347	1.2	1137.1	12504	C904_1137	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
1.6	51673	2.1	1081.1	17714	C1004_1081	S3 + ME3SA4	P90 + BE90S4	N140TC	196...199
1.7	48090	1.3	1006.1	12504	C904_1006	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
1.7	47982	2.2	1003.9	17714	C1004_1004	S3 + ME3SA4	P90 + BE90S4	N140TC	196...199
1.9	44082	1.4	922.3	12504	C904_922.3	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
1.9	43409	2.4	908.2	17714	C1004_908.2	S3 + ME3SA4	P90 + BE90S4	N140TC	196...199
2.1	40338	1.6	844.0	12504	C904_844.0	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
2.1	40308	2.6	843.3	17714	C1004_843.3	S3 + ME3SA4	P90 + BE90S4	N140TC	196...199
2.2	37442	0.9	783.4	7286	C804_783.4	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
2.2	37076	2.9	775.7	17714	C1004_775.7	S3 + ME3SA4	P90 + BE90S4	N140TC	196...199
2.2	36976	1.7	773.6	12504	C904_773.6	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
2.4	34638	1.0	724.7	7286	C804_724.7	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
2.4	34039	1.9	712.2	12504	C904_712.2	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
2.6	31752	1.1	664.3	7286	C804_664.3	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
2.7	31203	2.0	652.8	12504	C904_652.8	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
3.0	27855	2.3	582.8	12504	C904_582.8	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
3.0	27597	1.3	577.4	7286	C804_577.4	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
3.3	25534	2.5	534.2	12504	C904_534.2	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
3.3	25297	1.4	529.3	7286	C804_529.3	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
3.8	21850	2.9	457.1	12504	C904_457.1	S3 + ME3SA4	P90 + BE90S4	N140TC	190...193
3.8	21768	1.6	455.4	7286	C804_455.4	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
3.9	21198	1.0	443.5	5210	C704_443.5	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
4.2	19954	1.8	417.5	7286	C804_417.5	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
4.3	19568	1.0	409.4	5210	C704_409.4	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
4.8	17429	2.0	364.7	7286	C804_364.7	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
5.1	16459	1.2	344.3	5210	C704_344.3	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
5.2	15977	2.2	334.3	7286	C804_334.3	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
5.5	15193	1.3	317.9	5210	C704_317.9	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
5.8	14422	1.0	301.7	3288	C614_301.7	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
6.1	13653	2.6	285.7	7286	C804_285.7	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
6.3	13157	1.1	275.3	3288	C614_275.3	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
6.4	13011	1.6	272.2	5210	C704_272.2	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
6.6	12516	2.8	261.9	7286	C804_261.9	S3 + ME3SA4	P90 + BE90S4	N140TC	184...187
6.9	12010	1.7	251.3	5210	C704_251.3	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
7.3	11820	1.7	239.3	5210	C703_239.3	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
7.3	11390	1.2	238.3	3288	C614_238.3	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
7.9	10911	1.8	220.9	5210	C703_220.9	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
8.0	10391	1.4	217.4	3288	C614_217.4	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
8.8	9773	0.9	197.9	2050	C513_197.9	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
8.9	9357	1.5	195.8	3288	C613_195.8	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
9.0	9588	2.1	194.1	5210	C703_194.1	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
9.7	8850	2.3	179.2	5210	C703_179.2	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
9.7	8536	1.7	178.6	3288	C613_178.6	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
9.9	8681	1.0	175.8	2050	C513_175.8	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165

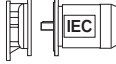
1.5 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
10.6	7860	1.8	164.5	3288	C613_164.5	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
10.7	8042	2.5	162.8	5210	C703_162.8	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
10.8	7927	1.1	160.5	2050	C513_160.5	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
11.6	7423	2.7	150.3	5210	C703_150.3	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
11.6	7171	2.0	150.0	3288	C613_150.0	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
11.8	7282	1.2	147.4	2050	C513_147.4	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
12.4	6714	2.1	140.5	3288	C613_140.5	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
12.7	6786	3.0	137.4	5210	C703_137.4	S3 + ME3SA4	P90 + BE90S4	N140TC	178...181
12.9	6649	1.3	134.6	2050	C513_134.6	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
13.6	6125	2.3	128.1	3288	C613_128.1	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
14.0	6145	1.4	124.4	2050	C513_124.4	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
15.3	5430	2.6	113.6	3288	C613_113.6	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
15.3	5611	1.6	113.6	2050	C513_113.6	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
15.8	5436	1.0	110.1	1432	C413_110.1	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
16.8	4954	2.9	103.6	3288	C613_103.6	S3 + ME3SA4	P90 + BE90S4	N140TC	170...173
17.0	5053	1.1	102.3	1432	C413_102.3	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
17.1	5028	1.8	101.8	2050	C513_101.8	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
18.6	4610	1.2	93.3	1432	C413_93.3	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
18.7	4591	1.9	93.0	2050	C513_93.0	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
20.9	4105	1.0	83.1	1284	C363_83.1	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
21.3	4026	1.3	81.5	1432	C413_81.5	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
21.8	3944	2.2	79.9	2050	C513_79.9	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
22.4	3832	1.0	77.6	1336	C363_77.6	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
23.4	3673	1.4	74.4	1432	C413_74.4	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
23.9	3602	2.5	72.9	2050	C513_72.9	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
24.6	3495	1.1	70.8	1336	C363_70.8	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
26.9	3190	2.8	64.6	2050	C513_64.6	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
27.1	3175	1.6	64.3	1432	C413_64.3	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
28.1	3063	1.3	62.0	1336	C363_62.0	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
29.5	2913	2.9	59.0	2050	C513_59.0	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
29.7	2897	1.7	58.7	1432	C413_58.7	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
31	2877	2.3	57.0	2050	C512_57.0	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
31	2774	1.4	56.2	1336	C363_56.2	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
33	2645	1.0	52.4	1134	C322_52.4	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
34	2543	1.9	51.5	1432	C413_51.5	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
34	2593	2.3	51.4	2050	C512_51.4	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
36	2379	1.7	48.2	1336	C363_48.2	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
36	2413	2.9	47.8	2050	C512_47.8	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
37	2319	2.1	47.0	1432	C413_47.0	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
38	2283	1.2	45.3	1134	C322_45.3	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
39	2258	2.0	44.8	1432	C412_44.8	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
40	2147	1.8	43.5	1336	C363_43.5	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
40	2175	3.0	43.1	2050	C512_43.1	S3 + ME3SA4	P90 + BE90S4	N140TC	162...165
43	2055	1.2	40.7	1134	C322_40.7	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
43	1992	2.5	40.3	1432	C413_40.3	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
46	1880	2.0	38.1	1336	C363_38.1	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
47	1870	2.2	37.1	1432	C412_37.1	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
47	1817	2.7	36.8	1432	C413_36.8	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
48	1821	1.4	36.1	1134	C322_36.1	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
50	1709	2.3	34.6	1295	C363_34.6	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149
52	1684	2.4	33.4	1432	C412_33.4	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
53	1669	1.0	33.1	629	C222_33.1	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
53	1669	1.5	33.1	1117	C322_33.1	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
55	1586	2.6	31.4	1432	C412_31.4	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
58	1502	1.6	29.8	1105	C322_29.8	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
59	1494	1.1	29.6	655	C222_29.6	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
61	1418	2.8	28.7	1272	C363_28.7	S3 + ME3SA4	P90 + BE90S4	N140TC	146...149





1.5 hp

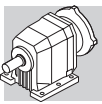
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
61	1428	2.9	28.3	1432	C412_28.3	S3 + ME3SA4	P90 + BE90S4	N140TC	154...157
64	1370	1.2	27.2	649	C222_27.2	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
65	1358	1.8	26.9	1076	C322_26.9	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
69	1267	1.9	25.1	1068	C322_25.1	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
72	1225	1.3	24.3	647	C222_24.3	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
76	1156	2.1	22.9	1041	C322_22.9	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
81	1082	1.5	21.5	641	C222_21.5	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
87	1013	2.4	20.1	1014	C322_20.1	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
87	1010	1.5	20.0	633	C222_20.0	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
96	917	2.4	18.2	981	C322_18.2	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
96	915	1.6	18.1	621	C222_18.1	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
110	799	1.8	15.8	610	C222_15.8	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
112	787	2.8	15.6	954	C322_15.6	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
120	734	1.9	14.5	604	C222_14.5	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
124	710	2.9	14.1	924	C322_14.1	S3 + ME3SA4	P90 + BE90S4	N140TC	138...141
140	626	2.1	12.4	584	C222_12.4	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
147	599	0.9	11.9	328	C122_11.9	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
157	559	2.2	11.1	575	C222_11.1	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
173	507	1.0	10.1	287	C122_10.1	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
180	487	2.4	9.6	555	C222_9.6	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
197	446	1.1	8.8	319	C122_8.8	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
201	437	2.6	8.7	540	C222_8.7	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
228	385	1.2	7.6	317	C122_7.6	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
246	357	3.0	7.1	516	C222_7.1	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
279	314	1.4	6.2	250	C122_6.2	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
286	307	2.8	6.1	489	C222_6.1	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
311	282	1.5	5.6	260	C122_5.6	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
311	282	2.9	5.6	483	C222_5.6	S3 + ME3SA4	P90 + BE90S4	N140TC	130...133
357	246	1.6	4.9	281	C122_4.9	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
404	218	1.7	4.3	270	C122_4.3	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
477	184	1.9	3.7	262	C122_3.7	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
542	162	2.0	3.2	252	C122_3.2	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125
629	140	2.2	2.8	244	C122_2.8	S3 + ME3SA4	P90 + BE90S4	N140TC	122...125

2 hp

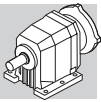
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
1.6	70620	1.5	1081.1	17714	C1004_1081	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
1.7	65723	1.0	1006.1	12504	C904_1006	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
1.7	65575	1.6	1003.9	17714	C1004_1004	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
1.9	60246	1.1	922.3	12504	C904_922.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
1.9	59325	1.8	908.2	17714	C1004_908.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
2.1	55128	1.2	844.0	12504	C904_844.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
2.1	55088	1.9	843.3	17714	C1004_843.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
2.2	50670	2.1	775.7	17714	C1004_775.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
2.2	50534	1.3	773.6	12504	C904_773.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
2.4	47051	2.3	720.3	17714	C1004_720.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
2.4	46520	1.4	712.2	12504	C904_712.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
2.7	42644	1.5	652.8	12504	C904_652.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
2.8	40983	2.6	627.4	17714	C1004_627.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
3.0	38068	1.7	582.8	12504	C904_582.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
3.0	38056	2.8	582.6	17714	C1004_582.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	196...199
3.0	37715	0.9	577.4	7286	C804_577.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187

2 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
3.3	34896	1.8	534.2	12504	C904_534.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
3.3	34572	1.0	529.3	7286	C804_529.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
3.8	29861	2.1	457.1	12504	C904_457.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
3.8	29750	1.2	455.4	7286	C804_455.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
4.2	27373	2.3	419.0	12504	C904_419.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
4.2	27270	1.3	417.5	7286	C804_417.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
4.7	24154	2.6	369.8	12504	C904_369.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
4.8	23820	1.5	364.7	7286	C804_364.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
5.1	22493	0.9	344.3	5210	C704_344.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
5.1	22141	2.9	339.0	12504	C904_339.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	190...193
5.2	21835	1.6	334.3	7286	C804_334.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
5.5	20763	1.0	317.9	5210	C704_317.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
6.1	18660	1.9	285.7	7286	C804_285.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
6.4	17782	1.1	272.2	5210	C704_272.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
6.6	17105	2.1	261.9	7286	C804_261.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
6.9	16414	1.2	251.3	5210	C704_251.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
7.3	16154	1.3	239.3	5210	C703_239.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
7.3	15567	0.9	238.3	3288	C614_238.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
7.9	14911	1.3	220.9	5210	C703_220.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
8.0	14201	1.0	217.4	3288	C614_217.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
8.1	14569	2.4	215.8	7286	C803_215.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
8.8	13355	2.7	197.9	7286	C803_197.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
8.9	12788	1.1	195.8	3288	C613_195.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
9.0	13103	1.6	194.1	5210	C703_194.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
9.4	12444	2.8	184.4	7286	C803_184.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	184...187
9.7	12095	1.7	179.2	5210	C703_179.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
9.7	11666	1.2	178.6	3288	C613_178.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
10.6	10743	1.3	164.5	3288	C613_164.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
10.7	10991	1.9	162.8	5210	C703_162.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
11.6	10145	2.0	150.3	5210	C703_150.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
11.6	9800	1.4	150.0	3288	C613_150.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
12.4	9175	1.5	140.5	3288	C613_140.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
12.7	9275	2.2	137.4	5210	C703_137.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
12.9	9087	1.0	134.6	2050	C513_134.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
13.6	8370	1.7	128.1	3288	C613_128.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
13.7	8561	2.4	126.8	5210	C703_126.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
14.0	8398	1.1	124.4	2050	C513_124.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
15.3	7421	1.9	113.6	3288	C613_113.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
15.3	7668	1.2	113.6	2050	C513_113.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
15.5	7590	2.7	112.4	5210	C703_112.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
16.8	7006	2.9	103.8	5210	C703_103.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	178...181
16.8	6770	2.1	103.6	3288	C613_103.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
17.1	6872	1.3	101.8	2050	C513_101.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
18.7	6275	1.4	93.0	2050	C513_93.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
19.1	5945	2.4	91.0	3288	C613_91.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
21.0	5424	2.6	83.0	3288	C613_83.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
21.3	5502	1.0	81.5	1432	C413_81.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
21.8	5391	1.6	79.9	2050	C513_79.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
23.4	5019	1.0	74.4	1432	C413_74.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
23.5	4847	2.8	74.2	3288	C613_74.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
23.9	4922	1.8	72.9	2050	C513_72.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
25.7	4422	3.0	67.7	3288	C613_67.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	170...173
26.9	4360	2.0	64.6	2050	C513_64.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
27.1	4340	1.1	64.3	1432	C413_64.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
28.1	4187	1.0	62.0	1233	C363_62.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
29.5	3981	2.2	59.0	2050	C513_59.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
29.7	3959	1.2	58.7	1432	C413_58.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157



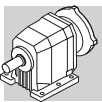
2 hp



n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
31	3932	1.7	57.0	2050	C512_57.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
31	3791	1.1	56.2	1305	C363_56.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
34	3475	1.4	51.5	1432	C413_51.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
34	3544	1.7	51.4	2050	C512_51.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
34	3454	2.4	51.2	2050	C513_51.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
36	3251	1.2	48.2	1292	C363_48.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
36	3298	2.1	47.8	2050	C512_47.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
37	3170	1.6	47.0	1432	C413_47.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
37	3154	2.6	46.7	2050	C513_46.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
39	3086	1.4	44.8	1432	C412_44.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
40	2935	1.3	43.5	1255	C363_43.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
40	2973	2.2	43.1	2050	C512_43.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
43	2808	0.9	40.7	1041	C322_40.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
43	2732	3.0	40.5	2050	C513_40.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
43	2783	2.5	40.4	2050	C512_40.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
43	2722	1.8	40.3	1432	C413_40.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
46	2570	1.5	38.1	1255	C363_38.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
47	2556	1.6	37.1	1432	C412_37.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
47	2483	2.0	36.8	1432	C413_36.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
48	2509	2.6	36.4	2050	C512_36.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	162...165
48	2489	1.0	36.1	1051	C322_36.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
50	2335	1.7	34.6	1223	C363_34.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
52	2302	1.8	33.4	1432	C412_33.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
53	2282	1.1	33.1	1041	C322_33.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
55	2168	1.9	31.4	1430	C412_31.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
56	2108	2.2	31.2	1391	C413_31.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
58	2052	1.2	29.8	1025	C322_29.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
61	1938	2.1	28.7	1198	C363_28.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
61	1923	2.4	28.5	1328	C413_28.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
61	1952	2.1	28.3	1397	C412_28.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
65	1855	1.3	26.9	1008	C322_26.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
66	1769	2.2	26.2	1173	C363_26.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
69	1732	1.4	25.1	998	C322_25.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
69	1727	2.4	25.0	1367	C412_25.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
72	1674	1.0	24.3	545	C222_24.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
76	1580	1.5	22.9	979	C322_22.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
77	1555	2.6	22.6	1332	C412_22.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
79	1494	2.5	22.1	1136	C363_22.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
81	1479	1.1	21.5	534	C222_21.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
87	1385	1.7	20.1	959	C322_20.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
87	1381	1.1	20.0	563	C222_20.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
88	1362	2.9	19.8	1295	C412_19.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	154...157
92	1310	2.6	19.0	1095	C362_19.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
96	1254	1.8	18.2	932	C322_18.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
96	1251	1.2	18.1	555	C222_18.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
101	1186	2.8	17.2	1056	C362_17.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	146...149
110	1092	1.3	15.8	555	C222_15.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
112	1075	2.0	15.6	909	C322_15.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
120	1003	1.4	14.5	555	C222_14.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
124	970	2.1	14.1	882	C322_14.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
140	856	1.5	12.4	540	C222_12.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
141	850	2.3	12.3	862	C322_12.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
155	772	2.4	11.2	835	C322_11.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
157	764	1.6	11.1	534	C222_11.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
180	665	1.8	9.6	520	C222_9.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
187	641	2.8	9.3	804	C322_9.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
201	597	1.9	8.7	508	C222_8.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133

2 hp

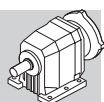
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
205	585	2.9	8.5	781	C322_8.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	138...141
246	488	2.2	7.1	489	C222_7.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
279	430	1.0	6.2	123	C122_6.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
286	420	2.0	6.1	462	C222_6.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
311	386	1.1	5.6	147	C122_5.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
311	385	2.2	5.6	452	C222_5.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
357	336	1.2	4.9	172	C122_4.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
365	329	2.5	4.8	440	C222_4.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
404	297	1.2	4.3	190	C122_4.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
409	294	2.6	4.3	432	C222_4.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
469	256	2.9	3.7	415	C222_3.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	130...133
477	252	1.4	3.7	225	C122_3.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
542	221	1.5	3.2	229	C122_3.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125
629	191	1.6	2.8	233	C122_2.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	122...125

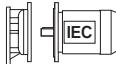


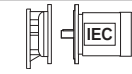
3 hp

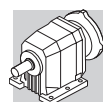
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.6	103346	1.0	1081.1	17714	C1004_1081	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
1.7	95964	1.1	1003.9	17714	C1004_1004	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
1.9	86817	1.2	908.2	17714	C1004_908.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
2.1	80616	1.3	843.3	17714	C1004_843.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
2.2	74151	1.4	775.7	17714	C1004_775.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
2.4	68855	1.5	720.3	17714	C1004_720.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
2.5	68078	0.9	712.2	12504	C904_712.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
2.7	62405	1.0	652.8	12504	C904_652.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
2.8	59975	1.8	627.4	17714	C1004_627.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
3.0	55710	1.1	582.8	12504	C904_582.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
3.0	55691	1.9	582.6	17714	C1004_582.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
3.3	51067	1.2	534.2	12504	C904_534.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
3.5	48048	2.2	502.6	17714	C1004_502.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
3.7	44616	2.4	466.7	17714	C1004_466.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
3.8	43699	1.5	457.1	12504	C904_457.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
4.2	40057	1.6	419.0	12504	C904_419.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
4.3	39170	2.7	409.8	17714	C1004_409.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
4.6	36373	2.9	380.5	17714	C1004_380.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	196...199
4.7	35347	1.8	369.8	12504	C904_369.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
4.8	34859	1.0	364.7	7286	C804_364.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
5.1	32401	2.0	339.0	12504	C904_339.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
5.2	31954	1.1	334.3	7286	C804_334.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
6.0	27999	2.3	292.9	12504	C904_292.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
6.1	27307	1.3	285.7	7286	C804_285.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
6.5	25666	2.5	268.5	12504	C904_268.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
6.7	25031	1.4	261.9	7286	C804_261.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
7.5	22148	2.9	231.7	12504	C904_231.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	190...193
7.9	21822	0.9	220.9	5210	C703_220.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
8.1	21321	1.7	215.8	7286	C803_215.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
8.8	19544	1.8	197.9	7286	C803_197.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
9.0	19175	1.1	194.1	5210	C703_194.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
9.5	18210	1.9	184.4	7286	C803_184.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
9.7	17700	1.2	179.2	5210	C703_179.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
10.3	16693	2.1	169.0	7286	C803_169.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
10.6	15721	0.9	164.5	3288	C613_164.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
10.7	16084	1.3	162.8	5210	C703_162.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181

3 hp

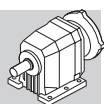


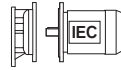
n2 rpm	T2 lb·in	S	i	Rn2 lbs					
11.6	14847	1.4	150.3	5210	C703_150.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
11.6	14342	1.0	150.0	3288	C613_150.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
11.7	14729	2.4	149.1	7286	C803_149.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
12.4	13427	1.1	140.5	3288	C613_140.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
12.7	13573	1.5	137.4	5210	C703_137.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
12.8	13502	2.6	136.7	7286	C803_136.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	184...187
13.6	12249	1.2	128.1	3288	C613_128.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
13.8	12529	1.6	126.8	5210	C703_126.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
15.4	10860	1.3	113.6	3288	C613_113.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
15.5	11107	1.8	112.4	5210	C703_112.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
16.8	10252	2.0	103.8	5210	C703_103.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
16.8	9908	1.4	103.6	3288	C613_103.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
18.8	9183	1.0	93.0	2050	C513_93.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
19.2	8701	1.6	91.0	3288	C613_91.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
19.8	8712	2.3	88.2	5210	C703_88.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
21.0	7937	1.8	83.0	3288	C613_83.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
21.4	8042	2.5	81.4	5210	C703_81.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
21.9	7889	1.1	79.9	2050	C513_79.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
23.5	7093	1.9	74.2	3288	C613_74.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
23.9	7203	1.2	72.9	2050	C513_72.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
24.5	7047	2.8	71.3	5210	C703_71.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
25.8	6471	2.0	67.7	3288	C613_67.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
26.5	6505	3.0	65.9	5210	C703_65.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	178...181
27.0	6381	1.4	64.6	2050	C513_64.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
29.6	5826	1.5	59.0	2050	C513_59.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
29.8	5602	2.3	58.6	3288	C613_58.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
31	5754	1.1	57.0	2050	C512_57.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
33	5110	2.6	53.5	3288	C613_53.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
34	5085	1.0	51.5	1346	C413_51.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
34	5187	1.1	51.4	2050	C512_51.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
34	5055	1.6	51.2	2050	C513_51.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
36	4826	1.5	47.8	2050	C512_47.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
37	4553	2.9	47.6	3288	C613_47.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
37	4639	1.1	47.0	1317	C413_47.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
37	4615	1.8	46.7	2050	C513_46.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
39	4516	1.0	44.8	1330	C412_44.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
40	4294	0.9	43.5	1142	C363_43.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
40	4350	1.5	43.1	2050	C512_43.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
43	3998	2.0	40.5	2050	C513_40.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
43	4073	1.7	40.4	2050	C512_40.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
43	3983	1.2	40.3	1322	C413_40.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
46	3761	1.0	38.1	1130	C363_38.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
46	3834	3.0	38.0	3288	C612_38.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
47	3740	1.1	37.1	1303	C412_37.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
47	3651	2.2	37.0	2050	C513_37.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
47	3634	1.4	36.8	1307	C413_36.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
48	3671	1.8	36.4	2050	C512_36.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
50	3417	1.2	34.6	1099	C363_34.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
51	3453	3.0	34.2	3288	C612_34.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	170...173
52	3369	1.2	33.4	1287	C412_33.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
53	3333	2.1	33.0	2050	C512_33.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
56	3172	1.3	31.4	1287	C412_31.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
56	3085	1.5	31.2	1258	C413_31.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
58	2969	2.7	30.1	2050	C513_30.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
59	3004	2.3	29.8	2050	C512_29.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
61	2836	1.4	28.7	1073	C363_28.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
61	2814	1.6	28.5	1203	C413_28.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157

3 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
62	2857	1.4	28.3	1266	C412 28.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
64	2711	2.9	27.4	2050	C513 27.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
67	2589	1.5	26.2	1056	C363 26.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
67	2614	2.5	25.9	2050	C512 25.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
69	2534	1.0	25.1	880	C322 25.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
70	2527	1.6	25.0	1252	C412 25.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
75	2357	2.8	23.4	2050	C512 23.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	162...165
76	2312	1.0	22.9	874	C322 22.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
77	2276	1.8	22.6	1227	C412 22.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
79	2186	1.7	22.1	1040	C363 22.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
87	2026	1.2	20.1	866	C322 20.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
88	1993	2.0	19.8	1205	C412 19.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
92	1918	1.8	19.0	1011	C362 19.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
96	1835	1.2	18.2	849	C322 18.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
98	1795	2.2	17.8	1178	C412 17.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
101	1736	1.9	17.2	986	C362 17.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
110	1596	2.3	15.8	1156	C412 15.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
112	1573	1.4	15.6	837	C322 15.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
118	1489	2.1	14.8	968	C362 14.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
120	1468	0.9	14.5	458	C222 14.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
122	1437	2.5	14.2	1127	C412 14.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
124	1420	1.4	14.1	820	C322 14.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
131	1344	2.3	13.3	943	C362 13.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
141	1252	1.0	12.4	466	C222 12.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
141	1250	2.8	12.4	1097	C412 12.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	154...157
142	1244	1.6	12.3	804	C322 12.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
150	1177	2.6	11.7	923	C362 11.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
156	1130	1.7	11.2	783	C322 11.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
157	1118	1.1	11.1	462	C222 11.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
165	1070	2.9	10.6	888	C362 10.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
181	973	1.2	9.6	462	C222 9.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
188	938	1.9	9.3	761	C322 9.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
202	873	1.3	8.7	456	C222 8.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
206	856	2.0	8.5	742	C322 8.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
244	723	2.3	7.2	717	C322 7.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
246	715	1.5	7.1	448	C222 7.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
279	632	2.1	6.3	670	C322 6.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
287	614	1.4	6.1	419	C222 6.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
298	590	2.8	5.8	762	C362 5.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	146...149
309	571	2.2	5.7	656	C322 5.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
312	564	1.5	5.6	421	C222 5.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
352	500	2.5	5.0	639	C322 5.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
366	481	1.7	4.8	405	C222 4.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
388	454	2.7	4.5	618	C322 4.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	138...141
410	430	1.8	4.3	405	C222 4.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
471	374	2.0	3.7	388	C222 3.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
478	368	0.9	3.7	145	C122 3.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	122...125
525	336	2.1	3.3	388	C222 3.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133
544	324	1.0	3.2	119	C122 3.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	122...125
631	279	1.1	2.8	141	C122 2.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	122...125
641	275	2.4	2.7	364	C222 2.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	130...133



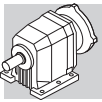
4 hp



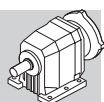
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
2.1	110847	1.0	843.3	17714	C1004_843.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
2.2	101958	1.0	775.7	17714	C1004_775.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
2.4	94675	1.1	720.3	17714	C1004_720.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
2.8	82466	1.3	627.4	17714	C1004_627.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
3.0	76575	1.4	582.6	17714	C1004_582.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
3.2	70218	0.9	534.2	12504	C904_534.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
3.5	66066	1.6	502.6	17714	C1004_502.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
3.7	61347	1.7	466.7	17714	C1004_466.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
3.8	60086	1.1	457.1	12504	C904_457.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
4.1	55079	1.2	419.0	12504	C904_419.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
4.2	53859	2.0	409.8	17714	C1004_409.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
4.6	50012	2.1	380.5	17714	C1004_380.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
4.7	48602	1.3	369.8	12504	C904_369.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
5.1	44551	1.4	339.0	12504	C904_339.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
5.4	42537	2.5	323.6	17714	C1004_323.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
5.8	39498	2.7	300.5	17714	C1004_300.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	196...199
5.9	38499	1.7	292.9	12504	C904_292.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
6.1	37547	0.9	285.7	7286	C804_285.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
6.5	35291	1.8	268.5	12504	C904_268.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
6.6	34418	1.0	261.9	7286	C804_261.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
7.5	30453	2.1	231.7	12504	C904_231.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
8.0	29316	1.2	215.8	7286	C803_215.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
8.2	27915	2.3	212.4	12504	C904_212.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
8.8	26873	1.3	197.9	7286	C803_197.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
9.4	25039	1.4	184.4	7286	C803_184.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
10.1	23375	2.7	172.1	12504	C903_172.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
10.3	22953	1.5	169.0	7286	C803_169.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
10.7	22115	0.9	162.8	5210	C703_162.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
11.0	21427	2.9	157.8	12504	C903_157.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	190...193
11.5	20414	1.0	150.3	5210	C703_150.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
11.6	20252	1.7	149.1	7286	C803_149.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
12.6	18662	1.1	137.4	5210	C703_137.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
12.7	18565	1.9	136.7	7286	C803_136.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
13.7	17227	1.2	126.8	5210	C703_126.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
14.5	16225	2.2	119.5	7286	C803_119.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
15.3	14933	0.9	113.6	3288	C613_113.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
15.4	15272	1.3	112.4	5210	C703_112.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
15.8	14873	2.4	109.5	7286	C803_109.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
16.7	14097	1.4	103.8	5210	C703_103.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
16.7	13623	1.0	103.6	3288	C613_103.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
17.8	13227	2.6	97.4	7286	C803_97.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
19.1	11963	1.2	91.0	3288	C613_91.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
19.4	12125	2.8	89.3	7286	C803_89.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	184...187
19.7	11979	1.7	88.2	5210	C703_88.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
20.9	10914	1.3	83.0	3288	C613_83.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
21.3	11058	1.8	81.4	5210	C703_81.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
23.4	9753	1.4	74.2	3288	C613_74.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
24.3	9690	2.0	71.3	5210	C703_71.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
25.6	8897	1.5	67.7	3288	C613_67.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
26.3	8944	2.2	65.9	5210	C703_65.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
26.9	8774	1.0	64.6	2050	C513_64.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
29.4	8011	1.1	59.0	2050	C513_59.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
29.6	7703	1.7	58.6	3288	C613_58.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
31	7675	2.5	56.5	5210	C703_56.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
32	7027	1.9	53.5	3288	C613_53.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
33	7085	2.7	52.2	5210	C703_52.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	178...181
34	6950	1.2	51.2	2050	C513_51.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165

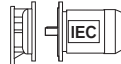
4 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
36	6636	1.1	47.8	2050	C512_47.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
36	6260	2.1	47.6	3288	C613_47.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
37	6346	1.3	46.7	2050	C513_46.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
40	5711	2.3	43.4	3288	C613_43.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
40	5982	1.1	43.1	2050	C512_43.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
43	5497	1.5	40.5	2050	C513_40.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
43	5600	1.3	40.4	2050	C512_40.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
46	5272	2.1	38.0	3288	C612_38.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
47	5020	1.6	37.0	2050	C513_37.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
47	4997	1.0	36.8	1133	C413_36.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
48	5048	1.3	36.4	2050	C512_36.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
48	4751	2.7	36.1	3288	C613_36.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
51	4748	2.2	34.2	3288	C612_34.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
53	4583	1.5	33.0	2050	C512_33.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
53	4335	2.9	33.0	3288	C613_33.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
55	4362	0.9	31.4	1123	C412_31.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
56	4242	1.1	31.2	1135	C413_31.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
57	4224	2.8	30.4	3267	C612_30.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	170...173
58	4083	2.0	30.1	2050	C513_30.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
58	4131	1.7	29.8	2050	C512_29.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
60	3900	1.0	28.7	945	C363_28.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
61	3870	1.2	28.5	1084	C413_28.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
61	3928	1.0	28.3	1117	C412_28.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
63	3728	2.1	27.4	2050	C513_27.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
66	3560	1.1	26.2	925	C363_26.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
67	3595	1.8	25.9	2050	C512_25.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
69	3475	1.2	25.0	1121	C412_25.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
73	3245	2.3	23.9	1974	C513_23.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
74	3240	2.0	23.4	2050	C512_23.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
77	3129	1.3	22.6	1109	C412_22.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
78	3006	1.3	22.1	931	C363_22.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
80	2963	2.5	21.8	1989	C513_21.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
83	2908	2.2	21.0	2050	C512_21.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
88	2741	1.5	19.8	1103	C412_19.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
91	2637	1.3	19.0	914	C362_19.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
92	2621	2.5	18.9	2050	C512_18.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
98	2468	1.6	17.8	1084	C412_17.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
101	2387	1.4	17.2	904	C362_17.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
105	2303	2.8	16.6	2007	C512_16.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	162...165
110	2195	1.7	15.8	1072	C412_15.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
111	2163	1.0	15.6	759	C322_15.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
118	2047	1.6	14.8	892	C362_14.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
122	1976	1.8	14.2	1052	C412_14.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
123	1953	1.0	14.1	752	C322_14.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
130	1848	1.7	13.3	875	C362_13.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
140	1719	2.0	12.4	1031	C412_12.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
141	1710	1.2	12.3	738	C322_12.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
149	1618	1.9	11.7	863	C362_11.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
155	1554	1.2	11.2	726	C322_11.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
155	1548	2.2	11.2	1009	C412_11.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
164	1471	2.1	10.6	842	C362_10.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
181	1331	2.4	9.6	982	C412_9.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
187	1290	1.4	9.3	711	C322_9.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
197	1221	2.6	8.8	820	C362_8.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
200	1201	0.9	8.7	390	C222_8.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
201	1199	2.6	8.6	941	C412_8.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
204	1177	1.4	8.5	701	C322_8.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
216	1114	2.7	8.0	789	C362_8.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149

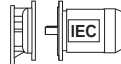


4 hp



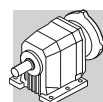
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
242	994	1.6	7.2	680	C322_7.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
245	983	1.1	7.1	399	C222_7.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
246	980	3.0	7.1	919	C412_7.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
277	869	1.5	6.3	639	C322_6.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
285	845	1.0	6.1	329	C222_6.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
291	826	2.8	6.0	837	C412_6.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	154...157
297	811	2.0	5.8	725	C362_5.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
307	785	1.6	5.7	627	C322_5.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
310	776	1.1	5.6	360	C222_5.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
329	732	2.2	5.3	695	C362_5.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
350	687	1.8	5.0	608	C322_5.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
364	662	1.2	4.8	366	C222_4.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
375	641	2.6	4.6	672	C362_4.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
386	624	2.0	4.5	594	C322_4.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
407	591	1.3	4.3	370	C222_4.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
413	583	2.8	4.2	655	C362_4.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	146...149
465	518	2.4	3.7	573	C322_3.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
468	514	1.4	3.7	358	C222_3.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
509	473	2.4	3.4	555	C322_3.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
522	461	1.5	3.3	358	C222_3.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133
603	399	2.6	2.9	538	C322_2.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	138...141
637	378	1.7	2.7	341	C222_2.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	130...133

5 hp

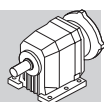
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
2.4	114758	0.9	720.3	17714	C1004_720.3	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
2.8	99959	1.1	627.4	17714	C1004_627.4	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
3.0	92819	1.1	582.6	17714	C1004_582.6	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
3.5	80081	1.3	502.6	17714	C1004_502.6	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
3.7	74361	1.4	466.7	17714	C1004_466.7	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
4.2	66762	1.0	419.0	12504	C904_419.0	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
4.2	65284	1.6	409.8	17714	C1004_409.8	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
4.6	60621	1.8	380.5	17714	C1004_380.5	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
4.7	58911	1.1	369.8	12504	C904_369.8	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
5.1	54002	1.2	339.0	12504	C904_339.0	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
5.4	51560	2.1	323.6	17714	C1004_323.6	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
5.8	47877	2.2	300.5	17714	C1004_300.5	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
5.9	46666	1.4	292.9	12504	C904_292.9	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
6.5	42777	1.5	268.5	12504	C904_268.5	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
6.6	41902	2.5	263.0	17714	C1004_263.0	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
7.1	38909	2.7	244.2	17714	C1004_244.2	S4 + ME4SA4	P112 + BE112M4	N180TC	196...199
7.5	36913	1.7	231.7	12504	C904_231.7	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
8.1	35535	1.0	215.8	7286	C803_215.8	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
8.2	33837	1.9	212.4	12504	C904_212.4	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
8.8	32574	1.1	197.9	7286	C803_197.9	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
9.4	30351	1.2	184.4	7286	C803_184.4	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
10.1	28334	2.2	172.1	12504	C903_172.1	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
10.3	27821	1.3	169.0	7286	C803_169.0	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
11.0	25973	2.4	157.8	12504	C903_157.8	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
11.7	24548	1.4	149.1	7286	C803_149.1	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
11.9	24090	2.6	146.3	12504	C903_146.3	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
12.7	22503	1.6	136.7	7286	C803_136.7	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
13.0	22083	2.8	134.1	12504	C903_134.1	S4 + ME4SA4	P112 + BE112M4	N180TC	190...193
13.7	20881	1.0	126.8	5210	C703_126.8	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
14.6	19667	1.8	119.5	7286	C803_119.5	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187

5 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
15.5	18511	1.1	112.4	5210	C703_112.4	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
15.9	18028	2.0	109.5	7286	C803_109.5	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
16.8	17087	1.2	103.8	5210	C703_103.8	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
17.9	16033	2.2	97.4	7286	C803_97.4	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
19.1	14501	1.0	91.0	3288	C613_91.0	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
19.5	14697	2.3	89.3	7286	C803_89.3	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
19.7	14520	1.4	88.2	5210	C703_88.2	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
21.0	13229	1.1	83.0	3288	C613_83.0	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
21.4	13403	1.5	81.4	5210	C703_81.4	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
22.6	12662	2.6	76.9	7286	C803_76.9	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
23.5	11822	1.1	74.2	3288	C613_74.2	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
24.4	11745	1.7	71.3	5210	C703_71.3	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
24.7	11607	2.8	70.5	7286	C803_70.5	S4 + ME4SA4	P112 + BE112M4	N180TC	184...187
25.7	10785	1.2	67.7	3288	C613_67.7	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
26.4	10841	1.8	65.9	5210	C703_65.9	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
29.7	9336	1.4	58.6	3288	C613_58.6	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
31	9304	2.0	56.5	5210	C703_56.5	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
33	8517	1.5	53.5	3288	C613_53.5	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
33	8588	2.2	52.2	5210	C703_52.2	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
34	8424	1.0	51.2	2050	C513_51.2	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
37	7588	1.7	47.6	3288	C613_47.6	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
37	7692	1.1	46.7	2050	C513_46.7	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
39	7359	2.6	44.7	5210	C703_44.7	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
40	6922	1.9	43.4	3288	C613_43.4	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
42	6793	2.8	41.3	5210	C703_41.3	S4 + ME4SA4	P112 + BE112M4	N180TC	178...181
43	6664	1.2	40.5	2050	C513_40.5	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
43	6788	1.0	40.4	2050	C512_40.4	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
46	6391	1.8	38.0	3288	C612_38.0	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
47	6085	1.3	37.0	2050	C513_37.0	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
48	6119	1.1	36.4	2050	C512_36.4	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
48	5759	2.2	36.1	3226	C613_36.1	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
51	5755	1.8	34.2	3226	C612_34.2	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
53	5555	1.2	33.0	2050	C512_33.0	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
53	5254	2.4	33.0	3185	C613_33.0	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
56	5141	0.9	31.2	1054	C413_31.2	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
57	5120	2.3	30.4	3144	C612_30.4	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
58	4949	1.6	30.1	2026	C513_30.1	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
58	5007	1.4	29.8	2050	C512_29.8	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
59	4677	2.6	29.4	3082	C613_29.4	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
61	4690	1.0	28.5	1031	C413_28.5	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
63	4519	1.7	27.4	1958	C513_27.4	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
63	4611	2.5	27.4	3062	C612_27.4	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
65	4266	2.8	26.8	3021	C613_26.8	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
66	4315	0.9	26.2	898	C363_26.2	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
67	4357	1.5	25.9	2050	C512_25.9	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
69	4212	1.0	25.0	1031	C412_25.0	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
70	4174	2.9	24.8	3000	C612_24.8	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
73	3933	1.9	23.9	1896	C513_23.9	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
75	3928	1.7	23.4	2050	C512_23.4	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
77	3793	1.1	22.6	1002	C412_22.6	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
78	3759	2.9	22.4	2918	C612_22.4	S4 + ME4SA4	P112 + BE112M4	N180TC	170...173
79	3644	1.0	22.1	884	C363_22.1	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
80	3592	2.0	21.8	1974	C513_21.8	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
83	3524	1.8	21.0	2034	C512_21.0	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
88	3322	1.2	19.8	974	C412_19.8	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
92	3196	1.1	19.0	867	C362_19.0	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
92	3177	2.0	18.9	1995	C512_18.9	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165

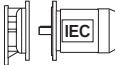


5 hp

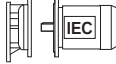


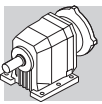
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
98	2992	1.3	17.8	966	C412_17.8	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
101	2894	1.1	17.2	861	C362_17.2	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
105	2792	2.3	16.6	1935	C512_16.6	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
110	2660	1.4	15.8	970	C412_15.8	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
116	2516	2.6	15.0	1892	C512_15.0	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
118	2481	1.3	14.8	797	C362_14.8	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
122	2396	1.5	14.2	959	C412_14.2	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
131	2240	1.4	13.3	789	C362_13.3	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
133	2208	2.8	13.1	1831	C512_13.1	S4 + ME4SA4	P112 + BE112M4	N180TC	162...165
140	2084	1.7	12.4	953	C412_12.4	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
141	2073	1.0	12.3	680	C322_12.3	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
149	1962	1.6	11.7	789	C362_11.7	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
155	1884	1.0	11.2	666	C322_11.2	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
156	1877	1.8	11.2	937	C412_11.2	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
164	1783	1.7	10.6	777	C362_10.6	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
181	1614	2.0	9.6	923	C412_9.6	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
187	1563	1.1	9.3	649	C322_9.3	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
198	1480	2.1	8.8	764	C362_8.8	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
201	1453	2.2	8.6	904	C412_8.6	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
205	1427	1.2	8.5	641	C322_8.5	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
217	1350	2.2	8.0	750	C362_8.0	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
243	1205	1.4	7.2	633	C322_7.2	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
246	1188	2.4	7.1	876	C412_7.1	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
257	1140	2.6	6.8	736	C362_6.8	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
273	1070	2.6	6.4	855	C412_6.4	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
278	1053	1.3	6.3	585	C322_6.3	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
292	1001	2.3	6.0	786	C412_6.0	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
298	983	1.7	5.8	680	C362_5.8	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
308	951	1.3	5.7	573	C322_5.7	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
330	888	1.8	5.3	658	C362_5.3	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
351	833	1.5	5.0	569	C322_5.0	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
365	802	1.0	4.8	277	C222_4.8		P112 + BE112M4	N180TC	130...133
373	784	2.9	4.7	716	C412_4.7	S4 + ME4SA4	P112 + BE112M4	N180TC	154...157
376	777	2.1	4.6	653	C362_4.6	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
387	757	1.6	4.5	555	C322_4.5	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
409	716	1.1	4.3	267	C222_4.3		P112 + BE112M4	N180TC	130...133
414	706	2.3	4.2	629	C362_4.2	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
466	628	1.9	3.7	544	C322_3.7	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
469	623	1.2	3.7	321	C222_3.7		P112 + BE112M4	N180TC	130...133
499	586	2.8	3.5	618	C362_3.5	S4 + ME4SA4	P112 + BE112M4	N180TC	146...149
510	573	2.0	3.4	532	C322_3.4	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
523	559	1.2	3.3	316	C222_3.3		P112 + BE112M4	N180TC	130...133
604	484	2.2	2.9	515	C322_2.9	S4 + ME4SA4	P112 + BE112M4	N180TC	138...141
639	458	1.4	2.7	314	C222_2.7		P112 + BE112M4	N180TC	130...133

7.5 hp

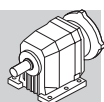
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
3.8	111541	1.0	466.7	17714	C1004_466.7	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
4.3	97926	1.1	409.8	17714	C1004_409.8	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
4.6	90931	1.2	380.5	17714	C1004_380.5	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
5.4	77340	1.4	323.6	17714	C1004_323.6	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
5.9	71815	1.5	300.5	17714	C1004_300.5	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199

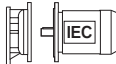
7.5 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
6.0	69998	0.9	292.9	12504	C904_292.9	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
6.6	64165	1.0	268.5	12504	C904_268.5	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
6.7	62853	1.7	263.0	17714	C1004_263.0	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
7.2	58363	1.8	244.2	17714	C1004_244.2	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
7.6	55369	1.2	231.7	12504	C904_231.7	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
8.3	50755	1.3	212.4	12504	C904_212.4	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
8.8	47708	2.2	199.6	17714	C1004_199.6	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
9.5	44300	2.4	185.4	17714	C1004_185.4	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
10.2	42500	1.5	172.1	12504	C903_172.1	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
10.9	38740	2.7	162.1	17714	C1004_162.1	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
11.2	38959	1.6	157.8	12504	C903_157.8	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
11.7	37147	2.9	150.4	17714	C1003_150.4	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
11.8	36822	1.0	149.1	7182	C803_149.1	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
12.0	36136	1.8	146.3	12504	C903_146.3	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
12.6	34494	2.8	139.7	17714	C1003_139.7	S4 + ME4SB4	P132 + BE132S4	N210TC	196...199
12.9	33754	1.0	136.7	7182	C803_136.7	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
13.1	33124	1.9	134.1	12504	C903_134.1	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
14.7	29500	1.2	119.5	7286	C803_119.5	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
15.1	28826	2.2	116.7	12504	C903_116.7	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
16.1	27041	1.3	109.5	7286	C803_109.5	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
16.4	26424	2.4	107.0	12504	C903_107.0	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
18.1	24049	1.4	97.4	7286	C803_97.4	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
18.3	23766	2.7	96.2	12504	C903_96.2	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
19.7	22045	1.6	89.3	7286	C803_89.3	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
20.0	21786	2.9	88.2	12504	C903_88.2	S4 + ME4SB4	P132 + BE132S4	N210TC	190...193
20.0	21780	0.9	88.2	4793	C703_88.2	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
21.6	20105	1.0	81.4	4793	C703_81.4	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
22.9	18993	1.7	76.9	7286	C803_76.9	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
24.7	17617	1.1	71.3	5210	C703_71.3	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
25.0	17411	1.9	70.5	7286	C803_70.5	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
26.7	16262	1.2	65.9	5210	C703_65.9	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
28.2	15436	2.1	62.5	7286	C803_62.5	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
30	14005	0.9	58.6	3000	C613_58.6	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
31	14149	2.3	57.3	7286	C803_57.3	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
31	13955	1.4	56.5	5210	C703_56.5	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
33	12776	1.0	53.5	3082	C613_53.5	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
34	12882	1.5	52.2	5147	C703_52.2	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
37	11381	1.2	47.6	3144	C613_47.6	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
37	11716	2.7	47.4	7286	C803_47.4	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
39	11039	1.7	44.7	5022	C703_44.7	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
40	10740	2.9	43.5	7286	C803_43.5	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
41	10383	1.3	43.4	3082	C613_43.4	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
43	10190	1.9	41.3	4960	C703_41.3	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
45	9866	2.7	39.1	7286	C802_39.1	S4 + ME4SB4	P132 + BE132S4	N210TC	184...187
46	9586	1.2	38.0	3041	C612_38.0	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
49	8639	1.5	36.1	3041	C613_36.1	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
51	8765	2.1	34.7	4606	C702_34.7	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
51	8633	1.2	34.2	2979	C612_34.2	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
53	7881	1.6	33.0	2979	C613_33.0	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
58	7680	1.6	30.4	2938	C612_30.4	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
59	7423	1.1	30.1	1970	C513_30.1	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
59	7510	0.9	29.8	1866	C512_29.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
60	7015	1.7	29.4	2877	C613_29.4	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
63	6992	2.7	27.7	4418	C702_27.7	S4 + ME4SB4	P132 + BE132S4	N210TC	178...181
64	6778	1.2	27.4	1946	C513_27.4	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
64	6916	1.7	27.4	2856	C612_27.4	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
66	6400	1.8	26.8	2836	C613_26.8	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173



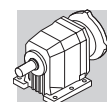
7.5 hp



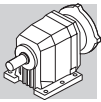
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
68	6536	1.0	25.9	1917	C512_25.9	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
71	6261	1.9	24.8	2815	C612_24.8	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
74	5900	1.3	23.9	1956	C513_23.9	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
75	5891	1.1	23.4	1909	C512_23.4	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
79	5638	2.0	22.4	2753	C612_22.4	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
81	5387	1.4	21.8	1817	C513_21.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
84	5287	1.2	21.0	1876	C512_21.0	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
90	4944	2.3	19.6	2692	C612_19.6	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
93	4765	1.4	18.9	1851	C512_18.9	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
100	4453	2.5	17.7	2610	C612_17.7	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
106	4188	1.5	16.6	1806	C512_16.6	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
110	4018	2.8	15.9	2568	C612_15.9	S4 + ME4SB4	P132 + BE132S4	N210TC	170...173
111	3990	0.9	15.8	839	C412_15.8	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
118	3775	1.7	15.0	1776	C512_15.0	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
124	3594	1.0	14.2	818	C412_14.2	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
132	3360	0.9	13.3	686	C362_13.3	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
134	3312	1.8	13.1	1726	C512_13.1	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
142	3126	1.1	12.4	831	C412_12.4	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
149	2986	2.1	11.8	1691	C512_11.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
151	2943	1.1	11.7	695	C362_11.7	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
158	2815	1.2	11.2	824	C412_11.2	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
166	2674	1.2	10.6	688	C362_10.6	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
180	2460	2.3	9.8	1618	C512_9.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
183	2421	1.3	9.6	824	C412_9.6	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
200	2219	1.4	8.8	688	C362_8.8	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
200	2217	2.5	8.8	1579	C512_8.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
204	2180	1.4	8.6	777	C412_8.6	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
219	2026	1.5	8.0	684	C362_8.0	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
227	1955	2.7	7.8	1529	C512_7.8	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
246	1807	0.9	7.2	526	C322_7.2	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
249	1782	1.6	7.1	802	C412_7.1	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
252	1762	2.9	7.0	1493	C512_7.0	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
260	1711	1.7	6.8	674	C362_6.8	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
277	1605	1.8	6.4	786	C412_6.4	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
296	1502	1.5	6.0	702	C412_6.0	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
301	1475	1.1	5.8	621	C362_5.8	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
313	1420	2.5	5.6	1378	C512_5.6	S4 + ME4SB4	P132 + BE132S4	N210TC	162...165
333	1331	1.2	5.3	602	C362_5.3	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
355	1249	1.0	5.0	511	C322_5.0	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
377	1176	2.0	4.7	687	C412_4.7	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
381	1166	1.4	4.6	588	C362_4.6	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
391	1135	1.1	4.5	515	C322_4.5	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
419	1059	1.5	4.2	581	C362_4.2	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
471	942	1.3	3.7	497	C322_3.7	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
487	911	2.5	3.6	663	C412_3.6	S4 + ME4SB4	P132 + BE132S4	N210TC	154...157
505	879	1.9	3.5	565	C362_3.5	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
516	860	1.3	3.4	489	C322_3.4	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
553	803	2.0	3.2	555	C362_3.2	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149
611	726	1.5	2.9	476	C322_2.9	S4 + ME4SB4	P132 + BE132S4	N210TC	138...141
655	678	2.4	2.7	538	C362_2.7	S4 + ME4SB4	P132 + BE132S4	N210TC	146...149

10 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
5.4	105697	1.0	323.6	17714	C1004_323.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
5.9	98148	1.1	300.5	17714	C1004_300.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
6.7	85899	1.2	263.0	17714	C1004_263.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
7.2	79763	1.3	244.2	17714	C1004_244.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
8.3	69365	0.9	212.4	12504	C904_212.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
8.8	65200	1.6	199.6	17714	C1004_199.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
9.5	60543	1.8	185.4	17714	C1004_185.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
10.2	58084	1.1	172.1	12504	C903_172.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
10.9	52945	2.0	162.1	17714	C1004_162.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
11.2	53244	1.2	157.8	12504	C903_157.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
11.7	50768	2.1	150.4	17714	C1003_150.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
12.0	49385	1.3	146.3	12421	C903_146.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
12.6	47142	2.1	139.7	17714	C1003_139.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
13.1	45270	1.4	134.1	12379	C903_134.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
14.6	40672	2.6	120.5	17714	C1003_120.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
15.1	39396	1.6	116.7	12212	C903_116.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
15.7	37767	2.8	111.9	17714	C1003_111.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	196...199
16.1	36957	1.0	109.5	7182	C803_109.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
16.4	36113	1.7	107.0	12129	C903_107.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
18.1	32867	1.1	97.4	7182	C803_97.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
18.3	32480	2.0	96.2	11983	C903_96.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
19.7	30128	1.1	89.3	7286	C803_89.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
20.0	29774	2.1	88.2	11795	C903_88.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
21.7	27409	2.3	81.2	11691	C903_81.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
22.9	25958	1.3	76.9	7286	C803_76.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
23.6	25125	2.5	74.4	11504	C903_74.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
25.0	23795	1.4	70.5	7286	C803_70.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
27.3	21796	2.9	64.6	11254	C903_64.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	190...193
28.2	21095	1.6	62.5	7286	C803_62.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
31	19337	1.7	57.3	7286	C803_57.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
31	19072	1.0	56.5	4689	C703_56.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
34	17605	1.1	52.2	4772	C703_52.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
37	16012	1.9	47.4	7286	C803_47.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
39	15086	1.2	44.7	4689	C703_44.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
40	14678	2.1	43.5	7286	C803_43.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
41	14190	0.9	43.4	2733	C613_43.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
43	13926	1.4	41.3	4647	C703_41.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
45	13484	1.9	39.1	6995	C802_39.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
49	11806	1.1	36.1	2733	C613_36.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
51	11979	1.6	34.7	4272	C702_34.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
53	10771	1.2	33.0	2692	C613_33.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
56	10802	2.8	31.3	6703	C802_31.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	184...187
58	10495	1.1	30.4	2671	C612_30.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
60	9587	1.3	29.4	2692	C613_29.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
63	9556	1.9	27.7	4168	C702_27.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
64	9452	1.2	27.4	2630	C612_27.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
66	8746	1.3	26.8	2630	C613_26.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
71	8556	1.4	24.8	2610	C612_24.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
74	8064	0.9	23.9	1681	C513_23.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
77	7879	2.4	22.9	4043	C702_22.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
79	7705	1.4	22.4	2568	C612_22.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
81	7363	1.0	21.8	1476	C513_21.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
90	6757	1.7	19.6	2527	C612_19.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
91	6648	2.8	19.3	3939	C702_19.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181
93	6512	1.0	18.9	1456	C512_18.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
100	6086	1.8	17.7	2466	C612_17.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
105	5758	2.9	16.7	3793	C702_16.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	178...181



10 hp

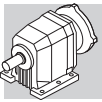


n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
106	5723	1.1	16.6	1655	C512_16.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
110	5492	2.0	15.9	2425	C612_15.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
118	5159	1.3	15.0	1640	C512_15.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
123	4946	2.2	14.3	2363	C612_14.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
134	4527	1.3	13.1	1607	C512_13.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
146	4168	2.7	12.1	2281	C612_12.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
149	4081	1.5	11.8	1585	C512_11.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
162	3754	3.0	10.9	2240	C612_10.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
180	3362	1.7	9.8	1527	C512_9.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
183	3308	1.0	9.6	675	C412_9.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
200	3033	1.0	8.8	592	C362_8.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
200	3031	1.8	8.8	1501	C512_8.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
204	2979	1.1	8.6	702	C412_8.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
219	2768	1.1	8.0	596	C362_8.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
227	2672	1.9	7.8	1460	C512_7.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
249	2436	1.2	7.1	710	C412_7.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
252	2409	2.1	7.0	1429	C512_7.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
260	2338	1.2	6.8	596	C362_6.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
277	2194	1.3	6.4	704	C412_6.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
293	2069	2.6	6.0	1886	C612_6.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	170...173
296	2052	1.1	6.0	597	C412_6.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
313	1941	1.8	5.6	1314	C512_5.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
333	1820	0.9	5.3	534	C362_5.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
377	1608	1.4	4.7	606	C412_4.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
381	1593	1.0	4.6	534	C362_4.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
395	1535	2.3	4.5	1249	C512_4.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
419	1448	1.1	4.2	524	C362_4.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
471	1288	0.9	3.7	437	C322_3.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	138...141
487	1245	1.8	3.6	599	C412_3.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157
505	1202	1.4	3.5	514	C362_3.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
516	1175	1.0	3.4	429	C322_3.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	138...141
532	1140	3.0	3.3	1160	C512_3.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	162...165
553	1097	1.5	3.2	514	C362_3.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
611	992	1.1	2.9	433	C322_2.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	138...141
655	926	1.8	2.7	501	C362_2.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	146...149
662	917	2.4	2.7	581	C412_2.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	154...157

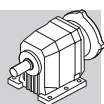
12.5 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
6.7	104755	1.0	263.0	17714	C1004_263.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
7.2	97272	1.1	244.2	17714	C1004_244.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
8.8	79513	1.3	199.6	17714	C1004_199.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
9.5	73833	1.4	185.4	17714	C1004_185.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
10.9	64567	1.6	162.1	17714	C1004_162.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
11.2	64931	1.0	157.8	11629	C903_157.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
11.7	61912	1.7	150.4	17714	C1003_150.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
12.0	60226	1.1	146.3	11545	C903_146.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
12.6	57490	1.7	139.7	17714	C1003_139.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
13.1	55207	1.1	134.1	11441	C903_134.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
14.6	49600	2.1	120.5	17714	C1003_120.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
15.1	48044	1.3	116.7	11420	C903_116.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193

12.5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
15.7	46057	2.3	111.9	17714	C1003_111.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
16.4	44040	1.4	107.0	11379	C903_107.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
17.6	41077	2.6	99.8	17714	C1003_99.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
18.3	39610	1.6	96.2	11295	C903_96.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
19.0	38143	2.8	92.7	17714	C1003_92.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	196...199
19.7	36742	0.9	89.3	6662	C803_89.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
20.0	36309	1.7	88.2	11191	C903_88.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
21.7	33425	1.9	81.2	11108	C903_81.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
22.9	31656	1.0	76.9	7015	C803_76.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
23.6	30640	2.1	74.4	10983	C903_74.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
25.0	29018	1.1	70.5	7286	C803_70.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
27.3	26581	2.4	64.6	10795	C903_64.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
28.2	25726	1.3	62.5	7286	C803_62.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
29.7	24366	2.6	59.2	10649	C903_59.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
31	23582	1.4	57.3	7286	C803_57.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
32	22585	2.7	54.9	10524	C903_54.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
35	20703	2.9	50.3	10357	C903_50.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	190...193
37	19527	1.6	47.4	7265	C803_47.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
39	18398	1.0	44.7	4397	C703_44.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
40	17900	1.7	43.5	7161	C803_43.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
43	16983	1.1	41.3	4376	C703_41.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
45	16443	1.6	39.1	6724	C802_39.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
51	14609	1.3	34.7	4001	C702_34.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
53	13135	1.0	33.0	2486	C613_33.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
56	13173	2.3	31.3	6474	C802_31.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
58	12799	0.9	30.4	2527	C612_30.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
60	11692	1.0	29.4	2158	C613_29.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
63	11654	1.6	27.7	3939	C702_27.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
64	11527	1.0	27.4	2137	C612_27.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
66	10666	1.1	26.8	2342	C613_26.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
68	10910	2.8	25.9	6308	C802_25.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
71	10434	1.1	24.8	2425	C612_24.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
73	10070	2.9	24.0	6245	C802_24.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	184...187
77	9608	1.9	22.9	3855	C702_22.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
79	9397	1.2	22.4	2404	C612_22.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
90	8241	1.4	19.6	2384	C612_19.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
91	8108	2.3	19.3	3772	C702_19.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
100	7421	1.5	17.7	2342	C612_17.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
105	7023	2.4	16.7	3647	C702_16.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
106	6979	0.9	16.6	1517	C512_16.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
110	6697	1.7	15.9	2301	C612_15.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
115	6448	2.9	15.3	3647	C702_15.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
118	6291	1.0	15.0	1523	C512_15.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
123	6031	1.8	14.3	2260	C612_14.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
125	5926	3.0	14.1	3543	C702_14.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	178...181
134	5521	1.1	13.1	1505	C512_13.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
146	5083	2.2	12.1	2199	C612_12.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
149	4976	1.3	11.8	1493	C512_11.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
162	4578	2.4	10.9	2158	C612_10.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
179	4128	2.7	9.8	2116	C612_9.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
180	4100	1.4	9.8	1452	C512_9.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
199	3717	3.0	8.8	2055	C612_8.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
200	3696	1.5	8.8	1433	C512_8.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
227	3259	1.6	7.8	1398	C512_7.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
249	2971	1.0	7.1	644	C412_7.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
252	2937	1.7	7.0	1376	C512_7.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
260	2851	1.0	6.8	503	C362_6.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	146...149



12.5 hp



n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
277	2675	1.1	6.4	634	C412_6.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
293	2523	2.2	6.0	1835	C612_6.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
296	2503	0.9	6.0	583	C412_6.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
313	2367	1.5	5.6	1261	C512_5.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
377	1960	1.2	4.7	536	C412_4.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
386	1915	2.8	4.6	1718	C612_4.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	170...173
395	1872	1.9	4.5	1206	C512_4.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
419	1766	0.9	4.2	485	C362_4.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	146...149
487	1518	1.5	3.6	546	C412_3.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
505	1466	1.1	3.5	473	C362_3.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	146...149
532	1391	2.5	3.3	1130	C512_3.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165
553	1338	1.2	3.2	473	C362_3.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	146...149
655	1130	1.5	2.7	468	C362_2.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	146...149
662	1118	1.9	2.7	542	C412_2.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	154...157
669	1105	2.9	2.6	1068	C512_2.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	162...165

15 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
7.2	116727	0.9	244.2	17714	C1004_244.2	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
8.8	95415	1.1	199.6	17714	C1004_199.6	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
9.5	88600	1.2	185.4	17714	C1004_185.4	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
10.9	77480	1.4	162.1	17714	C1004_162.1	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
11.7	74295	1.4	150.4	17714	C1003_150.4	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
12.6	68988	1.4	139.7	17714	C1003_139.7	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
13.2	66249	0.9	134.1	10858	C903_134.1	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
14.6	59520	1.8	120.5	17714	C1003_120.5	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
15.1	57653	1.1	116.7	10587	C903_116.7	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
15.8	55269	1.9	111.9	17714	C1003_111.9	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
16.5	52848	1.2	107.0	10628	C903_107.0	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
17.7	49292	2.2	99.8	17714	C1003_99.8	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
18.3	47532	1.3	96.2	10587	C903_96.2	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
19.0	45771	2.3	92.7	17714	C1003_92.7	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
20.0	43571	1.4	88.2	10566	C903_88.2	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
20.6	42255	2.5	85.6	17714	C1003_85.6	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
21.7	40111	1.6	81.2	10566	C903_81.2	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
22.2	39237	2.7	79.4	17714	C1003_79.4	S5 + ME5SA4	P160 + BE160M4	N250TC	196...199
23.7	36768	1.7	74.4	10462	C903_74.4	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
25.0	34821	0.9	70.5	6630	C803_70.5	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
27.3	31897	2.0	64.6	10420	C903_64.6	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
28.2	30871	1.1	62.5	6870	C803_62.5	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
29.8	29239	2.1	59.2	10212	C903_59.2	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
31	28299	1.2	57.3	7120	C803_57.3	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
32	27102	2.3	54.9	10170	C903_54.9	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
35	24843	2.4	50.3	10003	C903_50.3	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
37	23432	1.3	47.4	6974	C803_47.4	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
41	21480	1.5	43.5	6891	C803_43.5	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
41	21230	2.8	43.0	9795	C903_43.0	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
43	20379	0.9	41.3	4314	C703_41.3	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
45	19461	3.0	39.4	9607	C903_39.4	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
45	19732	1.3	39.1	6433	C802_39.1	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
50	17708	2.5	35.1	9378	C902_35.1	S5 + ME5SA4	P160 + BE160M4	N250TC	190...193
51	17531	1.1	34.7	3918	C702_34.7	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181

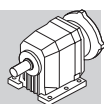
15 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
56	15808	1.9	31.3	6245	C802_31.3	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
64	13985	1.3	27.7	3710	C702_27.7	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
66	12799	0.9	26.8	2322	C613_26.8	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
68	13091	2.3	25.9	6079	C802_25.9	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
71	12521	1.0	24.8	2281	C612_24.8	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
74	12084	2.4	24.0	5975	C802_24.0	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
77	11530	1.6	22.9	3668	C702_22.9	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
79	11276	1.0	22.4	2199	C612_22.4	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
79	11223	2.7	22.2	5912	C802_22.2	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
86	10359	2.8	20.5	5829	C802_20.5	S5 + ME5SA4	P160 + BE160M4	N250TC	184...187
90	9889	1.2	19.6	2219	C612_19.6	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
92	9729	1.9	19.3	3605	C702_19.3	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
100	8906	1.2	17.7	2199	C612_17.7	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
106	8427	2.0	16.7	3501	C702_16.7	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
111	8037	1.4	15.9	2199	C612_15.9	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
115	7737	2.4	15.3	3501	C702_15.3	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
123	7238	1.5	14.3	2158	C612_14.3	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
125	7111	2.5	14.1	3418	C702_14.1	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
134	6625	0.9	13.1	1394	C512_13.1	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
135	6574	2.8	13.0	3418	C702_13.0	S5 + ME5SA4	P160 + BE160M4	N250TC	178...181
146	6100	1.8	12.1	2116	C612_12.1	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
149	5972	1.0	11.8	1396	C512_11.8	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
162	5494	2.0	10.9	2075	C612_10.9	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
180	4953	2.2	9.8	2036	C612_9.8	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
181	4920	1.1	9.8	1372	C512_9.8	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
200	4461	2.5	8.8	1991	C612_8.8	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
201	4435	1.3	8.8	1361	C512_8.8	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
228	3911	1.3	7.8	1335	C512_7.8	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
236	3776	2.9	7.5	1929	C612_7.5	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
253	3525	1.5	7.0	1318	C512_7.0	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
294	3028	1.8	6.0	1781	C612_6.0	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
313	2841	1.2	5.6	1206	C512_5.6	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
387	2298	2.4	4.6	1677	C612_4.6	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
396	2247	1.6	4.5	1160	C512_4.5	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
477	1866	2.9	3.7	1594	C612_3.7	S5 + ME5SA4	P160 + BE160M4	N250TC	170...173
534	1669	2.0	3.3	1095	C512_3.3	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165
671	1326	2.4	2.6	1042	C512_2.6	S5 + ME5SA4	P160 + BE160M4	N250TC	162...165

20 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
10.9	104598	1.0	162.1	16828	C1004_162.1	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
11.8	100298	1.1	150.4	17360	C1003_150.4	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
12.7	93134	1.1	139.7	17360	C1003_139.7	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
14.7	80353	1.3	120.5	17464	C1003_120.5	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
15.8	74613	1.4	111.9	17360	C1003_111.9	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
17.7	66544	1.6	99.8	17235	C1003_99.8	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
18.4	64169	1.0	96.2	9566	C903_96.2	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
19.1	61791	1.7	92.7	17172	C1003_92.7	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
20.1	58821	1.1	88.2	9482	C903_88.2	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
20.7	57045	1.9	85.6	16985	C1003_85.6	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
21.8	54149	1.2	81.2	9232	C903_81.2	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
22.3	52970	2.0	79.4	16880	C1003_79.4	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199

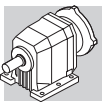
20 hp



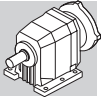
n2 rpm	T2 lb·in	S	i	Rn2 lbs					
23.8	49637	1.3	74.4	9336	C903_74.4	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
25.5	46291	2.3	69.4	16568	C1003_69.4	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
27.4	43060	1.5	64.6	9274	C903_64.6	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
27.5	42985	2.5	64.5	16380	C1003_64.5	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
29.9	39472	1.6	59.2	9253	C903_59.2	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
31	38239	2.8	57.4	16130	C1003_57.4	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
32	36587	1.7	54.9	9232	C903_54.9	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
33	35507	3.0	53.3	15880	C1003_53.3	S5 + ME5LA4	P160 + BE160L4	N250TC	196...199
35	33538	1.8	50.3	9190	C903_50.3	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
37	31634	1.0	47.4	6183	C803_47.4	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
41	28998	1.1	43.5	6308	C803_43.5	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
41	28660	2.1	43.0	9190	C903_43.0	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
45	26272	2.2	39.4	8961	C903_39.4	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
45	26638	1.0	39.1	5683	C802_39.1	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
50	23905	1.9	35.1	8794	C902_35.1	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
56	21341	1.4	31.3	5725	C802_31.3	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
60	20049	2.4	29.4	8565	C902_29.4	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
64	18879	1.0	27.7	3418	C702_27.7	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
65	18506	2.4	27.2	8482	C902_27.2	S5 + ME5LA4	P160 + BE160L4	N250TC	190...193
68	17674	1.7	25.9	5642	C802_25.9	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
74	16314	1.8	24.0	5600	C802_24.0	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
77	15565	1.2	22.9	3209	C702_22.9	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
80	15151	2.0	22.2	5537	C802_22.2	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
86	13985	2.1	20.5	5454	C802_20.5	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
92	13135	1.4	19.3	3251	C702_19.3	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
98	12295	2.5	18.1	5371	C802_18.1	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
100	12023	0.9	17.7	1942	C612_17.7	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
106	11377	1.5	16.7	3209	C702_16.7	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
106	11349	2.5	16.7	5308	C802_16.7	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
111	10849	1.0	15.9	1921	C612_15.9	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
115	10445	1.8	15.3	3209	C702_15.3	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
119	10156	3.0	14.9	5204	C802_14.9	S5 + ME5LA4	P160 + BE160L4	N250TC	184...187
123	9771	1.1	14.3	1907	C612_14.3	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
126	9600	1.8	14.1	3189	C702_14.1	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
136	8875	2.0	13.0	3168	C702_13.0	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
146	8235	1.3	12.1	1905	C612_12.1	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
158	7634	2.3	11.2	3063	C702_11.2	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
163	7416	1.5	10.9	1878	C612_10.9	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
173	6952	2.5	10.2	3043	C702_10.2	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
180	6687	1.7	9.8	1868	C612_9.8	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
186	6487	2.7	9.5	3001	C702_9.5	S5 + ME5LA4	P160 + BE160L4	N250TC	178...181
200	6022	1.8	8.8	1835	C612_8.8	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
201	5987	0.9	8.8	1204	C512_8.8	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
228	5279	1.0	7.8	1199	C512_7.8	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
236	5098	2.2	7.5	1800	C612_7.5	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
253	4759	1.1	7.0	1189	C512_7.0	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
263	4591	2.4	6.7	1761	C612_6.7	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
295	4088	1.3	6.0	1671	C612_6.0	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
314	3835	0.9	5.6	1074	C512_5.6	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
389	3103	1.8	4.6	1580	C612_4.6	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
397	3033	1.2	4.5	1076	C512_4.5	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
478	2520	2.2	3.7	1514	C612_3.7	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
535	2253	1.5	3.3	1042	C512_3.3	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165
628	1921	2.8	2.8	1426	C612_2.8	S5 + ME5LA4	P160 + BE160L4	N250TC	170...173
673	1791	1.8	2.6	1013	C512_2.6	S5 + ME5LA4	P160 + BE160L4	N250TC	162...165

25 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
14.6	99201	1.1	120.5	16318	C1003_120.5		P180 + BE180M4	N280TC	196...199
15.8	92115	1.2	111.9	15963	C1003_111.9		P180 + BE180M4	N280TC	196...199
17.7	82153	1.3	99.8	15984	C1003_99.8		P180 + BE180M4	N280TC	196...199
19.0	76285	1.4	92.7	15984	C1003_92.7		P180 + BE180M4	N280TC	196...199
20.6	70425	1.5	85.6	15922	C1003_85.6		P180 + BE180M4	N280TC	196...199
21.7	66851	1.0	81.2	8899	C903_81.2		P180 + BE180M4	N280TC	190...193
22.2	65395	1.6	79.4	15859	C1003_79.4		P180 + BE180M4	N280TC	196...199
23.7	61280	1.0	74.4	8878	C903_74.4		P180 + BE180M4	N280TC	190...193
25.4	57150	1.9	69.4	15713	C1003_69.4		P180 + BE180M4	N280TC	196...199
27.3	53161	1.2	64.6	8398	C903_64.6		P180 + BE180M4	N280TC	190...193
27.4	53068	2.0	64.5	15588	C1003_64.5		P180 + BE180M4	N280TC	196...199
29.8	48731	1.3	59.2	8440	C903_59.2		P180 + BE180M4	N280TC	190...193
31	47208	2.2	57.4	15359	C1003_57.4		P180 + BE180M4	N280TC	196...199
32	45170	1.4	54.9	8482	C903_54.9		P180 + BE180M4	N280TC	190...193
33	43836	2.4	53.3	15234	C1003_53.3		P180 + BE180M4	N280TC	196...199
35	41405	1.5	50.3	8482	C903_50.3		P180 + BE180M4	N280TC	190...193
38	38050	2.7	46.2	14921	C1003_46.2		P180 + BE180M4	N280TC	196...199
41	35383	1.7	43.0	8461	C903_43.0		P180 + BE180M4	N280TC	190...193
41	35332	2.8	42.9	14755	C1003_42.9		P180 + BE180M4	N280TC	196...199
45	32434	1.8	39.4	8440	C903_39.4		P180 + BE180M4	N280TC	190...193
50	29513	1.5	35.1	8294	C902_35.1		P180 + BE180M4	N280TC	190...193
56	26347	1.2	31.3	5204	C802_31.3		P180 + BE180M4	N280TC	184...187
60	24751	2.0	29.4	8148	C902_29.4		P180 + BE180M4	N280TC	190...193
65	22847	2.0	27.2	8086	C902_27.2		P180 + BE180M4	N280TC	190...193
68	21819	1.4	25.9	5267	C802_25.9		P180 + BE180M4	N280TC	184...187
71	20877	2.6	24.8	8003	C902_24.8		P180 + BE180M4	N280TC	190...193
74	20141	1.4	24.0	5204	C802_24.0		P180 + BE180M4	N280TC	184...187
77	19271	2.6	22.9	7898	C902_22.9		P180 + BE180M4	N280TC	190...193
77	19216	1.0	22.9	3147	C702_22.9		P180 + BE180M4	N280TC	178...181
79	18704	1.6	22.2	5225	C802_22.2		P180 + BE180M4	N280TC	184...187
86	17266	1.7	20.5	5184	C802_20.5		P180 + BE180M4	N280TC	184...187
92	16216	1.1	19.3	2938	C702_19.3		P180 + BE180M4	N280TC	178...181
98	15179	2.0	18.1	5142	C802_18.1		P180 + BE180M4	N280TC	184...187
106	14045	1.2	16.7	2876	C702_16.7		P180 + BE180M4	N280TC	178...181
106	14011	2.0	16.7	5079	C802_16.7		P180 + BE180M4	N280TC	184...187
115	12895	1.4	15.3	2876	C702_15.3		P180 + BE180M4	N280TC	178...181
118	12538	2.4	14.9	4996	C802_14.9		P180 + BE180M4	N280TC	184...187
123	12063	0.9	14.3	1757	C612_14.3		P180 + BE180M4	N280TC	170...173
125	11852	1.5	14.1	2897	C702_14.1		P180 + BE180M4	N280TC	178...181
128	11574	2.5	13.8	4934	C802_13.8		P180 + BE180M4	N280TC	184...187
135	10957	1.7	13.0	2876	C702_13.0		P180 + BE180M4	N280TC	178...181
146	10167	1.1	12.1	1730	C612_12.1		P180 + BE180M4	N280TC	170...173
157	9425	1.9	11.2	2876	C702_11.2		P180 + BE180M4	N280TC	178...181
162	9156	1.2	10.9	1718	C612_10.9		P180 + BE180M4	N280TC	170...173
173	8583	2.0	10.2	2855	C702_10.2		P180 + BE180M4	N280TC	178...181
180	8256	1.3	9.8	1726	C612_9.8		P180 + BE180M4	N280TC	170...173
185	8008	2.2	9.5	2834	C702_9.5		P180 + BE180M4	N280TC	178...181
200	7435	1.5	8.8	1705	C612_8.8		P180 + BE180M4	N280TC	170...173
221	6730	2.6	8.0	2813	C702_8.0		P180 + BE180M4	N280TC	178...181
236	6294	1.8	7.5	1691	C612_7.5		P180 + BE180M4	N280TC	170...173
237	6273	2.7	7.5	2793	C702_7.5		P180 + BE180M4	N280TC	178...181
262	5668	2.0	6.7	1662	C612_6.7		P180 + BE180M4	N280TC	170...173
294	5047	1.1	6.0	1551	C612_6.0		P180 + BE180M4	N280TC	170...173
387	3831	1.4	4.6	1500	C612_4.6		P180 + BE180M4	N280TC	170...173
396	3745	0.9	4.5	964	C512_4.5		P180 + BE180M4	N280TC	162...165
477	3111	1.8	3.7	1451	C612_3.7		P180 + BE180M4	N280TC	170...173
534	2781	1.2	3.3	974	C512_3.3		P180 + BE180M4	N280TC	162...165
626	2371	2.3	2.8	1377	C612_2.8		P180 + BE180M4	N280TC	170...173
671	2211	1.5	2.6	943	C512_2.6		P180 + BE180M4	N280TC	162...165



30 hp

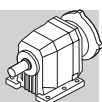


n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
15.8	109617	1.0	111.9	15130	C1003_111.9		P180 + BE180L4	N280TC	196...199
17.7	97762	1.1	99.8	14713	C1003_99.8		P180 + BE180L4	N280TC	196...199
19.1	90779	1.2	92.7	14775	C1003_92.7		P180 + BE180L4	N280TC	196...199
20.7	83806	1.3	85.6	14817	C1003_85.6		P180 + BE180L4	N280TC	196...199
22.3	77820	1.4	79.4	14838	C1003_79.4		P180 + BE180L4	N280TC	196...199
25.5	68008	1.6	69.4	14796	C1003_69.4		P180 + BE180L4	N280TC	196...199
27.4	63262	1.0	64.6	7773	C903_64.6		P180 + BE180L4	N280TC	190...193
27.5	63151	1.7	64.5	14755	C1003_64.5		P180 + BE180L4	N280TC	196...199
29.9	57990	1.1	59.2	7648	C903_59.2		P180 + BE180L4	N280TC	190...193
31	56178	1.9	57.4	14650	C1003_57.4		P180 + BE180L4	N280TC	196...199
32	53752	1.2	54.9	7502	C903_54.9		P180 + BE180L4	N280TC	190...193
33	52165	2.0	53.3	14546	C1003_53.3		P180 + BE180L4	N280TC	196...199
35	49272	1.2	50.3	7794	C903_50.3		P180 + BE180L4	N280TC	190...193
38	45280	2.3	46.2	14338	C1003_46.2		P180 + BE180L4	N280TC	196...199
41	42106	1.4	43.0	7815	C903_43.0		P180 + BE180L4	N280TC	190...193
41	42046	2.4	42.9	14192	C1003_42.9		P180 + BE180L4	N280TC	196...199
45	38597	1.5	39.4	7815	C903_39.4		P180 + BE180L4	N280TC	190...193
48	36180	2.7	36.9	13900	C1003_36.9		P180 + BE180L4	N280TC	196...199
50	35120	1.3	35.1	7794	C902_35.1		P180 + BE180L4	N280TC	190...193
52	33596	2.9	34.3	13733	C1003_34.3		P180 + BE180L4	N280TC	196...199
56	31353	1.0	31.3	5184	C802_31.3		P180 + BE180L4	N280TC	184...187
60	28951	2.6	29.6	13358	C1002_29.6		P180 + BE180L4	N280TC	196...199
60	29454	1.6	29.4	7732	C902_29.4		P180 + BE180L4	N280TC	190...193
65	27188	1.7	27.2	7690	C902_27.2		P180 + BE180L4	N280TC	190...193
68	25965	1.2	25.9	4788	C802_25.9		P180 + BE180L4	N280TC	184...187
71	24843	2.2	24.8	7627	C902_24.8		P180 + BE180L4	N280TC	190...193
74	23968	1.2	24.0	4934	C802_24.0		P180 + BE180L4	N280TC	184...187
77	22932	2.2	22.9	7586	C902_22.9		P180 + BE180L4	N280TC	190...193
80	22258	1.4	22.2	4892	C802_22.2		P180 + BE180L4	N280TC	184...187
86	20546	1.4	20.5	4871	C802_20.5		P180 + BE180L4	N280TC	184...187
87	20250	2.7	20.2	7461	C902_20.2		P180 + BE180L4	N280TC	190...193
92	19297	1.0	19.3	2853	C702_19.3		P180 + BE180L4	N280TC	178...181
95	18692	2.7	18.7	7377	C902_18.7		P180 + BE180L4	N280TC	190...193
98	18062	1.7	18.1	4850	C802_18.1		P180 + BE180L4	N280TC	184...187
106	16714	1.0	16.7	2584	C702_16.7		P180 + BE180L4	N280TC	178...181
106	16673	1.7	16.7	4809	C802_16.7		P180 + BE180L4	N280TC	184...187
115	15345	1.2	15.3	2584	C702_15.3		P180 + BE180L4	N280TC	178...181
119	14920	2.0	14.9	4767	C802_14.9		P180 + BE180L4	N280TC	184...187
126	14104	1.2	14.1	2647	C702_14.1		P180 + BE180L4	N280TC	178...181
129	13773	2.1	13.8	4726	C802_13.8		P180 + BE180L4	N280TC	184...187
136	13038	1.4	13.0	2647	C702_13.0		P180 + BE180L4	N280TC	178...181
146	12098	0.9	12.1	1623	C612_12.1		P180 + BE180L4	N280TC	170...173
147	12026	2.5	12.0	4684	C802_12.0		P180 + BE180L4	N280TC	184...187
158	11216	1.6	11.2	2688	C702_11.2		P180 + BE180L4	N280TC	178...181
160	11101	2.6	11.1	4601	C802_11.1		P180 + BE180L4	N280TC	184...187
163	10896	1.0	10.9	1558	C612_10.9		P180 + BE180L4	N280TC	170...173
173	10213	1.7	10.2	2668	C702_10.2		P180 + BE180L4	N280TC	178...181
180	9824	1.1	9.8	1584	C612_9.8		P180 + BE180L4	N280TC	170...173
186	9530	1.8	9.5	2668	C702_9.5		P180 + BE180L4	N280TC	178...181
200	8848	1.3	8.8	1574	C612_8.8		P180 + BE180L4	N280TC	170...173
221	8009	2.1	8.0	2647	C702_8.0		P180 + BE180L4	N280TC	178...181
236	7489	1.5	7.5	1580	C612_7.5		P180 + BE180L4	N280TC	170...173
237	7465	2.3	7.5	2647	C702_7.5		P180 + BE180L4	N280TC	178...181
263	6745	1.6	6.7	1562	C612_6.7		P180 + BE180L4	N280TC	170...173
283	6258	2.6	6.3	2605	C702_6.3		P180 + BE180L4	N280TC	178...181
295	6005	0.9	6.0	1479	C612_6.0		P180 + BE180L4	N280TC	170...173
303	5854	2.7	5.9	2563	C702_5.9		P180 + BE180L4	N280TC	178...181
389	4558	1.2	4.6	1420	C612_4.6		P180 + BE180L4	N280TC	170...173
478	3702	1.5	3.7	1385	C612_3.7		P180 + BE180L4	N280TC	170...173
535	3310	1.0	3.3	892	C512_3.3		P180 + BE180L4	N280TC	162...165
628	2822	1.9	2.8	1325	C612_2.8		P180 + BE180L4	N280TC	170...173
673	2631	1.2	2.6	880	C512_2.6		P180 + BE180L4	N280TC	162...165

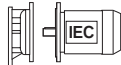
40 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
20.6	114089	0.9	85.6	13442	C1003_85.6		P200 + IEC200L4	N320TC	196...199
22.2	105940	1.0	79.4	12858	C1003_79.4		P200 + IEC200L4	N320TC	196...199
25.4	92583	1.1	69.4	13442	C1003_69.4		P200 + IEC200L4	N320TC	196...199
27.3	85970	1.2	64.5	13254	C1003_64.5		P200 + IEC200L4	N320TC	196...199
31	76477	1.4	57.4	14755	C1003_57.4		P200 + IEC200L4	N320TC	196...199
33	71015	1.5	53.3	14234	C1003_53.3		P200 + IEC200L4	N320TC	196...199
38	61642	1.7	46.2	14380	C1003_46.2		P200 + IEC200L4	N320TC	196...199
41	57320	1.0	43.0	6377	C903_43.0		P200 + IEC200L4	N320TC	190...193
41	57239	1.8	42.9	13879	C1003_42.9		P200 + IEC200L4	N320TC	196...199
45	52543	1.1	39.4	6169	C903_39.4		P200 + IEC200L4	N320TC	190...193
48	49254	2.0	36.9	15005	C1003_36.9		P200 + IEC200L4	N320TC	196...199
50	47811	0.9	35.1	6877	C902_35.1		P200 + IEC200L4	N320TC	190...193
51	45735	2.1	34.3	14505	C1003_34.3		P200 + IEC200L4	N320TC	196...199
60	39413	1.9	29.6	15234	C1002_29.6		P200 + IEC200L4	N320TC	196...199
60	40097	1.2	29.4	6794	C902_29.4		P200 + IEC200L4	N320TC	190...193
65	37013	1.2	27.2	7377	C902_27.2		P200 + IEC200L4	N320TC	190...193
71	33820	1.6	24.8	7398	C902_24.8		P200 + IEC200L4	N320TC	190...193
73	32832	2.7	24.1	13546	C1002_24.1		P200 + IEC200L4	N320TC	196...199
77	31219	1.6	22.9	7482	C902_22.9		P200 + IEC200L4	N320TC	190...193
79	30307	2.7	22.2	13796	C1002_22.2		P200 + IEC200L4	N320TC	196...199
79	30301	1.0	22.2	4517	C802_22.2		P200 + IEC200L4	N320TC	184...187
86	27970	1.0	20.5	4497	C802_20.5		P200 + IEC200L4	N320TC	184...187
87	27567	2.0	20.2	7044	C902_20.2		P200 + IEC200L4	N320TC	190...193
94	25446	2.0	18.7	7607	C902_18.7		P200 + IEC200L4	N320TC	190...193
98	24589	1.2	18.1	4663	C802_18.1		P200 + IEC200L4	N320TC	184...187
102	23581	2.3	17.3	6189	C902_17.3		P200 + IEC200L4	N320TC	190...193
106	22698	1.3	16.7	4746	C802_16.7		P200 + IEC200L4	N320TC	184...187
110	21767	2.3	16.0	6502	C902_16.0		P200 + IEC200L4	N320TC	190...193
118	20312	1.5	14.9	4288	C802_14.9		P200 + IEC200L4	N320TC	184...187
125	19200	0.9	14.1	2344	C702_14.1		P200 + IEC200L4	N320TC	178...181
127	18875	2.6	13.9	6565	C902_13.9		P200 + IEC200L4	N320TC	190...193
128	18749	1.5	13.8	4392	C802_13.8		P200 + IEC200L4	N320TC	184...187
135	17750	1.0	13.0	2501	C702_13.0		P200 + IEC200L4	N320TC	178...181
138	17423	2.8	12.8	6398	C902_12.8		P200 + IEC200L4	N320TC	190...193
146	16371	1.9	12.0	4268	C802_12.0		P200 + IEC200L4	N320TC	184...187
157	15268	1.2	11.2	6377	C902_11.2		P200 + IEC200L4	N320TC	190...193
159	15112	1.9	11.1	4392	C802_11.1		P200 + IEC200L4	N320TC	184...187
172	13904	1.2	10.2	2480	C702_10.2		P200 + IEC200L4	N320TC	178...181
183	13081	2.3	9.6	4184	C802_9.6		P200 + IEC200L4	N320TC	184...187
199	12075	2.4	8.9	4372	C802_8.9		P200 + IEC200L4	N320TC	184...187
220	10903	1.6	8.0	2417	C702_8.0		P200 + IEC200L4	N320TC	178...181
231	10389	2.7	7.6	4059	C802_7.6		P200 + IEC200L4	N320TC	184...187
236	10162	1.7	7.5	2292	C702_7.5		P200 + IEC200L4	N320TC	178...181
250	9590	2.9	7.0	4018	C802_7.0		P200 + IEC200L4	N320TC	184...187
281	8520	1.9	6.3	2397	C702_6.3		P200 + IEC200L4	N320TC	178...181
301	7969	2.0	5.9	2251	C702_5.9		P200 + IEC200L4	N320TC	178...181
385	6227	2.2	4.6	2292	C702_4.6		P200 + IEC200L4	N320TC	178...181

50 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
25.4	114014	0.9	69.4	12212	C1003_69.4		P225 + IEC225S4	N320TC	196...199
27.4	105870	1.0	64.5	11691	C1003_64.5		P225 + IEC225S4	N320TC	196...199
31	94180	1.1	57.4	11524	C1003_57.4		P225 + IEC225S4	N320TC	196...199

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.



50 hp									
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
33	87453	1.2	53.3	11108	C1003_53.3		P225 + IEC225S4	N320TC	196...199
38	75911	1.4	46.2	11795	C1003_46.2		P225 + IEC225S4	N320TC	196...199
41	70488	1.4	42.9	11379	C1003_42.9		P225 + IEC225S4	N320TC	196...199
45	64706	0.9	39.4	6231	C903_39.4		P225 + IEC225S4	N320TC	190...193
48	60655	1.6	36.9	11879	C1003_36.9		P225 + IEC225S4	N320TC	196...199
51	56322	1.7	34.3	11483	C1003_34.3		P225 + IEC225S4	N320TC	196...199
60	48536	1.5	29.6	12921	C1002_29.6		P225 + IEC225S4	N320TC	196...199
60	49379	1.0	29.4	6002	C902_29.4		P225 + IEC225S4	N320TC	190...193
65	45581	1.0	27.2	6044	C902_27.2		P225 + IEC225S4	N320TC	190...193
71	41649	1.3	24.8	6148	C902_24.8		P225 + IEC225S4	N320TC	190...193
73	40432	2.2	24.1	11504	C1002_24.1		P225 + IEC225S4	N320TC	196...199
77	38445	1.3	22.9	6210	C902_22.9		P225 + IEC225S4	N320TC	190...193
79	37322	2.2	22.2	11712	C1002_22.2		P225 + IEC225S4	N320TC	196...199
87	33948	1.6	20.2	5064	C902_20.2		P225 + IEC225S4	N320TC	190...193
87	33923	2.6	20.2	10524	C1002_20.2		P225 + IEC225S4	N320TC	196...199
94	31337	1.6	18.7	6273	C902_18.7		P225 + IEC225S4	N320TC	190...193
95	31314	2.8	18.7	11170	C1002_18.7		P225 + IEC225S4	N320TC	196...199
98	30281	1.0	18.1	3810	C802_18.1		P225 + IEC225S4	N320TC	184...187
102	29040	1.8	17.3	5106	C902_17.3		P225 + IEC225S4	N320TC	190...193
106	27952	1.0	16.7	3851	C802_16.7		P225 + IEC225S4	N320TC	184...187
110	26806	1.9	16.0	5335	C902_16.0		P225 + IEC225S4	N320TC	190...193
118	25014	1.2	14.9	3331	C802_14.9		P225 + IEC225S4	N320TC	184...187
127	23244	2.1	13.9	6189	C902_13.9		P225 + IEC225S4	N320TC	190...193
128	23089	1.2	13.8	3914	C802_13.8		P225 + IEC225S4	N320TC	184...187
138	21456	2.3	12.8	6023	C902_12.8		P225 + IEC225S4	N320TC	190...193
147	20161	1.5	12.0	3914	C802_12.0		P225 + IEC225S4	N320TC	184...187
157	18832	2.5	11.2	6064	C902_11.2		P225 + IEC225S4	N320TC	190...193
159	18610	1.5	11.1	4039	C802_11.1		P225 + IEC225S4	N320TC	184...187
170	17383	2.6	10.4	5919	C902_10.4		P225 + IEC225S4	N320TC	190...193
184	16109	1.9	9.6	3914	C802_9.6		P225 + IEC225S4	N320TC	184...187
196	15131	2.8	9.0	5898	C902_9.0		P225 + IEC225S4	N320TC	190...193
199	14870	1.9	8.9	4080	C802_8.9		P225 + IEC225S4	N320TC	184...187
212	13967	3.0	8.3	5773	C902_8.3		P225 + IEC225S4	N320TC	190...193
231	12794	2.2	7.6	3851	C802_7.6		P225 + IEC225S4	N320TC	184...187
251	11810	2.3	7.0	3747	C802_7.0		P225 + IEC225S4	N320TC	184...187
289	10251	2.5	6.1	3747	C802_6.1		P225 + IEC225S4	N320TC	184...187
313	9463	2.7	5.6	3622	C802_5.6		P225 + IEC225S4	N320TC	184...187

60 hp									
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
31	114244	0.9	57.4	11149	C1003_57.4		P225 + IEC225M4		196...199
33	106084	1.0	53.3	11024	C1003_53.3		P225 + IEC225M4		196...199
38	92082	1.1	46.2	10295	C1003_46.2		P225 + IEC225M4		196...199
41	85505	1.2	42.9	9920	C1003_42.9		P225 + IEC225M4		196...199
48	73576	1.3	36.9	10191	C1003_36.9		P225 + IEC225M4		196...199
52	68321	1.4	34.3	9836	C1003_34.3		P225 + IEC225M4		196...199
60	58876	1.3	29.6	11087	C1002_29.6		P225 + IEC225M4		196...199
71	50521	1.1	24.8	5418	C902_24.8		P225 + IEC225M4		190...193
73	49046	1.8	24.1	12108	C1002_24.1		P225 + IEC225M4		196...199
77	46635	1.1	22.9	5460	C902_22.9		P225 + IEC225M4		190...193
80	45273	1.8	22.2	12337	C1002_22.2		P225 + IEC225M4		196...199
87	41180	1.3	20.2	5252	C902_20.2		P225 + IEC225M4		190...193
88	41150	2.2	20.2	11066	C1002_20.2		P225 + IEC225M4		196...199

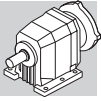
The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

60 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
95	38012	1.3	18.7	5668	C902_18.7		P225 + IEC225M4		190...193
95	37984	2.3	18.7	10628	C1002_18.7		P225 + IEC225M4		196...199
102	35226	1.5	17.3	4626	C902_17.3		P225 + IEC225M4		190...193
107	33538	2.5	16.5	9399	C1002_16.5		P225 + IEC225M4		196...199
111	32516	1.6	16.0	4856	C902_16.0		P225 + IEC225M4		190...193
116	30958	2.7	15.2	9086	C1002_15.2		P225 + IEC225M4		196...199
119	30342	1.0	14.9	3393	C802_14.9		P225 + IEC225M4		184...187
128	28196	1.8	13.9	5752	C902_13.9		P225 + IEC225M4		190...193
129	28008	1.0	13.8	3477	C802_13.8		P225 + IEC225M4		184...187
131	27455	2.8	13.5	8982	C1002_13.5		P225 + IEC225M4		196...199
138	26027	1.9	12.8	5606	C902_12.8		P225 + IEC225M4		190...193
147	24456	1.2	12.0	3539	C802_12.0		P225 + IEC225M4		184...187
158	22844	2.0	11.2	5710	C902_11.2		P225 + IEC225M4		190...193
160	22575	1.3	11.1	3643	C802_11.1		P225 + IEC225M4		184...187
171	21087	2.2	10.4	5585	C902_10.4		P225 + IEC225M4		190...193
184	19541	1.6	9.6	3601	C802_9.6		P225 + IEC225M4		184...187
196	18355	2.3	9.0	5606	C902_9.0		P225 + IEC225M4		190...193
200	18038	1.6	8.9	3747	C802_8.9		P225 + IEC225M4		184...187
213	16943	2.5	8.3	5481	C902_8.3		P225 + IEC225M4		190...193
232	15519	1.8	7.6	3601	C802_7.6		P225 + IEC225M4		184...187
242	14898	2.7	7.3	5481	C902_7.3		P225 + IEC225M4		190...193
251	14326	1.9	7.0	3497	C802_7.0		P225 + IEC225M4		184...187
262	13752	2.8	6.8	5377	C902_6.8		P225 + IEC225M4		190...193
290	12435	2.1	6.1	3435	C802_6.1		P225 + IEC225M4		184...187
314	11479	2.2	5.6	3539	C802_5.6		P225 + IEC225M4		184...187

75 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
38	112249	0.9	46.2	10066	C1003_46.2		P250 + IEC250M4		196...199
41	104231	1.0	42.9	10128	C1003_42.9		P250 + IEC250M4		196...199
48	89690	1.1	36.9	9461	C1003_36.9		P250 + IEC250M4		196...199
52	83284	1.2	34.3	9149	C1003_34.3		P250 + IEC250M4		196...199
60	71770	1.0	29.6	9732	C1002_29.6		P250 + IEC250M4		196...199
73	59787	1.5	24.1	9899	C1002_24.1		P250 + IEC250M4		196...199
80	55188	1.5	22.2	10087	C1002_22.2		P250 + IEC250M4		196...199
87	50199	1.1	20.2	4293	C902_20.2		P250 + IEC250M4		190...193
88	50162	1.8	20.2	9045	C1002_20.2		P250 + IEC250M4		196...199
95	46337	1.1	18.7	4626	C902_18.7		P250 + IEC250M4		190...193
95	46303	1.9	18.7	9941	C1002_18.7		P250 + IEC250M4		196...199
102	42941	1.2	17.3	3772	C902_17.3		P250 + IEC250M4		190...193
107	40883	2.0	16.5	8794	C1002_16.5		P250 + IEC250M4		196...199
111	39638	1.3	16.0	3960	C902_16.0		P250 + IEC250M4		190...193
116	37738	2.2	15.2	8503	C1002_15.2		P250 + IEC250M4		196...199
128	34371	1.4	13.9	5189	C902_13.9		P250 + IEC250M4		190...193
131	33467	2.3	13.5	9691	C1002_13.5		P250 + IEC250M4		196...199
138	31727	1.5	12.8	5043	C902_12.8		P250 + IEC250M4		190...193
142	30893	2.5	12.5	9295	C1002_12.5		P250 + IEC250M4		196...199
158	27847	1.7	11.2	4939	C902_11.2		P250 + IEC250M4		190...193
162	27120	2.7	10.9	9461	C1002_10.9		P250 + IEC250M4		196...199
171	25705	1.8	10.4	4835	C902_10.4		P250 + IEC250M4		190...193
175	25034	2.9	10.1	8836	C1002_10.1		P250 + IEC250M4		196...199
196	22374	1.9	9.0	5252	C902_9.0		P250 + IEC250M4		190...193
213	20653	2.0	8.3	5127	C902_8.3		P250 + IEC250M4		190...193

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

75 hp

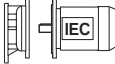


n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
242	18161	2.2	7.3	5189	C902_7.3		P250 + IEC250M4		190...193
262	16764	2.3	6.8	5085	C902_6.8		P250 + IEC250M4		190...193
316	13899	2.6	5.6	5043	C902_5.6		P250 + IEC250M4		190...193
342	12830	2.7	5.2	5002	C902_5.2		P250 + IEC250M4		190...193

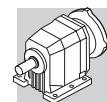
100 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
74	81473	1.1	24.1	6961	C1002_24.1		P280 + IEC280S4		196...199
80	75205	1.1	22.2	7106	C1002_22.2		P280 + IEC280S4		196...199
88	68356	1.3	20.2	6710	C1002_20.2		P280 + IEC280S4		196...199
95	63098	1.4	18.7	7794	C1002_18.7		P280 + IEC280S4		196...199
108	55711	1.5	16.5	8148	C1002_16.5		P280 + IEC280S4		196...199
117	51426	1.6	15.2	8294	C1002_15.2		P280 + IEC280S4		196...199
132	45606	1.7	13.5	8357	C1002_13.5		P280 + IEC280S4		196...199
143	42098	1.8	12.5	8461	C1002_12.5		P280 + IEC280S4		196...199
162	36957	2.0	10.9	8482	C1002_10.9		P280 + IEC280S4		196...199
176	34114	2.1	10.1	8503	C1002_10.1		P280 + IEC280S4		196...199
196	30583	2.2	9.0	8524	C1002_9.0		P280 + IEC280S4		196...199
213	28231	2.4	8.4	8461	C1002_8.4		P280 + IEC280S4		196...199
251	23887	2.6	7.1	8273	C1002_7.1		P280 + IEC280S4		196...199
272	22050	2.8	6.5	8190	C1002_6.5		P280 + IEC280S4		196...199

120 hp

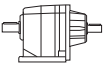
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
74	97686	0.9	24.1	8107	C1002_24.1		P280 + IEC280M4		196...199
88	81959	1.1	20.2	6377	C1002_20.2		P280 + IEC280M4		196...199
95	75655	1.2	18.7	7398	C1002_18.7		P280 + IEC280M4		196...199
108	66798	1.2	16.5	7732	C1002_16.5		P280 + IEC280M4		196...199
117	61660	1.3	15.2	7877	C1002_15.2		P280 + IEC280M4		196...199
132	54682	1.4	13.5	7940	C1002_13.5		P280 + IEC280M4		196...199
143	50476	1.5	12.5	8023	C1002_12.5		P280 + IEC280M4		196...199
162	44312	1.6	10.9	8044	C1002_10.9		P280 + IEC280M4		196...199
176	40903	1.8	10.1	8065	C1002_10.1		P280 + IEC280M4		196...199
196	36669	1.9	9.0	8023	C1002_9.0		P280 + IEC280M4		196...199
213	33849	2.0	8.4	8003	C1002_8.4		P280 + IEC280M4		196...199
251	28641	2.2	7.1	7877	C1002_7.1		P280 + IEC280M4		196...199
272	26438	2.3	6.5	7836	C1002_6.5		P280 + IEC280M4		196...199
333	21616	2.6	5.3	7627	C1002_5.3		P280 + IEC280M4		196...199
361	19953	2.8	4.9	7565	C1002_4.9		P280 + IEC280M4		196...199

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.



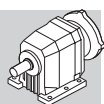
C 12

890 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 12 2_2.8	2.8	643	301	3.2	203	162	429	345	2.5	234	187	128 129
C 12 2_3.2	3.2	563	325	3.1	197	162	375	372	2.3	227	187	
C 12 2_3.7	3.7	486	342	2.8	197	164	324	391	2.1	227	189	
C 12 2_4.3	4.3	419	366	2.6	183	164	279	419	2.0	210	189	
C 12 2_4.9	4.9	367	390	2.4	181	164	245	447	1.8	208	189	
C 12 2_5.6	5.6	321	415	2.2	172	166	214	475	1.7	198	191	
C 12 2_6.2	6.2	290	431	2.1	166	170	194	494	1.6	191	196	
C 12 2_7.6	7.6	237	456	1.8	267	315	158	521	1.4	290	364	
C 12 2_8.8	8.8	205	480	1.6	267	332	136	549	1.3	290	383	
C 12 2_10.1	10.1	178	512	1.5	267	344	119	587	1.2	290	397	
C 12 2_11.9	11.9	151	545	1.4	267	360	101	624	1.1	290	416	
C 12 2_13.4	13.4	134	569	1.3	267	377	90	652	0.97	290	435	
C 12 2_15.4	15.4	117	594	1.2	267	395	78	680	0.88	290	450	
C 12 2_17.2	17.2	105	618	1.1	267	410	70	708	0.82	290	450	
C 12 2_18.4	18.4	98	634	1.0	267	410	65	726	0.79	290	450	
C 12 2_20.6	20.6	87	667	0.97	267	410	58	764	0.74	290	450	
C 12 2_23.2	23.2	78	691	0.90	267	410	52	788	0.68	290	450	
C 12 2_25.4	25.4	71	716	0.85	267	410	47	788	0.62	290	450	
C 12 2_29.5	29.5	61	756	0.77	267	423	41	866	0.59	290	450	
C 12 2_32.8	32.8	55	732	0.67	267	443	37	797	0.49	290	450	
C 12 2_37.0	37.0	49	732	0.59	267	450	32	797	0.43	290	450	
C 12 2_42.3	42.3	43	813	0.58	267	450	28	890	0.42	290	450	
C 12 2_47.6	47.6	38	752	0.47	267	450	25	797	0.34	290	450	
C 12 2_55.2	55.2	33	788	0.43	267	450	22	797	0.29	290	450	
C 12 2_66.2	66.2	27	761	0.35	267	450	18.1	797	0.24	290	450	

C 22

1770 lb·in

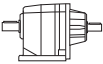


	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 22 2_2.7	2.7	667	651	7.2	—	300	444	745	5.5	—	345	136 137
C 22 2_3.3	3.3	545	691	6.3	—	321	364	791	4.8	—	369	
C 22 2_3.7	3.7	486	732	5.9	—	331	324	838	4.5	—	380	
C 22 2_4.3	4.3	419	765	5.3	—	339	279	875	4.1	—	390	
C 22 2_4.8	4.8	375	813	5.1	—	355	250	929	3.9	—	409	
C 22 2_5.6	5.6	321	830	4.5	—	368	214	929	3.3	—	423	
C 22 2_6.1	6.1	295	854	4.2	—	390	197	974	3.2	—	449	
C 22 2_7.1	7.1	254	1057	4.5	293	409	169	1210	3.4	334	470	
C 22 2_8.7	8.7	207	1123	3.9	295	429	138	1285	3.0	337	494	
C 22 2_9.6	9.6	188	1179	3.7	302	452	125	1350	2.8	344	520	
C 22 2_11.1	11.1	162	1245	3.4	287	466	108	1425	2.6	327	536	
C 22 2_12.4	12.4	145	1301	3.2	293	489	97	1490	2.4	334	562	
C 22 2_14.5	14.5	124	1367	2.8	281	503	83	1564	2.2	320	579	
C 22 2_15.8	15.8	114	1423	2.7	273	528	76	1629	2.1	311	607	
C 22 2_18.1	18.1	99	1489	2.5	258	545	66	1704	1.9	294	626	
C 22 2_20.0	20.0	90	1545	2.3	258	569	60	1770	1.8	294	654	
C 22 2_21.5	21.5	84	1578	2.2	246	579	56	1770	1.6	280	666	
C 22 2_24.3	24.3	74	1627	2.0	258	610	49	1770	1.5	294	702	
C 22 2_27.2	27.2	66	1627	1.8	277	639	44	1770	1.3	315	735	
C 22 2_29.6	29.6	61	1627	1.7	279	672	41	1770	1.2	318	773	
C 22 2_33.1	33.1	54	1627	1.5	287	699	36	1770	1.1	327	803	
C 22 2_36.8	36.8	49	1637	1.3	289	742	33	1770	1.0	330	853	
C 22 2_43.3	43.3	41.6	1637	1.1	333	812	27.7	1682	0.78	379	933	
C 22 2_48.6	48.6	37.0	1328	0.82	359	904	24.7	1416	0.58	410	1040	
C 22 2_54.7	54.7	32.9	1328	0.73	366	945	21.9	1416	0.52	417	1087	
C 22 2_63.3	63.3	28.4	1106	0.53	376	1027	19.0	1195	0.38	428	1120	
C 22 3_60.0	60.0	30.0	1593	0.82	254	925	20.0	1682	0.57	290	1063	
C 22 3_65.3	65.3	27.6	1770	0.83	262.38	960	18.4	1770	0.55	290	1103	
C 22 3_74.8	74.8	24.1	1770	0.73	262.38	986	16.0	1770	0.48	290	1120	
C 22 3_82.6	82.6	21.8	1770	0.66	268.58	1027	14.5	1770	0.44	290	1120	
C 22 3_88.5	88.5	20.3	1770	0.61	268.58	1027	13.6	1770	0.41	290	1120	
C 22 3_100.2	100.2	18.0	1770	0.54	268.58	1027	12.0	1770	0.36	290	1120	
C 22 3_112.0	112.0	16.1	1770	0.49	268.58	1027	10.7	1770	0.32	290	1120	
C 22 3_122.2	122.2	14.7	1770	0.44	268.58	1027	9.8	1770	0.30	290	1120	
C 22 3_136.5	136.5	13.2	1770	0.40	268.58	1057	8.8	1770	0.27	290	1120	
C 22 3_151.7	151.7	11.9	1770	0.36	274.27	1120	7.9	1770	0.24	290	1120	
C 22 3_178.5	178.5	10.1	1770	0.30	283.26	1120	6.7	1770	0.20	290	1120	
C 22 3_200.7	200.7	9.0	1545	0.24	287.76	1120	6.0	1726	0.18	290	1120	
C 22 3_225.8	225.8	8.0	1505	0.20	290	1120	5.3	1726	0.16	290	1120	
C 22 3_261.0	261.0	6.9	1261	0.15	290	1120	4.6	1416	0.11	290	1120	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

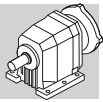
C 32

2660 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 32 2_2.9	2.9	621	1057	11.0	195	447	414	1210	8.4	221	513	144 145
C 32 2_3.4	3.4	529	1123	9.9	187	470	353	1285	7.6	211	539	
C 32 2_3.7	3.7	486	1220	9.9	156	476	324	1372	7.4	176	546	
C 32 2_4.5	4.5	400	1236	8.3	201	515	267	1398	6.2	228	591	
C 32 2_5.0	5.0	360	1261	7.6	228	536	240	1434	5.7	258	614	
C 32 2_5.7	5.7	316	1261	6.6	260	569	211	1443	5.1	294	652	
C 32 2_6.3	6.3	286	1328	6.3	301	596	190	1443	4.6	341	683	
C 32 2_7.2	7.2	250	1627	6.8	457	616	167	1862	5.2	490	706	
C 32 2_8.5	8.5	212	1700	6.0	457	656	141	1946	4.6	490	751	
C 32 2_9.3	9.3	194	1790	5.8	457	672	129	2049	4.4	490	770	
C 32 2_11.2	11.2	161	1879	5.0	457	717	107	2151	3.8	490	822	
C 32 2_12.3	12.3	146	1993	4.9	457	734	98	2281	3.7	490	841	
C 32 2_14.1	14.1	128	2042	4.4	457	773	85	2337	3.3	490	886	
C 32 2_15.6	15.6	115	2196	4.2	457	787	77	2514	3.2	490	903	
C 32 2_18.2	18.2	99	2237	3.7	457	839	66	2561	2.8	490	962	
C 32 2_20.1	20.1	90	2400	3.6	457	858	60	2660	2.6	490	983	
C 32 2_22.9	22.9	79	2400	3.1	457	907	52	2660	2.3	490	1040	
C 32 2_25.1	25.1	72	2440	2.9	457	942	48	2660	2.1	490	1080	
C 32 2_26.9	26.9	67	2440	2.7	457	969	45	2660	2.0	490	1110	
C 32 2_29.8	29.8	60	2440	2.5	457	1014	40	2660	1.8	490	1162	
C 32 2_33.1	33.1	54	2440	2.2	457	1062	36	2660	1.6	490	1217	
C 32 2_36.1	36.1	50	2478	2.1	457	1103	33	2660	1.5	490	1240	
C 32 2_40.7	40.7	44	2567	1.9	457	1134	29.5	2660	1.3	490	1240	
C 32 2_45.3	45.3	40	2660	1.8	457	1134	26.5	2660	1.2	490	1240	
C 32 2_52.4	52.4	34	2660	1.5	457	1134	22.9	2660	1.0	490	1240	
C 32 2_59.4	59.4	30	1814	0.92	457	1240	20.2	1947	0.66	490	1240	
C 32 2_66.8	66.8	26.9	1814	0.82	457	1240	18.0	1947	0.58	490	1240	
C 32 3_74.7	74.7	24.1	2478	1.0	243	1240	16.1	2567	0.70	275	1240	
C 32 3_82.6	82.6	21.8	2660	0.99	258	1240	14.5	2660	0.66	290	1240	
C 32 3_94.2	94.2	19.1	2660	0.87	264	1240	12.7	2660	0.58	290	1240	
C 32 3_103.3	103.3	17.4	2660	0.79	270	1240	11.6	2660	0.53	290	1240	
C 32 3_110.6	110.6	16.3	2660	0.74	270	1240	10.8	2660	0.49	290	1240	
C 32 3_122.4	122.4	14.7	2660	0.67	270	1240	9.8	2660	0.44	290	1240	
C 32 3_136.0	136.0	13.2	2660	0.60	270	1240	8.8	2660	0.40	290	1240	
C 32 3_148.4	148.4	12.1	2660	0.55	270	1240	8.1	2660	0.37	290	1240	
C 32 3_167.4	167.4	10.8	2660	0.49	270	1240	7.2	2660	0.32	290	1240	
C 32 3_186.0	186.0	9.7	2660	0.44	270	1240	6.5	2660	0.29	290	1240	
C 32 3_215.6	215.6	8.3	2660	0.38	279	1240	5.6	2660	0.25	290	1240	
C 32 3_244.2	244.2	7.4	2124	0.27	288	1240	4.9	2301	0.19	290	1240	
C 32 3_274.7	274.7	6.6	2124	0.24	290	1240	4.4	2301	0.17	290	1240	

C 36

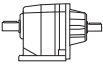
3980 lb·in



	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 36 2_2.7	2.7	667	1393	15.5	238	460	444	1575	11.7	271	529	152 153
C 36 2_3.2	3.2	563	1451	13.6	256	489	375	1640	10.3	292	562	
C 36 2_3.5	3.5	514	1516	13.0	273	501	343	1714	9.8	311	577	
C 36 2_4.2	4.2	429	1574	11.3	291	538	286	1770	8.4	332	619	
C 36 2_4.6	4.6	391	1639	10.7	304	555	261	1770	7.7	346	638	
C 36 2_5.3	5.3	340	1639	9.3	341	590	226	1770	6.7	388	678	
C 36 2_5.8	5.8	310	1639	8.5	411	621	207	1770	6.1	468	714	
C 36 2_6.8	6.8	265	2910	12.9	459	557	176	3290	9.7	523	640	
C 36 2_8.0	8.0	225	2992	11.2	465	598	150	3363	8.4	530	688	
C 36 2_8.8	8.8	205	3115	10.6	469	616	136	3363	7.7	534	709	
C 36 2_10.6	10.6	170	3115	8.8	479	676	113	3363	6.4	546	777	
C 36 2_11.7	11.7	154	3115	8.0	490	711	103	3363	5.8	558	818	
C 36 2_13.3	13.3	135	3115	7.0	496	754	90	3363	5.1	565	867	
C 36 2_14.8	14.8	122	3186	6.5	504	799	81	3363	4.6	574	919	
C 36 2_17.2	17.2	105	3275	5.7	508	863	70	3363	3.9	579	992	
C 36 2_19.0	19.0	95	3363	5.3	517	904	63	3363	3.5	588	1040	
C 36 3_22.1	22.1	81	3524	4.9	599	923	54	3980	3.7	670	1061	
C 36 3_26.2	26.2	69	3606	4.2	601	988	46	3980	3.1	670	1136	
C 36 3_28.7	28.7	63	3688	3.9	605	1023	42	3980	2.8	670	1177	
C 36 3_34.6	34.6	52	3688	3.3	609	1114	35	3980	2.4	670	1281	
C 36 3_38.1	38.1	47	3850	3.1	614	1169	31	3980	2.1	670	1344	
C 36 3_43.5	43.5	41.4	3894	2.7	616	1243	27.6	3980	1.9	670	1429	
C 36 3_48.2	48.2	37.3	3980	2.5	618	1301	24.9	3980	1.7	670	1460	
C 36 3_56.2	56.2	32.0	3980	2.2	618	1336	21.4	3980	1.5	670	1460	
C 36 3_62.0	62.0	29.0	3980	2.0	620	1336	19.4	3980	1.3	670	1460	
C 36 3_70.8	70.8	25.4	3980	1.7	620	1336	16.9	3980	1.2	670	1460	
C 36 3_77.6	77.6	23.2	3980	1.6	620	1336	15.5	3980	1.1	670	1460	
C 36 3_83.1	83.1	21.7	3980	1.5	620	1336	14.4	3980	0.98	670	1460	
C 36 3_91.9	91.9	19.6	3980	1.3	620	1394	13.1	3980	0.89	670	1460	
C 36 3_102.2	102.2	17.6	3980	1.2	620	1439	11.7	3980	0.80	670	1460	
C 36 3_111.5	111.5	16.1	3980	1.1	620	1460	10.8	3980	0.73	670	1460	
C 36 3_125.8	125.8	14.3	3980	0.97	620	1460	9.5	3980	0.65	670	1460	
C 36 3_139.8	139.8	12.9	3980	0.87	620	1460	8.6	3980	0.58	670	1460	
C 36 3_162.0	162.0	11.1	3980	0.75	620	1460	7.4	3980	0.50	670	1460	
C 36 3_183.5	183.5	9.8	3980	0.67	620	1460	6.5	3980	0.44	670	1460	
C 36 3_206.4	206.4	8.7	3980	0.59	620	1460	5.8	3980	0.39	670	1460	
C 36 4_230.9	230.9	7.8	3980	0.55	269	1460	5.2	3980	0.36	290	1460	
C 36 4_255.0	255.0	7.1	3980	0.50	269	1460	4.7	3980	0.33	290	1460	
C 36 4_290.9	290.9	6.2	3980	0.43	272	1460	4.1	3980	0.29	290	1460	
C 36 4_318.9	318.9	5.6	3980	0.40	277	1460	3.8	3980	0.26	290	1460	
C 36 4_341.7	341.7	5.3	3980	0.37	279	1460	3.5	3980	0.25	290	1460	
C 36 4_377.9	377.9	4.8	3980	0.33	283	1460	3.2	3980	0.22	290	1460	
C 36 4_420.2	420.2	4.3	3980	0.30	286	1460	2.9	3980	0.20	290	1460	
C 36 4_458.4	458.4	3.9	3980	0.28	288	1460	2.6	3980	0.18	290	1460	
C 36 4_517.2	517.2	3.5	3980	0.24	290	1460	2.3	3980	0.16	290	1460	
C 36 4_574.7	574.7	3.1	3980	0.22	290	1460	2.1	3980	0.15	290	1460	
C 36 4_665.9	665.9	2.7	3980	0.19	290	1460	1.8	3980	0.13	290	1460	
C 36 4_754.2	754.2	2.4	3980	0.17	290	1460	1.6	3980	0.11	290	1460	
C 36 4_848.5	848.5	2.1	3980	0.15	290	1460	1.4	3980	0.10	290	1460	

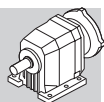
C 41

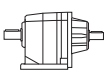
5310 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 41 2 2.7	2.7	667	2169	24	287	421	444	2169	16.1	328	489	160 161
C 41 2 3.6	3.6	500	2257	18.8	341	489	333	2257	12.6	390	567	
C 41 2 4.7	4.7	383	2301	14.7	416	558	255	2301	9.8	475	647	
C 41 2 6.0	6.0	300	2301	11.5	496	636	200	2301	7.7	567	738	
C 41 2 6.4	6.4	281	2828	13.3	592	667	188	3194	10.0	676	773	
C 41 2 7.1	7.1	254	2910	12.3	616	700	169	3287	9.3	704	811	
C 41 2 8.6	8.6	209	3156	11.0	600	736	140	3564	8.3	685	854	
C 41 2 9.6	9.6	188	3196	10.0	627	777	125	3611	7.5	716	901	
C 41 2 11.2	11.2	161	3442	9.2	602	802	107	3888	7.0	688	930	
C 41 2 12.4	12.4	145	3483	8.4	635	847	97	3935	6.4	725	982	
C 41 2 14.2	14.2	127	3647	7.7	616	880	85	4120	5.8	704	1020	
C 41 2 15.8	15.8	114	3688	7.0	645	929	76	4166	5.3	737	1077	
C 41 2 17.8	17.8	101	3934	6.6	631	947	67	4426	5.0	721	1098	
C 41 2 19.8	19.8	91	3975	6.0	658	1000	61	4426	4.5	751	1160	
C 41 2 22.6	22.6	80	4098	5.4	643	1045	53	4426	3.9	735	1212	
C 41 2 25.0	25.0	72	4098	4.9	668	1109	48	4426	3.5	763	1285	
C 41 2 28.3	28.3	64	4098	4.4	658	1168	42	4426	3.1	751	1354	
C 41 2 31.4	31.4	57	4098	3.9	683	1236	38	4426	2.8	780	1433	
C 41 2 33.4	33.4	54	4116	3.7	666	1262	36	4426	2.7	761	1463	
C 41 2 37.1	37.1	49	4160	3.4	687	1334	32	4426	2.4	784	1546	
C 41 2 44.8	44.8	40	4426	3.0	724	1432	26.8	4426	2.0	790	1570	
C 41 3 28.5	28.5	63	4590	4.9	724	1109	42	5185	3.7	790	1285	
C 41 3 31.2	31.2	58	4672	4.6	724	1160	38	5277	3.5	790	1345	
C 41 3 36.8	36.8	49	4918	4.1	724	1219	33	5310	3.0	790	1414	
C 41 3 40.3	40.3	45	4918	3.7	724	1285	29.8	5310	2.7	790	1489	
C 41 3 47.0	47.0	38	4918	3.2	724	1375	25.5	5310	2.3	790	1570	
C 41 3 51.5	51.5	35	4918	2.9	724	1432	23.3	5310	2.1	790	1570	
C 41 3 58.7	58.7	31	4918	2.6	724	1432	20.4	5310	1.9	790	1570	
C 41 3 64.3	64.3	28.0	4957	2.4	724	1432	18.7	5310	1.7	790	1570	
C 41 3 74.4	74.4	24.2	5222	2.2	724	1432	16.1	5310	1.5	790	1570	
C 41 3 81.5	81.5	22.1	5310	2.0	724	1506	14.7	5310	1.3	790	1570	
C 41 3 93.3	93.3	19.3	5310	1.7	724	1570	12.9	5310	1.2	790	1570	
C 41 3 102.3	102.3	17.6	5310	1.6	724	1570	11.7	5310	1.1	790	1570	
C 41 3 110.1	110.1	16.3	5310	1.5	724	1570	10.9	5310	0.99	790	1570	
C 41 3 120.6	120.6	14.9	5310	1.4	724	1570	10.0	5310	0.90	790	1570	
C 41 3 132.9	132.9	13.5	5310	1.2	724	1570	9.0	5310	0.82	790	1570	
C 41 3 145.6	145.6	12.4	5310	1.1	724	1570	8.2	5310	0.75	790	1570	
C 41 3 164.1	164.1	11.0	5310	0.99	724	1570	7.3	5310	0.66	790	1570	
C 41 3 179.9	179.9	10.0	5310	0.91	724	1570	6.7	5310	0.60	790	1570	
C 41 3 190.8	190.8	9.4	5310	0.85	724	1570	6.3	5310	0.57	790	1570	
C 41 3 209.1	209.1	8.6	5310	0.78	724	1570	5.7	5310	0.52	790	1570	
C 41 4 239.9	239.9	7.5	5310	0.70	395	1570	5.0	5310	0.47	451	1570	
C 41 4 263.0	263.0	6.8	5310	0.64	397	1570	4.6	5310	0.43	454	1570	
C 41 4 304.2	304.2	5.9	5310	0.55	403	1570	3.9	5310	0.37	461	1570	
C 41 4 333.4	333.4	5.4	5310	0.51	405	1570	3.6	5310	0.34	463	1570	
C 41 4 381.8	381.8	4.7	5310	0.44	407	1570	3.1	5310	0.29	465	1570	
C 41 4 418.5	418.5	4.3	5310	0.40	410	1570	2.9	5310	0.27	468	1570	
C 41 4 450.2	450.2	4.0	5310	0.37	412	1570	2.7	5310	0.25	470	1570	
C 41 4 493.5	493.5	3.6	5310	0.34	414	1570	2.4	5310	0.23	473	1570	
C 41 4 543.5	543.5	3.3	5310	0.31	414	1570	2.2	5310	0.21	473	1570	
C 41 4 595.8	595.8	3.0	5310	0.28	416	1570	2.0	5310	0.19	475	1570	
C 41 4 671.3	671.3	2.7	5310	0.25	418	1570	1.8	5310	0.17	477	1570	
C 41 4 735.9	735.9	2.4	5310	0.23	418	1570	1.6	5310	0.15	477	1570	
C 41 4 780.4	780.4	2.3	5310	0.22	420	1570	1.5	5310	0.14	480	1570	
C 41 4 855.5	855.5	2.1	5310	0.20	420	1570	1.4	5310	0.13	480	1570	

C 51

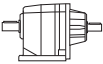
8850 lb·in



	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 51 2 2.6	2.6	692	3247	38	276	861	462	3540	27	329	996	168 169
C 51 2 3.3	3.3	545	3409	31	328	939	364	3717	23	390	1086	
C 51 2 4.5	4.5	400	3531	24	399	1062	267	3850	17.1	475	1229	
C 51 2 5.6	5.6	321	3531	18.9	477	1181	214	3850	13.8	568	1366	
C 51 2 7.0	7.0	257	5113	22	568	1230	171	5849	16.7	676	1423	
C 51 2 7.8	7.8	231	5195	20	592	1277	154	5942	15.3	705	1478	
C 51 2 8.8	8.8	205	5560	19.0	576	1322	136	6360	14.5	686	1530	
C 51 2 9.8	9.8	184	5560	17.0	602	1384	122	6360	13.0	717	1601	
C 51 2 11.8	11.8	153	6250	15.9	578	1452	102	7081	12.0	688	1679	
C 51 2 13.1	13.1	137	6087	14.0	610	1532	92	7081	10.8	726	1772	
C 51 2 15.0	15.0	120	6493	13.0	592	1593	80	7081	9.5	705	1843	
C 51 2 16.6	16.6	108	6453	11.7	620	1667	72	7081	8.5	738	1928	
C 51 2 18.9	18.9	95	6493	10.3	606	1767	63	7081	7.5	721	2044	
C 51 2 21.0	21.0	86	6453	9.2	632	1849	57	7081	6.8	752	2139	
C 51 2 23.4	23.4	77	6506	8.4	618	1940	51	7081	6.1	736	2244	
C 51 2 25.9	25.9	69	6453	7.5	642	2028	46	7081	5.5	764	2250	
C 51 2 29.8	29.8	60	7037	7.1	632	2050	40	7081	4.8	752	2250	
C 51 2 33.0	33.0	55	6860	6.2	656	2050	36	7081	4.3	780	2250	
C 51 2 36.4	36.4	49	6638	5.5	640	2050	33	7081	3.9	762	2250	
C 51 2 40.4	40.4	45	7037	5.2	660	2050	30	7081	3.5	785	2250	
C 51 2 43.1	43.1	42	6461	4.5	652	2109	28	7081	3.3	776	2250	
C 51 2 47.8	47.8	38	7081	4.5	666	2142	25	7081	3.0	790	2250	
C 51 2 51.4	51.4	35	5886	3.4	674	2250	23	6417	2.5	790	2250	
C 51 2 57.0	57.0	32	6594	3.5	672	2250	21	7037	2.5	790	2250	
C 51 3 21.8	21.8	83	7345	10.3	696	1794	55	8403	7.9	790	2075	
C 51 3 23.9	23.9	75	7467	9.6	696	1868	50	8542	7.3	790	2161	
C 51 3 27.4	27.4	66	7873	8.8	696	1942	44	8850	6.6	790	2246	
C 51 3 30.1	30.1	60	8116	8.3	696	2011	40	8850	6.0	790	2250	
C 51 3 37.0	37.0	49	8116	6.7	696	2050	32	8850	4.9	790	2250	
C 51 3 40.5	40.5	44	8116	6.2	696	2050	29.6	8850	4.5	790	2250	
C 51 3 46.7	46.7	39	8116	5.3	696	2050	25.7	8850	3.9	790	2250	
C 51 3 51.2	51.2	35	8143	4.9	696	2111	23.4	8850	3.5	790	2250	
C 51 3 59.0	59.0	31	8586	4.5	696	2199	20.3	8850	3.1	790	2250	
C 51 3 64.6	64.6	27.9	8850	4.2	696	2250	18.6	8850	2.8	790	2250	
C 51 3 72.9	72.9	24.7	8850	3.7	696	2250	16.5	8850	2.5	790	2250	
C 51 3 79.9	79.9	22.5	8850	3.4	696	2250	15.0	8850	2.3	790	2250	
C 51 3 93.0	93.0	19.4	8850	2.9	696	2250	12.9	8850	1.9	790	2250	
C 51 3 101.8	101.8	17.7	8850	2.7	696	2250	11.8	8850	1.8	790	2250	
C 51 3 113.6	113.6	15.8	8850	2.4	696	2250	10.6	8850	1.6	790	2250	
C 51 3 124.4	124.4	14.5	8850	2.2	696	2250	9.6	8850	1.5	790	2250	
C 51 3 134.6	134.6	13.4	8850	2.0	696	2250	8.9	8850	1.3	790	2250	
C 51 3 147.4	147.4	12.2	8850	1.8	696	2250	8.1	8850	1.2	790	2250	
C 51 3 160.5	160.5	11.2	8850	1.7	696	2250	7.5	8850	1.1	790	2250	
C 51 3 175.8	175.8	10.2	8850	1.5	696	2250	6.8	8850	1.0	790	2250	
C 51 3 197.9	197.9	9.1	8850	1.4	696	2250	6.1	8850	0.92	790	2250	
C 51 3 216.7	216.7	8.3	8850	1.3	696	2250	5.5	8850	0.84	790	2250	
C 51 4 240.9	240.9	7.5	8850	1.2	437	2250	5.0	8850	0.78	490	2250	
C 51 4 263.8	263.8	6.8	8850	1.1	437	2250	4.5	8850	0.71	490	2250	
C 51 4 297.8	297.8	6.0	8850	0.94	437	2250	4.0	8850	0.63	490	2250	
C 51 4 326.1	326.1	5.5	8850	0.86	437	2250	3.7	8850	0.57	490	2250	
C 51 4 379.6	379.6	4.7	8850	0.74	437	2250	3.2	8850	0.49	490	2250	
C 51 4 415.7	415.7	4.3	8850	0.68	490	2250	2.9	8850	0.45	490	2250	
C 51 4 463.9	463.9	3.9	8850	0.61	490	2250	2.6	8850	0.40	490	2250	
C 51 4 508.0	508.0	3.5	8850	0.55	490	2250	2.4	8850	0.37	490	2250	
C 51 4 549.7	549.7	3.3	8850	0.51	490	2250	2.2	8850	0.34	490	2250	
C 51 4 602.0	602.0	3.0	8850	0.47	490	2250	2.0	8850	0.31	490	2250	
C 51 4 655.4	655.4	2.7	8850	0.43	490	2250	1.8	8850	0.29	490	2250	
C 51 4 717.7	717.7	2.5	8850	0.39	490	2250	1.7	8850	0.26	490	2250	
C 51 4 808.0	808.0	2.2	8850	0.35	490	2250	1.5	8850	0.23	490	2250	
C 51 4 884.9	884.9	2.0	8850	0.32	490	2250	1.4	8850	0.21	490	2250	

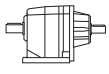
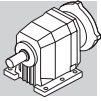
C 61

14200 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 61 2 2.8	2.8	643	4513	48	147	1218	429	5097	36	182	1406	176 177
C 61 2 3.7	3.7	486	4718	38	329	1356	324	5329	29	409	1565	
C 61 2 4.6	4.6	391	5089	33	409	1465	261	5560	24	508	1691	
C 61 2 6.0	6.0	300	5128	26	514	1634	200	5792	19	639	1886	
C 61 2 6.7	6.7	269	9272	42	543	1451	179	10472	31	674	1674	
C 61 2 7.5	7.5	240	10256	41	552	1461	160	11584	31	686	1686	
C 61 2 8.8	8.8	205	10256	35	567	1580	136	11584	26	705	1824	
C 61 2 9.8	9.8	184	11077	34	634	1613	122	11949	24	788	1862	
C 61 2 10.9	10.9	165	11077	31	569	1687	110	11949	22	695	1947	
C 61 2 12.1	12.1	149	11077	28	685	1794	99	11949	19.8	851	2071	
C 61 2 14.3	14.3	126	11077	23	684	1938	84	11949	16.7	849	2237	
C 61 2 15.9	15.9	113	11077	21	720	2053	75	11949	15.1	894	2369	
C 61 2 17.7	17.7	102	11077	18.8	705	2137	68	11949	13.5	875	2467	
C 61 2 19.6	19.6	92	11506	17.6	741	2260	61	11949	12.2	920	2609	
C 61 2 22.4	22.4	80	11077	14.9	725	2384	54	11949	10.7	901	2751	
C 61 2 24.8	24.8	73	11949	14.5	758	2527	48	11949	9.7	941	2917	
C 61 2 27.4	27.4	66	11506	12.6	739	2630	44	11949	8.7	918	3036	
C 61 2 30.4	30.4	59	11949	11.8	771	2774	39	11949	7.9	958	3202	
C 61 2 34.2	34.2	53	10312	9.1	779	2979	35	11352	6.6	967	3439	
C 61 2 38.0	38.0	47	11329	9.0	781	3041	32	11949	6.3	970	3510	
C 61 3 26.8	26.8	67	11774	13.5	895	2548	45	13298	10.2	1060	2941	
C 61 3 29.4	29.4	61	12020	12.6	895	2651	41	13576	9.5	1060	3060	
C 61 3 33.0	33.0	55	12513	11.6	895	2733	36	14132	8.8	1060	3154	
C 61 3 36.1	36.1	50	12759	10.8	895	2836	33	14200	8.0	1060	3273	
C 61 3 43.4	43.4	41	13128	9.3	895	3041	27.6	14200	6.7	1060	3510	
C 61 3 47.6	47.6	38	13128	8.5	895	3185	25.2	14200	6.1	1060	3600	
C 61 3 53.5	53.5	34	13128	7.5	895	3288	22.4	14200	5.4	1060	3600	
C 61 3 58.6	58.6	31	13128	6.9	895	3288	20.5	14200	4.9	1060	3600	
C 61 3 67.7	67.7	26.6	13128	6.0	895	3288	17.7	14200	4.3	1060	3600	
C 61 3 74.2	74.2	24.3	13586	5.6	895	3288	16.2	14200	3.9	1060	3600	
C 61 3 83.0	83.0	21.7	14200	5.2	895	3288	14.5	14200	3.5	1060	3600	
C 61 3 91.0	91.0	19.8	14200	4.8	895	3417	13.2	14200	3.2	1060	3600	
C 61 3 103.6	103.6	17.4	14200	4.2	895	3600	11.6	14200	2.8	1060	3600	
C 61 3 113.6	113.6	15.8	14200	3.8	895	3600	10.6	14200	2.6	1060	3600	
C 61 3 128.1	128.1	14.1	14200	3.4	895	3600	9.4	14200	2.3	1060	3600	
C 61 3 140.5	140.5	12.8	14200	3.1	895	3600	8.5	14200	2.1	1060	3600	
C 61 3 150.0	150.0	12.0	14200	2.9	895	3600	8.0	14200	1.9	1060	3600	
C 61 3 164.5	164.5	10.9	14200	2.6	895	3600	7.3	14200	1.8	1060	3600	
C 61 3 178.6	178.6	10.1	14200	2.4	895	3600	6.7	14200	1.6	1060	3600	
C 61 3 195.8	195.8	9.2	14200	2.2	895	3600	6.1	14200	1.5	1060	3600	
C 61 4 217.4	217.4	8.3	14200	2.1	666	3600	5.5	14200	1.4	790	3600	
C 61 4 238.3	238.3	7.6	14200	1.9	666	3600	5.0	14200	1.3	790	3600	
C 61 4 275.3	275.3	6.5	14200	1.6	666	3600	4.4	14200	1.1	790	3600	
C 61 4 301.7	301.7	6.0	14200	1.5	666	3600	4.0	14200	0.99	790	3600	
C 61 4 337.7	337.7	5.3	14200	1.3	666	3600	3.6	14200	0.89	790	3600	
C 61 4 370.1	370.1	4.9	14200	1.2	666	3600	3.2	14200	0.81	790	3600	
C 61 4 421.5	421.5	4.3	14200	1.1	666	3600	2.8	14200	0.71	790	3600	
C 61 4 462.0	462.0	3.9	14200	0.97	666	3600	2.6	14200	0.65	790	3600	
C 61 4 521.1	521.1	3.5	14200	0.86	666	3600	2.3	14200	0.57	790	3600	
C 61 4 571.2	571.2	3.2	14200	0.79	666	3600	2.1	14200	0.52	790	3600	
C 61 4 610.1	610.1	3.0	14200	0.74	666	3600	2.0	14200	0.49	790	3600	
C 61 4 668.8	668.8	2.7	14200	0.67	666	3600	1.8	14200	0.45	790	3600	
C 61 4 726.3	726.3	2.5	14200	0.62	666	3600	1.7	14200	0.41	790	3600	
C 61 4 796.1	796.1	2.3	14200	0.56	666	3600	1.5	14200	0.38	790	3600	

C 70

20400 lb·in



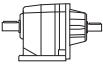
	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 70 2_4.6	4.6	391	13933	91	—	1480	261	15754	69	—	1673	
C 70 2_5.9	5.9	305	15573	79	—	1457	203	17260	59	—	1647	
C 70 2_6.3	6.3	286	15982	76	456	1719	190	18071	57	640	1944	
C 70 2_7.5	7.5	240	15982	64	—	1751	160	18071	48	—	1979	
C 70 2_8.0	8.0	225	17212	65	463	1851	150	19461	49	649	2092	
C 70 2_9.5	9.5	189	16392	52	—	2065	126	18534	39	151	2335	
C 70 2_10.2	10.2	176	17212	51	776	2251	118	19461	38	1087	2544	
C 70 2_11.2	11.2	161	16392	44	186	2355	107	18534	33	260	2662	
C 70 2_13.0	13.0	138	18145	42	972	2688	92	18587	29	1362	3039	
C 70 2_14.1	14.1	128	17212	37	247	2584	85	19030	27	311	2921	
C 70 2_15.3	15.3	118	18587	37	1017	2980	78	18587	24	1425	3369	
C 70 2_16.7	16.7	108	16802	30	408	2980	72	18145	22	572	3369	
C 70 2_19.3	19.3	93	18587	29	1041	3397	62	18587	19.3	1459	3840	
C 70 2_22.9	22.9	79	18587	24	1052	3751	52	18587	16.3	1474	4241	
C 70 2_27.7	27.7	65	18587	20	1062	4147	43	18587	13.4	1489	4688	
C 70 2_34.7	34.7	52	18587	16.1	1073	4626	35	18587	10.7	1503	5230	
C 70 3_41.3	41.3	44	18851	14.0	1215	4751	29.1	20400	10.1	1570	5372	
C 70 3_44.7	44.7	40	18851	12.9	1215	4960	26.8	20400	9.3	1570	5607	
C 70 3_52.2	52.2	34	18851	11.1	1215	5210	23.0	20400	8.0	1570	5620	
C 70 3_56.5	56.5	32	18851	10.2	1215	5210	21.2	20400	7.4	1570	5620	
C 70 3_65.9	65.9	27.3	19472	9.1	1215	5210	18.2	20400	6.3	1570	5620	
C 70 3_71.3	71.3	25.2	19472	8.4	1215	5210	16.8	20400	5.8	1570	5620	
C 70 3_81.4	81.4	22.1	20400	7.7	1215	5210	14.7	20400	5.1	1570	5620	
C 70 3_88.2	88.2	20.4	20400	7.1	1215	5306	13.6	20400	4.7	1570	5620	
C 70 3_103.8	103.8	17.3	20400	6.0	1215	5620	11.6	20400	4.0	1570	5620	
C 70 3_112.4	112.4	16.0	20400	5.6	1215	5620	10.7	20400	3.7	1570	5620	
C 70 3_126.8	126.8	14.2	20400	4.9	1215	5620	9.5	20400	3.3	1570	5620	
C 70 3_137.4	137.4	13.1	20400	4.5	1215	5620	8.7	20400	3.0	1570	5620	
C 70 3_150.3	150.3	12.0	20400	4.2	1215	5620	8.0	20400	2.8	1570	5620	
C 70 3_162.8	162.8	11.1	20400	3.8	1215	5620	7.4	20400	2.6	1570	5620	
C 70 3_179.2	179.2	10.0	20400	3.5	1215	5620	6.7	20400	2.3	1570	5620	
C 70 3_194.1	194.1	9.3	20400	3.2	1215	5620	6.2	20400	2.1	1570	5620	
C 70 3_220.9	220.9	8.1	20400	2.8	1215	5620	5.4	20400	1.9	1570	5620	
C 70 3_239.3	239.3	7.5	20400	2.6	1215	5620	5.0	20400	1.7	1570	5620	
C 70 4_251.3	251.3	7.2	20400	2.6	455	5620	4.8	20400	1.7	637	5620	
C 70 4_272.2	272.2	6.6	20400	2.4	460	5620	4.4	20400	1.6	645	5620	
C 70 4_317.9	317.9	5.7	20400	2.0	460	5620	3.8	20400	1.4	645	5620	
C 70 4_344.3	344.3	5.2	20400	1.9	463	5620	3.5	20400	1.3	649	5620	
C 70 4_409.4	409.4	4.4	20400	1.6	463	5620	2.9	20400	1.1	649	5620	
C 70 4_443.5	443.5	4.1	20400	1.5	469	5620	2.7	20400	0.97	657	5620	
C 70 4_512.0	512.0	3.5	20400	1.3	465	5620	2.3	20400	0.84	652	5620	
C 70 4_554.7	554.7	3.2	20400	1.2	470	5620	2.2	20400	0.78	659	5620	
C 70 4_606.8	606.8	3.0	20400	1.1	469	5620	2.0	20400	0.71	657	5620	
C 70 4_657.3	657.3	2.7	20400	0.98	472	5620	1.8	20400	0.65	662	5620	
C 70 4_736.0	736.0	2.4	20400	0.88	470	5620	1.6	20400	0.58	657	5620	
C 70 4_797.3	797.3	2.3	20400	0.81	474	5620	1.5	20400	0.54	662	5620	
C 70 4_922.6	922.6	2.0	20400	0.70	472	5620	1.3	20400	0.47	659	5620	
C 70 4_999.5	999.5	1.8	20400	0.65	474	5620	1.2	20400	0.43	664	5620	
C 70 4_1069	1069	1.7	20400	0.60	472	5620	1.1	20400	0.40	662	5620	
C 70 4_1158	1158	1.6	20400	0.56	486	5620	1.0	20400	0.37	681	5620	
C 70 4_1362	1362	1.3	20400	0.47	486	5620	0.9	20400	0.32	681	5620	
C 70 4_1476	1476	1.2	20400	0.44	486	5620	0.8	20400	0.29	681	5620	

182
183

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

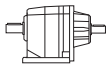
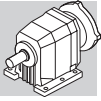
C 80

35400 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 80 2_5.6	5.6	321	25435	136	110	2561	214	28728	103	164	2895	188 189
C 80 2_6.1	6.1	295	25846	127	220	2644	197	29191	96	328	2989	
C 80 2_7.0	7.0	257	27487	118	145	2685	171	30979	89	216	3036	
C 80 2_7.6	7.6	237	27897	110	255	2769	158	31508	83	381	3131	
C 80 2_8.9	8.9	202	28717	97	179	3019	135	30979	70	266	3413	
C 80 2_9.6	9.6	188	30358	95	220	2894	125	32749	68	328	3272	
C 80 2_11.1	11.1	162	28717	78	311	3560	108	30979	56	464	4025	
C 80 2_12.0	12.0	150	30358	76	349	3456	100	32749	55	521	3907	
C 80 2_13.8	13.8	130	28717	63	371	4122	87	30979	45	554	4660	
C 80 2_14.9	14.9	121	30358	61	408	4018	81	32749	44	609	4543	
C 80 2_16.7	16.7	108	28717	52	453	4642	72	30979	37	675	5249	
C 80 2_18.1	18.1	99	30358	50	488	4580	66	32749	36	728	5178	
C 80 2_20.5	20.5	88	29128	43	488	5163	59	31421	31	728	5837	
C 80 2_22.2	22.2	81	30358	41	542	5184	54	32749	30	809	5861	
C 80 2_24.0	24.0	75	29128	36	507	5621	50	31421	26	756	6355	
C 80 2_25.9	25.9	69	30358	35	559	5662	46	32749	25	835	6402	
C 80 2_31.3	31.3	58	30358	29	595	6245	38	32749	21	887	7061	
C 80 2_39.1	39.1	46	26256	20	859	7286	31	28324	14.5	1204	7870	
C 80 3_43.5	43.5	41	31179	22	1261	7244	27.6	35215	16.6	1570	7870	
C 80 3_47.4	47.4	38	31179	20	1272	7286	25.3	35215	15.2	1570	7870	
C 80 3_57.3	57.3	31	32820	17.6	1263	7286	20.9	35400	12.6	1570	7870	
C 80 3_62.5	62.5	28.8	32820	16.1	1275	7286	19.2	35400	11.6	1570	7870	
C 80 3_70.5	70.5	25.5	32820	14.3	1263	7286	17.0	35400	10.3	1570	7870	
C 80 3_76.9	76.9	23.4	32820	13.1	1275	7286	15.6	35400	9.4	1570	7870	
C 80 3_89.3	89.3	20.2	34519	11.9	1263	7286	13.4	35400	8.1	1570	7870	
C 80 3_97.4	97.4	18.5	34519	10.9	1275	7870	12.3	35400	7.4	1570	7870	
C 80 3_109.5	109.5	16.4	35400	9.9	1266	7870	11.0	35400	6.6	1570	7870	
C 80 3_119.5	119.5	15.1	35400	9.1	1277	7870	10.0	35400	6.1	1570	7870	
C 80 3_136.7	136.7	13.2	35400	8.0	1272	7870	8.8	35400	5.3	1570	7870	
C 80 3_149.1	149.1	12.1	35400	7.3	1281	7870	8.0	35400	4.9	1570	7870	
C 80 3_169.0	169.0	10.7	35400	6.4	1277	7870	7.1	35400	4.3	1570	7870	
C 80 3_184.4	184.4	9.8	35400	5.9	1286	7870	6.5	35400	3.9	1570	7870	
C 80 3_197.9	197.9	9.1	35400	5.5	1284	7870	6.1	35400	3.7	1570	7870	
C 80 3_215.8	215.8	8.3	35400	5.0	1288	7870	5.6	35400	3.4	1570	7870	
C 80 4_261.9	261.9	6.9	35400	4.3	416	7870	4.6	35400	2.9	587	7870	
C 80 4_285.7	285.7	6.3	35400	3.9	425	7870	4.2	35400	2.6	597	7870	
C 80 4_334.3	334.3	5.4	35400	3.4	423	7870	3.6	35400	2.2	595	7870	
C 80 4_364.7	364.7	4.9	35400	3.1	432	7870	3.3	35400	2.1	604	7870	
C 80 4_417.5	417.5	4.3	35400	2.7	429	7870	2.9	35400	1.8	602	7870	
C 80 4_455.4	455.4	4.0	35400	2.5	438	7870	2.6	35400	1.6	611	7870	
C 80 4_529.3	529.3	3.4	35400	2.1	436	7870	2.3	35400	1.4	607	7870	
C 80 4_577.4	577.4	3.1	35400	1.9	443	7870	2.1	35400	1.3	616	7870	
C 80 4_664.3	664.3	2.7	35400	1.7	441	7870	1.8	35400	1.1	611	7870	
C 80 4_724.7	724.7	2.5	35400	1.5	447	7870	1.7	35400	1.0	621	7870	
C 80 4_783.4	783.4	2.3	35400	1.4	443	7870	1.5	35400	0.96	616	7870	
C 80 4_854.6	854.6	2.1	35400	1.3	450	7870	1.4	35400	0.88	623	7870	
C 80 4_945.7	945.7	1.9	35400	1.2	445	7870	1.3	35400	0.79	618	7870	
C 80 4_1032	1032	1.7	35400	1.1	452	7870	1.2	35400	0.73	626	7870	
C 80 4_1168	1168	1.5	35400	0.96	445	7870	1.0	35400	0.64	618	7870	
C 80 4_1274	1274	1.4	35400	0.88	454	7870	0.9	35400	0.59	628	7870	
C 80 4_1358	1358	1.3	35400	0.83	447	7870	0.9	35400	0.55	621	7870	
C 80 4_1481	1481	1.2	35400	0.76	456	7870	0.8	35400	0.51	628	7870	

C 90

63700 lb·in



i

$n_1 = 1800 \text{ rpm}$

$n_1 = 1200 \text{ rpm}$

n_2

rpm

T_{n2}

lb·in

P_{n1}

hp

R_{n1}

lbs

R_{n2}

lbs

n_2

rpm

T_{n2}

lb·in

P_{n1}

hp

R_{n1}

lbs

R_{n2}

lbs

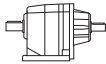


C 90 2_5.2	5.2	346	35281	204	382	3293	231	39849	154	528	3722
C 90 2_5.6	5.6	321	36102	194	738	3334	214	40775	146	1034	3770
C 90 2_6.8	6.8	265	38974	172	418	3418	176	44019	130	519	3864
C 90 2_7.3	7.3	247	39794	164	780	3480	164	44946	123	1061	3935
C 90 2_8.3	8.3	217	41845	152	452	3564	145	47262	114	607	4029
C 90 2_9.0	9.0	200	42666	142	823	3647	133	48189	107	1148	4123
C 90 2_10.4	10.4	173	45538	132	223	3626	115	51433	99	280	4099
C 90 2_11.2	11.2	161	46358	124	618	3710	107	52359	94	842	4194
C 90 2_12.8	12.8	141	48820	115	146	3793	94	55139	86	204	4288
C 90 2_13.9	13.9	129	49640	107	607	3897	86	56066	81	783	4406
C 90 2_16.0	16.0	113	50871	96	165	4335	75	54877	69	231	4900
C 90 2_17.3	17.3	104	53332	93	382	4126	69	57975	67	535	4665
C 90 2_18.7	18.7	96	50871	82	260	5064	64	54877	59	365	5725
C 90 2_20.2	20.2	89	54153	81	375	4689	59	58417	58	525	5301
C 90 2_22.9	22.9	79	50871	67	474	5752	52	54877	48	657	6503
C 90 2_24.8	24.8	73	54153	66	580	5689	48	58417	47	812	6432
C 90 2_27.2	27.2	66	45127	50	1385	6710	44	48681	36	1902	7586
C 90 2_29.4	29.4	61	48409	49	1475	6669	41	52222	36	1978	7539
C 90 2_35.1	35.1	51	44307	38	1926	7565	34	47796	27	2700	8552
C 90 3_39.4	39.4	46	58255	45	2428	6856	30	63700	33	3332	7751
C 90 3_43.0	43.0	42	59076	42	2428	7086	27.9	63700	30	3357	8010
C 90 3_50.3	50.3	36	60188	37	2428	7711	23.9	63700	26	3357	8717
C 90 3_54.9	54.9	33	61958	35	2450	7982	21.9	63700	24	3372	9024
C 90 3_59.2	59.2	30	62843	33	2428	8336	20.3	63700	22	3372	9424
C 90 3_64.6	64.6	27.9	63700	30	2450	8607	18.6	63700	20	3372	9730
C 90 3_74.4	74.4	24.2	63700	26	2450	9253	16.1	63700	17.5	3372	10461
C 90 3_81.2	81.2	22.2	63700	24	2450	9566	14.8	63700	16.1	3372	10814
C 90 3_88.2	88.2	20.4	63700	22	2473	9982	13.6	63700	14.8	3372	11285
C 90 3_96.2	96.2	18.7	63700	20	2473	10295	12.5	63700	13.6	3372	11639
C 90 3_107.0	107.0	16.8	63700	18.0	2473	10858	11.2	63700	12.2	3372	12275
C 90 3_116.7	116.7	15.4	63700	16.8	2473	11191	10.3	63700	11.2	3372	12652
C 90 3_134.1	134.1	13.4	63700	14.4	2473	11941	8.9	63700	9.7	3372	13500
C 90 3_146.3	146.3	12.3	63700	13.4	2473	12296	8.2	63700	8.9	3372	13500
C 90 3_157.8	157.8	11.4	63700	12.2	2473	12504	7.6	63700	8.3	3372	13500
C 90 3_172.1	172.1	10.5	63700	11.4	2473	12504	7.0	63700	7.6	3372	13500
C 90 4_212.4	212.4	8.5	63700	9.5	205	13500	5.6	63700	6.3	287	13500
C 90 4_231.7	231.7	7.8	63700	8.7	271	13500	5.2	63700	5.8	379	13500
C 90 4_268.5	268.5	6.7	63700	7.5	267	13500	4.5	63700	5.0	375	13500
C 90 4_292.9	292.9	6.1	63700	6.9	326	13500	4.1	63700	4.6	457	13500
C 90 4_339.0	339.0	5.3	63700	6.0	299	13500	3.5	63700	4.0	418	13500
C 90 4_369.8	369.8	4.9	63700	5.5	356	13500	3.2	63700	3.6	499	13500
C 90 4_419.0	419.0	4.3	63700	4.8	328	13500	2.9	63700	3.2	460	13500
C 90 4_457.1	457.1	3.9	63700	4.4	384	13500	2.6	63700	2.9	538	13500
C 90 4_534.2	534.2	3.4	63700	3.8	363	13500	2.2	63700	2.5	508	13500
C 90 4_582.8	582.8	3.1	63700	3.5	394	13500	2.1	63700	2.3	552	13500
C 90 4_652.8	652.8	2.8	63700	3.1	375	13500	1.8	63700	2.1	525	13500
C 90 4_712.2	712.2	2.5	63700	2.8	397	13500	1.7	63700	1.9	557	13500
C 90 4_773.6	773.6	2.3	63700	2.6	390	13500	1.6	63700	1.7	547	13500
C 90 4_844.0	844.0	2.1	63700	2.4	401	13500	1.4	63700	1.6	562	13500
C 90 4_922.3	922.3	2.0	63700	2.2	392	13500	1.3	63700	1.5	550	13500
C 90 4_1006	1006	1.8	63700	2.0	403	13500	1.2	63700	1.3	564	13500
C 90 4_1137	1137	1.6	63700	1.8	394	13500	1.1	63700	1.2	552	13500
C 90 4_1240	1240	1.5	63700	1.6	387	13500	1.0	63700	1.1	542	13500

194
195

C 100

106200 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
C 100 2 4.9	4.9	367	55794	342	711	5272	245	63016	258	943	5961	200 201
C 100 2 5.3	5.3	340	57025	323	926	5377	226	64407	243	1229	6079	
C 100 2 6.5	6.5	277	61948	286	741	5627	185	69967	216	983	6361	
C 100 2 7.1	7.1	254	62768	266	988	5814	169	70894	200	1312	6573	
C 100 2 8.4	8.4	214	67281	241	744	5939	143	75990	181	988	6715	
C 100 2 9.0	9.0	200	68512	229	973	6085	133	77381	172	1292	6880	
C 100 2 10.1	10.1	178	71794	214	731	6148	119	81087	161	971	6950	
C 100 2 10.9	10.9	165	71794	198	1024	6585	110	81087	149	1359	7445	
C 100 2 12.5	12.5	144	77127	185	611	6419	96	87111	140	811	7257	
C 100 2 13.5	13.5	133	77947	174	877	6690	89	88038	131	1165	7563	
C 100 2 15.2	15.2	118	82050	162	502	6773	79	92671	122	667	7657	
C 100 2 16.5	16.5	109	83281	152	829	7002	73	94061	114	1100	7916	
C 100 2 18.7	18.7	96	82050	132	675	7919	64	92671	99	896	8953	
C 100 2 20.2	20.2	89	82050	122	977	8253	59	92671	92	1297	9330	
C 100 2 22.2	22.2	81	75486	102	1117	9190	54	85258	77	1483	10390	
C 100 2 24.1	24.1	75	82050	102	1106	9024	50	92671	77	1468	10202	
C 100 2 29.6	29.6	61	69742	71	1729	10878	41	78771	53	2295	12298	
C 100 3 34.3	34.3	52	95998	86	2437	9670	35	103558	62	3235	10932	
C 100 3 36.9	36.9	49	96819	81	2456	10003	33	104443	58	3260	11309	
C 100 3 42.9	42.9	42	100460	72	2456	10670	28.0	106200	51	3260	12063	
C 100 3 46.2	46.2	39	103558	69	2494	11066	26.0	106200	47	3310	12510	
C 100 3 53.3	53.3	34	106200	61	2475	11858	22.5	106200	41	3285	13406	
C 100 3 57.4	57.4	31	106200	57	2512	12296	20.9	106200	38	3335	13900	
C 100 3 64.5	64.5	27.9	106200	51	2512	12983	18.6	106200	34	3335	14678	
C 100 3 69.4	69.4	25.9	106200	47	2531	13442	17.3	106200	31	3360	15196	
C 100 3 79.4	79.4	22.7	106200	41	2531	14296	15.1	106200	27	3360	16162	
C 100 3 85.6	85.6	21.0	106200	38	2550	14775	14.0	106200	25	3372	16704	
C 100 3 92.7	92.7	19.4	106200	35	2531	15317	12.9	106200	23	3372	17317	
C 100 3 99.8	99.8	18.0	106200	33	2550	15817	12.0	106200	22	3372	17882	
C 100 3 111.9	111.9	16.1	106200	29	2531	16630	10.7	106200	19.4	3372	18801	
C 100 3 120.5	120.5	14.9	106200	27	2569	17172	10.0	106200	18.0	3372	19100	
C 100 3 139.7	139.7	12.9	97800	21	2569	17714	8.6	97800	14.3	3372	19100	
C 100 3 150.4	150.4	12.0	106200	22	2569	17714	8.0	106200	14.5	3372	19100	
C 100 4 162.1	162.1	11.1	106200	21	—	19100	7.4	106200	13.9	—	19100	
C 100 4 185.4	185.4	9.7	106200	18.2	—	19100	6.5	106200	12.1	—	19100	
C 100 4 199.6	199.6	9.0	106200	16.9	—	19100	6.0	106200	11.3	—	19100	
C 100 4 244.2	244.2	7.4	106200	13.8	—	19100	4.9	106200	9.2	—	19100	
C 100 4 263.0	263.0	6.8	106200	12.8	—	19100	4.6	106200	8.5	—	19100	
C 100 4 300.5	300.5	6.0	106200	11.2	—	19100	4.0	106200	7.5	—	19100	
C 100 4 323.6	323.6	5.6	106200	10.4	—	19100	3.7	106200	6.9	—	19100	
C 100 4 380.5	380.5	4.7	106200	8.9	—	19100	3.2	106200	5.9	—	19100	
C 100 4 409.8	409.8	4.4	106200	8.2	—	19100	2.9	106200	5.5	—	19100	
C 100 4 466.7	466.7	3.9	106200	7.2	—	19100	2.6	106200	4.8	—	19100	
C 100 4 502.6	502.6	3.6	106200	6.7	—	19100	2.4	106200	4.5	—	19100	
C 100 4 582.6	582.6	3.1	106200	5.8	—	19100	2.1	106200	3.9	—	19100	
C 100 4 627.4	627.4	2.9	106200	5.4	—	19100	1.9	106200	3.6	—	19100	
C 100 4 720.3	720.3	2.5	106200	4.7	—	19100	1.7	106200	3.1	—	19100	
C 100 4 775.7	775.7	2.3	106200	4.3	—	19100	1.5	106200	2.9	—	19100	
C 100 4 843.3	843.3	2.1	106200	4.0	—	19100	1.4	106200	2.7	—	19100	
C 100 4 908.2	908.2	2.0	106200	3.7	156	19100	1.3	106200	2.5	207	19100	
C 100 4 1004	1004	1.8	106200	3.4	—	19100	1.2	106200	2.2	—	19100	
C 100 4 1081	1081	1.7	106200	3.1	163	19100	1.1	106200	2.1	217	19100	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

27 MOTOR AVAILABILITY

Please be aware that motor-gearbox combinations resulting from following charts are purely based on geometrical compatibility.

When selecting a gearmotor, refer to procedure specified at paragraph 12 and observe particularly the condition $S \geq f_s$.

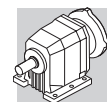
(B 22)

	IEC    (IM B5)									
	P63 P71	P80 P90	P100 P112	P132	P160	P180	P200	P225	P250	P280
C 12 2	2.8_66.2	2.8_47.6	2.8_47.6							
C 22 2	3.7_63.3 ⊖ (7.1_8.7)	2.7_54.7	2.7_54.7							
C 22 3	60.0_261.0	60.0_261.0	60.0_261.0							
C 32 2	5.0_66.8 ⊖ (7.2_11.2)	2.9_66.8	2.9_66.8	2.9_25.1						
C 32 3	74.7_274.7	74.7_274.7	74.7_274.7							
C 36 2	4.6_19.0 ⊖ (6.8_10.6)	2.7_19.0	2.7_19.0	2.7_19.0						
C 36 3	38.1_206.4	22.1_206.4	22.1_206.4	22.1_77.6						
C 36 4	230.9_848.5	230.9_848.5	230.9_848.5							
C 41 2	14.2_44.8	2.7_44.8	2.7_44.8	2.7_31.4						
C 41 3	47.0_209.1	28.5_209.1	28.5_209.1	28.5_102.3						
C 41 4	239.9_855.5	239.9_855.5	239.9_855.5							
C 51 2	18.9_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4	2.6_40.4				
C 51 3	59.0_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4	21.8_124.4				
C 51 4	240.9_884.9	240.9_884.9	240.9_884.9	240.9_508.0						
C 61 2	22.4_38.0 i = ⊖ (6.7_7.5)	3.7_38.0 ⊖ (6.7_7.5)	3.7_38.0 ⊖ (6.7_7.5)	2.8_38.0	2.8_38.0	2.8_38.0				
C 61 3	67.7_195.8	26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5	26.8_140.5				
C 61 4	217.4_796.1	217.4_796.1	217.4_796.1							
C 70 2		14.1_34.7 ⊖ (15.3)	14.1_34.7 ⊖ (15.3)	7.5_34.7 ⊖ (8.0)	4.6_34.7	4.6_34.7*	4.6_10.2* ⊖ (9.5)			
C 70 3		41.3_239.3	41.3_239.3	41.3_137.4	41.3_137.4	41.3_137.4*				
C 70 4	251.3_1476	251.3_1476	251.3_1476	251.3_554.7						
C 80 2		20.5_39.1	20.5_39.1	11.1_39.1	7.0_39.1	5.6_39.1	5.6_25.9*	5.6_25.9*		
C 80 3		43.5_215.8	43.5_215.8	43.5_184.4	43.5_184.4	43.5_184.4				
C 80 4	334.3_1481	261.9_1481	261.9_1481	261.9_724.7						
C 90 2		22.9_35.1	22.9_35.1	12.8_35.1	10.4_35.1	10.4_35.1	5.2_29.4	5.2_29.4*	5.2_29.4*	
C 90 3		74.4_172.1	74.4_172.1	39.4_172.1	39.4_172.1	39.4_172.1	39.4_96.2	39.4_96.2*	39.4_96.2*	
C 90 4	339.0_1240	212.4_1240	212.4_1240	212.4_712.2	212.4_712.2	212.4_712.2				
C 100 2			29.6	15.2_29.6	12.5_29.6	12.5_29.6	4.9_29.6	4.9_29.6	4.9_29.6*	4.9_29.6*
C 100 3			79.4_150.4	42.9_150.4	34.3_150.4	34.3_150.4	34.3_99.8	34.3_99.8*	34.3_99.8	34.3_99.8*
C 100 4	380.5_1081	162.1_1081	162.1_1081	162.1_775.7	162.1_775.7	162.1_775.7				

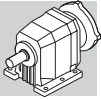
For mounting position B3-B5 B6-B7-B8 the motor marked with * will be supplied in B3/B5

(B 23)

 NEMA Motor frame								
	HP	N56C 0.16 ... 1	N140TC 1.5 ... 2	N180TC 3 ... 5	N210TC 7.5 ... 10	N250TC 15 ... 20	N280TC 25 ... 30	N320TC 40 ... 50
C 12 2		2.8_66.2	2.8_47.6	2.8_47.6				
C 22 2		3.7_63.3 ☉ (7.1_8.7)	2.7_54.7	2.7_54.7				
C 22 3		60.0_261.0	60.0_261.0	60.0_261.0				
C 32 2		5.0_66.8 ☉ (7.2_11.2)	2.9_66.8	2.9_66.8	2.9_25.1			
C 32 3		74.7_274.7	74.7_274.7	74.7_274.7				
C 36 2		4.6_19.0 ☉ (6.8_10.6)	2.7_19.0	2.7_19.0	2.7_19.0			
C 36 3		38.1_206.4	22.1_206.4	22.1_206.4	22.1_77.6			
C 36 4		230.9_848.5	230.9_848.5	230.9_848.5				
C 41 2		14.2_44.8	2.7_44.8	2.7_44.8	2.7_31.4			
C 41 3		47.0_209.1	28.5_209.1	28.5_209.1	28.5_102.3			
C 41 4		239.9_855.5	239.9_855.5	239.9_855.5				
C 51 2		18.9_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4	2.6_40.4	
C 51 3		59.0_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4	21.8_124.4	
C 51 4		240.9_884.9	240.9_884.9	240.9_884.9	240.9_508.0			
C 61 2	i =	22.4_38.0	3.7_38.0 ☉ (6.7_7.5)	3.7_38.0 ☉ (6.7_7.5)	2.8_38.0	2.8_38.0	2.8_38.0	
C 61 3		67.7_195.8	26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5	26.8_140.5	
C 61 4		217.4_796.1	217.4_796.1	217.4_796.1				
C 70 2			14.1_34.7 ☉ (15.3)	14.1_34.7 ☉ (15.3)	7.5_34.7 ☉ (8.0)	4.6_34.7	4.6_34.7*	
C 70 3			41.3_239.3	41.3_239.3	41.3_137.4	41.3_137.4	41.3_137.4*	
C 70 4		251.3_1476	251.3_1476	251.3_1476	251.3_554.7			
C 80 2			20.5_39.1	20.5_39.1	11.1_39.1	7.0_39.1	5.6_39.1	5.6_25.9*
C 80 3			43.5_215.8	43.5_215.8	43.5_184.4	43.5_184.4	43.5_184.4	
C 80 4		334.3_1481	261.9_1481	261.9_1481	261.9_724.7			
C 90 2			22.9_35.1	22.9_35.1	12.8_35.1	10.4_35.1	10.4_35.1	5.2_29.4*
C 90 3			74.4_172.1	74.4_172.1	39.4_172.1	39.4_172.1	39.4_172.1	39.4_96.2*
C 90 4		339.0_1240	212.4_1240	212.4_1240	212.4_712.2	212.4_712.2	212.4_712.2	
C 100 2				29.6	15.2_29.6	12.5_29.6	12.5_29.6	4.9_29.6
C 100 3				79.4_150.4	42.9_150.4	34.3_150.4	34.3_150.4	34.3_99.8*
C 100 4		380.5_1081	162.1_1081	162.1_1081	162.1_775.7	162.1_775.7	162.1_775.7	

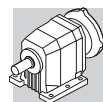


(B 24)



								
		M0	M05	M1	ME2	ME3	ME4	ME5
C 05 2	i =	27.1_44.7	5.5_44.7	5.5_44.7				
C 12 2			2.8_66.2	2.8_37.0	2.8_47.7	2.8_47.7		
C 22 2			3.7_63.3 ⦿ (7.1_8.7)	3.7_43.3 ⦿ (7.1_8.7)	2.7_54.7	2.7_54.7		
C 22 3			60.0_261.0	60.0_261.0	60.0_261.0	60.0_261.0		
C 32 2				5.0_52.4 ⦿ (7.2_11.2)	2.9_66.8	2.9_66.8	2.9_25.1	
C 32 3			74.7_274.7	74.7_274.7	74.7_274.7	74.7_274.7		
C 36 2				4.6_19.0 ⦿ (6.8_10.6)	2.7_19.0	2.7_19.0	2.7_19.0	
C 36 3				38.1_162.0	22.1_206.4	22.1_206.4	22.1_77.6	
C 36 4			230.9_848.5	230.9_848.5	230.9_848.5	230.9_848.5		
C 41 2				14.2_44.8	2.7_44.8	2.7_44.8	2.7_31.4	
C 41 3				47.0_209.1	28.5_209.1	28.5_209.1	28.5_102.3	
C 41 4			239.9_855.5	239.9_855.5	239.9_855.5	239.9_855.5		
C 51 2				18.9_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4
C 51 3				59.0_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4
C 51 4				240.9_884.9	240.9_884.9	240.9_884.9	240.9_508.0	
C 61 2					3.7_38.0 ⦿ (6.7_7.5)	3.7_38.0 ⦿ (6.7_7.5)	2.8_38.0	2.8_38.0
C 61 3					26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5
C 61 4				217.4_796.1	217.4_796.1	217.4_796.1		
C 70 2					14.1_34.7 ⦿ (15.3)	14.1_34.7 ⦿ (15.3)	7.5_34.7 ⦿ (8.0)	7.5_34.7 ⦿ (8.0)
C 70 3					41.3_239.3	41.3_239.3	41.3_137.4	41.3_137.4
C 70 4				251.3_1476	251.3_1476	251.3_1476	251.3_554.7	
C 80 2						20.5_39.1	11.1_39.1	11.1_39.1
C 80 3						43.5_215.8	43.5_184.4	43.5_184.4
C 80 4				334.3_1481	261.9_1481	261.9_1481	261.9_724.7	
C 90 2						22.9_35.1	12.8_35.1	12.8_35.1
C 90 3						74.4_172.1	39.4_172.1	39.4_172.1
C 90 4			339.0_1240	212.4_1240	212.4_1240	212.4_712.2		
C 100 2						15.2_29.6	15.2_29.6	
C 100 3						42.9_150.4	42.9_150.4	
C 100 4			380.5_1081	162.1_1081	162.1_1081	162.1_775.7		

Motor adapters matching the most popular brands of servomotors are available for units size C12... C61. Dimensions of servomotor inputs are provided within the drawing section for each frame size. The code **SK** applies for inputs featuring a conventional keyway, while through the specification of the **SC** code the input shaft will feature a clamping device instead.



(B 25)

		SERVO INPUT							
		SK60A	SK60B	SK80A	SK80B	SK80C	SK95A	SK95B	SK95C
		SC60A	SC60B	SC80A	SC80B	SC80C	SC95A	SC95B	SC95C
C 12 2	i =	2.8_66.2	2.8_66.2	2.8_66.2		2.8_47.6	2.8_66.2	2.8_47.6	2.8_47.6
C 22 2		3.7_63.3 ⌀ (7.1_8.7)	3.7_63.3 ⌀ (7.1_8.7)	3.7_63.3 ⌀ (7.1_8.7)		2.7_54.7	3.7_63.3 ⌀ (7.1_8.7)	2.7_54.7	2.7_54.7
C 22 3		60.0_261.0	60.0_261.0	60.0_261.0		60.0_261.0	60.0_261.0	60.0_261.0	60.0_261.0
C 32 2		5.0_66.8 ⌀ (7.2_11.2)	5.0_66.8 ⌀ (7.2_11.2)	5.0_66.8 ⌀ (7.2_11.2)		2.9_66.8	5.0_66.8 ⌀ (7.2_11.2)	2.9_66.8	2.9_66.8
C 32 3		74.7_274.7	74.7_274.7	74.7_274.7		74.7_274.7	74.7_274.7	74.7_274.7	74.7_274.7
C 36 2		4.6_19.0 ⌀ (6.8_10.6)	4.6_19.0 ⌀ (6.8_10.6)	4.6_19.0 ⌀ (6.8_10.6)		2.7_19.0	4.6_19.0 ⌀ (6.8_10.6)	2.7_19.0	2.7_19.0
C 36 3		38.1_206.4	38.1_206.4	38.1_206.4		22.1_206.4	38.1_206.4	22.1_206.4	22.1_206.4
C 36 4		230.9_848.5	230.9_848.5	230.9_848.5		230.9_848.5	230.9_848.5	230.9_848.5	230.9_848.5
C 41 2					6.0_44.8 ⌀ (6.4_12.4)	2.7_44.8	6.0_44.8 ⌀ (6.4_12.4)	2.7_44.8	2.7_44.8
C 41 3					47.0_209.1	28.5_209.1	47.0_209.1	28.5_209.1	28.5_209.1
C 41 4		239.9_855.5	239.9_855.5	239.9_855.5		239.9_855.5	239.9_855.5	239.9_855.5	239.9_855.5
C 51 2					18.9_57.0	2.6_57.0	18.9_57.0	2.6_57.0	2.6_57.0
C 51 3					59.0_216.7	21.8_216.7	59.0_216.7	21.8_216.7	21.8_216.7
C 51 4						240.9_884.9	240.9_884.9	240.9_884.9	240.9_884.9
C 61 2						3.7_38.0 ⌀ (6.7_7.5)	22.4_38.0	3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)
C 61 3						26.8_195.8	67.7_195.8	26.8_195.8	26.8_195.8
C 61 4					217.4_796.1	217.4_796.1	217.4_796.1	217.4_796.1	217.4_796.1

(B 26)

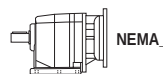
		SK110A	SK110B	SK130A	SK130B	SK180A	SK180B
		SC110A	SC110B	SC130A	SC130B	SC180A	SC180B
C 12 2	i =	2.8_47.6	2.8_47.6				
C 22 2		2.7_54.7	2.7_54.7				
C 22 3		60.0_261.0	60.0_261.0				
C 32 2		2.9_66.8	2.9_66.8	2.9_66.8			
C 32 3		74.7_274.7	74.7_274.7				
C 36 2		2.7_19.0	2.7_19.0	2.7_19.0			
C 36 3		22.1_206.4	22.1_206.4	22.1_206.4			
C 36 4		230.9_848.5	230.9_848.5				
C 41 2		2.7_44.8	2.7_44.8	2.7_44.8	2.7_31.4	2.7_31.4	2.7_31.4
C 41 3		28.5_209.1	28.5_209.1	28.5_209.1	28.5_102.3	28.5_102.3	28.5_102.3
C 41 4		239.9_855.5	239.9_855.5				
C 51 2		2.6_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4	2.6_40.4
C 51 3		21.8_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4	21.8_124.4
C 51 4		240.9_884.9	240.9_884.9	240.9_884.9			
C 61 2		3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)	2.8_38.0	2.8_38.0	2.8_38.0
C 61 3		26.8_195.8	26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5	26.8_140.5
C 61 4		217.4_796.1	217.4_796.1	217.4_796.1			

28 MOMENT OF INERTIA

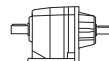
The following charts indicate moment of inertia values J_r [lb·ft²] referred to the gear unit high speed shaft. A key to the symbols used follows:



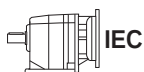
Values under this icon refer to compact gear units, without motor. To obtain the overall moment of inertia for the gearmotor just add the value of the inertia for the specific compact motor, given in the relevant rating chart.



Values under this symbol refer to gearboxes with NEMA motor adaptor (NEMA size...).



This symbol refers to gearbox values.



Values under this symbol refer to gearboxes with IEC motor adaptor (IEC size...).

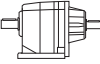


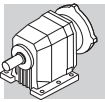
Values under this symbol refer to gear unit with servomotor input adapter.

C 05

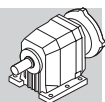
	i	J (•10 ⁻⁴) [lb·ft ²]
C 05_5.5	5.5	6.9
C 05_6.7	6.7	6.9
C 05_7.4	7.4	6.6
C 05_9.3	9.3	4.0
C 05_11.2	11.2	3.8
C 05_12.5	12.5	3.8
C 05_15.6	15.6	2.1
C 05_18.9	18.9	2.1
C 05_21.0	21.0	1.9
C 05_27.1	27.1	0.95
C 05_32.8	32.8	0.95
C 05_36.4	36.4	0.95
C 05_40.3	40.3	0.71
C 05_44.7	44.7	0.71

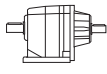
C 12

	i	J (•10 ⁻⁴) [lb•ft ²]							
			 IEC						
			63	71	80	90	100	112	
C 12 2_2.8	2.8	10	45	45	78	76	107	107	31
C 12 2_3.2	3.2	8.1	43	43	76	74	104	104	28
C 12 2_3.7	3.7	6.9	43	40	74	74	104	104	28
C 12 2_4.3	4.3	5.0	40	40	74	71	102	102	26
C 12 2_4.9	4.9	4.5	40	40	71	71	102	102	26
C 12 2_5.6	5.6	3.6	38	38	71	69	100	100	24
C 12 2_6.2	6.2	2.8	38	38	71	69	100	100	24
C 12 2_7.6	7.6	7.8	43	43	76	74	104	104	28
C 12 2_8.8	8.8	7.6	43	43	76	74	104	104	28
C 12 2_10.1	10.1	5.5	40	40	74	71	102	102	26
C 12 2_11.9	11.9	4.0	38	38	71	71	100	100	26
C 12 2_13.4	13.4	3.8	38	38	71	69	100	100	26
C 12 2_15.4	15.4	2.8	38	38	71	69	100	100	24
C 12 2_17.2	17.2	2.4	38	38	69	69	100	100	24
C 12 2_18.4	18.4	1.9	38	36	69	69	100	100	23
C 12 2_20.6	20.6	1.9	36	36	69	69	100	100	23
C 12 2_23.2	23.2	1.7	36	36	69	69	97	97	23
C 12 2_25.4	25.4	1.4	36	36	69	66	97	97	23
C 12 2_29.5	29.5	1.2	36	36	69	66	97	97	23
C 12 2_32.8	32.8	0.95	36	36	69	66	97	97	22
C 12 2_37.0	37.0	0.71	36	36	69	66	97	97	22
C 12 2_42.3	42.3	0.71	36	36	69	66	97	97	22
C 12 2_47.6	47.6	0.47	36	36	69	66	97	97	22
C 12 2_55.2	55.2	0.47	36	36	—	—	—	—	22
C 12 2_66.2	66.2	0.24	36	36	—	—	—	—	22



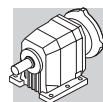
C 12



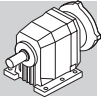
	i	J (•10 ⁻⁴) [lb•ft ²]				
			NEMA 			
			N56C	N140TC	N180TC	
C 12 2_2.8	2.8	10	45	45	78	31
C 12 2_3.2	3.2	8.1	43	43	76	28
C 12 2_3.7	3.7	6.9	43	43	74	28
C 12 2_4.3	4.3	5.0	40	40	74	26
C 12 2_4.9	4.9	4.5	40	40	71	26
C 12 2_5.6	5.6	3.6	38	38	71	24
C 12 2_6.2	6.2	2.8	38	38	71	24
C 12 2_7.6	7.6	7.8	43	43	76	28
C 12 2_8.8	8.8	7.6	43	43	76	28
C 12 2_10.1	10.1	5.5	40	40	74	26
C 12 2_11.9	11.9	4.0	38	38	71	26
C 12 2_13.4	13.4	3.8	38	38	71	26
C 12 2_15.4	15.4	2.8	38	38	71	24
C 12 2_17.2	17.2	2.4	38	38	69	24
C 12 2_18.4	18.4	1.9	38	38	69	23
C 12 2_20.6	20.6	1.9	36	36	69	23
C 12 2_23.2	23.2	1.7	36	36	69	23
C 12 2_25.4	25.4	1.4	36	36	69	23
C 12 2_29.5	29.5	1.2	36	36	69	23
C 12 2_32.8	32.8	0.95	36	36	69	22
C 12 2_37.0	37.0	0.71	36	36	69	22
C 12 2_42.3	42.3	0.71	36	36	69	22
C 12 2_47.6	47.6	0.47	36	36	69	22
C 12 2_55.2	55.2	0.47	36	36	—	22
C 12 2_66.2	66.2	0.24	36	36	—	22

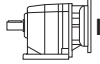
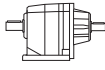
C 12

	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 12 2_2.8	2.8	17	23	17	28	78	88	78	90	76	100
C 12 2_3.2	3.2	14	21	15	26	76	85	76	88	74	97
C 12 2_3.7	3.7	13	19	14	24	74	83	74	85	74	97
C 12 2_4.3	4.3	11	18	12	22	71	83	74	85	71	95
C 12 2_4.9	4.9	11	17	11	22	71	81	71	83	71	95
C 12 2_5.6	5.6	10	16	10	21	71	81	71	83	69	93
C 12 2_6.2	6.2	9.3	15	10	20	69	81	71	83	69	93
C 12 2_7.6	7.6	14	20	15	26	76	85	76	88	74	97
C 12 2_8.8	8.8	14	20	14	24	74	85	76	88	74	97
C 12 2_10.1	10.1	12	18	12	23	74	83	74	85	71	95
C 12 2_11.9	11.9	10	17	11	21	71	81	71	83	71	95
C 12 2_13.4	13.4	10	16	11	20	71	81	71	83	69	93
C 12 2_15.4	15.4	9.3	15	9.7	20	69	81	71	83	69	93
C 12 2_17.2	17.2	8.8	15	9.3	20	69	81	69	81	69	93
C 12 2_18.4	18.4	8.3	14	8.8	19	69	78	69	81	69	93
C 12 2_20.6	20.6	8.3	14	8.8	19	69	78	69	81	69	93
C 12 2_23.2	23.2	8.1	14	8.5	19	69	78	69	81	69	93
C 12 2_25.4	25.4	7.8	14	8.3	19	69	78	69	81	66	90
C 12 2_29.5	29.5	7.6	14	8.1	19	69	78	69	81	66	90
C 12 2_32.8	32.8	8.1	14	7.8	18	69	78	69	81	66	90
C 12 2_37.0	37.0	7.1	13	7.6	18	69	78	69	81	66	90
C 12 2_42.3	42.3	7.1	13	7.6	18	69	78	69	81	66	90
C 12 2_47.6	47.6	6.9	13	7.4	18	66	78	69	81	66	90
C 12 2_55.2	55.2	6.9	13	7.4	18	66	78	—	—	—	—
C 12 2_66.2	66.2	6.6	13	7.1	18	66	78	—	—	—	—

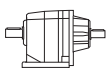


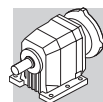
C 22



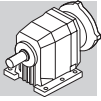
	i	J (•10 ⁻⁴) [lb•ft ²]							
			 IEC						
			63	71	80	90	100	112	
C 22 2_2.7	2.7	28	—	—	95	95	126	126	74
C 22 2_3.3	3.3	20	—	—	88	85	116	116	64
C 22 2_3.7	3.7	17	52	52	85	83	114	114	62
C 22 2_4.3	4.3	13	47	47	81	78	109	109	57
C 22 2_4.8	4.8	11	47	45	78	78	109	109	57
C 22 2_5.6	5.6	8.5	43	43	76	76	104	104	52
C 22 2_6.1	6.1	6.9	43	40	74	74	104	104	52
C 22 2_7.1	7.1	18	—	—	85	85	114	114	62
C 22 2_8.7	8.7	13	—	—	81	78	109	109	57
C 22 2_9.6	9.6	12	47	47	78	78	109	109	57
C 22 2_11.1	11.1	9.3	45	43	76	76	107	107	55
C 22 2_12.4	12.4	8.3	43	43	76	74	104	104	52
C 22 2_14.5	14.5	8.5	40	40	74	74	102	102	50
C 22 2_15.8	15.8	4.7	40	40	74	71	102	102	50
C 22 2_18.1	18.1	4.3	38	38	71	71	102	102	47
C 22 2_20.0	20.0	3.6	38	38	71	69	100	100	47
C 22 2_21.5	21.5	3.1	38	38	71	69	100	100	47
C 22 2_24.3	24.3	2.8	38	38	71	69	100	100	47
C 22 2_27.2	27.2	2.4	38	38	71	69	100	100	47
C 22 2_29.6	29.6	2.1	38	36	69	69	100	100	47
C 22 2_33.1	33.1	1.7	36	36	69	69	100	100	45
C 22 2_36.8	36.8	1.4	36	36	69	66	97	97	45
C 22 2_43.3	43.3	1.2	36	36	69	66	97	97	45
C 22 2_48.6	48.6	0.95	36	36	69	66	97	97	45
C 22 2_54.7	54.7	0.71	36	36	69	66	97	97	45
C 22 2_63.3	63.3	0.47	36	36	—	—	—	—	45
C 22 3_60.0	60.0	0.95	36	36	69	66	97	97	22
C 22 3_65.3	65.3	0.71	36	36	69	66	97	97	22
C 22 3_74.8	74.8	0.71	36	36	69	66	97	97	22
C 22 3_82.6	82.6	0.71	36	36	69	66	97	97	22
C 22 3_88.5	88.5	0.71	36	36	69	66	97	97	22
C 22 3_100.2	100.2	0.71	36	36	69	66	97	97	22
C 22 3_112.0	112.0	0.71	36	36	69	66	97	97	22
C 22 3_122.2	122.2	0.71	36	36	69	66	97	97	22
C 22 3_136.5	136.5	0.47	36	36	69	66	97	97	22
C 22 3_151.7	151.7	0.47	36	36	69	66	97	97	22
C 22 3_178.5	178.5	0.47	36	36	69	66	97	97	22
C 22 3_200.7	200.7	0.47	36	36	69	66	97	97	22
C 22 3_225.8	225.8	0.47	36	36	69	66	97	97	22
C 22 3_261.0	261.0	0.47	36	36	69	66	97	97	22

C 22

	i	J (•10 ⁻⁴) [lb•ft ²]				
			NEMA			
			N56C	N140TC	N180TC	
C 22 2_2.7	2.7	28	—	—	95	74
C 22 2_3.3	3.3	20	—	—	88	64
C 22 2_3.7	3.7	17	52	52	85	62
C 22 2_4.3	4.3	13	47	47	81	57
C 22 2_4.8	4.8	11	47	47	78	57
C 22 2_5.6	5.6	8.5	43	43	76	52
C 22 2_6.1	6.1	6.9	43	43	74	52
C 22 2_7.1	7.1	18	—	—	85	62
C 22 2_8.7	8.7	13	—	—	81	57
C 22 2_9.6	9.6	12	47	47	78	57
C 22 2_11.1	11.1	9.3	45	45	76	55
C 22 2_12.4	12.4	8.3	43	43	76	52
C 22 2_14.5	14.5	8.5	40	40	74	50
C 22 2_15.8	15.8	4.7	40	40	74	50
C 22 2_18.1	18.1	4.3	38	38	71	47
C 22 2_20.0	20.0	3.6	38	38	71	47
C 22 2_21.5	21.5	3.1	38	38	71	47
C 22 2_24.3	24.3	2.8	38	38	71	47
C 22 2_27.2	27.2	2.4	38	38	71	47
C 22 2_29.6	29.6	2.1	38	38	69	47
C 22 2_33.1	33.1	1.7	36	36	69	45
C 22 2_36.8	36.8	1.4	36	36	69	45
C 22 2_43.3	43.3	1.2	36	36	69	45
C 22 2_48.6	48.6	0.95	36	36	69	45
C 22 2_54.7	54.7	0.71	36	36	69	45
C 22 2_63.3	63.3	0.47	36	36	—	45
C 22 3_60.0	60.0	0.95	36	36	69	22
C 22 3_65.3	65.3	0.71	36	36	69	22
C 22 3_74.8	74.8	0.71	36	36	69	22
C 22 3_82.6	82.6	0.71	36	36	69	22
C 22 3_88.5	88.5	0.71	36	36	69	22
C 22 3_100.2	100.2	0.71	36	36	69	22
C 22 3_112.0	112.0	0.71	36	36	69	22
C 22 3_122.2	122.2	0.71	36	36	69	22
C 22 3_136.5	136.5	0.47	36	36	69	22
C 22 3_151.7	151.7	0.47	36	36	69	22
C 22 3_178.5	178.5	0.47	36	36	69	22
C 22 3_200.7	200.7	0.47	36	36	69	22
C 22 3_225.8	225.8	0.47	36	36	69	22
C 22 3_261.0	261.0	0.47	36	36	69	22



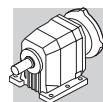
C 22



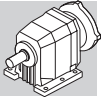
	i	J (•10 ⁻⁴) [lb•ft ²]									
		SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 22 2_2.7	2.7	—	—	—	—	—	—	95	107	95	119
C 22 2_3.3	3.3	—	—	—	—	—	—	88	100	85	109
C 22 2_3.7	3.7	23	31	24	33	83	95	85	97	83	107
C 22 2_4.3	4.3	20	26	20	31	81	90	81	93	78	102
C 22 2_4.8	4.8	18	24	18	28	78	88	78	90	78	102
C 22 2_5.6	5.6	15	21	15	26	76	85	76	88	76	100
C 22 2_6.1	6.1	13	19	14	24	74	83	74	85	74	97
C 22 2_7.1	7.1	—	—	—	—	—	—	85	97	85	109
C 22 2_8.7	8.7	—	—	—	—	—	—	81	93	78	102
C 22 2_9.6	9.6	18	24	19	28	78	90	78	90	78	102
C 22 2_11.1	11.1	16	22	16	26	76	85	76	88	76	100
C 22 2_12.4	12.4	15	21	15	26	76	85	76	88	74	97
C 22 2_14.5	14.5	15	21	15	26	76	85	74	85	74	97
C 22 2_15.8	15.8	11	17	12	22	71	83	74	85	71	95
C 22 2_18.1	18.1	11	17	11	22	71	81	71	83	71	95
C 22 2_20.0	20.0	10	16	10	21	71	81	71	83	69	93
C 22 2_21.5	21.5	9.5	16	10	20	71	81	71	83	69	93
C 22 2_24.3	24.3	9.3	15	9.7	20	69	81	71	83	69	93
C 22 2_27.2	27.2	8.8	15	9.3	20	69	81	71	83	69	93
C 22 2_29.6	29.6	8.5	15	9.0	19	69	78	69	81	69	93
C 22 2_33.1	33.1	8.1	14	8.5	19	69	78	69	81	69	93
C 22 2_36.8	36.8	7.8	14	8.3	19	69	78	69	81	66	90
C 22 2_43.3	43.3	7.6	14	8.1	19	69	78	69	81	66	90
C 22 2_48.6	48.6	7.4	14	7.8	18	69	78	69	81	66	90
C 22 2_54.7	54.7	7.1	13	7.6	18	69	78	69	81	66	90
C 22 2_63.3	63.3	6.9	13	7.4	18	66	78	—	—	—	—
C 22 3_60.0	60.0	7.4	14	7.8	18	69	78	69	81	66	90
C 22 3_65.3	65.3	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_74.8	74.8	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_82.6	82.6	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_88.5	88.5	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_100.2	100.2	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_112.0	112.0	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_122.2	122.2	7.1	13	7.6	18	69	78	69	81	66	90
C 22 3_136.5	136.5	6.9	13	7.4	18	66	78	69	81	66	90
C 22 3_151.7	151.7	6.9	13	7.4	18	66	78	69	81	66	90
C 22 3_178.5	178.5	6.9	13	7.4	18	66	78	69	81	66	90
C 22 3_200.7	200.7	6.9	13	7.4	18	66	78	69	81	66	90
C 22 3_225.8	225.8	6.9	13	7.4	18	66	78	69	81	66	90
C 22 3_261.0	261.0	6.9	13	7.4	18	66	78	69	81	66	90

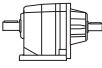
C 32

	i	J (•10 ⁻⁴) [lb•ft ²]								
			 IEC							
			63	71	80	90	100	112	132	
C 32 2_2.9	2.9	55	—	—	123	121	152	152	475	109
C 32 2_3.4	3.4	43	—	—	109	109	140	140	475	95
C 32 2_3.7	3.7	38	—	—	104	102	133	133	475	90
C 32 2_4.5	4.5	28	—	—	95	95	123	123	451	81
C 32 2_5.0	5.0	21	55	55	88	88	119	119	451	74
C 32 2_5.7	5.7	19	55	55	88	85	116	116	451	71
C 32 2_6.3	6.3	15	50	50	83	81	112	112	427	66
C 32 2_7.2	7.2	36	—	—	104	102	133	133	451	88
C 32 2_8.5	8.5	28	—	—	97	95	126	126	451	81
C 32 2_9.3	9.3	26	—	—	93	93	121	121	451	78
C 32 2_11.2	11.2	20	—	—	88	85	116	116	451	71
C 32 2_12.3	12.3	14	50	50	81	81	112	112	427	66
C 32 2_14.1	14.1	14	50	50	83	81	112	112	427	66
C 32 2_15.6	15.6	11	45	45	78	76	107	107	427	64
C 32 2_18.2	18.2	10	45	45	78	76	107	107	427	62
C 32 2_20.1	20.1	8.1	43	43	76	74	104	104	427	62
C 32 2_22.9	22.9	7.4	43	43	76	74	104	104	403	59
C 32 2_25.1	25.1	5.9	40	40	74	71	102	102	403	59
C 32 2_26.9	26.9	5.7	40	40	74	71	102	102	—	59
C 32 2_29.8	29.8	4.5	40	40	71	71	102	102	—	57
C 32 2_33.1	33.1	4.5	40	40	71	71	102	102	—	57
C 32 2_36.1	36.1	3.3	38	38	71	69	100	100	—	57
C 32 2_40.7	40.7	3.3	38	38	71	69	100	100	—	57
C 32 2_45.3	45.3	2.4	38	38	71	69	100	100	—	55
C 32 2_52.4	52.4	1.9	38	38	69	69	100	100	—	55
C 32 2_59.4	59.4	1.7	36	36	69	69	100	100	—	55
C 32 2_66.8	66.8	1.2	36	36	69	66	97	97	—	55
C 32 3_74.7	74.7	1.4	36	36	69	69	97	97	—	23
C 32 3_82.6	82.6	1.4	36	36	69	66	97	97	—	23
C 32 3_94.2	94.2	1.4	36	36	69	66	97	97	—	23
C 32 3_103.3	103.3	1.2	36	36	69	66	97	97	—	23
C 32 3_110.6	110.6	1.2	36	36	69	66	97	97	—	23
C 32 3_122.4	122.4	1.2	36	36	69	66	97	97	—	23
C 32 3_136.0	136.0	1.2	36	36	69	66	97	97	—	23
C 32 3_148.4	148.4	1.2	36	36	69	66	97	97	—	23
C 32 3_167.4	167.4	1.2	36	36	69	66	97	97	—	23
C 32 3_186.0	186.0	0.95	36	36	69	66	97	97	—	22
C 32 3_215.6	215.6	0.95	36	36	69	66	97	97	—	22
C 32 3_244.2	244.2	0.95	36	36	69	66	97	97	—	22
C 32 3_274.7	274.7	0.95	36	36	69	66	97	97	—	22

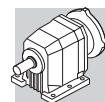


C 32



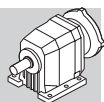
	i	J (•10 ⁻⁴) [lb•ft ²]				
			NEMA 			
			N56C	N140TC	N180TC	N210TC
C 32 2_2.9	2.9	55	—	—	123	475
C 32 2_3.4	3.4	43	—	—	109	475
C 32 2_3.7	3.7	38	—	—	104	475
C 32 2_4.5	4.5	28	—	—	95	451
C 32 2_5.0	5.0	21	55	55	88	451
C 32 2_5.7	5.7	19	55	55	88	451
C 32 2_6.3	6.3	15	50	50	83	427
C 32 2_7.2	7.2	36	—	—	104	451
C 32 2_8.5	8.5	28	—	—	97	451
C 32 2_9.3	9.3	26	—	—	93	451
C 32 2_11.2	11.2	20	—	—	88	451
C 32 2_12.3	12.3	14	50	50	81	427
C 32 2_14.1	14.1	14	50	50	83	427
C 32 2_15.6	15.6	11	45	45	78	427
C 32 2_18.2	18.2	10	45	45	78	427
C 32 2_20.1	20.1	8.1	43	43	76	427
C 32 2_22.9	22.9	7.4	43	43	76	403
C 32 2_25.1	25.1	5.9	40	40	74	403
C 32 2_26.9	26.9	5.7	40	40	74	—
C 32 2_29.8	29.8	4.5	40	40	71	—
C 32 2_33.1	33.1	4.5	40	40	71	—
C 32 2_36.1	36.1	3.3	38	38	71	—
C 32 2_40.7	40.7	3.3	38	38	71	—
C 32 2_45.3	45.3	2.4	38	38	71	—
C 32 2_52.4	52.4	1.9	38	38	69	—
C 32 2_59.4	59.4	1.7	36	36	69	—
C 32 2_66.8	66.8	1.2	36	36	69	—
C 32 3_74.7	74.7	1.4	36	36	69	—
C 32 3_82.6	82.6	1.4	36	36	69	—
C 32 3_94.2	94.2	1.4	36	36	69	—
C 32 3_103.3	103.3	1.2	36	36	69	—
C 32 3_110.6	110.6	1.2	36	36	69	—
C 32 3_122.4	122.4	1.2	36	36	69	—
C 32 3_136.0	136.0	1.2	36	36	69	—
C 32 3_148.4	148.4	1.2	36	36	69	—
C 32 3_167.4	167.4	1.2	36	36	69	—
C 32 3_186.0	186.0	0.95	36	36	69	—
C 32 3_215.6	215.6	0.95	36	36	69	—
C 32 3_244.2	244.2	0.95	36	36	69	—
C 32 3_274.7	274.7	0.95	36	36	69	—

C 32



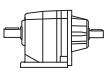
	i	J (•10 ⁻⁴) [lb•ft ²]											
		 SERVO											
		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 32 2_2.9	2.9	—	—	—	—	—	—	123	135	121	145	121	145
C 32 2_3.4	3.4	—	—	—	—	—	—	109	121	109	133	109	133
C 32 2_3.7	3.7	—	—	—	—	—	—	104	116	102	126	102	126
C 32 2_4.5	4.5	—	—	—	—	—	—	95	107	95	119	95	119
C 32 2_5.0	5.0	26	33	28	38	88	97	88	100	88	112	88	112
C 32 2_5.7	5.7	26	33	26	36	85	97	88	100	85	109	85	109
C 32 2_6.3	6.3	21	28	22	33	83	93	83	95	81	104	81	104
C 32 2_7.2	7.2	—	—	—	—	—	—	104	116	102	126	102	126
C 32 2_8.5	8.5	—	—	—	—	—	—	97	109	95	119	95	119
C 32 2_9.3	9.3	—	—	—	—	—	—	93	104	93	116	93	116
C 32 2_11.2	11.2	—	—	—	—	—	—	88	100	85	109	85	109
C 32 2_12.3	12.3	21	26	21	31	81	93	81	93	81	104	81	104
C 32 2_14.1	14.1	21	26	21	31	81	93	83	95	81	104	81	104
C 32 2_15.6	15.6	17	23	18	28	78	88	78	90	76	100	76	100
C 32 2_18.2	18.2	16	23	17	26	76	88	78	90	76	100	76	100
C 32 2_20.1	20.1	14	21	15	26	76	85	76	88	74	97	74	97
C 32 2_22.9	22.9	14	20	14	24	74	85	76	88	74	97	74	97
C 32 2_25.1	25.1	12	19	13	23	74	83	74	85	71	95	71	95
C 32 2_26.9	26.9	12	18	13	23	74	83	74	85	71	95	71	95
C 32 2_29.8	29.8	11	17	11	22	71	81	71	83	71	95	71	95
C 32 2_33.1	33.1	11	17	11	22	71	81	71	83	71	95	71	95
C 32 2_36.1	36.1	9.7	16	10	21	71	81	71	83	69	93	69	93
C 32 2_40.7	40.7	9.7	16	10	21	71	81	71	83	69	93	69	93
C 32 2_45.3	45.3	8.8	15	9.3	20	69	81	71	83	69	93	69	93
C 32 2_52.4	52.4	8.3	14	8.8	19	69	78	69	81	69	93	69	93
C 32 2_59.4	59.4	8.1	14	8.5	19	69	78	69	81	69	93	69	93
C 32 2_66.8	66.8	7.6	14	8.1	19	69	78	69	81	66	90	66	90
C 32 3_74.7	74.7	7.8	14	8.3	19	69	78	69	81	69	93	—	—
C 32 3_82.6	82.6	7.8	14	8.3	19	69	78	69	81	66	90	—	—
C 32 3_94.2	94.2	7.8	14	8.3	19	69	78	69	81	66	90	—	—
C 32 3_103.3	103.3	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_110.6	110.6	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_122.4	122.4	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_136.0	136.0	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_148.4	148.4	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_167.4	167.4	7.6	14	8.1	19	69	78	69	81	66	90	—	—
C 32 3_186.0	186.0	7.4	14	7.8	18	69	78	69	81	66	90	—	—
C 32 3_215.6	215.6	7.4	14	7.8	18	69	78	69	81	66	90	—	—
C 32 3_244.2	244.2	7.4	14	7.8	18	69	78	69	81	66	90	—	—
C 32 3_274.7	274.7	7.4	14	7.8	18	69	78	69	81	66	90	—	—

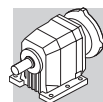
C 36



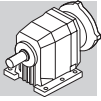
	i	J (•10 ⁻⁴) [lb•ft ²]								
			IEC							
			63	71	80	90	100	112	132	
C 36 2_2.7	2.7	85	—	—	154	152	183	183	522	332
C 36 2_3.2	3.2	59	—	—	128	126	157	157	498	308
C 36 2_3.5	3.5	57	—	—	126	123	154	154	475	308
C 36 2_4.2	4.2	38	—	—	107	104	135	135	475	285
C 36 2_4.6	4.6	36	71	71	104	102	133	133	451	285
C 36 2_5.3	5.3	26	62	62	95	93	123	123	451	285
C 36 2_5.8	5.8	23	59	59	93	90	121	121	451	285
C 36 2_6.8	6.8	52	—	—	121	119	150	150	475	308
C 36 2_8.0	8.0	38	—	—	104	102	133	133	475	285
C 36 2_8.8	8.8	36	—	—	104	102	133	133	451	285
C 36 2_10.6	10.6	26	—	—	93	90	121	121	451	285
C 36 2_11.7	11.7	24	59	59	93	90	121	121	451	285
C 36 2_13.3	13.3	16	52	52	85	83	114	114	451	261
C 36 2_14.8	14.8	16	52	52	85	83	114	114	451	261
C 36 2_17.2	17.2	11	47	47	81	78	109	109	427	261
C 36 2_19.0	19.0	11	47	47	81	78	109	109	427	261
C 36 3_22.1	22.1	43	—	—	112	109	140	140	451	285
C 36 3_26.2	26.2	31	—	—	100	97	128	128	451	285
C 36 3_28.7	28.7	31	—	—	100	97	128	128	451	285
C 36 3_34.6	34.6	21	—	—	90	88	119	119	451	261
C 36 3_38.1	38.1	21	57	57	90	88	119	119	451	261
C 36 3_43.5	43.5	14	50	50	83	81	112	112	451	261
C 36 3_48.2	48.2	14	50	50	83	81	112	112	451	261
C 36 3_56.2	56.2	9.7	45	45	78	76	107	107	427	261
C 36 3_62.0	62.0	10	45	45	78	76	107	107	427	261
C 36 3_70.8	70.8	7.1	43	43	76	74	104	104	427	261
C 36 3_77.6	77.6	6.6	43	43	76	74	104	104	403	261
C 36 3_83.1	83.1	5.7	40	40	74	71	102	102	—	261
C 36 3_91.9	91.9	5.0	40	40	74	71	102	102	—	261
C 36 3_102.2	102.2	4.5	40	40	74	71	102	102	—	261
C 36 3_111.5	111.5	3.8	40	40	74	71	102	102	—	261
C 36 3_125.8	125.8	3.3	38	38	71	69	100	100	—	261
C 36 3_139.8	139.8	2.6	38	38	71	69	100	100	—	261
C 36 3_162.0	162.0	2.1	38	38	71	69	100	100	—	261
C 36 3_183.5	183.5	1.7	38	38	71	69	100	100	—	261
C 36 3_206.4	206.4	1.4	38	38	71	69	100	100	—	261
C 36 4_230.9	230.9	1.9	—	—	—	—	—	—	—	—
C 36 4_255.0	255.0	1.9	38	38	71	69	100	100	—	21
C 36 4_290.9	290.9	1.7	38	38	71	69	100	100	—	21
C 36 4_318.9	318.9	1.7	38	38	71	69	100	100	—	21
C 36 4_341.7	341.7	1.7	38	38	71	69	100	100	—	21
C 36 4_377.9	377.9	1.7	38	38	71	69	100	100	—	21
C 36 4_420.2	420.2	1.4	38	38	71	69	100	100	—	21
C 36 4_458.4	458.4	1.4	38	38	71	69	100	100	—	21
C 36 4_517.2	517.2	1.4	38	38	71	69	100	100	—	21
C 36 4_574.7	574.7	1.4	38	38	71	69	100	100	—	21
C 36 4_665.9	665.9	1.4	38	38	71	69	100	100	—	21
C 36 4_754.2	754.2	1.4	38	38	71	69	100	100	—	21
C 36 4_848.5	848.5	1.4	38	38	71	69	100	100	—	21

C 36

	i	J (•10 ⁻⁴) [lb•ft ²]					
			NEMA				
			N56C	N140TC	N180TC	N210TC	
C 36 2_2.7	2.7	85	—	—	154	522	332
C 36 2_3.2	3.2	59	—	—	128	498	308
C 36 2_3.5	3.5	57	—	—	126	475	308
C 36 2_4.2	4.2	38	—	—	107	475	285
C 36 2_4.6	4.6	36	71	71	104	451	285
C 36 2_5.3	5.3	26	62	62	95	451	285
C 36 2_5.8	5.8	23	59	59	93	451	285
C 36 2_6.8	6.8	52	—	—	121	475	308
C 36 2_8.0	8.0	38	—	—	104	475	285
C 36 2_8.8	8.8	36	—	—	104	451	285
C 36 2_10.6	10.6	26	—	—	93	451	285
C 36 2_11.7	11.7	24	59	59	93	451	285
C 36 2_13.3	13.3	16	52	52	85	451	261
C 36 2_14.8	14.8	16	52	52	85	451	261
C 36 2_17.2	17.2	11	47	47	81	427	261
C 36 2_19.0	19.0	11	47	47	81	427	261
C 36 3_22.1	22.1	43	—	—	112	451	285
C 36 3_26.2	26.2	31	—	—	100	451	285
C 36 3_28.7	28.7	31	—	—	100	451	285
C 36 3_34.6	34.6	21	—	—	90	451	261
C 36 3_38.1	38.1	21	57	57	90	451	261
C 36 3_43.5	43.5	14	50	50	83	451	261
C 36 3_48.2	48.2	14	50	50	83	451	261
C 36 3_56.2	56.2	9.7	45	45	78	427	261
C 36 3_62.0	62.0	10	45	45	78	427	261
C 36 3_70.8	70.8	7.1	43	43	76	427	261
C 36 3_77.6	77.6	6.6	43	43	76	403	261
C 36 3_83.1	83.1	5.7	40	40	74	—	261
C 36 3_91.9	91.9	5.0	40	40	74	—	261
C 36 3_102.2	102.2	4.5	40	40	74	—	261
C 36 3_111.5	111.5	3.8	40	40	74	—	261
C 36 3_125.8	125.8	3.3	38	38	71	—	261
C 36 3_139.8	139.8	2.6	38	38	71	—	261
C 36 3_162.0	162.0	2.1	38	38	71	—	261
C 36 3_183.5	183.5	1.7	38	38	71	—	261
C 36 3_206.4	206.4	1.4	38	38	71	—	261
C 36 4_230.9	230.9	1.9	—	—	—	—	—
C 36 4_255.0	255.0	1.9	38	38	71	—	21
C 36 4_290.9	290.9	1.7	38	38	71	—	21
C 36 4_318.9	318.9	1.7	38	38	71	—	21
C 36 4_341.7	341.7	1.7	38	38	71	—	21
C 36 4_377.9	377.9	1.7	38	38	71	—	21
C 36 4_420.2	420.2	1.4	38	38	71	—	21
C 36 4_458.4	458.4	1.4	38	38	71	—	21
C 36 4_517.2	517.2	1.4	38	38	71	—	21
C 36 4_574.7	574.7	1.4	38	38	71	—	21
C 36 4_665.9	665.9	1.4	38	38	71	—	21
C 36 4_754.2	754.2	1.4	38	38	71	—	21
C 36 4_848.5	848.5	1.4	38	38	71	—	21

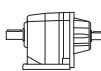


C 36

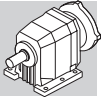


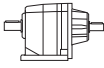
	i	J (•10 ⁻⁴) [lb•ft ²]											
		SERVO											
		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 36 2_2.7	2.7	—	—	—	—	—	—	154	166	152	176	152	176
C 36 2_3.2	3.2	—	—	—	—	—	—	128	140	126	150	126	150
C 36 2_3.5	3.5	—	—	—	—	—	—	126	138	123	147	123	147
C 36 2_4.2	4.2	—	—	—	—	—	—	107	119	104	128	104	128
C 36 2_4.6	4.6	43	47	43	52	102	112	104	116	102	126	102	126
C 36 2_5.3	5.3	33	38	33	43	93	104	95	107	93	116	93	116
C 36 2_5.8	5.8	31	36	31	40	90	100	93	104	90	114	90	114
C 36 2_6.8	6.8	—	—	—	—	—	—	121	133	119	142	119	142
C 36 2_8.0	8.0	—	—	—	—	—	—	104	116	102	126	102	126
C 36 2_8.8	8.8	—	—	—	—	—	—	104	116	102	126	102	126
C 36 2_10.6	10.6	—	—	—	—	—	—	93	104	90	114	90	114
C 36 2_11.7	11.7	31	36	31	40	90	102	93	104	90	114	90	114
C 36 2_13.3	13.3	23	28	23	33	83	93	85	97	83	107	83	107
C 36 2_14.8	14.8	23	28	23	33	83	93	85	97	83	107	83	107
C 36 2_17.2	17.2	18	24	18	28	78	88	81	93	78	102	78	102
C 36 2_19.0	19.0	18	24	18	28	78	88	81	93	78	102	78	102
C 36 3_22.1	22.1	—	—	—	—	—	—	112	123	109	133	109	133
C 36 3_26.2	26.2	—	—	—	—	—	—	100	112	97	121	97	121
C 36 3_28.7	28.7	—	—	—	—	—	—	100	112	97	121	97	121
C 36 3_34.6	34.6	—	—	—	—	—	—	90	102	88	112	88	112
C 36 3_38.1	38.1	28	33	28	38	88	100	90	102	88	112	88	112
C 36 3_43.5	43.5	20	26	21	31	81	90	83	95	81	104	81	104
C 36 3_48.2	48.2	21	26	21	31	81	93	83	95	81	104	81	104
C 36 3_56.2	56.2	16	22	17	26	76	88	78	90	76	100	76	100
C 36 3_62.0	62.0	16	23	17	26	76	88	78	90	76	100	76	100
C 36 3_70.8	70.8	14	20	14	24	74	85	76	88	74	97	74	97
C 36 3_77.6	77.6	13	19	14	24	74	83	76	88	74	97	74	97
C 36 3_83.1	83.1	12	18	13	23	74	83	74	85	71	95	71	95
C 36 3_91.9	91.9	11	18	12	22	71	83	74	85	71	95	71	95
C 36 3_102.2	102.2	11	17	11	22	71	81	74	85	71	95	71	95
C 36 3_111.5	111.5	10	16	11	21	71	81	74	85	71	95	71	95
C 36 3_125.8	125.8	9.7	16	10	21	71	81	71	83	69	93	69	93
C 36 3_139.8	139.8	9.0	15	9.5	20	69	81	71	83	69	93	69	93
C 36 3_162.0	162.0	8.5	15	9.0	19	69	78	71	83	69	93	69	93
C 36 3_183.5	183.5	8.1	14	8.5	19	69	78	71	83	69	93	69	93
C 36 3_206.4	206.4	7.8	14	8.3	19	69	78	71	83	69	93	69	93
C 36 4_230.9	230.9	8.3	14	8.8	19	69	78	71	83	69	93	—	—
C 36 4_255.0	255.0	8.3	14	8.8	19	69	78	71	83	69	93	—	—
C 36 4_290.9	290.9	8.1	14	8.5	19	69	78	71	83	69	93	—	—
C 36 4_318.9	318.9	8.1	14	8.5	19	69	78	71	83	69	93	—	—
C 36 4_341.7	341.7	8.1	14	8.5	19	69	78	71	83	69	93	—	—
C 36 4_377.9	377.9	8.1	14	8.5	19	69	78	71	83	69	93	—	—
C 36 4_420.2	420.2	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_458.4	458.4	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_517.2	517.2	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_574.7	574.7	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_665.9	665.9	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_754.2	754.2	7.8	14	8.3	19	69	78	71	83	69	93	—	—
C 36 4_848.5	848.5	7.8	14	8.3	19	69	78	71	83	69	93	—	—

C 41

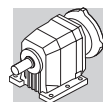
	i	J (•10-4) [lb•ft²]								
			 IEC							
			63	71	80	90	100	112		132
C 41 2_2.7	2.7	237	—	—	308	308	332	332	688	498
C 41 2_3.6	3.6	142	—	—	211	209	237	237	593	403
C 41 2_4.7	4.7	88	—	—	157	154	185	185	546	332
C 41 2_6.0	6.0	59	—	—	128	126	157	157	498	308
C 41 2_6.4	6.4	102	—	—	171	168	199	199	546	356
C 41 2_7.1	7.1	97	—	—	166	164	195	195	546	356
C 41 2_8.6	8.6	69	—	—	138	135	166	166	522	308
C 41 2_9.6	9.6	66	—	—	135	133	164	164	522	308
C 41 2_11.2	11.2	43	—	—	112	109	140	140	498	285
C 41 2_12.4	12.4	43	—	—	112	109	140	140	498	285
C 41 2_14.2	14.2	33	69	69	102	100	131	131	475	285
C 41 2_15.8	15.8	31	66	66	100	97	128	128	475	285
C 41 2_17.8	17.8	24	59	59	93	90	121	121	475	285
C 41 2_19.8	19.8	23	59	59	93	90	121	121	475	285
C 41 2_22.6	22.6	14	50	50	83	81	112	112	475	261
C 41 2_25.0	25.0	14	50	50	83	81	112	112	475	261
C 41 2_28.3	28.3	10	45	45	78	76	107	107	451	261
C 41 2_31.4	31.4	10	45	45	78	76	107	107	451	261
C 41 2_33.4	33.4	8.1	43	43	76	74	104	104	—	261
C 41 2_37.1	37.1	7.8	43	43	76	74	104	104	—	261
C 41 2_44.8	44.8	6.4	43	43	76	74	104	104	—	261
C 41 3_28.5	28.5	59	—	—	128	126	157	157	498	308
C 41 3_31.2	31.2	59	—	—	128	126	157	157	498	308
C 41 3_36.8	36.8	38	—	—	107	104	135	135	498	285
C 41 3_40.3	40.3	38	—	—	107	104	135	135	498	285
C 41 3_47.0	47.0	28	64	64	97	95	126	126	475	285
C 41 3_51.5	51.5	28	64	64	97	95	126	126	475	285
C 41 3_58.7	58.7	21	57	57	90	88	119	119	475	261
C 41 3_64.3	64.3	21	57	57	90	88	119	119	475	261
C 41 3_74.4	74.4	14	50	50	83	81	112	112	475	261
C 41 3_81.5	81.5	14	50	50	83	81	112	112	475	261
C 41 3_93.9	93.9	9.5	45	45	78	76	107	107	451	261
C 41 3_102.3	102.3	9.5	45	45	78	76	107	107	451	261
C 41 3_110.1	110.1	7.1	43	43	76	74	104	104	—	261
C 41 3_120.6	120.6	7.1	43	43	76	74	104	104	—	261
C 41 3_132.9	132.9	7.1	43	43	76	74	104	104	—	261
C 41 3_145.6	145.6	7.1	43	43	76	74	104	104	—	261
C 41 3_164.1	164.1	4.7	40	40	74	71	102	102	—	261
C 41 3_179.9	179.9	4.7	40	40	74	71	102	102	—	261
C 41 3_190.8	190.8	2.4	38	38	71	69	100	100	—	261
C 41 3_209.1	209.1	2.4	38	38	71	69	100	100	—	261
C 41 4_239.9	239.9	3.6	40	40	74	71	102	102	—	50
C 41 4_263.0	263.0	3.6	40	40	74	71	102	102	—	50
C 41 4_304.2	304.2	3.1	38	38	71	69	100	100	—	47
C 41 4_333.4	333.4	3.1	38	38	71	69	100	100	—	47
C 41 4_382.0	382.0	2.8	38	38	71	69	100	100	—	47
C 41 4_419.0	419.0	2.8	38	38	71	69	100	100	—	47
C 41 4_450.2	450.2	2.8	38	38	71	69	100	100	—	47
C 41 4_493.5	493.5	2.8	38	38	71	69	100	100	—	47
C 41 4_543.5	543.5	2.8	38	38	71	69	100	100	—	47
C 41 4_595.8	595.8	2.8	38	38	71	69	100	100	—	47
C 41 4_671.3	671.3	2.4	38	38	71	69	100	100	—	47
C 41 4_735.9	735.9	2.4	38	38	71	69	100	100	—	47
C 41 4_780.4	780.4	2.4	38	38	71	69	100	100	—	47
C 41 4_855.5	855.5	2.4	38	38	71	69	100	100	—	47

C 41



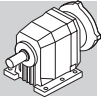
		J (•10 ⁻⁴) [lb•ft ²]					
	i		NEMA 				
			N56C	N140TC	N180TC	N210TC	
C 41 2_2.7	2.7	237	—	—	308	688	498
C 41 2_3.6	3.6	142	—	—	211	593	403
C 41 2_4.7	4.7	88	—	—	157	546	332
C 41 2_6.0	6.0	59	—	—	128	498	308
C 41 2_6.4	6.4	102	—	—	171	546	356
C 41 2_7.1	7.1	97	—	—	166	546	356
C 41 2_8.6	8.6	69	—	—	138	522	308
C 41 2_9.6	9.6	66	—	—	135	522	308
C 41 2_11.2	11.2	43	—	—	112	498	285
C 41 2_12.4	12.4	43	—	—	112	498	285
C 41 2_14.2	14.2	33	69	69	102	475	285
C 41 2_15.8	15.8	31	66	66	100	475	285
C 41 2_17.8	17.8	24	59	59	93	475	285
C 41 2_19.8	19.8	23	59	59	93	475	285
C 41 2_22.6	22.6	14	50	50	83	475	261
C 41 2_25.0	25.0	14	50	50	83	475	261
C 41 2_28.3	28.3	10	45	45	78	451	261
C 41 2_31.4	31.4	10	45	45	78	451	261
C 41 2_33.4	33.4	8.1	43	43	76	—	261
C 41 2_37.1	37.1	7.8	43	43	76	—	261
C 41 2_44.8	44.8	6.4	43	43	76	—	261
C 41 3_28.5	28.5	59	—	—	128	498	308
C 41 3_31.2	31.2	59	—	—	128	498	308
C 41 3_36.8	36.8	38	—	—	107	498	285
C 41 3_40.3	40.3	38	—	—	107	498	285
C 41 3_47.0	47.0	28	64	64	97	475	285
C 41 3_51.5	51.5	28	64	64	97	475	285
C 41 3_58.7	58.7	21	57	57	90	475	261
C 41 3_64.3	64.3	21	57	57	90	475	261
C 41 3_74.4	74.4	14	50	50	83	475	261
C 41 3_81.5	81.5	14	50	50	83	475	261
C 41 3_93.9	93.9	9.5	45	45	78	451	261
C 41 3_102.3	102.3	9.5	45	45	78	451	261
C 41 3_110.1	110.1	7.1	43	43	76	—	261
C 41 3_120.6	120.6	7.1	43	43	76	—	261
C 41 3_132.9	132.9	7.1	43	43	76	—	261
C 41 3_145.6	145.6	7.1	43	43	76	—	261
C 41 3_164.1	164.1	4.7	40	40	74	—	261
C 41 3_179.9	179.9	4.7	40	40	74	—	261
C 41 3_190.8	190.8	2.4	38	38	71	—	261
C 41 3_209.1	209.1	2.4	38	38	71	—	261
C 41 4_239.9	239.9	3.6	40	40	74	—	50
C 41 4_263.0	263.0	3.6	40	40	74	—	50
C 41 4_304.2	304.2	3.1	38	38	71	—	47
C 41 4_333.4	333.4	3.1	38	38	71	—	47
C 41 4_382.0	382.0	2.8	38	38	71	—	47
C 41 4_419.0	419.0	2.8	38	38	71	—	47
C 41 4_450.2	450.2	2.8	38	38	71	—	47
C 41 4_493.5	493.5	2.8	38	38	71	—	47
C 41 4_543.5	543.5	2.8	38	38	71	—	47
C 41 4_595.8	595.8	2.8	38	38	71	—	47
C 41 4_671.3	671.3	2.4	38	38	71	—	47
C 41 4_735.9	735.9	2.4	38	38	71	—	47
C 41 4_780.4	780.4	2.4	38	38	71	—	47
C 41 4_855.5	855.5	2.4	38	38	71	—	47

C 41



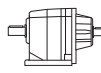
	i	J (•10 ⁻⁴) [lb•ft ²]																	
		SERVO																	
		60A		60B 80A		80B		95A		80C 95B 110A		95C 110B		130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 41 2 2.7	2.7	—	—	—	—	—	—	—	—	308	332	308	332	308	332	641	688	688	807
C 41 2 3.6	3.6	—	—	—	—	—	—	—	—	211	223	209	233	209	233	546	593	593	712
C 41 2 4.7	4.7	—	—	—	—	—	—	—	—	157	168	154	178	154	178	498	546	546	664
C 41 2 6.0	6.0	—	—	—	—	126	138	126	138	128	140	126	150	126	150	451	522	498	617
C 41 2 6.4	6.4	—	—	—	—	—	—	—	—	171	183	168	192	168	192	498	570	546	664
C 41 2 7.1	7.1	—	—	—	—	—	—	—	—	166	178	164	187	164	187	498	570	546	664
C 41 2 8.6	8.6	—	—	—	—	—	—	—	—	138	150	135	159	135	159	475	522	522	641
C 41 2 9.6	9.6	—	—	—	—	—	—	—	—	135	147	133	157	133	157	475	522	522	641
C 41 2 11.2	11.2	—	—	—	—	—	—	—	—	112	123	109	133	109	133	451	498	498	617
C 41 2 12.4	12.4	—	—	—	—	—	—	—	—	112	123	109	133	109	133	451	498	498	617
C 41 2 14.2	14.2	—	—	—	—	100	112	100	112	102	114	100	123	100	123	427	498	475	593
C 41 2 15.8	15.8	—	—	—	—	97	109	97	109	100	112	97	121	97	121	427	498	475	593
C 41 2 17.8	17.8	—	—	—	—	90	126	90	126	93	104	90	114	90	114	427	475	475	593
C 41 2 19.8	19.8	—	—	—	—	90	100	90	100	93	104	90	114	90	114	427	475	475	593
C 41 2 22.6	22.6	—	—	—	—	81	93	81	93	83	95	81	104	81	104	427	475	475	593
C 41 2 25.0	25.0	—	—	—	—	81	93	81	93	83	95	81	104	81	104	427	475	475	593
C 41 2 28.3	28.3	—	—	—	—	78	88	78	88	78	90	76	100	76	100	403	475	451	570
C 41 2 31.4	31.4	—	—	—	—	78	88	78	88	78	90	76	100	76	100	403	475	451	570
C 41 2 33.4	33.4	—	—	—	—	76	85	76	85	76	88	74	97	74	97	—	—	—	—
C 41 2 37.1	37.1	—	—	—	—	76	85	76	85	76	88	74	97	74	97	—	—	—	—
C 41 2 44.8	44.8	—	—	—	—	74	83	74	83	76	88	74	97	74	97	—	—	—	—
C 41 3 28.5	28.5	—	—	—	—	—	—	—	—	128	140	126	150	126	150	451	522	498	617
C 41 3 31.2	31.2	—	—	—	—	—	—	—	—	128	140	126	150	126	150	451	522	498	617
C 41 3 36.8	36.8	—	—	—	—	—	—	—	—	107	119	104	128	104	128	451	498	498	617
C 41 3 40.3	40.3	—	—	—	—	—	—	—	—	107	119	104	128	104	128	451	498	498	617
C 41 3 47.0	47.0	—	—	—	—	95	107	95	107	97	109	95	119	95	119	427	498	475	593
C 41 3 51.5	51.5	—	—	—	—	95	107	95	107	97	109	95	119	95	119	427	498	475	593
C 41 3 58.7	58.7	—	—	—	—	88	100	88	100	90	102	88	112	88	112	427	475	475	593
C 41 3 64.3	64.3	—	—	—	—	88	100	88	100	90	102	88	112	88	112	427	475	475	593
C 41 3 74.4	74.4	—	—	—	—	81	93	81	93	83	95	81	104	81	104	427	475	475	593
C 41 3 81.5	81.5	—	—	—	—	81	93	81	93	83	95	81	104	81	104	427	475	475	593
C 41 3 93.9	93.9	—	—	—	—	76	88	76	88	78	90	76	100	76	100	403	475	451	570
C 41 3 102.3	102.3	—	—	—	—	76	88	76	88	78	90	76	100	76	100	403	475	451	570
C 41 3 110.1	110.1	—	—	—	—	74	85	74	85	76	88	74	97	74	97	—	—	—	—
C 41 3 120.6	120.6	—	—	—	—	74	85	74	85	76	88	74	97	74	97	—	—	—	—
C 41 3 132.9	132.9	—	—	—	—	74	85	74	85	76	88	74	97	74	97	—	—	—	—
C 41 3 145.6	145.6	—	—	—	—	74	85	74	85	76	88	74	97	74	97	—	—	—	—
C 41 3 164.1	164.1	—	—	—	—	71	83	71	83	74	85	71	95	71	95	—	—	—	—
C 41 3 179.9	179.9	—	—	—	—	71	83	71	83	74	85	71	95	71	95	—	—	—	—
C 41 3 190.8	190.8	—	—	—	—	69	81	69	81	71	83	69	93	69	93	—	—	—	—
C 41 3 209.1	209.1	—	—	—	—	69	81	69	81	71	83	69	93	69	93	—	—	—	—
C 41 4 239.9	239.9	10	16	10	21	—	—	71	81	74	85	71	95	—	—	—	—	—	—
C 41 4 263.0	263.0	10	16	10	21	—	—	71	81	74	85	71	95	—	—	—	—	—	—
C 41 4 304.2	304.2	9.5	16	10	20	—	—	71	81	71	83	69	93	—	—	—	—	—	—
C 41 4 333.4	333.4	9.5	16	10	20	—	—	71	81	71	83	69	93	—	—	—	—	—	—
C 41 4 382.0	382.0	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 419.0	419.0	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 450.2	450.2	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 493.5	493.5	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 543.5	543.5	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 595.8	595.8	9.3	15	9.7	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 671.3	671.3	8.8	15	9.3	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 735.9	735.9	8.8	15	9.3	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 780.4	780.4	8.8	15	9.3	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—
C 41 4 855.5	855.5	8.8	15	9.3	20	—	—	69	81	71	83	69	93	—	—	—	—	—	—

C 51

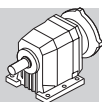


	i	J (•10 ⁻⁴) [lb•ft ²]										
			IEC 									
			63	71	80	90	100	112	132	160	180	
C 51 2_2.6	2.6	356	—	—	403	403	451	451	783	1875	1804	593
C 51 2_3.3	3.3	237	—	—	308	308	332	332	688	1780	1709	498
C 51 2_4.5	4.5	150	—	—	218	216	237	237	593	1685	1614	403
C 51 2_5.6	5.6	97	—	—	166	164	195	195	546	1637	1566	356
C 51 2_7.0	7.0	192	—	—	261	261	285	285	641	1732	1661	451
C 51 2_7.8	7.8	185	—	—	261	261	285	285	641	1732	1661	427
C 51 2_8.8	8.8	142	—	—	211	209	237	237	593	1685	1614	403
C 51 2_9.8	9.8	138	—	—	206	204	235	235	593	1685	1614	380
C 51 2_11.8	11.8	97	—	—	166	164	195	195	546	1637	1566	356
C 51 2_13.1	13.1	95	—	—	164	161	192	192	546	1637	1566	356
C 51 2_15.0	15.0	64	—	—	133	131	161	161	522	1614	1542	308
C 51 2_16.6	16.6	62	—	—	131	128	159	159	522	1614	1542	308
C 51 2_18.9	18.9	47	83	83	116	114	145	145	498	1590	1519	308
C 51 2_21.0	21.0	45	81	81	114	112	142	142	498	1590	1519	285
C 51 2_23.4	23.4	36	71	71	104	102	133	133	475	1566	1495	285
C 51 2_25.9	25.9	33	69	69	102	100	131	131	475	1566	1495	285
C 51 2_29.8	29.8	21	57	57	90	88	119	119	475	1566	1495	261
C 51 2_33.0	33.0	21	57	57	90	88	119	119	475	1566	1495	261
C 51 2_36.4	36.4	17	52	52	85	83	114	114	475	1566	1495	261
C 51 2_40.4	40.4	17	52	52	85	83	114	114	475	1566	1495	261
C 51 2_43.1	43.1	12	47	47	81	78	109	109	—	—	—	261
C 51 2_47.8	47.8	12	47	47	81	78	109	109	—	—	—	261
C 51 2_51.4	51.4	9.5	45	45	78	76	107	107	—	—	—	261
C 51 2_57.0	57.0	9.5	45	45	78	76	107	107	—	—	—	261
C 51 3_21.8	21.8	161	—	—	230	228	261	261	617	1709	1637	403
C 51 3_23.9	23.9	161	—	—	230	228	261	261	617	1709	1637	403
C 51 3_27.4	27.4	123	—	—	192	190	221	221	570	1661	1590	380
C 51 3_30.1	30.1	123	—	—	192	190	221	221	570	1661	1590	380
C 51 3_37.0	37.0	85	—	—	154	152	183	183	546	1637	1566	332
C 51 3_40.5	40.5	85	—	—	154	152	183	183	546	1637	1566	332
C 51 3_46.7	46.7	57	—	—	126	123	154	154	498	1590	1519	308
C 51 3_51.2	51.2	57	—	—	126	123	154	154	498	1590	1519	308
C 51 3_59.0	59.0	43	78	78	112	109	140	140	498	1590	1519	285
C 51 3_64.6	64.6	43	78	78	112	109	140	140	498	1590	1519	285
C 51 3_72.9	72.9	31	66	66	100	97	128	128	475	1566	1495	285
C 51 3_79.9	79.9	31	66	66	100	97	128	128	475	1566	1495	285
C 51 3_93.0	93.0	19	55	55	88	85	116	116	475	1566	1495	261
C 51 3_101.8	101.8	19	55	55	88	85	116	116	475	1566	1495	261
C 51 3_113.6	113.6	14	50	50	83	81	112	112	475	1566	1495	261
C 51 3_124.4	124.4	14	50	50	83	81	112	112	475	1566	1495	261
C 51 3_134.6	134.6	12	47	47	81	78	109	109	—	—	—	261
C 51 3_147.4	147.4	12	47	47	81	78	109	109	—	—	—	261
C 51 3_160.5	160.5	9.5	45	45	78	76	107	107	—	—	—	261
C 51 3_175.8	175.8	9.5	45	45	78	76	107	107	—	—	—	261
C 51 3_197.9	197.9	7.1	43	43	76	74	104	104	—	—	—	261
C 51 3_216.7	216.7	7.1	43	43	76	74	104	104	—	—	—	261
C 51 4_240.9	240.9	7.1	43	43	76	74	104	104	403	—	—	28
C 51 4_263.8	263.8	7.1	43	43	76	74	104	104	403	—	—	28
C 51 4_297.8	297.8	7.1	43	43	76	74	104	104	403	—	—	28
C 51 4_326.1	326.1	7.1	43	43	76	74	104	104	403	—	—	28
C 51 4_380.0	380.0	4.7	40	40	74	71	102	102	403	—	—	26
C 51 4_416.0	416.0	4.7	40	40	74	71	102	102	403	—	—	26
C 51 4_463.9	463.9	4.7	40	40	74	71	102	102	403	—	—	26
C 51 4_508.0	508.0	4.7	40	40	74	71	102	102	403	—	—	26
C 51 4_549.7	549.7	4.7	40	40	74	71	102	102	—	—	—	26
C 51 4_602.0	602.0	4.7	40	40	74	71	102	102	—	—	—	26
C 51 4_655.4	655.4	4.7	40	40	74	71	102	102	—	—	—	26
C 51 4_717.7	717.7	4.7	40	40	74	71	102	102	—	—	—	26
C 51 4_808.0	808.0	4.7	40	40	74	71	102	102	—	—	—	26
C 51 4_884.9	884.9	4.7	40	40	74	71	102	102	—	—	—	26

C 51

	i	J (•10 ⁻⁴) [lb•ft ²]							
			 NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
C 51 2 2.6	2.6	356	—	—	403	783	1875	1804	593
C 51 2 3.3	3.3	237	—	—	308	688	1780	1709	498
C 51 2 4.5	4.5	150	—	—	218	593	1685	1614	403
C 51 2 5.6	5.6	97	—	—	166	546	1637	1566	356
C 51 2 7.0	7.0	192	—	—	261	641	1732	1661	451
C 51 2 7.8	7.8	185	—	—	261	641	1732	1661	427
C 51 2 8.8	8.8	142	—	—	211	593	1685	1614	403
C 51 2 9.8	9.8	138	—	—	206	593	1685	1614	380
C 51 2 11.8	11.8	97	—	—	166	546	1637	1566	356
C 51 2 13.1	13.1	95	—	—	164	546	1637	1566	356
C 51 2 15.0	15.0	64	—	—	133	522	1614	1542	308
C 51 2 16.6	16.6	62	—	—	131	522	1614	1542	308
C 51 2 18.9	18.9	47	83	83	116	498	1590	1519	308
C 51 2 21.0	21.0	45	81	81	114	498	1590	1519	285
C 51 2 23.4	23.4	36	71	71	104	475	1566	1495	285
C 51 2 25.9	25.9	33	69	69	102	475	1566	1495	285
C 51 2 29.8	29.8	21	57	57	90	475	1566	1495	261
C 51 2 33.0	33.0	21	57	57	90	475	1566	1495	261
C 51 2 36.4	36.4	17	52	52	85	475	1566	1495	261
C 51 2 40.4	40.4	17	52	52	85	475	1566	1495	261
C 51 2 43.1	43.1	12	47	47	81	—	—	—	261
C 51 2 47.8	47.8	12	47	47	81	—	—	—	261
C 51 2 51.4	51.4	9.5	45	45	78	—	—	—	261
C 51 2 57.0	57.0	9.5	45	45	78	—	—	—	261
C 51 3 21.8	21.8	161	—	—	230	617	1709	1637	403
C 51 3 23.9	23.9	161	—	—	230	617	1709	1637	403
C 51 3 27.4	27.4	123	—	—	192	570	1661	1590	380
C 51 3 30.1	30.1	123	—	—	192	570	1661	1590	380
C 51 3 37.0	37.0	85	—	—	154	546	1637	1566	332
C 51 3 40.5	40.5	85	—	—	154	546	1637	1566	332
C 51 3 46.7	46.7	57	—	—	126	498	1590	1519	308
C 51 3 51.2	51.2	57	—	—	126	498	1590	1519	308
C 51 3 59.0	59.0	43	78	78	112	498	1590	1519	285
C 51 3 64.6	64.6	43	78	78	112	498	1590	1519	285
C 51 3 72.9	72.9	31	66	66	100	475	1566	1495	285
C 51 3 79.9	79.9	31	66	66	100	475	1566	1495	285
C 51 3 93.0	93.0	19	55	55	88	475	1566	1495	261
C 51 3 101.8	101.8	19	55	55	88	475	1566	1495	261
C 51 3 113.6	113.6	14	50	50	83	475	1566	1495	261
C 51 3 124.4	124.4	14	50	50	83	475	1566	1495	261
C 51 3 134.6	134.6	12	47	47	81	—	—	—	261
C 51 3 147.4	147.4	12	47	47	81	—	—	—	261
C 51 3 160.5	160.5	9.5	45	45	78	—	—	—	261
C 51 3 175.8	175.8	9.5	45	45	78	—	—	—	261
C 51 3 197.9	197.9	7.1	43	43	76	—	—	—	261
C 51 3 216.7	216.7	7.1	43	43	76	—	—	—	261
C 51 4 240.9	240.9	7.1	43	43	76	403	—	—	28
C 51 4 263.8	263.8	7.1	43	43	76	403	—	—	28
C 51 4 297.8	297.8	7.1	43	43	76	403	—	—	28
C 51 4 326.1	326.1	7.1	43	43	76	403	—	—	28
C 51 4 380.0	380.0	4.7	40	40	74	403	—	—	26
C 51 4 416.0	416.0	4.7	40	40	74	403	—	—	26
C 51 4 463.9	463.9	4.7	40	40	74	403	—	—	26
C 51 4 508.0	508.0	4.7	40	40	74	403	—	—	26
C 51 4 549.7	549.7	4.7	40	40	74	—	—	—	26
C 51 4 602.0	602.0	4.7	40	40	74	—	—	—	26
C 51 4 655.4	655.4	4.7	40	40	74	—	—	—	26
C 51 4 717.7	717.7	4.7	40	40	74	—	—	—	26
C 51 4 808.0	808.0	4.7	40	40	74	—	—	—	26
C 51 4 884.9	884.9	4.7	40	40	74	—	—	—	26

C 51

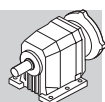


	i	J (•10 ⁻⁴) [lb•ft ²]											
		SERVO											
		80B		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 51 2 2.6	2.6	—	—	—	—	403	427	403	427	759	807	783	902
C 51 2 3.3	3.3	—	—	—	—	308	332	308	332	641	688	688	807
C 51 2 4.5	4.5	—	—	—	—	218	230	216	237	546	617	593	712
C 51 2 5.6	5.6	—	—	—	—	166	178	164	187	498	570	546	664
C 51 2 7.0	7.0	—	—	—	—	261	285	261	285	593	664	641	759
C 51 2 7.8	7.8	—	—	—	—	261	285	261	285	593	641	641	759
C 51 2 8.8	8.8	—	—	—	—	211	223	209	233	546	593	593	712
C 51 2 9.8	9.8	—	—	—	—	206	218	204	228	546	593	593	712
C 51 2 11.8	11.8	—	—	—	—	166	178	164	187	498	570	546	664
C 51 2 13.1	13.1	—	—	—	—	164	176	161	185	498	546	546	664
C 51 2 15.0	15.0	—	—	—	—	133	145	131	154	475	522	522	641
C 51 2 16.6	16.6	—	—	—	—	131	142	128	152	475	522	522	641
C 51 2 18.9	18.9	114	126	114	126	116	128	114	138	451	498	498	617
C 51 2 21.0	21.0	112	123	112	123	114	126	112	135	451	498	498	617
C 51 2 23.4	23.4	102	114	102	114	104	102	102	126	427	498	475	593
C 51 2 25.9	25.9	100	112	100	112	102	114	100	123	427	498	475	593
C 51 2 29.8	29.8	88	100	88	100	90	102	88	112	427	475	475	593
C 51 2 33.0	33.0	88	100	88	100	90	102	88	112	427	475	475	593
C 51 2 36.4	36.4	83	95	83	95	85	97	83	107	427	475	475	593
C 51 2 40.4	40.4	83	95	83	95	85	97	83	107	427	475	475	593
C 51 2 43.1	43.1	78	90	78	90	81	93	78	102	—	—	—	—
C 51 2 47.8	47.8	78	90	78	90	81	93	78	102	—	—	—	—
C 51 2 51.4	51.4	76	88	76	88	78	90	76	100	—	—	—	—
C 51 2 57.0	57.0	76	88	76	88	78	90	76	100	—	—	—	—
C 51 3 21.8	21.8	—	—	—	—	230	237	228	261	570	617	617	736
C 51 3 23.9	23.9	—	—	—	—	230	237	228	261	570	617	617	736
C 51 3 27.4	27.4	—	—	—	—	192	204	190	214	522	593	570	688
C 51 3 30.1	30.1	—	—	—	—	192	204	190	214	522	593	570	688
C 51 3 37.0	37.0	—	—	—	—	154	166	152	176	498	546	546	664
C 51 3 40.5	40.5	—	—	—	—	154	166	152	176	498	546	546	664
C 51 3 46.7	46.7	—	—	—	—	126	138	123	147	451	522	498	617
C 51 3 51.2	51.2	—	—	—	—	126	138	123	147	451	522	498	617
C 51 3 59.0	59.0	109	121	109	121	112	123	109	133	451	498	498	617
C 51 3 64.6	64.6	109	121	109	121	112	123	109	133	451	498	498	617
C 51 3 72.9	72.9	97	109	97	109	100	123	97	121	427	498	475	593
C 51 3 79.9	79.9	97	109	97	109	100	123	97	121	427	498	475	593
C 51 3 93.0	93.0	85	97	85	97	88	100	85	109	427	475	475	593
C 51 3 101.8	101.8	85	97	85	97	88	100	85	109	427	475	475	593
C 51 3 113.6	113.6	81	93	81	93	83	95	81	104	427	475	475	593
C 51 3 124.4	124.4	81	93	81	93	83	95	81	104	427	475	475	593
C 51 3 134.6	134.6	78	90	78	90	81	93	78	102	—	—	—	—
C 51 3 147.4	147.4	78	90	78	90	81	93	78	102	—	—	—	—
C 51 3 160.5	160.5	76	88	76	88	78	90	76	100	—	—	—	—
C 51 3 175.8	175.8	76	88	76	88	78	90	76	100	—	—	—	—
C 51 3 197.9	197.9	74	85	74	85	76	88	74	97	—	—	—	—
C 51 3 216.7	216.7	74	85	74	85	76	88	74	97	—	—	—	—
C 51 4 240.9	240.9	—	—	74	85	76	88	74	97	—	—	—	—
C 51 4 263.8	263.8	—	—	74	85	76	88	74	97	—	—	—	—
C 51 4 297.8	297.8	—	—	74	85	76	88	74	97	—	—	—	—
C 51 4 326.1	326.1	—	—	74	85	76	88	74	97	—	—	—	—
C 51 4 380.0	380.0	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 416.0	416.0	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 463.9	463.9	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 508.0	508.0	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 549.7	549.7	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 602.0	602.0	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 655.4	655.4	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 717.7	717.7	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 808.0	808.0	—	—	71	83	74	85	71	95	—	—	—	—
C 51 4 884.9	884.9	—	—	71	83	74	85	71	95	—	—	—	—

C 61

	i	J (•10 ⁻⁴) [lb•ft ²]									
			 IEC								
			63	71	80	90	100	112	132	160	180
C 61 2_2.8	2.8	712	—	—	—	—	—	—	1163	1851	1804
C 61 2_3.7	3.7	451	—	—	522	522	546	546	902	1851	1804
C 61 2_4.6	4.6	332	—	—	403	403	427	427	783	1851	1804
C 61 2_6.0	6.0	209	—	—	285	285	308	308	664	1851	1804
C 61 2_6.7	6.7	332	—	—	—	—	—	—	783	1851	1804
C 61 2_7.5	7.5	308	—	—	—	—	—	—	759	1851	1804
C 61 2_8.8	8.8	308	—	—	380	380	403	403	759	1851	1804
C 61 2_9.8	9.8	285	—	—	356	356	380	380	736	1851	1804
C 61 2_10.9	10.9	228	—	—	308	285	332	332	688	1851	1804
C 61 2_12.1	12.1	218	—	—	285	285	308	308	664	1851	1804
C 61 2_14.3	14.3	138	—	—	206	204	235	235	593	1851	1804
C 61 2_15.9	15.9	133	—	—	202	199	230	230	593	1851	1804
C 61 2_17.7	17.7	104	—	—	173	171	202	202	546	1851	1804
C 61 2_19.6	19.6	102	—	—	171	168	199	199	546	1851	1804
C 61 2_22.4	22.4	76	112	112	145	142	173	173	522	1851	1804
C 61 2_24.8	24.8	74	109	109	142	140	171	171	522	1851	1804
C 61 2_27.4	27.4	50	85	85	119	116	147	147	498	1851	1804
C 61 2_30.4	30.4	52	88	88	121	119	150	150	498	1851	1804
C 61 2_34.2	34.2	36	71	71	104	102	133	133	475	1851	1804
C 61 2_38.0	38.0	36	71	71	104	102	133	133	475	1851	1804
C 61 3_26.8	26.8	237	—	—	308	308	332	332	688	1851	1804
C 61 3_29.4	29.4	237	—	—	308	308	332	332	688	1851	1804
C 61 3_33.0	33.0	192	—	—	261	261	285	285	641	1851	1804
C 61 3_36.1	36.1	192	—	—	261	261	285	285	641	1851	1804
C 61 3_43.4	43.4	119	—	—	187	185	216	216	570	1851	1804
C 61 3_47.6	47.6	119	—	—	187	185	216	216	570	1851	1804
C 61 3_53.5	53.5	93	—	—	161	159	190	190	546	1851	1804
C 61 3_58.6	58.6	90	—	—	159	157	187	187	546	1851	1804
C 61 3_67.7	67.7	66	102	102	135	133	164	164	522	1851	1804
C 61 3_74.2	74.2	66	102	102	135	133	164	164	522	1851	1804
C 61 3_83.0	83.0	45	81	81	114	112	142	142	498	1851	1804
C 61 3_91.0	91.0	45	81	81	114	112	142	142	498	1851	1804
C 61 3_103.6	103.6	31	66	66	100	97	128	128	475	1851	1804
C 61 3_113.6	113.6	31	66	66	100	97	128	128	475	1851	1804
C 61 3_128.1	128.1	24	59	59	93	90	121	121	475	1851	1804
C 61 3_140.5	140.5	24	59	59	93	90	121	121	475	1851	1804
C 61 3_150.0	150.0	17	52	52	85	83	114	114	—	—	—
C 61 3_164.5	164.5	17	52	52	85	83	114	114	—	—	—
C 61 3_178.6	178.6	14	50	50	83	81	112	112	—	—	—
C 61 3_195.8	195.8	14	50	50	83	81	112	112	—	—	—
C 61 4_217.4	217.4	16	52	52	85	83	114	114	—	—	—
C 61 4_238.3	238.3	16	52	52	85	83	114	114	—	—	—
C 61 4_275.3	275.3	19	55	55	88	85	116	116	—	—	—
C 61 4_301.7	301.7	19	55	55	88	85	116	116	—	—	—
C 61 4_337.7	337.7	13	50	50	83	81	112	112	—	—	—
C 61 4_370.1	370.1	13	50	50	83	81	112	112	—	—	—
C 61 4_421.5	421.5	13	47	47	81	78	109	109	—	—	—
C 61 4_462.0	462.0	13	47	47	81	78	109	109	—	—	—
C 61 4_521.1	521.1	12	47	47	81	78	109	109	—	—	—
C 61 4_571.2	571.2	12	47	47	81	78	109	109	—	—	—
C 61 4_610.1	610.1	12	47	47	81	78	109	109	—	—	—
C 61 4_668.8	668.8	12	47	47	81	78	109	109	—	—	—
C 61 4_726.3	726.3	11	47	47	81	78	109	109	—	—	—
C 61 4_796.1	796.1	11	47	47	81	78	109	109	—	—	—

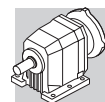
C 61



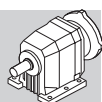
	i	J (•10 ⁻⁴) [lb•ft ²]							
			NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
C 61 2_2.8	2.8	712	—	—	—	1163	1851	1804	1234
C 61 2_3.7	3.7	451	—	—	522	902	1851	1804	973
C 61 2_4.6	4.6	332	—	—	403	783	1851	1804	854
C 61 2_6.0	6.0	209	—	—	285	664	1851	1804	736
C 61 2_6.7	6.7	332	—	—	—	783	1851	1804	854
C 61 2_7.5	7.5	308	—	—	—	759	1851	1804	831
C 61 2_8.8	8.8	308	—	—	380	759	1851	1804	831
C 61 2_9.8	9.8	285	—	—	356	736	1851	1804	807
C 61 2_10.9	10.9	228	—	—	308	688	1851	1804	736
C 61 2_12.1	12.1	218	—	—	285	664	1851	1804	736
C 61 2_14.3	14.3	138	—	—	206	593	1851	1804	664
C 61 2_15.9	15.9	133	—	—	202	593	1851	1804	641
C 61 2_17.7	17.7	104	—	—	173	546	1851	1804	617
C 61 2_19.6	19.6	102	—	—	171	546	1851	1804	617
C 61 2_22.4	22.4	76	112	112	145	522	1851	1804	593
C 61 2_24.8	24.8	74	109	109	142	522	1851	1804	593
C 61 2_27.4	27.4	50	85	85	119	498	1851	1804	570
C 61 2_30.4	30.4	52	88	88	121	498	1851	1804	570
C 61 2_34.2	34.2	36	71	71	104	475	1851	1804	546
C 61 2_38.0	38.0	36	71	71	104	475	1851	1804	546
C 61 3_26.8	26.8	237	—	—	308	688	1851	1804	759
C 61 3_29.4	29.4	237	—	—	308	688	1851	1804	759
C 61 3_33.0	33.0	192	—	—	261	641	1851	1804	712
C 61 3_36.1	36.1	192	—	—	261	641	1851	1804	712
C 61 3_43.4	43.4	119	—	—	187	570	1851	1804	641
C 61 3_47.6	47.6	119	—	—	187	570	1851	1804	641
C 61 3_53.5	53.5	93	—	—	161	546	1851	1804	617
C 61 3_58.6	58.6	90	—	—	159	546	1851	1804	617
C 61 3_67.7	67.7	66	102	102	135	522	1851	1804	593
C 61 3_74.2	74.2	66	102	102	135	522	1851	1804	593
C 61 3_83.0	83.0	45	81	81	114	498	1851	1804	570
C 61 3_91.0	91.0	45	81	81	114	498	1851	1804	570
C 61 3_103.6	103.6	31	66	66	100	475	1851	1804	546
C 61 3_113.6	113.6	31	66	66	100	475	1851	1804	546
C 61 3_128.1	128.1	24	59	59	93	475	1851	1804	546
C 61 3_140.5	140.5	24	59	59	93	475	1851	1804	546
C 61 3_150.0	150.0	17	52	52	85	—	—	—	546
C 61 3_164.5	164.5	17	52	52	85	—	—	—	546
C 61 3_178.6	178.6	14	50	50	83	—	—	—	522
C 61 3_195.8	195.8	14	50	50	83	—	—	—	522
C 61 4_217.4	217.4	16	52	52	85	—	—	—	261
C 61 4_238.3	238.3	16	52	52	85	—	—	—	261
C 61 4_275.3	275.3	19	55	55	88	—	—	—	261
C 61 4_301.7	301.7	19	55	55	88	—	—	—	261
C 61 4_337.7	337.7	13	50	50	83	—	—	—	261
C 61 4_370.1	370.1	13	50	50	83	—	—	—	261
C 61 4_421.5	421.5	13	47	47	81	—	—	—	261
C 61 4_462.0	462.0	13	47	47	81	—	—	—	261
C 61 4_521.1	521.1	12	47	47	81	—	—	—	261
C 61 4_571.2	571.2	12	47	47	81	—	—	—	261
C 61 4_610.1	610.1	12	47	47	81	—	—	—	261
C 61 4_668.8	668.8	12	47	47	81	—	—	—	261
C 61 4_726.3	726.3	11	47	47	81	—	—	—	261
C 61 4_796.1	796.1	11	47	47	81	—	—	—	261

C 61

	i	J (•10 ⁻⁴) [lb•ft ²]											
		SERVO											
		80B		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 61 2_2.8	2.8	—	—	—	—	—	—	—	—	1115	1163	1163	1281
C 61 2_3.7	3.7	—	—	—	—	522	546	522	546	854	902	902	1020
C 61 2_4.6	4.6	—	—	—	—	403	427	403	427	736	783	783	902
C 61 2_6.0	6.0	—	—	—	—	285	308	285	308	617	664	664	783
C 61 2_6.7	6.7	—	—	—	—	—	—	—	—	736	783	783	902
C 61 2_7.5	7.5	—	—	—	—	—	—	—	—	712	759	759	878
C 61 2_8.8	8.8	—	—	—	—	380	403	380	403	712	759	759	878
C 61 2_9.8	9.8	—	—	—	—	356	380	356	380	546	736	736	854
C 61 2_10.9	10.9	—	—	—	—	308	332	285	308	641	688	688	807
C 61 2_12.1	12.1	—	—	—	—	285	308	285	308	617	688	664	783
C 61 2_14.3	14.3	—	—	—	—	206	218	204	228	546	593	593	712
C 61 2_15.9	15.9	—	—	—	—	202	214	199	223	546	593	593	712
C 61 2_17.7	17.7	—	—	—	—	173	185	171	195	498	570	546	664
C 61 2_19.6	19.6	—	—	—	—	171	183	168	192	498	570	546	664
C 61 2_22.4	22.4	—	—	142	154	145	157	142	166	475	546	522	641
C 61 2_24.8	24.8	—	—	140	152	142	154	140	164	475	546	522	641
C 61 2_27.4	27.4	—	—	116	128	119	131	116	140	451	522	498	617
C 61 2_30.4	30.4	—	—	119	131	121	133	119	142	451	522	498	617
C 61 2_34.2	34.2	—	—	102	114	104	116	102	126	427	498	475	593
C 61 2_38.0	38.0	—	—	102	114	104	116	102	126	427	498	475	593
C 61 3_26.8	26.8	—	—	—	—	308	332	308	332	641	688	688	807
C 61 3_29.4	29.4	—	—	—	—	308	332	308	332	641	688	688	807
C 61 3_33.0	33.0	—	—	—	—	261	285	261	285	593	664	641	759
C 61 3_36.1	36.1	—	—	—	—	261	285	261	285	593	664	641	759
C 61 3_43.4	43.4	—	—	—	—	187	199	185	209	522	570	570	688
C 61 3_47.6	47.6	—	—	—	—	187	199	185	209	522	570	570	688
C 61 3_53.5	53.5	—	—	—	—	161	173	159	183	498	546	546	664
C 61 3_58.6	58.6	—	—	—	—	159	171	157	180	498	546	546	664
C 61 3_67.7	67.7	—	—	133	145	135	147	133	157	475	522	522	641
C 61 3_74.2	74.2	—	—	133	145	135	147	133	157	475	522	522	641
C 61 3_83.0	83.0	—	—	112	123	114	126	112	135	451	498	498	617
C 61 3_91.0	91.0	—	—	112	123	114	126	112	135	451	498	498	617
C 61 3_103.6	103.6	—	—	97	109	100	112	97	121	427	498	475	593
C 61 3_113.6	113.6	—	—	97	109	100	112	97	121	427	498	475	593
C 61 3_128.1	128.1	—	—	90	102	93	104	90	114	427	475	475	593
C 61 3_140.5	140.5	—	—	90	102	93	104	90	114	427	475	475	593
C 61 3_150.0	150.0	—	—	83	95	85	97	83	107	—	—	—	—
C 61 3_164.5	164.5	—	—	83	95	85	97	83	107	—	—	—	—
C 61 3_178.6	178.6	—	—	81	93	83	95	81	104	—	—	—	—
C 61 3_195.8	195.8	—	—	81	93	83	95	81	104	—	—	—	—
C 61 4_217.4	217.4	83	93	83	93	85	97	83	107	—	—	—	—
C 61 4_238.3	238.3	83	93	83	93	85	97	83	107	—	—	—	—
C 61 4_275.3	275.3	85	97	85	97	88	100	85	109	—	—	—	—
C 61 4_301.7	301.7	85	97	85	97	88	100	85	109	—	—	—	—
C 61 4_337.7	337.7	81	90	81	90	83	95	81	104	—	—	—	—
C 61 4_370.1	370.1	81	90	81	90	83	95	81	104	—	—	—	—
C 61 4_421.5	421.5	81	90	81	90	81	93	78	102	—	—	—	—
C 61 4_462.0	462.0	81	90	81	90	81	93	78	102	—	—	—	—
C 61 4_521.1	521.1	78	90	78	90	81	93	78	102	—	—	—	—
C 61 4_571.2	571.2	78	90	78	90	81	93	78	102	—	—	—	—
C 61 4_610.1	610.1	78	88	78	88	81	93	78	102	—	—	—	—
C 61 4_668.8	668.8	78	88	78	88	81	93	78	102	—	—	—	—
C 61 4_726.3	726.3	78	88	78	88	81	93	78	102	—	—	—	—
C 61 4_796.1	796.1	78	88	78	88	81	93	78	102	—	—	—	—



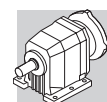
C 70



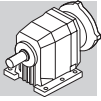
	i	J (•10 ⁻⁴) [lb•ft ²]													
			63	71	80	90	100 112	132	160	180	200	225	250	280	
C 70 2_4.6	4.6	—	—	—	—	—	—	—	3227	3156	3393	—	—	—	2349
C 70 2_5.9	5.9	—	—	—	—	—	—	—	2824	2776	2990	—	—	—	759
C 70 2_6.3	6.3	—	—	—	—	—	—	—	3061	3014	3227	—	—	—	2207
C 70 2_7.5	7.5	617	—	—	—	—	—	1068	2492	2420	2658	—	—	—	1614
C 70 2_8.0	8.0	—	—	—	—	—	—	—	2729	2682	2895	—	—	—	1851
C 70 2_9.5	9.5	451	—	—	—	—	—	902	2302	2254	—	—	—	—	1424
C 70 2_10.2	10.2	570	—	—	—	—	—	1020	2420	2373	2587	—	—	—	1542
C 70 2_11.2	11.2	356	—	—	—	—	—	807	2231	2159	—	—	—	—	1329
C 70 2_13.0	13.0	403	—	—	—	—	—	854	2254	2207	—	—	—	—	1376
C 70 2_14.1	14.1	235	—	—	285	285	332	688	2088	2041	—	—	—	—	1210
C 70 2_15.3	15.3	332	—	—	—	—	—	783	2207	2136	—	—	—	—	1305
C 70 2_16.7	16.7	164	—	—	225	223	261	617	2017	1970	—	—	—	—	1139
C 70 2_19.3	19.3	216	—	—	285	285	308	664	2065	2017	—	—	—	—	1187
C 70 2_22.9	22.9	152	—	—	214	211	237	593	2017	1970	—	—	—	—	1139
C 70 2_27.7	27.7	123	—	—	190	187	218	570	1993	1922	—	—	—	—	1092
C 70 2_34.7	34.7	76	—	—	145	142	173	522	1946	1875	—	—	—	—	1044
C 70 3_41.3	41.3	104	—	—	171	171	202	546	1970	1898	—	—	—	—	1092
C 70 3_44.7	44.7	100	—	—	166	166	195	546	1970	1898	—	—	—	—	1068
C 70 3_52.2	52.2	71	—	—	138	138	166	522	1922	1875	—	—	—	—	1044
C 70 3_56.5	56.5	66	—	—	135	133	164	522	1922	1875	—	—	—	—	1044
C 70 3_65.9	65.9	47	—	—	116	114	145	498	1898	1851	—	—	—	—	1020
C 70 3_71.3	71.3	47	—	—	114	114	142	498	1898	1851	—	—	—	—	1020
C 70 3_81.4	81.4	36	—	—	102	102	133	475	1898	1851	—	—	—	—	1020
C 70 3_88.2	88.2	33	—	—	102	100	131	475	1898	1804	—	—	—	—	1020
C 70 3_103.8	103.8	24	—	—	90	90	121	475	1875	1827	—	—	—	—	997
C 70 3_112.4	112.4	21	—	—	90	88	119	475	1875	1827	—	—	—	—	997
C 70 3_126.8	126.8	17	—	—	83	83	114	475	1875	1827	—	—	—	—	997
C 70 3_137.4	137.4	17	—	—	83	83	112	475	1875	1827	—	—	—	—	997
C 70 3_150.3	150.3	12	—	—	81	81	228	—	—	—	—	—	—	—	997
C 70 3_162.8	162.8	12	—	—	81	81	109	—	—	—	—	—	—	—	997
C 70 3_179.2	179.2	9.5	—	—	76	78	107	—	—	—	—	—	—	—	997
C 70 3_194.1	194.1	9.5	—	—	76	76	107	—	—	—	—	—	—	—	997
C 70 3_220.9	220.9	7.1	—	—	74	74	102	—	—	—	—	—	—	—	973
C 70 3_239.3	239.3	7.1	—	—	74	74	102	—	—	—	—	—	—	—	973
C 70 4_251.3	251.3	17	52	52	83	83	114	475	—	—	—	—	—	—	261
C 70 4_272.2	272.2	17	52	50	83	83	114	475	—	—	—	—	—	—	261
C 70 4_317.9	317.9	12	47	47	81	78	109	451	—	—	—	—	—	—	261
C 70 4_344.3	344.3	12	47	47	81	78	109	451	—	—	—	—	—	—	261
C 70 4_409.4	409.4	9.5	43	43	76	76	107	451	—	—	—	—	—	—	187
C 70 4_443.5	443.5	9.5	43	43	76	76	107	451	—	—	—	—	—	—	187
C 70 4_512.0	512.0	7.1	40	40	74	74	104	451	—	—	—	—	—	—	185
C 70 4_554.7	554.7	7.1	40	40	74	74	104	451	—	—	—	—	—	—	185
C 70 4_606.8	606.8	4.7	40	40	74	71	102	—	—	—	—	—	—	—	185
C 70 4_657.3	657.3	4.7	40	40	74	71	102	—	—	—	—	—	—	—	183
C 70 4_736.0	736.0	4.7	38	38	71	69	102	—	—	—	—	—	—	—	183
C 70 4_797.3	797.3	4.7	38	38	71	69	102	—	—	—	—	—	—	—	183
C 70 4_922.6	922.6	2.4	38	38	71	69	100	—	—	—	—	—	—	—	183
C 70 4_999.5	999.5	2.4	38	38	71	69	100	—	—	—	—	—	—	—	180
C 70 4_1069	1069	19	38	36	69	69	100	—	—	—	—	—	—	—	180
C 70 4_1158	1158	19	38	36	69	69	100	—	—	—	—	—	—	—	180
C 70 4_1362	1362	14	36	36	69	69	97	—	—	—	—	—	—	—	180
C 70 4_1476	1476	14	36	36	69	69	97	—	—	—	—	—	—	—	180

C 70

	i	J (•10 ⁻⁴) [lb•ft ²]							
			 NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC		N280TC
C 70 2_4.6	4.6	—	—	—	—	—	3227	3156	2349
C 70 2_5.9	5.9	—	—	—	—	—	2824	2776	759
C 70 2_6.3	6.3	—	—	—	—	—	3061	3014	2207
C 70 2_7.5	7.5	617	—	—	—	1068	2492	2420	1614
C 70 2_8.0	8.0	—	—	—	—	—	2729	2682	1851
C 70 2_9.5	9.5	451	—	—	—	902	2302	2254	1424
C 70 2_10.2	10.2	570	—	—	—	1020	2420	2373	1542
C 70 2_11.2	11.2	356	—	—	—	807	2231	2159	1329
C 70 2_13.0	13.0	403	—	—	—	854	2254	2207	1376
C 70 2_14.1	14.1	235	—	—	285	688	2088	2041	1210
C 70 2_15.3	15.3	332	—	—	—	783	2207	2136	1305
C 70 2_16.7	16.7	164	—	—	225	617	2017	1970	1139
C 70 2_19.3	19.3	216	—	—	285	664	2065	2017	1187
C 70 2_22.9	22.9	152	—	—	214	593	2017	1970	1139
C 70 2_27.7	27.7	123	—	—	190	570	1993	1922	1092
C 70 2_34.7	34.7	76	—	—	145	522	1946	1875	1044
C 70 3_41.3	41.3	104	—	—	171	546	1970	1898	1092
C 70 3_44.7	44.7	100	—	—	166	546	1970	1898	1068
C 70 3_52.2	52.2	71	—	—	138	522	1922	1875	1044
C 70 3_56.5	56.5	66	—	—	135	522	1922	1875	1044
C 70 3_65.9	65.9	47	—	—	116	498	1898	1851	1020
C 70 3_71.3	71.3	47	—	—	114	498	1898	1851	1020
C 70 3_81.4	81.4	36	—	—	102	475	1898	1851	1020
C 70 3_88.2	88.2	33	—	—	102	475	1898	1804	1020
C 70 3_103.8	103.8	24	—	—	90	475	1875	1827	997
C 70 3_112.4	112.4	21	—	—	90	475	1875	1827	997
C 70 3_126.8	126.8	17	—	—	83	475	1875	1827	997
C 70 3_137.4	137.4	17	—	—	83	475	1875	1827	997
C 70 3_150.3	150.3	12	—	—	81	—	—	—	997
C 70 3_162.8	162.8	12	—	—	81	—	—	—	997
C 70 3_179.2	179.2	9.5	—	—	76	—	—	—	997
C 70 3_194.1	194.1	9.5	—	—	76	—	—	—	997
C 70 3_220.9	220.9	7.1	—	—	74	—	—	—	973
C 70 3_239.3	239.3	7.1	—	—	74	—	—	—	973
C 70 4_251.3	251.3	17	52	52	83	475	—	—	261
C 70 4_272.2	272.2	17	52	52	83	475	—	—	261
C 70 4_317.9	317.9	12	47	47	81	451	—	—	261
C 70 4_344.3	344.3	12	47	47	81	451	—	—	261
C 70 4_409.4	409.4	9.5	43	43	76	451	—	—	187
C 70 4_443.5	443.5	9.5	43	43	76	451	—	—	187
C 70 4_512.0	512.0	7.1	40	40	74	451	—	—	185
C 70 4_554.7	554.7	7.1	40	40	74	451	—	—	185
C 70 4_606.8	606.8	4.7	40	40	74	—	—	—	185
C 70 4_657.3	657.3	4.7	40	40	74	—	—	—	183
C 70 4_736.0	736.0	4.7	38	38	71	—	—	—	183
C 70 4_797.3	797.3	4.7	38	38	71	—	—	—	183
C 70 4_922.6	922.6	2.4	38	38	71	—	—	—	183
C 70 4_999.5	999.5	2.4	38	38	71	—	—	—	180
C 70 4_1069	1069	19	38	38	69	—	—	—	180
C 70 4_1158	1158	19	38	38	69	—	—	—	180
C 70 4_1362	1362	14	36	36	69	—	—	—	180
C 70 4_1476	1476	14	36	36	69	—	—	—	180



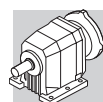
C 80



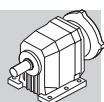
	i	J (•10 ⁻⁴) [lb•ft ²]													
			 IEC												
			63	71	80	90	100 112	132	160	180	200	225	250	280	
C 80 2_5.6	5.6	—	—	—	—	—	—	—	—	4675	5007	11604	—	—	3892
C 80 2_6.1	6.1	—	—	—	—	—	—	—	—	4580	4983	11509	—	—	3773
C 80 2_7.0	7.0	—	—	—	—	—	—	—	3797	3821	4129	10726	—	—	3014
C 80 2_7.6	7.6	—	—	—	—	—	—	—	3749	3749	4082	10655	—	—	2943
C 80 2_8.9	8.9	—	—	—	—	—	—	—	3251	3204	3465	10180	—	—	2397
C 80 2_9.6	9.6	—	—	—	—	—	—	—	3227	3156	3417	10133	—	—	2349
C 80 2_11.1	11.1	902	—	—	—	—	—	1329	2753	2682	2943	9682	—	—	1875
C 80 2_12.0	12.0	854	—	—	—	—	—	1305	2729	2658	2919	9658	—	—	1851
C 80 2_13.8	13.8	664	—	—	—	—	—	1115	2515	2468	3204	9445	—	—	1637
C 80 2_14.9	14.9	641	—	—	—	—	—	1092	2515	2444	3180	9421	—	—	1637
C 80 2_16.7	16.7	498	—	—	—	—	—	949	2373	2302	3014	9279	—	—	1495
C 80 2_18.1	18.1	498	—	—	—	—	—	949	2349	2302	3014	9255	—	—	1471
C 80 2_20.5	20.5	332	—	—	403	403	427	783	2207	2136	2848	9089	—	—	1305
C 80 2_22.2	22.2	332	—	—	380	380	427	783	2183	2136	2848	9089	—	—	1305
C 80 2_24.0	24.0	308	—	—	380	380	403	759	2159	2112	2824	9065	—	—	1281
C 80 2_25.9	25.9	308	—	—	380	356	403	759	2159	2112	2800	9065	—	—	1281
C 80 2_31.3	31.3	206	—	—	285	261	308	664	2065	2017	—	—	—	—	1187
C 80 2_39.1	39.1	123	—	—	190	190	218	570	1993	1922	—	—	—	—	1092
C 80 3_43.5	43.5	228	—	—	285	285	332	688	2088	2041	—	—	—	—	1210
C 80 3_47.4	47.4	216	—	—	285	285	308	664	2065	2017	—	—	—	—	1187
C 80 3_57.3	57.3	135	—	—	202	202	230	593	1993	1946	—	—	—	—	1115
C 80 3_62.5	62.5	128	—	—	195	195	225	570	1993	1946	—	—	—	—	1115
C 80 3_70.5	70.5	102	—	—	168	166	197	546	1970	1898	—	—	—	—	1068
C 80 3_76.9	76.9	97	—	—	166	164	195	546	1946	1898	—	—	—	—	1068
C 80 3_89.3	89.3	71	—	—	140	138	168	522	1922	1875	—	—	—	—	1044
C 80 3_97.4	97.4	69	—	—	138	135	166	522	1922	1875	—	—	—	—	1044
C 80 3_109.5	109.5	47	—	—	114	114	145	498	1898	1851	—	—	—	—	1020
C 80 3_119.5	119.5	45	—	—	114	112	142	498	1898	1875	—	—	—	—	1020
C 80 3_136.7	136.7	33	—	—	102	100	131	475	1898	1851	—	—	—	—	1020
C 80 3_149.1	149.1	33	—	—	100	100	131	475	1898	1827	—	—	—	—	1020
C 80 3_169.0	169.0	24	—	—	93	90	121	475	1898	1827	—	—	—	—	997
C 80 3_184.4	184.4	24	—	—	93	90	121	475	1898	1827	—	—	—	—	997
C 80 3_197.9	197.9	19	—	—	88	85	116	—	—	—	—	—	—	—	997
C 80 3_215.8	215.8	19	—	—	85	85	116	—	—	—	—	—	—	—	997
C 80 4_261.9	261.9	40	—	—	109	107	138	498	—	—	—	—	—	—	285
C 80 4_285.7	285.7	40	—	—	109	107	138	498	—	—	—	—	—	—	285
C 80 4_334.3	334.3	28	64	64	95	95	126	475	—	—	—	—	—	—	261
C 80 4_364.7	364.7	28	64	62	95	95	126	475	—	—	—	—	—	—	261
C 80 4_417.5	417.5	21	57	55	88	88	119	475	—	—	—	—	—	—	261
C 80 4_455.4	455.4	21	55	55	88	88	131	475	—	—	—	—	—	—	261
C 80 4_529.3	529.3	12	47	47	81	78	109	451	—	—	—	—	—	—	261
C 80 4_577.4	577.4	12	47	47	81	78	109	451	—	—	—	—	—	—	261
C 80 4_664.3	664.3	9.5	47	45	78	76	107	451	—	—	—	—	—	—	261
C 80 4_724.7	724.7	9.5	47	45	78	76	107	451	—	—	—	—	—	—	261
C 80 4_783.4	783.4	7.1	47	43	76	74	104	—	—	—	—	—	—	—	223
C 80 4_854.6	854.6	7.1	47	43	76	74	104	—	—	—	—	—	—	—	223
C 80 4_945.7	945.7	4.7	40	40	74	71	102	—	—	—	—	—	—	—	221
C 80 4_1032	1032	4.7	40	40	74	71	102	—	—	—	—	—	—	—	221
C 80 4_1168	1168	4.7	38	38	71	71	100	—	—	—	—	—	—	—	218
C 80 4_1274	1274	4.7	38	38	71	71	100	—	—	—	—	—	—	—	218
C 80 4_1358	1358	2.4	38	38	71	69	100	—	—	—	—	—	—	—	218
C 80 4_1481	1481	2.4	38	38	71	69	100	—	—	—	—	—	—	—	218

C 80

	i	J (•10 ⁻⁴) [lb•ft ²]								
			NEMA							
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	N320TC	
C 80 2_5.6	5.6	—	—	—	—	—	—	4675	11604	3892
C 80 2_6.1	6.1	—	—	—	—	—	—	4580	11509	3773
C 80 2_7.0	7.0	—	—	—	—	—	3797	3821	10726	3014
C 80 2_7.6	7.6	—	—	—	—	—	3749	3749	10655	2943
C 80 2_8.9	8.9	—	—	—	—	—	3251	3204	10180	2397
C 80 2_9.6	9.6	—	—	—	—	—	3227	3156	10133	2349
C 80 2_11.1	11.1	902	—	—	—	1329	2753	2682	9682	1875
C 80 2_12.0	12.0	854	—	—	—	1305	2729	2658	9658	1851
C 80 2_13.8	13.8	664	—	—	—	1115	2515	2468	9445	1637
C 80 2_14.9	14.9	641	—	—	—	1092	2515	2444	9421	163 7
C 80 2_16.7	16.7	498	—	—	—	949	2373	2302	9279	1495
C 80 2_18.1	18.1	498	—	—	—	949	2349	2302	9255	1471
C 80 2_20.5	20.5	332	—	—	403	783	2207	2136	9089	1305
C 80 2_22.2	22.2	332	—	—	380	783	2183	2136	9089	1305
C 80 2_24.0	24.0	308	—	—	380	759	2159	2112	9065	1281
C 80 2_25.9	25.9	308	—	—	380	759	2159	2112	9065	1281
C 80 2_31.3	31.3	206	—	—	285	664	2065	2017	—	1187
C 80 2_39.1	39.1	123	—	—	190	570	1993	1922	—	1092
C 80 3_43.5	43.5	228	—	—	285	688	2088	2041	—	1210
C 80 3_47.4	47.4	216	—	—	285	664	2065	2017	—	1187
C 80 3_57.3	57.3	135	—	—	202	593	1993	1946	—	1115
C 80 3_62.5	62.5	128	—	—	195	570	1993	1946	—	1115
C 80 3_70.5	70.5	102	—	—	168	546	1970	1898	—	1068
C 80 3_76.9	76.9	97	—	—	166	546	1946	1898	—	1068
C 80 3_89.3	89.3	71	—	—	140	522	1922	1875	—	1044
C 80 3_97.4	97.4	69	—	—	138	522	1922	1875	—	1044
C 80 3_109.5	109.5	47	—	—	114	498	1898	1851	—	1020
C 80 3_119.5	119.5	45	—	—	114	498	1898	1875	—	1020
C 80 3_136.7	136.7	33	—	—	102	475	1898	1851	—	1020
C 80 3_149.1	149.1	33	—	—	100	475	1898	1827	—	1020
C 80 3_169.0	169.0	24	—	—	93	475	1898	1827	—	997
C 80 3_184.4	184.4	24	—	—	93	475	1898	1827	—	997
C 80 3_197.9	197.9	19	—	—	88	—	—	—	—	997
C 80 3_215.8	215.8	19	—	—	85	—	—	—	—	997
C 80 4_261.9	261.9	40	—	—	109	498	—	—	—	285
C 80 4_285.7	285.7	40	—	—	109	498	—	—	—	285
C 80 4_334.3	334.3	28	64	64	95	475	—	—	—	261
C 80 4_364.7	364.7	28	64	64	95	475	—	—	—	261
C 80 4_417.5	417.5	21	57	57	88	475	—	—	—	261
C 80 4_455.4	455.4	21	55	55	88	475	—	—	—	261
C 80 4_529.3	529.3	12	47	47	81	451	—	—	—	261
C 80 4_577.4	577.4	12	47	47	81	451	—	—	—	261
C 80 4_664.3	664.3	9.5	47	47	78	451	—	—	—	261
C 80 4_724.7	724.7	9.5	47	47	78	451	—	—	—	261
C 80 4_783.4	783.4	7.1	47	47	76	—	—	—	—	223
C 80 4_854.6	854.6	7.1	47	47	76	—	—	—	—	223
C 80 4_945.7	945.7	4.7	40	40	74	—	—	—	—	221
C 80 4_1032	1032	4.7	40	40	74	—	—	—	—	221
C 80 4_1168	1168	4.7	38	38	71	—	—	—	—	218
C 80 4_1274	1274	4.7	38	38	71	—	—	—	—	218
C 80 4_1358	1358	2.4	38	38	71	—	—	—	—	218
C 80 4_1481	1481	2.4	38	38	71	—	—	—	—	218



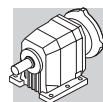
C 90



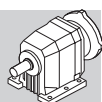
	i	J (•10 ⁻⁴) [lb•ft ²]													
			63	71	80	90	100 112	132	160	180	200	225	250	280	
C 90 2 5.2	5.2	—	—	—	—	—	—	—	—	—	7878	14476	15116	—	14689
C 90 2 5.6	5.6	—	—	—	—	—	—	—	—	—	7617	14214	14855	—	14452
C 90 2 6.8	6.8	—	—	—	—	—	—	—	—	—	5980	12577	13218	—	12814
C 90 2 7.3	7.3	—	—	—	—	—	—	—	—	—	5838	12435	13075	—	12648
C 90 2 8.3	8.3	—	—	—	—	—	—	—	—	—	5031	11628	12269	—	11841
C 90 2 9.0	9.0	—	—	—	—	—	—	—	—	—	4936	11509	12174	—	11747
C 90 2 10.4	10.4	—	—	—	—	—	—	3963	3892	4153	10869	11485	—	—	10940
C 90 2 11.2	11.2	—	—	—	—	—	—	3892	3844	4105	10797	11438	—	—	10869
C 90 2 12.8	12.8	1542	—	—	—	—	—	1993	3393	3346	3607	10346	10963	—	10418
C 90 2 13.9	13.9	1495	—	—	—	—	—	1946	3346	3299	4746	10299	10916	—	10370
C 90 2 16.0	16.0	1115	—	—	—	—	—	1566	2966	2919	3654	9896	10513	—	9967
C 90 2 17.3	17.3	1092	—	—	—	—	—	1542	2943	2895	3631	9872	10489	—	9943
C 90 2 18.7	18.7	997	—	—	—	—	—	1448	2871	2824	3512	9777	10275	—	9848
C 90 2 20.2	20.2	973	—	—	—	—	—	1448	4722	2800	3488	9753	10394	—	9824
C 90 2 22.9	22.9	664	—	—	712	712	736	1115	2515	2468	3156	9421	10038	—	9492
C 90 2 24.8	24.8	641	—	—	688	688	736	1092	2492	2444	3156	9397	10014	—	9468
C 90 2 27.2	27.2	522	—	—	593	593	617	973	2397	2349	3037	9279	9919	—	9350
C 90 2 29.4	29.4	522	—	—	593	570	617	973	2373	2326	3014	9279	9896	—	9350
C 90 2 35.1	35.1	332	—	—	403	403	427	783	2207	2136	—	—	—	—	9160
C 90 3 39.4	39.4	641	—	—	—	—	—	1092	2492	2444	2658	9445	10062	—	9777
C 90 3 43.0	43.0	617	—	—	—	—	—	1068	2468	2420	2634	9397	10014	—	9729
C 90 3 50.3	50.3	451	—	—	—	—	—	902	2326	2254	2990	9231	9848	—	9563
C 90 3 54.9	54.9	451	—	—	—	—	—	878	2302	2254	2966	9231	9848	—	9516
C 90 3 59.2	59.2	380	—	—	—	—	—	831	2231	2183	2895	9136	9753	—	9445
C 90 3 64.6	64.6	356	—	—	—	—	—	807	2231	2159	2871	9112	9729	—	9445
C 90 3 74.4	74.4	237	—	—	308	308	332	688	2088	2041	2753	8994	9611	—	9326
C 90 3 81.2	81.2	233	—	—	285	285	308	688	2088	2041	2729	8994	9611	—	9302
C 90 3 88.2	88.2	168	—	—	230	228	261	617	2017	1970	2682	8923	9540	—	9231
C 90 3 96.2	96.2	164	—	—	223	223	261	617	2017	1970	2658	8923	9540	—	9231
C 90 3 107.0	107.0	135	—	—	199	199	228	593	1993	1946	—	—	—	—	9207
C 90 3 116.7	116.7	131	—	—	197	195	225	570	1993	1946	—	—	—	—	9207
C 90 3 134.1	134.1	83	—	—	152	150	180	522	1946	1898	—	—	—	—	9160
C 90 3 146.3	146.3	81	—	—	150	147	178	522	1946	1898	—	—	—	—	9160
C 90 3 157.8	157.8	59	—	—	128	126	157	498	1922	1875	—	—	—	—	9136
C 90 3 172.1	172.1	57	—	—	126	123	154	498	1922	1875	—	—	—	—	9136
C 90 4 212.4	212.4	100	—	—	166	166	197	546	1970	1898	—	—	—	—	332
C 90 4 231.7	231.7	97	—	—	166	164	195	546	1946	1898	—	—	—	—	332
C 90 4 268.5	268.5	66	—	—	135	133	164	522	1922	1875	—	—	—	—	308
C 90 4 292.9	292.9	66	—	—	135	62	164	522	1922	1875	—	—	—	—	308
C 90 4 339.0	339.0	47	81	81	114	114	142	498	1898	1851	—	—	—	—	285
C 90 4 369.8	369.8	47	81	81	114	114	142	498	1898	1851	—	—	—	—	285
C 90 4 419.0	419.0	33	69	69	102	100	131	475	1898	1851	—	—	—	—	285
C 90 4 457.1	457.1	33	69	69	102	100	131	475	1898	1851	—	—	—	—	285
C 90 4 534.2	534.2	21	57	57	90	88	119	475	1875	1827	—	—	—	—	261
C 90 4 582.8	582.8	21	57	57	90	88	119	475	1875	1827	—	—	—	—	261
C 90 4 652.8	652.8	17	50	50	83	83	112	475	1875	1827	—	—	—	—	261
C 90 4 712.2	712.2	17	50	50	83	83	112	475	1875	1827	—	—	—	—	261
C 90 4 773.6	773.6	12	47	47	81	78	109	—	—	—	—	—	—	—	230
C 90 4 844.0	844.0	12	47	47	81	78	109	—	—	—	—	—	—	—	228
C 90 4 922.3	922.3	9.5	43	43	76	76	107	—	—	—	—	—	—	—	225
C 90 4 1006	1006	9.5	43	43	76	76	107	—	—	—	—	—	—	—	223
C 90 4 1137	1137	7.1	40	40	74	71	102	—	—	—	—	—	—	—	221
C 90 4 1240	1240	7.1	40	40	74	71	102	—	—	—	—	—	—	—	221

C 90

	i	J (•10 ⁻⁴) [lb•ft ²]							
			NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	N320TC
C 90 2_5.2	5.2	—	—	—	—	—	—	—	14476
C 90 2_5.6	5.6	—	—	—	—	—	—	—	14214
C 90 2_6.8	6.8	—	—	—	—	—	—	—	12577
C 90 2_7.3	7.3	—	—	—	—	—	—	—	12435
C 90 2_8.3	8.3	—	—	—	—	—	—	—	11628
C 90 2_9.0	9.0	—	—	—	—	—	—	—	11509
C 90 2_10.4	10.4	—	—	—	—	—	3963	3892	10869
C 90 2_11.2	11.2	—	—	—	—	—	3892	3844	10797
C 90 2_12.8	12.8	1542	—	—	—	1993	3393	3346	10346
C 90 2_13.9	13.9	1495	—	—	—	1946	3346	3299	10299
C 90 2_16.0	16.0	1115	—	—	—	1566	2966	2919	9896
C 90 2_17.3	17.3	1092	—	—	—	1542	2943	2895	9872
C 90 2_18.7	18.7	997	—	—	—	1448	2871	2824	9777
C 90 2_20.2	20.2	973	—	—	—	1448	4722	2800	9753
C 90 2_22.9	22.9	664	—	—	712	1115	2515	2468	9421
C 90 2_24.8	24.8	641	—	—	688	1092	2492	2444	9397
C 90 2_27.2	27.2	522	—	—	593	973	2397	2349	9279
C 90 2_29.4	29.4	522	—	—	593	973	2373	2326	9279
C 90 2_35.1	35.1	332	—	—	403	783	2207	2136	—
C 90 3_39.4	39.4	641	—	—	—	1092	2492	2444	9445
C 90 3_43.0	43.0	617	—	—	—	1068	2468	2420	9397
C 90 3_50.3	50.3	451	—	—	—	902	2326	2254	9231
C 90 3_54.9	54.9	451	—	—	—	878	2302	2254	9231
C 90 3_59.2	59.2	380	—	—	—	831	2231	2183	9136
C 90 3_64.6	64.6	356	—	—	—	807	2231	2159	9112
C 90 3_74.4	74.4	237	—	—	308	688	2088	2041	8994
C 90 3_81.2	81.2	233	—	—	285	688	2088	2041	8994
C 90 3_88.2	88.2	168	—	—	230	617	2017	1970	8923
C 90 3_96.2	96.2	164	—	—	223	617	2017	1970	8923
C 90 3_107.0	107.0	135	—	—	199	593	1993	1946	—
C 90 3_116.7	116.7	131	—	—	197	570	1993	1946	—
C 90 3_134.1	134.1	83	—	—	152	522	1946	1898	—
C 90 3_146.3	146.3	81	—	—	150	522	1946	1898	—
C 90 3_157.8	157.8	59	—	—	128	498	1922	1875	—
C 90 3_172.1	172.1	57	—	—	126	498	1922	1875	—
C 90 4_212.4	212.4	100	—	—	166	546	1970	1898	—
C 90 4_231.7	231.7	97	—	—	166	546	1946	1898	—
C 90 4_268.5	268.5	66	—	—	135	522	1922	1875	—
C 90 4_292.9	292.9	66	—	—	135	522	1922	1875	—
C 90 4_339.0	339.0	47	81	81	114	498	1898	1851	—
C 90 4_369.8	369.8	47	81	81	114	498	1898	1851	—
C 90 4_419.0	419.0	33	69	69	102	475	1898	1851	—
C 90 4_457.1	457.1	33	69	69	102	475	1898	1851	—
C 90 4_534.2	534.2	21	57	57	90	475	1875	1827	—
C 90 4_582.8	582.8	21	57	57	90	475	1875	1827	—
C 90 4_652.8	652.8	17	50	50	83	475	1875	1827	—
C 90 4_712.2	712.2	17	50	50	83	475	1875	1827	—
C 90 4_773.6	773.6	12	47	47	81	—	—	—	—
C 90 4_844.0	844.0	12	47	47	81	—	—	—	—
C 90 4_922.3	922.3	9.5	43	43	76	—	—	—	—
C 90 4_1006	1006	9.5	43	43	76	—	—	—	—
C 90 4_1137	1137	7.1	40	40	74	—	—	—	—
C 90 4_1240	1240	7.1	40	40	74	—	—	—	—



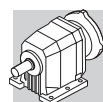
C 100



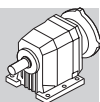
	i	J (•10 ⁻⁴) [lb•ft ²]													
			 IEC												
			63	71	80	90	100 112	132	160	180	200	225	250	280	
C 100 2_4.9	4.9	—	—	—	—	—	—	—	—	—	15994	22781	23422	23018	23066
C 100 2_5.3	5.3	—	—	—	—	—	—	—	—	—	15354	22140	22781	22378	22401
C 100 2_6.5	6.5	—	—	—	—	—	—	—	—	—	11414	18201	18842	18438	18462
C 100 2_7.1	7.1	—	—	—	—	—	—	—	—	—	11035	17822	18462	18059	18106
C 100 2_8.4	8.4	—	—	—	—	—	—	—	—	—	8662	15448	16089	15662	15709
C 100 2_9.0	9.0	—	—	—	—	—	—	—	—	—	8424	15211	15852	15448	15496
C 100 2_10.1	10.1	—	—	—	—	—	—	—	—	—	6906	13692	14333	13930	13977
C 100 2_10.9	10.9	—	—	—	—	—	—	—	—	—	6763	13526	14167	13764	13811
C 100 2_12.5	12.5	—	—	—	—	—	—	5316	5268	5529	12364	13052	12791	12553	12553
C 100 2_13.5	13.5	—	—	—	—	—	—	5221	5173	5411	12269	12933	12625	12435	12435
C 100 2_15.2	15.2	2895	—	—	—	—	—	1946	3346	4746	4722	11201	11841	12530	12197
C 100 2_16.5	16.5	2824	—	—	—	—	—	3275	4675	4627	4888	11770	12458	12126	11960
C 100 2_18.7	18.7	2302	—	—	—	—	—	2753	4153	4105	4817	11248	11889	11580	11391
C 100 2_20.2	20.2	2254	—	—	—	—	—	2705	4105	4058	4770	11177	11841	11533	11343
C 100 2_22.2	22.2	1732	—	—	—	—	—	2183	2420	3560	4248	10631	11319	10987	10821
C 100 2_24.1	24.1	1709	—	—	—	—	—	2159	3560	3512	4224	10607	11296	10963	10797
C 100 2_29.6	29.6	1187	—	—	—	—	1281	1637	3061	3014	3702	10085	10774	10441	10275
C 100 3_34.3	34.3	—	—	—	—	—	—	—	3512	3465	3678	10418	11035	11177	10940
C 100 3_36.9	36.9	—	—	—	—	—	—	—	3441	3393	3607	10346	10963	11106	10869
C 100 3_42.9	42.9	1044	—	—	—	—	—	1495	2919	2848	3085	9848	10465	10702	10370
C 100 3_46.2	46.2	1020	—	—	—	—	—	1448	2871	2800	3037	9801	10418	10726	10323
C 100 3_53.3	53.3	783	—	—	—	—	—	1210	2634	2587	3299	9563	10180	10252	10062
C 100 3_57.4	57.4	736	—	—	—	—	—	1187	2610	2539	3275	9516	10133	10228	10038
C 100 3_64.5	64.5	570	—	—	—	—	—	1020	2444	2397	3085	9350	9967	10014	9848
C 100 3_69.4	69.4	570	—	—	—	—	—	1020	2420	2373	3061	9326	9943	9990	9824
C 100 3_79.4	79.4	380	—	—	—	—	475	831	2254	2183	2895	9136	9753	9801	9658
C 100 3_85.6	85.6	380	—	—	—	—	451	831	2231	2183	2871	9136	9753	9801	9635
C 100 3_92.7	92.7	356	—	—	—	—	427	807	2207	2159	2848	9112	9729	9777	9611
C 100 3_99.8	99.8	332	—	—	—	—	427	783	2207	2136	2824	9089	9706	9753	9587
C 100 3_111.9	111.9	235	—	—	—	—	332	688	2088	2041	—	—	—	—	9302
C 100 3_120.5	120.5	228	—	—	—	—	332	688	2088	2041	—	—	—	—	9302
C 100 3_139.7	139.7	142	—	—	—	—	237	593	1993	1946	—	—	—	—	9207
C 100 3_150.4	150.4	138	—	—	—	—	233	593	1993	1946	—	—	—	—	9207
C 100 4_162.1	162.1	308	—	—	380	380	403	759	2373	2112	—	—	—	—	546
C 100 4_185.4	185.4	228	—	—	308	285	332	688	2088	2041	—	—	—	—	475
C 100 4_199.6	199.6	202	—	—	285	285	332	664	2088	2041	—	—	—	—	475
C 100 4_244.2	244.2	135	—	—	202	202	233	593	1993	1946	—	—	—	—	380
C 100 4_263.0	263.0	133	—	—	202	199	230	593	1993	1946	—	—	—	—	380
C 100 4_300.5	300.5	100	—	—	168	168	199	546	1970	1898	—	—	—	—	356
C 100 4_323.6	323.6	100	—	—	168	166	197	546	1970	1898	—	—	—	—	332
C 100 4_380.5	380.5	74	107	107	140	131	168	522	1922	1875	—	—	—	—	308
C 100 4_409.8	409.8	71	107	107	140	131	168	522	1922	1875	—	—	—	—	308
C 100 4_466.7	466.7	47	83	83	116	114	145	475	1898	1851	—	—	—	—	285
C 100 4_502.6	502.6	47	83	81	114	114	145	475	1898	1851	—	—	—	—	285
C 100 4_582.6	582.6	33	69	69	102	100	131	475	1898	1827	—	—	—	—	285
C 100 4_627.4	627.4	33	69	69	102	100	131	475	1898	1827	—	—	—	—	285
C 100 4_720.3	720.3	24	59	59	93	81	121	475	1875	1827	—	—	—	—	261
C 100 4_775.7	775.7	24	59	59	93	81	121	475	1875	1827	—	—	—	—	261
C 100 4_843.3	843.3	19	55	55	88	85	116	—	—	—	—	—	—	—	235
C 100 4_908.2	908.2	19	55	55	88	85	116	—	—	—	—	—	—	—	235
C 100 4_1004	1004	14	50	47	81	81	112	—	—	—	—	—	—	—	230
C 100 4_1081	1081	14	50	47	81	81	112	—	—	—	—	—	—	—	230

C 100

	i	J (•10 ⁻⁴) [lb•ft ²]							
			NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	N320TC
C 100 2_4.9	4.9	—	—	—	—	—	—	—	22781
C 100 2_5.3	5.3	—	—	—	—	—	—	—	22140
C 100 2_6.5	6.5	—	—	—	—	—	—	—	18201
C 100 2_7.1	7.1	—	—	—	—	—	—	—	17822
C 100 2_8.4	8.4	—	—	—	—	—	—	—	15448
C 100 2_9.0	9.0	—	—	—	—	—	—	—	15211
C 100 2_10.1	10.1	—	—	—	—	—	—	—	13692
C 100 2_10.9	10.9	—	—	—	—	—	—	—	13526
C 100 2_12.5	12.5	—	—	—	—	—	5316	5268	12364
C 100 2_13.5	13.5	—	—	—	—	—	5221	5173	12269
C 100 2_15.2	15.2	2895	—	—	—	1946	3346	4746	11201
C 100 2_16.5	16.5	2824	—	—	—	3275	4675	4627	11770
C 100 2_18.7	18.7	2302	—	—	—	2753	4153	4105	11248
C 100 2_20.2	20.2	2254	—	—	—	2705	4105	4058	11177
C 100 2_22.2	22.2	1732	—	—	—	2183	2420	3560	10631
C 100 2_24.1	24.1	1709	—	—	—	2159	3560	3512	10607
C 100 2_29.6	29.6	1187	—	—	—	1637	3061	3014	10085
C 100 3_34.3	34.3	—	—	—	—	—	3512	3465	10418
C 100 3_36.9	36.9	—	—	—	—	—	3441	3393	10346
C 100 3_42.9	42.9	1044	—	—	—	1495	2919	2848	9848
C 100 3_46.2	46.2	1020	—	—	—	1448	2871	2800	9801
C 100 3_53.3	53.3	783	—	—	—	1210	2634	2587	9563
C 100 3_57.4	57.4	736	—	—	—	1187	2610	2539	9516
C 100 3_64.5	64.5	570	—	—	—	1020	2444	2397	9350
C 100 3_69.4	69.4	570	—	—	—	1020	2420	2373	9326
C 100 3_79.4	79.4	380	—	—	—	831	2254	2183	9136
C 100 3_85.6	85.6	380	—	—	—	831	2231	2183	9136
C 100 3_92.7	92.7	356	—	—	—	807	2207	2159	9112
C 100 3_99.8	99.8	332	—	—	—	783	2207	2136	9089
C 100 3_111.9	111.9	235	—	—	—	688	2088	2041	—
C 100 3_120.5	120.5	228	—	—	—	688	2088	2041	—
C 100 3_139.7	139.7	142	—	—	—	593	1993	1946	—
C 100 3_150.4	150.4	138	—	—	—	593	1993	1946	—
C 100 4_162.1	162.1	308	—	—	380	759	2373	2112	—
C 100 4_185.4	185.4	228	—	—	308	688	2088	2041	—
C 100 4_199.6	199.6	202	—	—	285	664	2088	2041	—
C 100 4_244.2	244.2	135	—	—	202	593	1993	1946	—
C 100 4_263.0	263.0	133	—	—	202	593	1993	1946	—
C 100 4_300.5	300.5	100	—	—	168	546	1970	1898	—
C 100 4_323.6	323.6	100	—	—	168	546	1970	1898	—
C 100 4_380.5	380.5	74	107	107	140	522	1922	1875	—
C 100 4_409.8	409.8	71	107	107	140	522	1922	1875	—
C 100 4_466.7	466.7	47	83	83	116	475	1898	1851	—
C 100 4_502.6	502.6	47	83	83	114	475	1898	1851	—
C 100 4_582.6	582.6	33	69	69	102	475	1898	1827	—
C 100 4_627.4	627.4	33	69	69	102	475	1898	1827	—
C 100 4_720.3	720.3	24	59	59	93	475	1875	1827	—
C 100 4_775.7	775.7	24	59	59	93	475	1875	1827	—
C 100 4_843.3	843.3	19	55	55	88	—	—	—	—
C 100 4_908.2	908.2	19	55	55	88	—	—	—	—
C 100 4_1004	1004	14	50	50	81	—	—	—	—
C 100 4_1081	1081	14	50	50	81	—	—	—	—



29 EXACT RATIOS

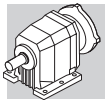


i _N	C12	C22	C32	C36	C41	C51	C61	C70	C80	C90	C100
2.5						2.62895					
2.8	2.76731	2.72212	2.87879	2.68687	2.65909		2.82011				
3.2	3.20743	3.32609		3.18182		3.30758					
3.5	3.65132	3.70709	3.40909	3.48617	3.61111		3.69925				
4.0			3.73518	4.20000							
4.5	4.31203	4.25831	4.50000	4.62201	4.66304	4.45370	4.55556	4.57143			
5.0	4.86842	4.76902	4.95215	5.27807						5.17231	4.92308
5.6	5.59868	5.59006	5.65508	5.84659	5.95263	5.63043		5.85034	5.64103	5.60333	5.33333
6.3	6.23158	6.08696	6.26420		6.36364		6.00176 6.74074	6.25455	6.11111	6.75824	6.52308
7.1		7.08300	7.16498	6.78114	7.06612	6.98684	7.48485	7.46032	7.04000	7.32143	7.06667
8.0	7.62201		8.48485	8.03030		7.75120		8.00433	7.62667	8.32615	8.35165
9.0	8.83422	8.65455	9.29644	8.79842	8.64198	8.79040	8.84211	9.52381	8.86447	9.02000	9.04762
10.0	10.05682	9.64593		10.60000	9.59596	9.75207	9.81818	10.20707	9.60317	10.36264	10.09231
11.2		11.08021	11.20000	11.66507	11.15942	11.83642	10.88889	11.20879	11.09402	11.22619	10.93333
12.5	11.87662	12.40909	12.32536	13.32086	12.39130	13.13131	12.09091	13.03030	12.01852	12.79060	12.45421
14.0	13.40909	14.54545	14.07487	14.75568	14.24561	14.96377	14.34568	14.09524	13.76410 14.91111	13.85648	13.49206
16.0	15.42045	15.83838	15.59091		15.81818	16.60079	15.92929	15.33566 16.70330	16.66272	15.97949	15.21368 16.48148
18.0	17.16364 18.38961	18.13636	18.18182	17.20779	17.79167	18.89035	17.65217		18.05128	17.31111 18.68047	18.66667
20.0	20.62937	20.02424	20.08081	19.00505	19.75568	20.95694 21.81606	19.60079	19.28485	20.53333	20.23718	20.22222
22.4	23.24242	21.45455	22.90909	22.13187	22.55556	23.35417 23.89242	22.35088	22.85315	22.24444	22.91795	22.24852
25.0	25.35537	24.27972	25.11515	26.20879	25.04545	25.90909	24.81818 26.77895		23.95266 25.94872	24.82778	24.10256
28.0	29.50000	27.15152 29.61983	26.90909	28.71572	28.31111 28.49003	27.44759 29.77315	27.41667 29.35385	27.71901		27.17160 29.43590	29.55556
31.5	32.77778	33.09091	29.76224 33.09091		31.22945 31.43636	30.05994 33.03030	30.44318 32.97778		31.33333		
35.5	37.00909	36.76768	36.09917	34.59560	33.38462 36.78930	36.38333 36.95862	34.22222 36.14872	34.74747		35.09848	34.29705 36.93529
40.0	42.31313		40.72727	38.07172	37.06993 40.32673	40.36364 40.47619	38.00000	41.26263	39.11111	39.40239	42.92328
45.0		43.27273	45.25253	43.47576	44.75207 46.96356	43.11538 46.72360	43.44691	44.70118	43.49074	42.98443	46.22507
50.0	47.60227	48.64646	52.43636	48.15865	51.47929	47.83217 51.40152	47.62450	52.16479	47.44444	50.30093	53.25397
56.0	55.16883	54.72727	59.39394	56.16170	58.65385	57.02479 58.98416	53.46087 58.60134	56.51186	57.29733	54.87374 59.20032	57.35043
63.0	66.15152	60.00000 63.27273	66.81818	62.02747	64.29364	64.59803		65.85315	62.50617	64.58217	64.46886
71.0		65.33333 74.81250	74.74747	70.76374	74.35897	72.92219	67.69123 74.20000	71.34091	70.50362	74.44537	69.42801
80.0		82.60000	82.55443	77.57802 83.11931	81.50888	79.86264	83.03333	81.41434	76.91304	81.21313	79.44444
90.0		88.50000	94.18182	91.93238	93.33333	92.96514	91.01731	88.19886	89.27047	88.22009	85.55556 92.67399
100.0		100.15385	103.25118	102.21429	102.30769	101.81319	103.64444	103.79138	97.38596	96.24009	99.80276

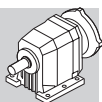
2x

3x

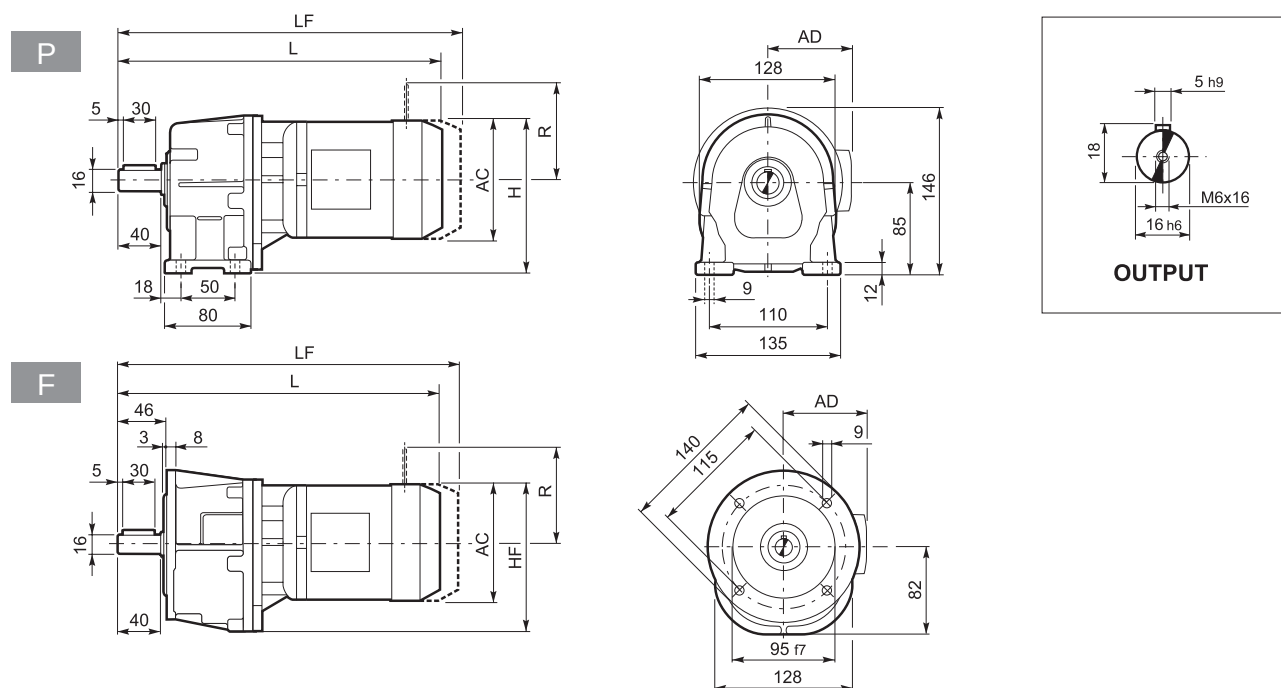
i _N	C12	C22	C32	C36	C41	C51	C61	C70	C80	C90	C100
112.2		112.00000	110.62626	111.50649	110.05917	113.60510	113.61026	112.44066	109.50347	107.00379 116.73140	111.90476
125.5		122.18182	122.35587	125.80220	120.64178	124.41758	128.14222	126.83497	119.45833		120.51282
140.0		136.50000	136.04040 148.40771	139.78022	132.86713 145.64282	134.62559 147.43872	140.46359	137.40455	136.68519 149.11111	134.13580 146.32997	139.68254
160.0		151.66667	167.43434	161.97033	164.10256	160.49861	150.03077 164.45680	150.30339 162.82867	168.99259	157.76199	150.42735 162.10526
180.0		178.50000	186.03816	183.46154	179.88166	175.77423	178.59394	179.18945	184.35556	172.10399	185.37037
200.0		200.66667		206.39423	190.76923 209.11243	197.87075	195.76643	194.12190	197.85897	212.38169	199.62963
225.0		225.75000	215.57172	230.88697		216.70330	217.40754	220.91375	215.84615	231.68911	
250.0		261.00000	244.17508	255.00183	239.94755	240.85197 263.77530	238.31211	239.32323 251.28438	261.85613	268.49591	244.21811 263.00412
280.0			274.69697	290.91758	263.01943		275.27766	272.22475	285.66123	292.90463	300.50725
315.0				318.93187	304.19580 333.44540	297.76563 326.10577	301.74667	317.86109	334.27376	338.95085	323.62319
355.0				341.71272			337.66889 370.13705	344.34951	364.66228	369.76457	380.49708
400.0				377.94421 420.21429	381.81818 418.53147	379.60764 415.73718	421.48741	409.39931	417.48199	419.04541	409.76608
450.0				458.41558	450.24207	463.88750	462.01504	443.51592	455.43490	457.14044	466.73611
500.0				517.18681	493.53457	508.03846	521.11170	512.03745	529.26678		502.63889
560.0				574.65201	543.54736	549.72115	571.21860	554.70724	577.38194	534.22163 582.78723	582.59259
630.0				665.87802	595.81153	602.04142 655.36932	610.12513 668.79101	606.78035 657.34538	664.32106	652.82863	627.40741
710.0				754.23077	671.32867 735.87951	717.74476	726.28202	735.97521	724.71389	712.17669	720.29630
800.0				848.50962	780.41958	807.97222	796.11683	797.30647	783.37099	773.62229 843.95159	775.70370 843.33333
900.0					855.45992	884.87179		922.59000	854.58654 945.71181	922.30089	908.20513
1000.0								999.47250 1069.05117	1031.68561	1006.14643	1003.88889
1125.0								1158.13876	1168.03704	1137.05888	1081.11111
1250.0									1274.22222	1240.42787	
1400.0								1362.26180 1475.78362	1357.84306 1481.28333		



30 DIMENSIONS



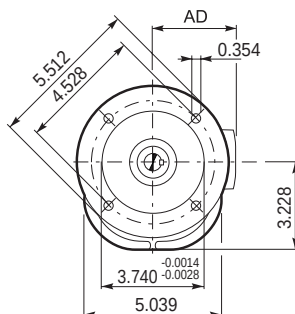
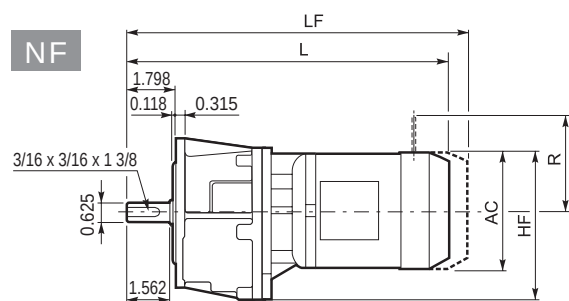
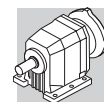
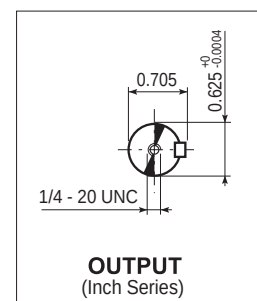
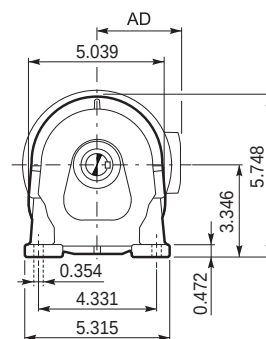
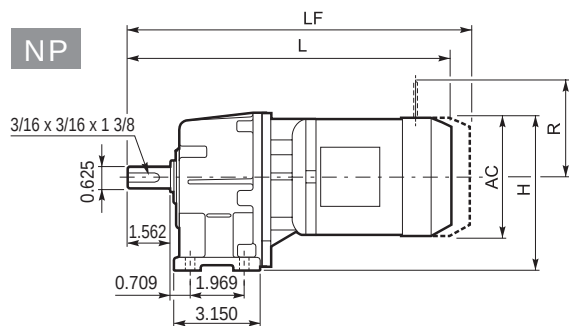
C 05...M



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD	Kg		LF	Kg	R	AD	R	AD
C 05 2	S0	M0	110	140	137	287	91	7	—	—	—	—	—	—	—
C 05 2	S05	M05	121	145.5	142.5	332	95	8	398	10	96	122	116	95	
C 05 2	S1	M1	138	154	151	360.5	108	11	423	13	103	135	124	108	

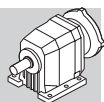
C 05...M



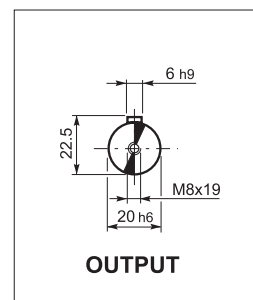
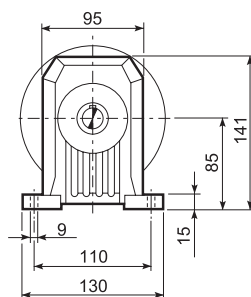
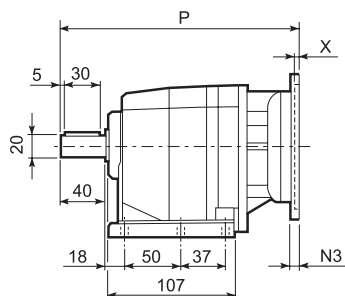
Dimensions are in Inch except when shown in *italic [mm]*

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD			LF		R	AD	R	AD
C 05 2	S0	M0	4.331	5.512	5.394	11.287	3.583	15		—	—	—	—	—	—
C 05 2	S05	M05	4.764	5.728	5.610	13.058	3.740	18		15.657	22	3.780	4.803	4.567	3.740
C 05 2	S1	M1	5.433	6.063	5.945	14.180	4.252	24		16.641	29	4.055	5.315	4.882	4.252

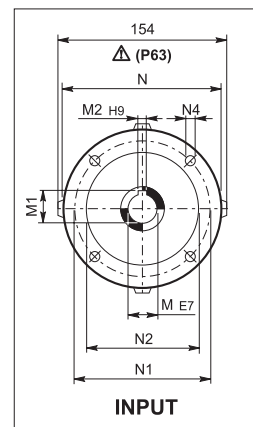
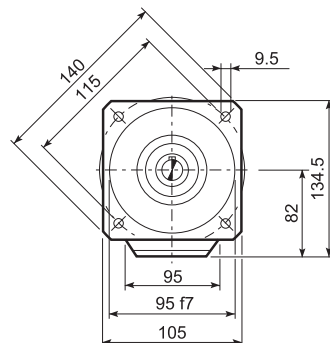
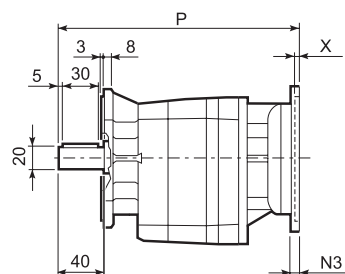
C 12...P (IEC)



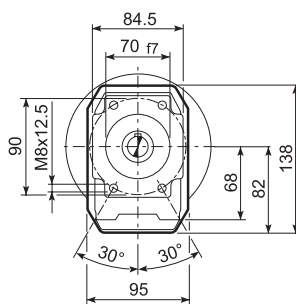
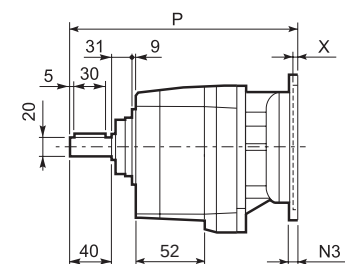
P



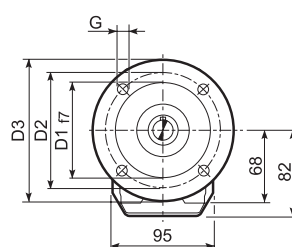
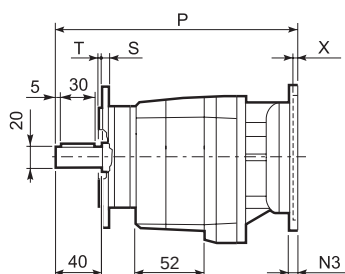
F



U



UF



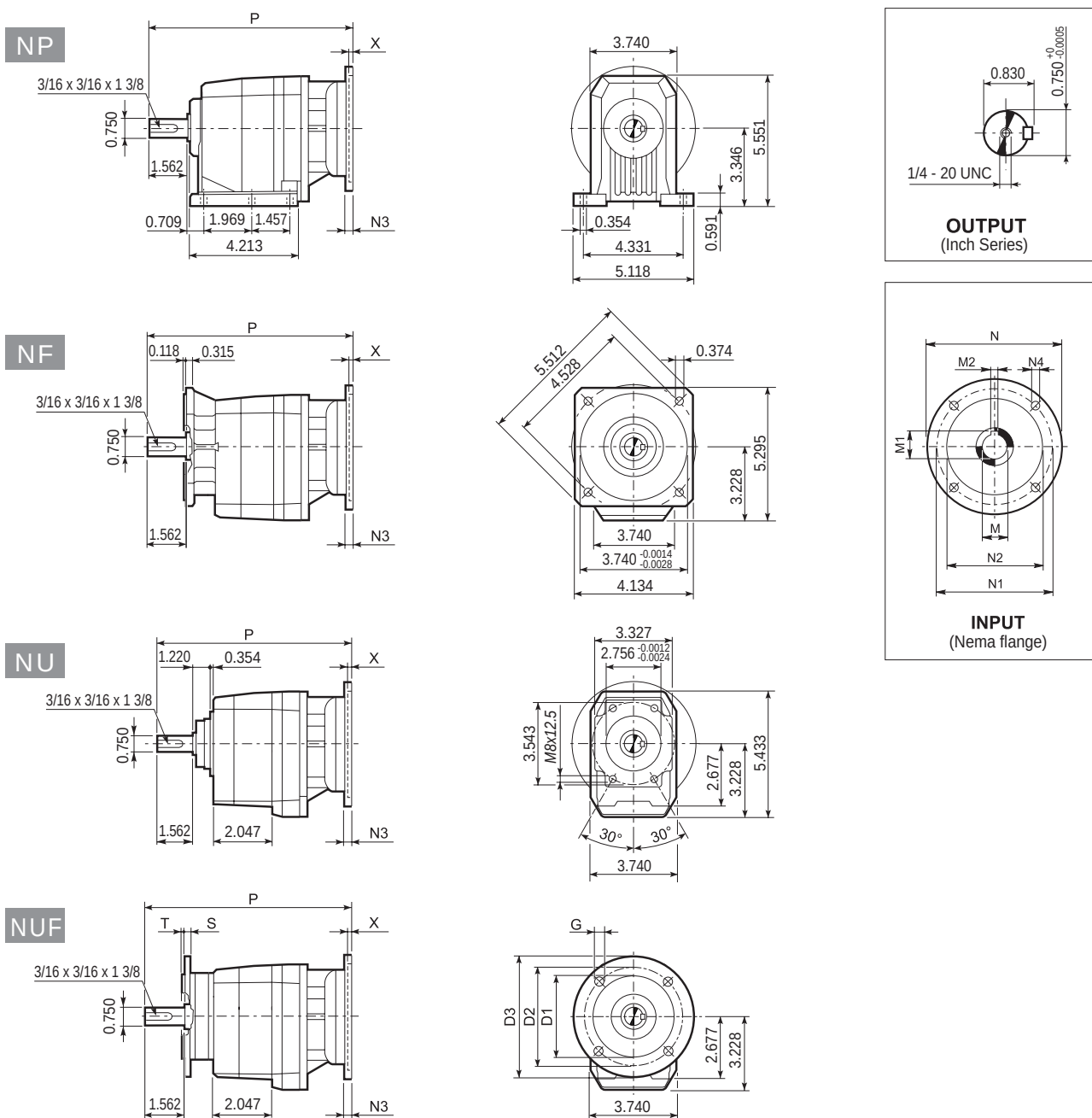
C 12 2 _ U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 12 2	P63	11	12.8	4	140	115	95	—	M8x19	4	244.5	6
C 12 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	244.5	6
C 12 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	264	7
C 12 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	264	7
C 12 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	274	11
C 12 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	274	11

Metric output versions available also in combination with NEMA motor adaptor

C 12...N(NEMA Input)



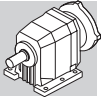
C 12 2 NU						
	D1	D2	D3	G	T	S
FA	3.150 -0.0012 -0.0024	3.937	4.724	0.276	0.118	0.315
FB	3.740 -0.0014 -0.0028	4.528	5.512	0.354	0.118	0.394
FC	4.331 -0.0014 -0.0028	5.118	6.299	0.354	0.118	0.394

Dimensions are in Inch except when shown in *italics* [mm]

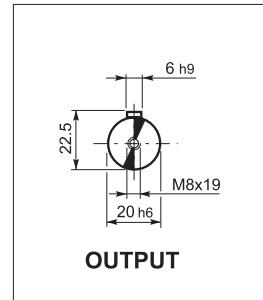
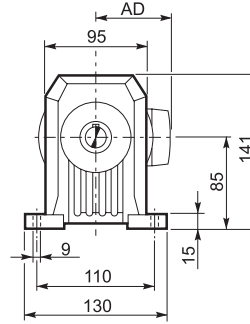
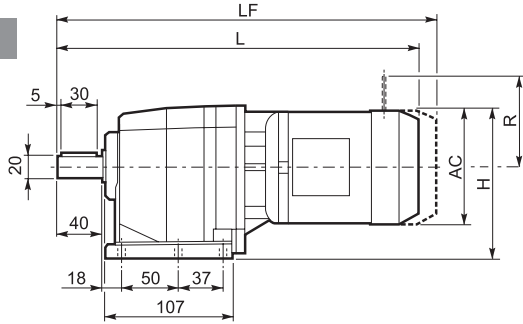
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 12 2	N56C	0.625 +0.0020 +0.0013	0.710	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	10.401	13
C 12 2	N140TC	0.875 +0.0020 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	10.401	15
C 12 2	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	11.228	24

Imperial output versions available also in combination with IEC motor adaptor

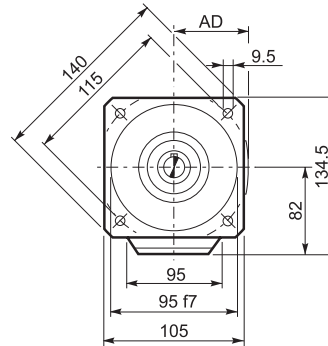
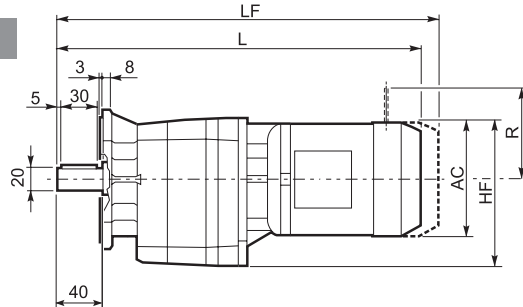
C 12...M/ME



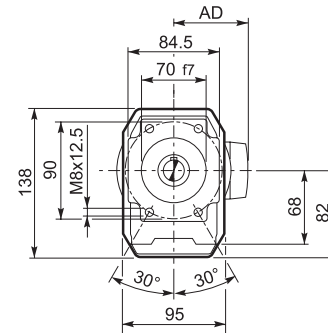
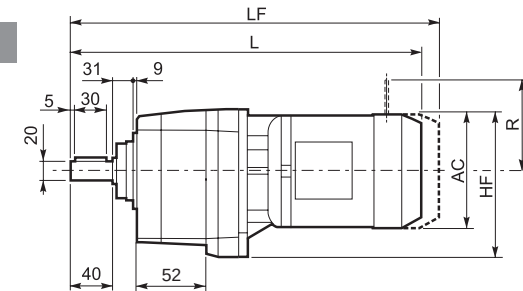
P



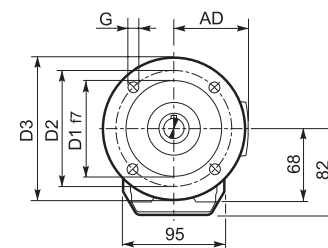
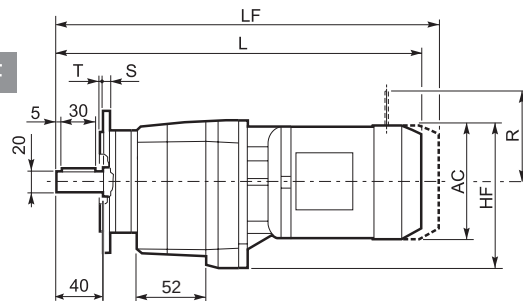
F



U



UF

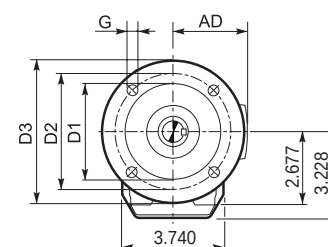
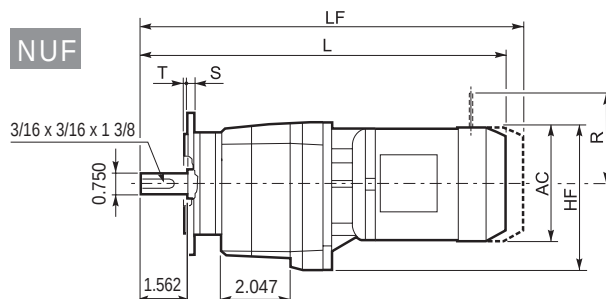
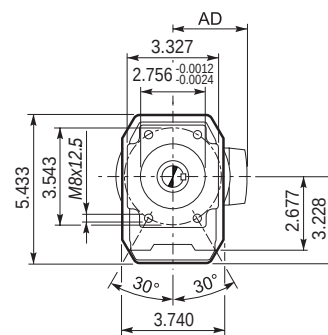
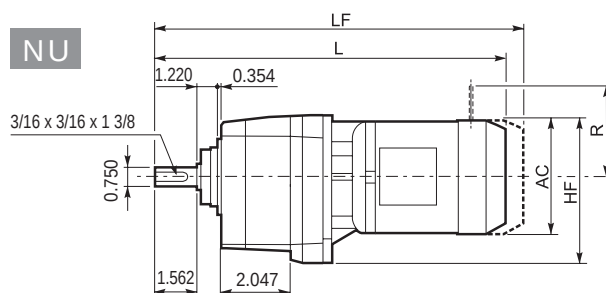
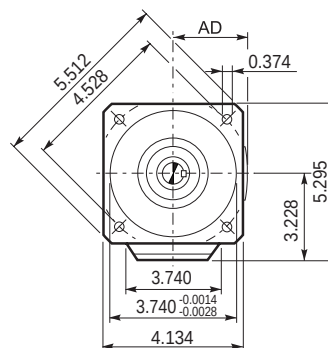
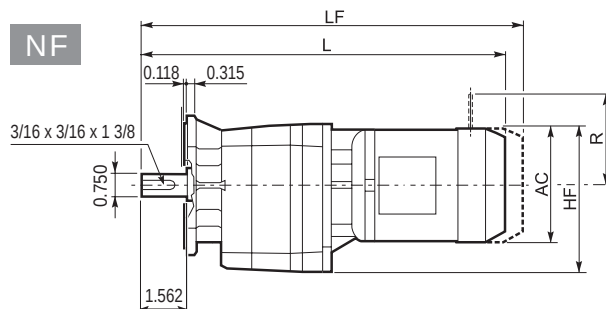
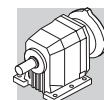
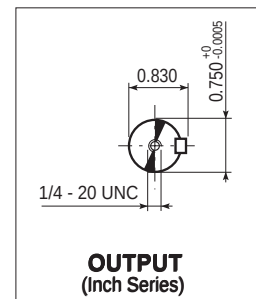
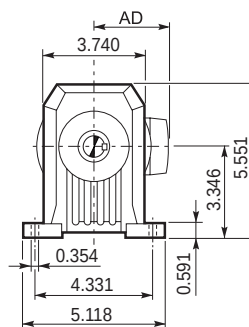
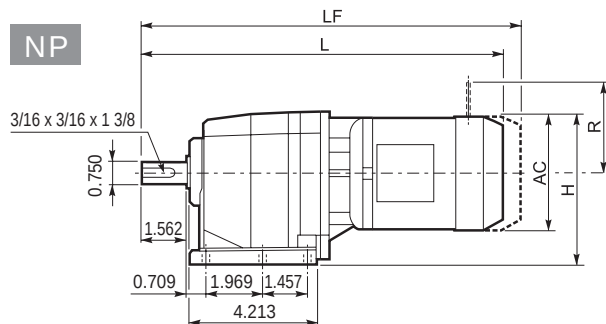


C 12 2_U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD	Kg		LF	Kg	R	AD	R	AD
C 12 2	S05	M05	121	145.5	142.5	370.5	95	9		436.5	10	96	122	116	95
C 12 2	S1	M1	138	154	151	404.5	108	11		460.5	13	103	135	124	108
C 12 2	S2	M2S	156	163	160	428.5	119	15		498.5	18	129	146	134	119
C 12 2	S2	ME2S	156	163	160	428.5	119	15		—	—	—	—	—	—
C 12 2	S3	ME3S	195	182.5	179.5	471.5	142	21.5		—	—	—	—	—	—
C 12 2	S3	ME3L	195	182.5	179.5	503.5	142	22		—	—	—	—	—	—

C 12...M/ME

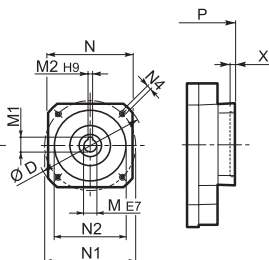
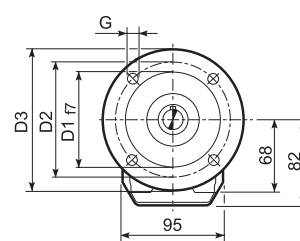
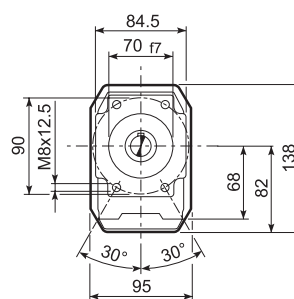
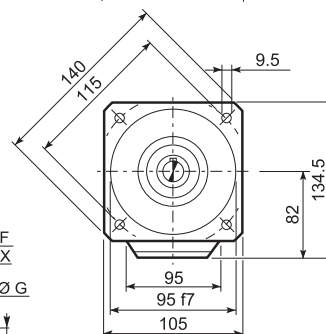
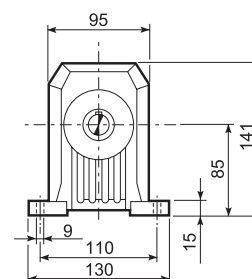
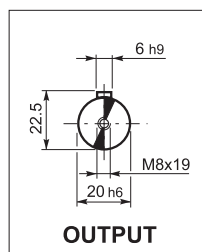
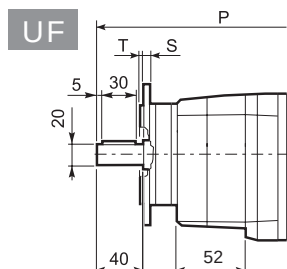
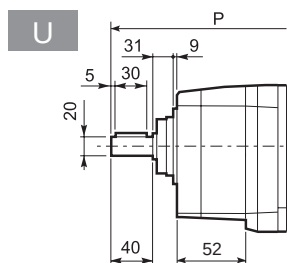
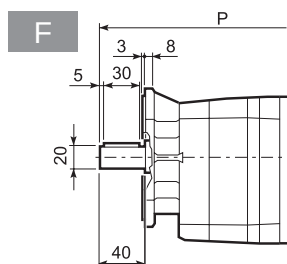
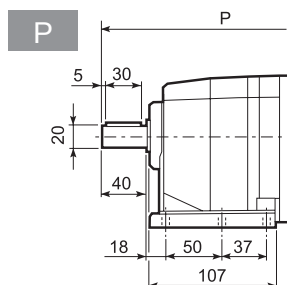
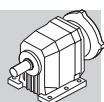


C 12 2 NU						
	D1	D2	D3	G	T	S
FA	3.150 -0.0012 -0.0024	3.937	4.724	0.276	0.118	0.315
FB	3.740 -0.0014 -0.0028	4.528	5.512	0.354	0.118	0.394
FC	4.331 -0.0014 -0.0028	5.118	6.299	0.354	0.118	0.394

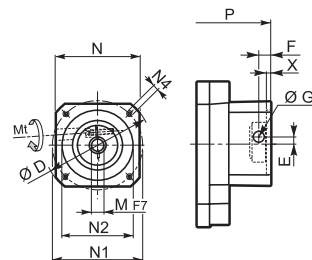
Dimensions are in Inch except when shown in *italic [mm]*

									M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD		LF		R	AD	R	AD
C 12 2	S05	M05	4.764	5.728	5.610	14.574	3.740	20	17.172	22	3.780	4.803	4.567	3.740
C 12 2	S1	M1	5.433	6.063	5.945	15.913	4.252	24	18.117	29	4.055	5.315	4.882	4.252
C 12 2	S2	M2S	6.142	6.417	6.299	16.857	4.685	33	19.613	40	5.079	5.748	5.276	4.685
C 12 2	S2	ME2S	6.142	6.417	6.299	16.857	4.685	33	—	—	—	—	—	—
C 12 2	S3	ME3S	7.677	7.185	7.067	18.550	5.591	47	—	—	—	—	—	—
C 12 2	S3	ME3L	7.677	7.185	7.067	19.810	5.591	49	—	—	—	—	—	—

C 12...SK / SC



SK...



SC...

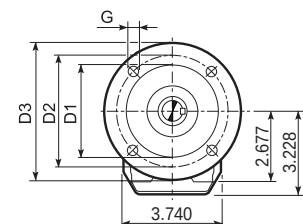
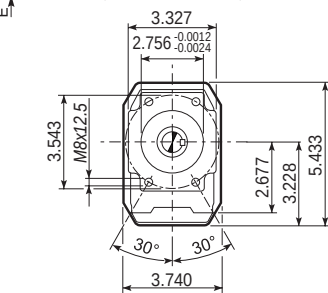
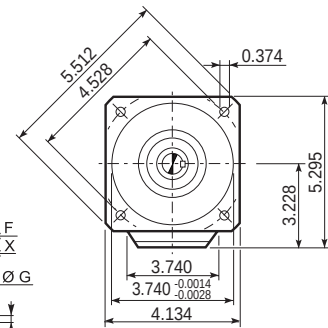
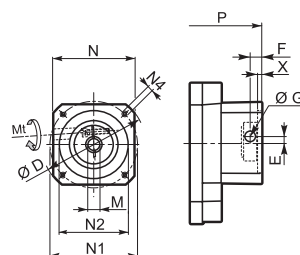
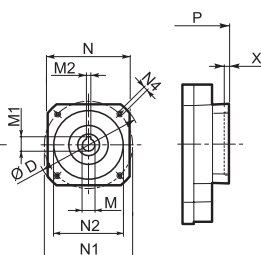
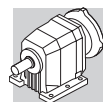
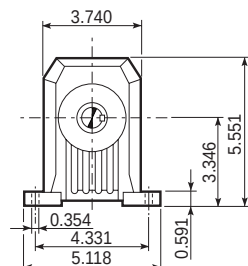
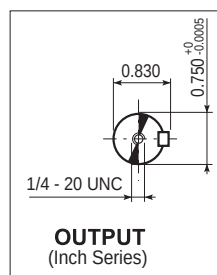
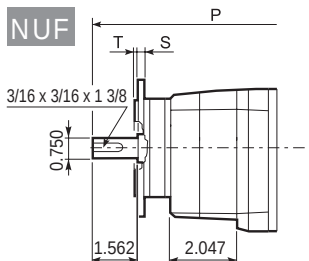
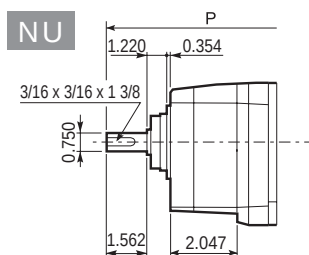
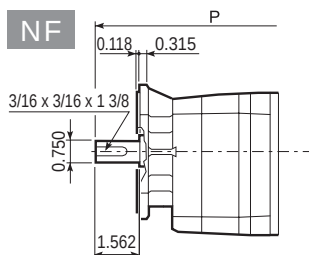
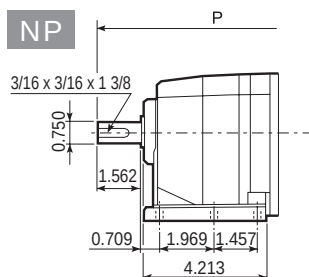
C 12 2 _U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	P	Kg
C 12 2	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	216	6
C 12 2	SK60B	102	14	16.3	5	82	75	60	M5x10	4	223	5
C 12 2	SK80A	115	14	16.3	5	90	100	80	M6x12	4	223	5
C 12 2	SK80C	120	19	21.8	6	96	100	80	M6x12	4	264	7
C 12 2	SK95A	130	14	16.3	5	102	115	95	M8x12	4	264	6
C 12 2	SK95B	130	19	21.8	6	102	115	95	M8x12	4	264	7
C 12 2	SK95C	130	24	27.3	8	102	115	95	M8x12	4	264	7
C 12 2	SK110A	150	19	21.8	6	120	130	110	M8x12	5	264	7
C 12 2	SK110B	150	24	27.3	8	120	130	110	M8x12	5	264	7

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	
C 12 2	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	243	7
C 12 2	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	243	6
C 12 2	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	243	6
C 12 2	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	287.5	8
C 12 2	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	287.5	7
C 12 2	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	287.5	8
C 12 2	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	287.5	8
C 12 2	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	287.5	10
C 12 2	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	287.5	10

C 12...SK / SC



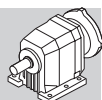
C 12 2 NU						
	D1	D2	D3	G	T	S
FA	3.150 ^{-0.0012} / _{-0.0024}	3.937	4.724	0.276	0.118	0.315
FB	3.740 ^{-0.0014} / _{-0.0028}	4.528	5.512	0.354	0.118	0.394
FC	4.331 ^{-0.0014} / _{-0.0028}	5.118	6.299	0.354	0.118	0.394

Dimensions are in Inch except when shown in *italic* [mm]

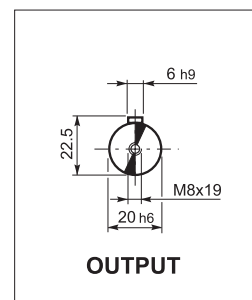
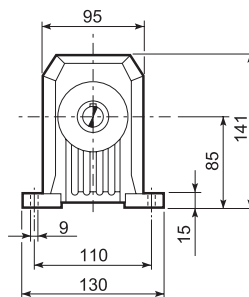
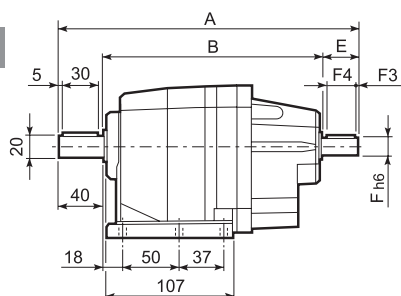
		D	M	M1	M2	N	N1	N2	N4	X	P	lbs
C 12 2	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	8.491	13
C 12 2	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	8.767	11
C 12 2	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	8.767	11
C 12 2	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	10.381	15
C 12 2	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.381	13
C 12 2	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.381	15
C 12 2	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.381	15
C 12 2	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	10.381	15
C 12 2	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	10.381	15

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P	lbs
C 12 2	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	9.554	15
C 12 2	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	9.554	13
C 12 2	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	9.554	13
C 12 2	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	11.306	18
C 12 2	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	11.306	15
C 12 2	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	11.306	18
C 12 2	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	11.306	18
C 12 2	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	11.306	22
C 12 2	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	11.306	22

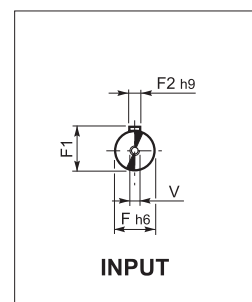
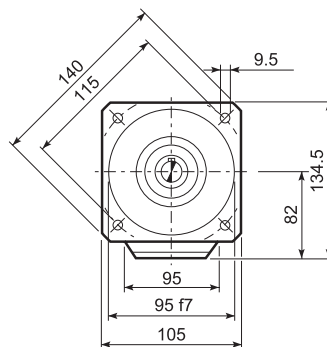
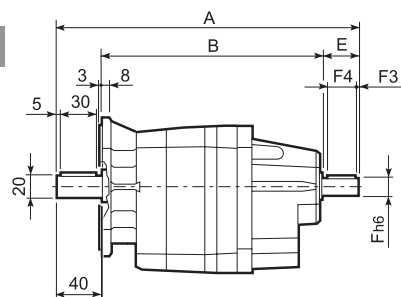
C 12...HS



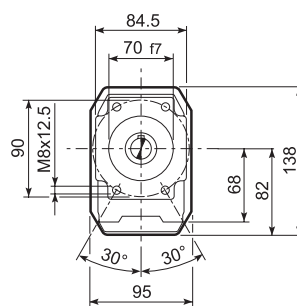
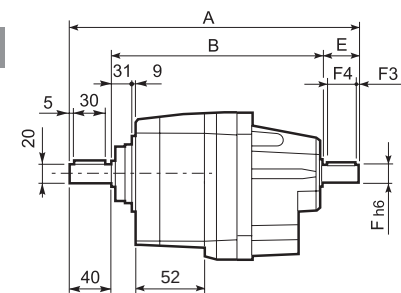
P



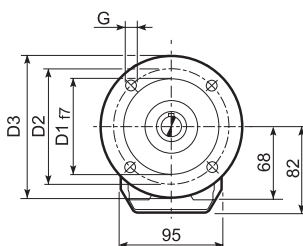
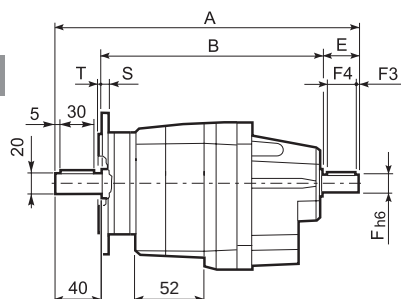
F



U



UF



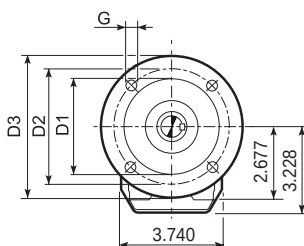
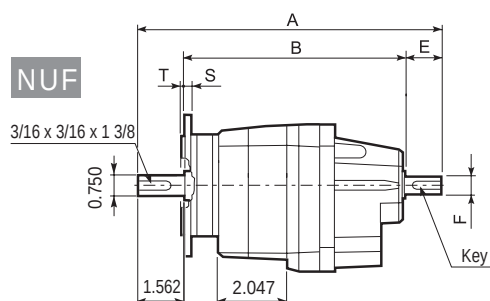
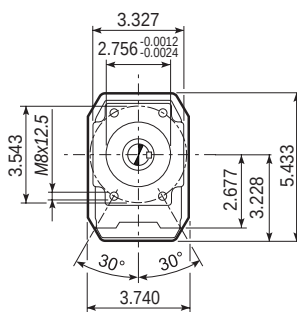
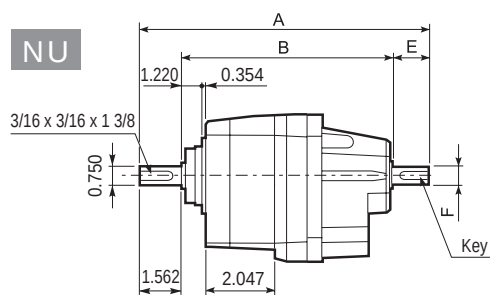
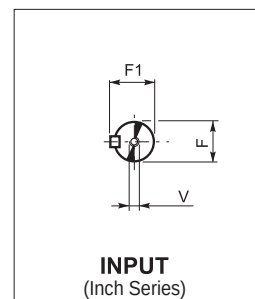
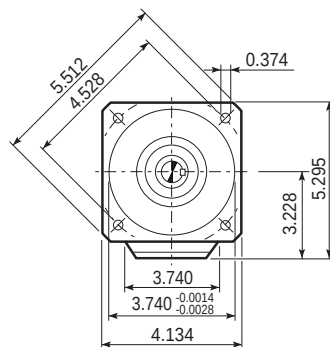
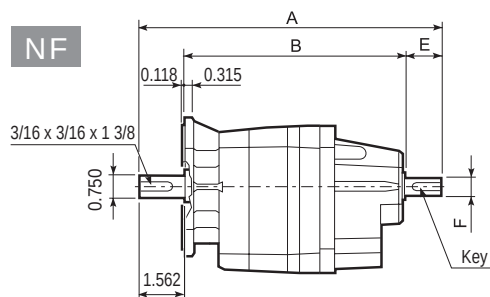
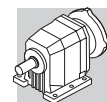
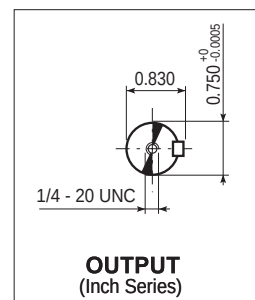
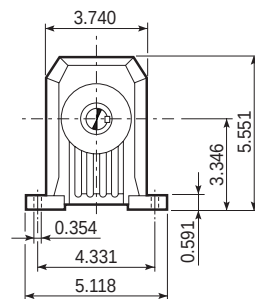
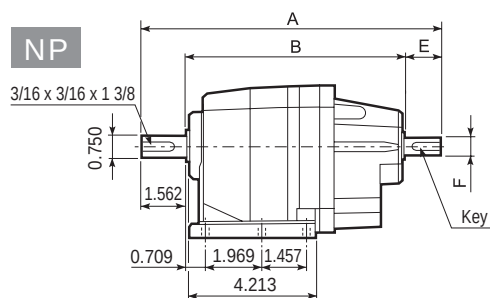
C 12 2 U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 12 2	HS	251.5	171.5	40	16	18	5	2.5	35	M6x16	7.8

Metric output versions available also in combination with NHS input

C 12...NHS



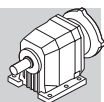
C 12 2 NU						
	D1	D2	D3	G	T	S
FA	3.150 ^{-0.0012} _{-0.0024}	3.937	4.724	0.276	0.118	0.315
FB	3.740 ^{-0.0014} _{-0.0028}	4.528	5.512	0.354	0.118	0.394
FC	4.331 ^{-0.0014} _{-0.0028}	5.118	6.299	0.354	0.118	0.394

Dimensions are in Inch except when shown in *italic* [mm]

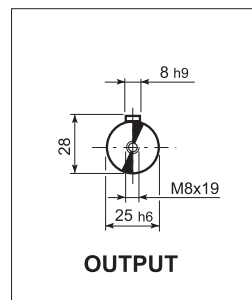
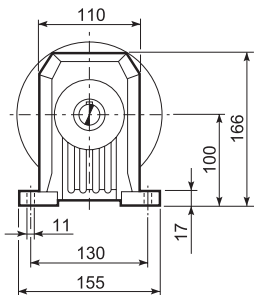
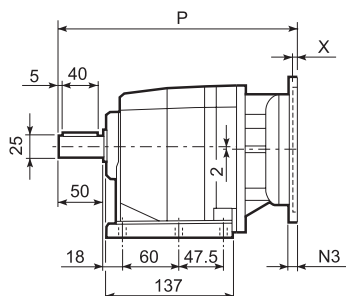
		A	B	E	F	F1	V	Key	lbs
C 12 2	NHS	9.889	6.752	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	17.196

Imperial output versions available also in combination with HS input

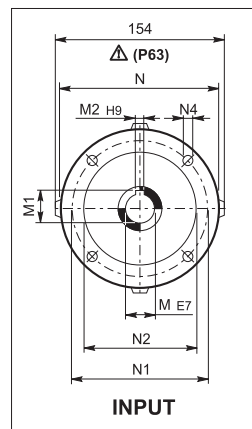
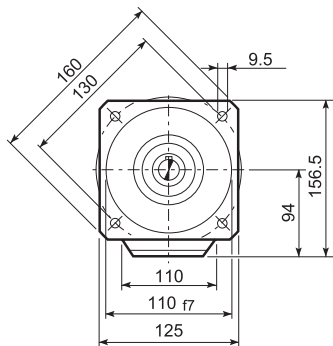
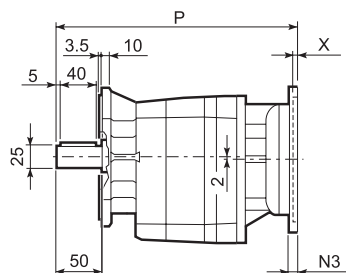
C 22...P(IEC)



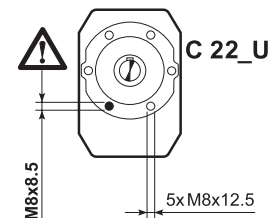
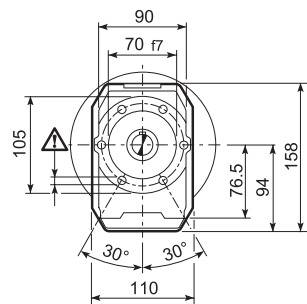
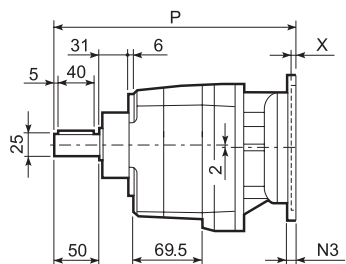
P



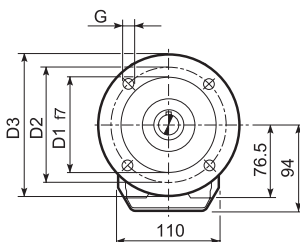
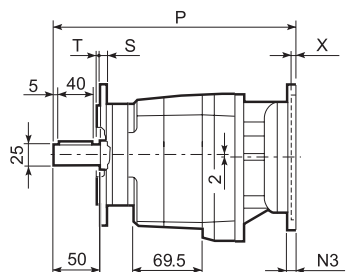
F



U



UF



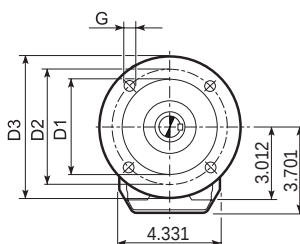
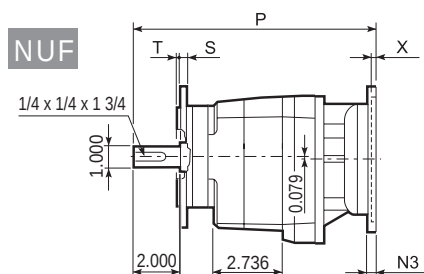
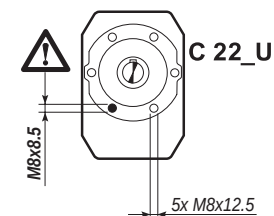
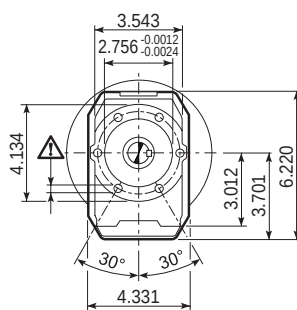
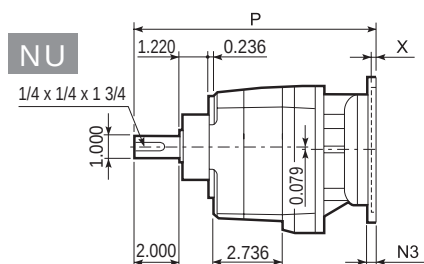
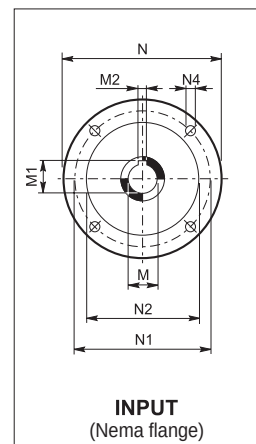
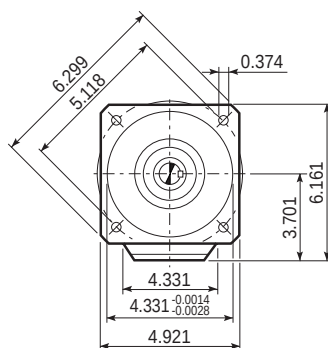
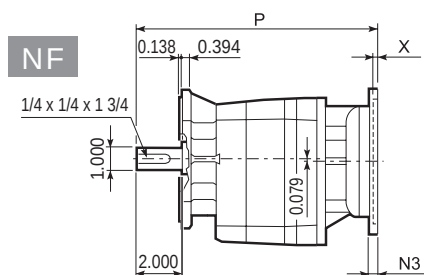
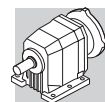
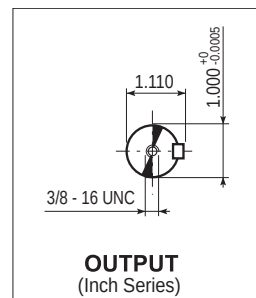
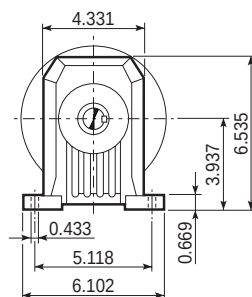
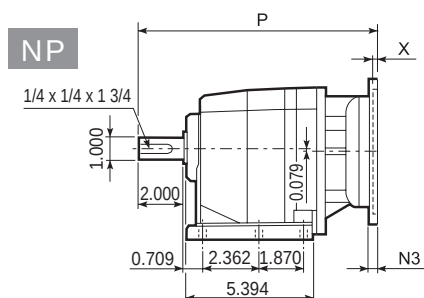
C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	kg
C 22 2	P63	11	12.8	4	140	115	95	—	M8x19	4	273	7
C 22 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	273	7
C 22 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	292.5	8
C 22 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	292.5	8
C 22 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	302.5	12
C 22 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	302.5	12
C 22 3	P63	11	12.8	4	140	115	95	—	M8x19	4	328.5	8
C 22 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	328.5	8
C 22 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	348	9
C 22 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	348	9
C 22 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	358	13
C 22 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	358	13

Metric output versions available also in combination with NEMA motor adaptor

C 22...N(NEMA Input)



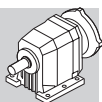
C 22 NU						
	D1	D2	D3	G	T	S
FA	3.740 ^{-0.0014} / _{-0.0028}	4.528	5.512	0.354	0.118	0.394
FB	4.331 ^{-0.0014} / _{-0.0028}	5.118	6.299	0.354	0.118	0.394
FC	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433

Dimensions are in Inch except when shown in *italic* [mm]

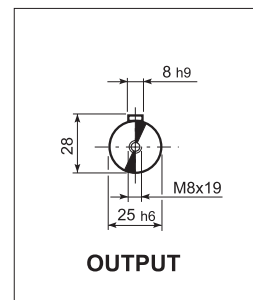
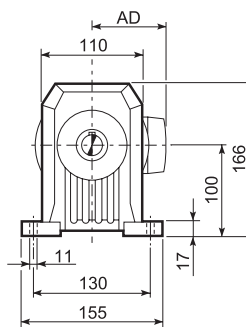
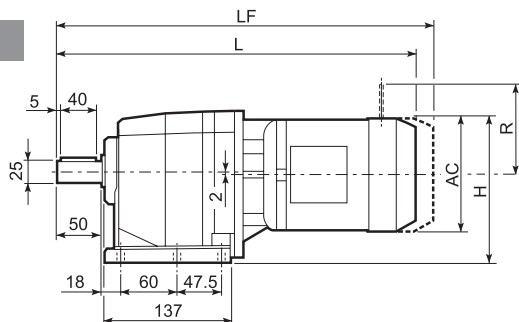
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 22 2	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	11.567	15
C 22 2	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	11.567	18
C 22 2	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	12.394	26
C 22 3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.752	18
C 22 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.752	20
C 22 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	14.579	29

Imperial output versions available also in combination with IEC motor adaptor

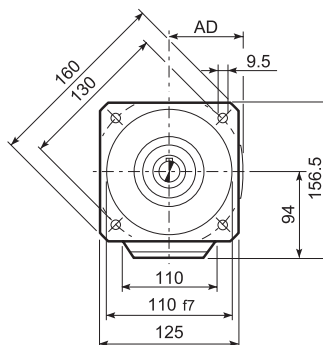
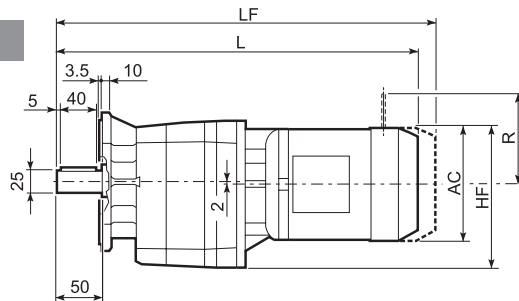
C 22...M/ME



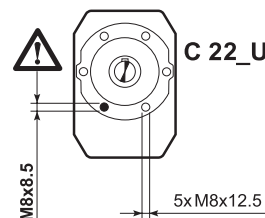
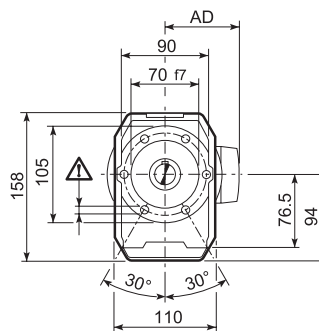
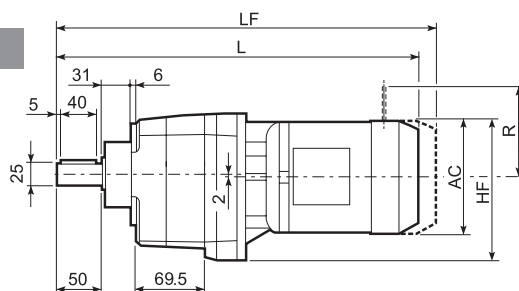
P



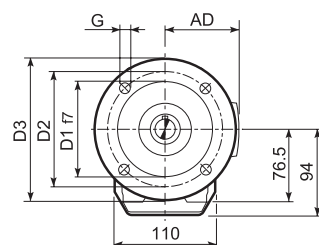
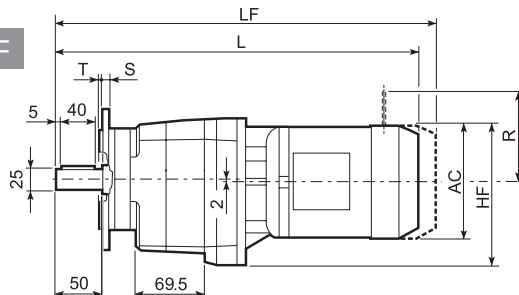
F



U



UF

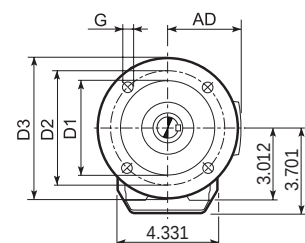
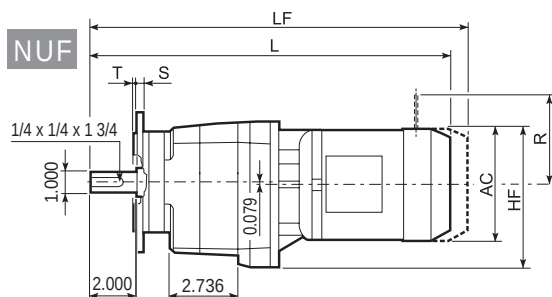
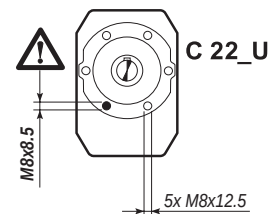
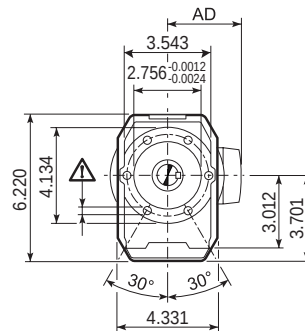
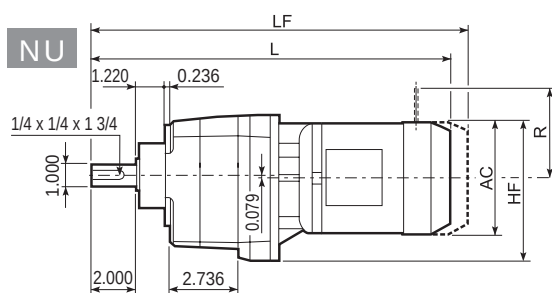
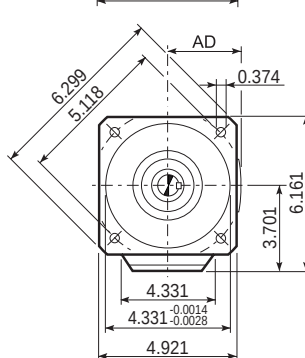
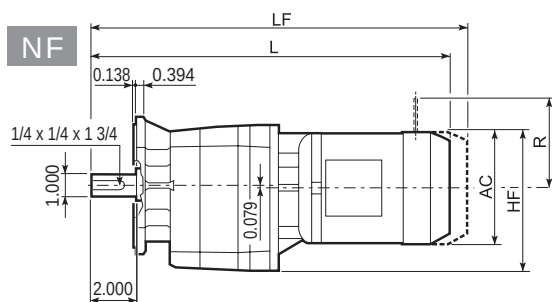
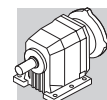
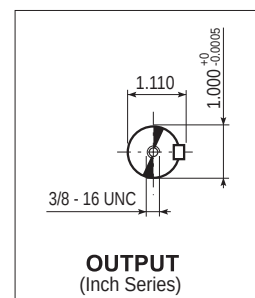
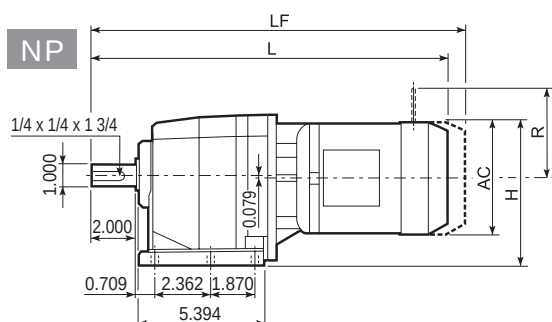


C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

Dimensions are in mm

									M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD		LF		R	AD	R	AD
C 22 2	S05	M05	121	160.5	154.5	399	95	8	465	10	96	119	116	95
C 22 2	S1	M1	138	169	163	428	108	11	489	14	103	135	124	108
C 22 2	S2	M2S	156	178	170	456	119	16	527	19	129	146	134	119
C 22 2	S2	ME2S	156	178	170	456	119	16	—	—	—	—	—	—
C 22 2	S3	ME3S	195	197.5	191.5	500	142	22.5	—	—	—	—	—	—
C 22 2	S3	ME3L	195	197.5	191.5	532	142	27	—	—	—	—	—	—
C 22 3	S05	M05	121	160.5	154.5	454.5	95	11	520.5	12	96	122	116	95
C 22 3	S1	M1	138	169	163	483.5	108	13	544.5	15	103	135	124	108
C 22 3	S2	ME2S	156	178	170	511.5	119	18	—	—	—	—	—	—
C 22 3	S3	ME3S	195	197.5	191.5	555.5	142	24.5	—	—	—	—	—	—
C 22 3	S3	ME3L	195	197.5	191.5	587.5	142	29	—	—	—	—	—	—

C 22...M/ME

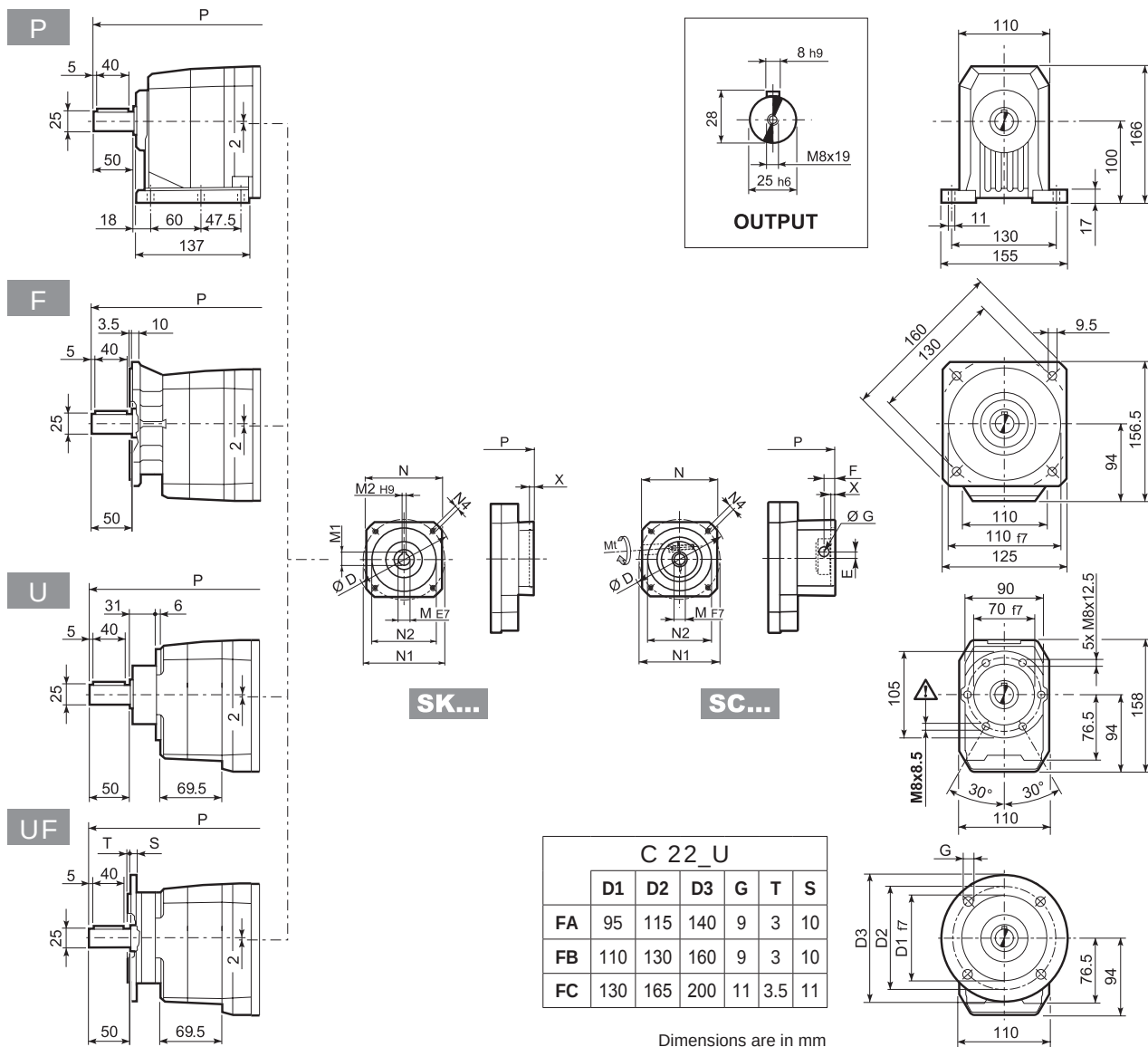
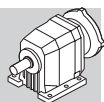


C 22 NU							
	D1	D2	D3	G	T	S	
FA	3.740 ^{-0.0014} _{-0.0028}	4.528	5.512	0.354	0.118	0.394	
FB	4.331 ^{-0.0014} _{-0.0028}	5.118	6.299	0.354	0.118	0.394	
FC	5.118 ^{-0.0017} _{-0.0033}	6.496	7.874	0.433	0.138	0.433	

Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	HF	L	AD	lbs	M...FD M...FA		M...FD		M...FA	
									LF	lbs	R	AD	R	AD
C 22 2	S05	M05	4.764	6.319	6.083	15.740	3.740	18	18.339	22	3.780	4.685	4.567	3.740
C 22 2	S1	M1	5.433	6.654	6.417	16.882	4.252	24	19.283	31	4.055	5.315	4.882	4.252
C 22 2	S2	M2S	6.142	7.008	6.693	17.984	4.685	35	20.780	42	5.079	5.748	5.276	4.685
C 22 2	S2	ME2S	6.142	7.008	6.693	17.984	4.685	35	—	—	—	—	—	—
C 22 2	S3	ME3S	7.677	7.776	7.539	19.717	5.591	50	—	—	—	—	—	—
C 22 2	S3	ME3L	7.677	7.776	7.539	20.976	5.591	60	—	—	—	—	—	—
C 22 3	S05	M05	4.764	6.319	6.083	17.925	3.740	24	20.524	26	3.780	4.803	4.567	3.740
C 22 3	S1	M1	5.433	6.654	6.417	19.067	4.252	29	21.469	33	4.055	5.315	4.882	4.252
C 22 3	S2	ME2S	6.142	7.008	6.693	20.169	4.685	40	—	—	—	—	—	—
C 22 3	S3	ME3S	7.677	7.776	7.539	21.902	5.591	54	—	—	—	—	—	—
C 22 3	S3	ME3L	7.677	7.776	7.539	23.161	5.591	64	—	—	—	—	—	—

C 22...SK / SC

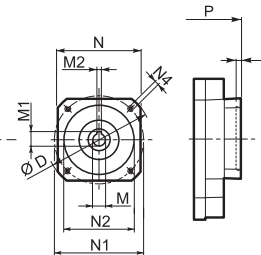
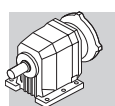
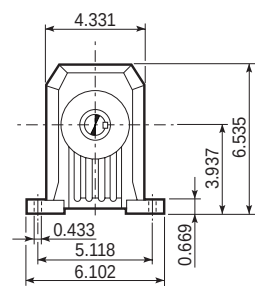
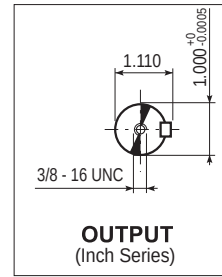
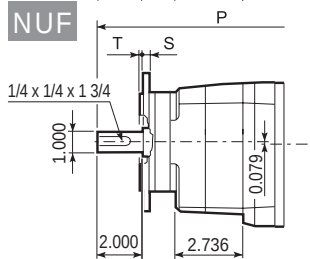
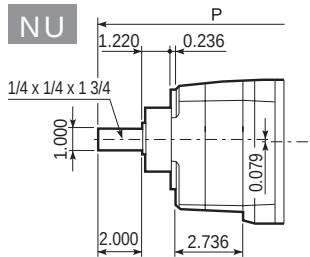
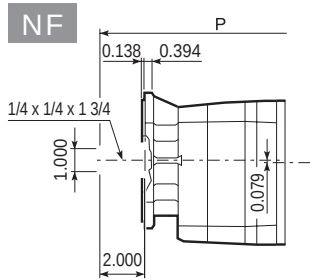
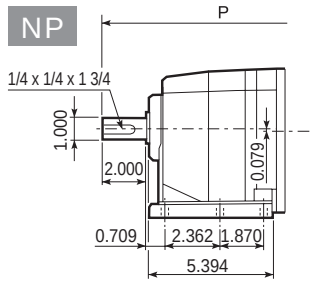


		D	M	M1	M2	N	N1	N2	N4	X	P		Kg
											2x	3x	
C 22 2/3	SK60A*	102	11	12.8	4	82	75	60	M5x10	3.5	224.5	300	6/9
C 22 2/3	SK60B*	102	14	16.3	5	82	75	60	M5x10	4	251.5	307	7/8
C 22 2/3	SK80A*	115	14	16.3	5	90	100	80	M6x12	4	251.5	307	7/8
C 22 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	292.5	348	8/9
C 22 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	292.5	348	8/9
C 22 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	292.5	348	8/9

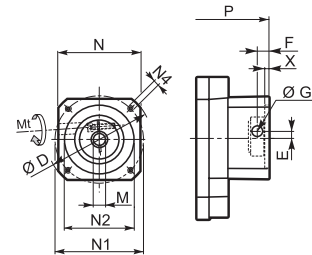
		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		Kg
													2x	3x	
C 22 2/3	SC60A*	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	271.5	327	7/8
C 22 2/3	SC60B*	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	271.5	327	8/9
C 22 2/3	SC80A*	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	271.5	327	8/9
C 22 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	316	371.5	9/10
C 22 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	316	371.5	10/11
C 22 2/3	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	316	371.5	10/11

* Contact our technical service department advising application data

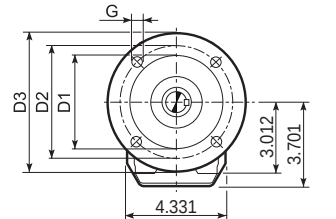
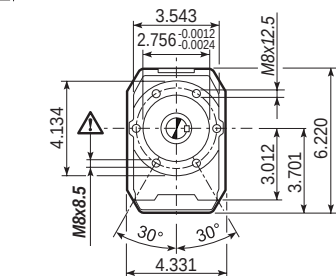
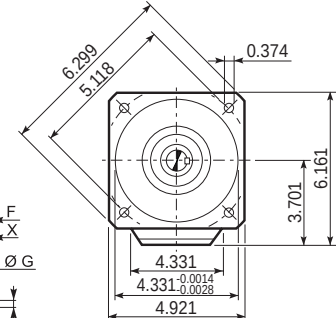
C 22...SK / SC



SK...



SC...



C 22 NU						
	D1	D2	D3	G	T	S
FA	3.740 -0.0014 -0.0028	4.528	5.512	0.354	0.118	0.394
FB	4.331 -0.0014 -0.0028	5.118	6.299	0.354	0.118	0.394
FC	5.118 -0.0017 -0.0033	6.496	7.874	0.433	0.138	0.433

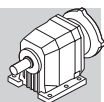
Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2x 	3x 			
C 22 2/3	SK60A*	4.016	0.433	^{+0.0020} _{+0.0013}	0.504	0.157	^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.138	8.870	11.843	13/20
C 22 2/3	SK60B*	4.016	0.551	^{+0.0020} _{+0.0013}	0.642	0.197	^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.157	9.933	12.118	15/18
C 22 2/3	SK80A*	4.528	0.551	^{+0.0020} _{+0.0013}	0.642	0.197	^{+0.0012} ₊₀	3.543	3.937	3.150	M6x12	0.157	9.933	12.118	15/18
C 22 2/3	SK80C	4.724	0.748	^{+0.0024} _{+0.0016}	0.858	0.236	^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	11.547	13.732	18/20
C 22 2/3	SK95A	5.118	0.551	^{+0.0020} _{+0.0013}	0.642	0.197	^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	11.547	13.732	18/20
C 22 2/3	SK95B	5.118	0.748	^{+0.0024} _{+0.0016}	0.858	0.236	^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	11.547	13.732	18/20
C 22 2/3	SK95C	5.118	0.945	^{+0.0024} _{+0.0016}	1.075	0.315	^{+0.0014} ₊₀	4.016	4.528	3.740	M8x12	0.157	11.547	13.732	18/20
C 22 2/3	SK110A	5.906	0.748	^{+0.0024} _{+0.0016}	0.858	0.236	^{+0.0012} ₊₀	4.724	5.118	4.331	M8x12	0.197	11.547	13.732	18/20
C 22 2/3	SK110B	5.906	0.945	^{+0.0024} _{+0.0016}	1.075	0.315	^{+0.0014} ₊₀	4.724	5.118	4.331	M8x12	0.197	11.547	13.732	18/20

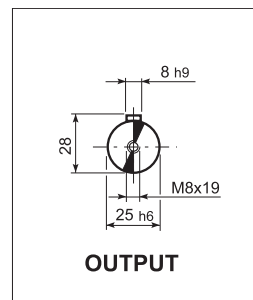
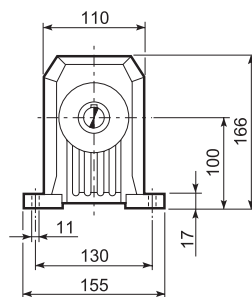
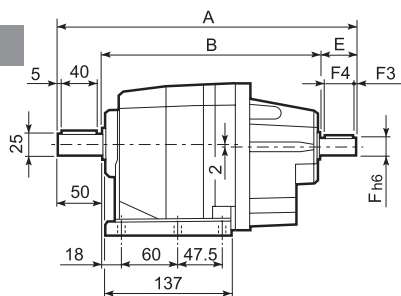
			Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	2x 	3x 	
C 22 2/3	SC60A*	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	10.720	12.906	15/18
C 22 2/3	SC60B*	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	10.720	12.906	18/20
C 22 2/3	SC80A*	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	10.720	12.906	18/20
C 22 2/3	SC80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	12.472	14.657	20/22
C 22 2/3	SC95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	12.472	14.657	20/22
C 22 2/3	SC95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.472	14.657	20/22
C 22 2/3	SC95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.472	14.657	20/22
C 22 2/3	SC110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.472	14.657	22/24
C 22 2/3	SC110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.472	14.657	22/24

* Contact our technical service department advising application data

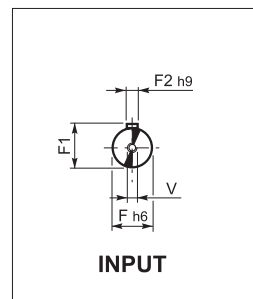
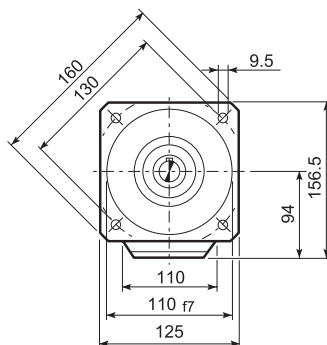
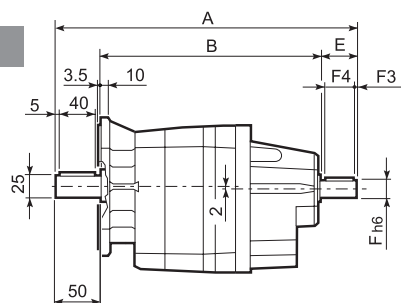
C 22...HS



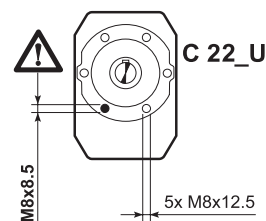
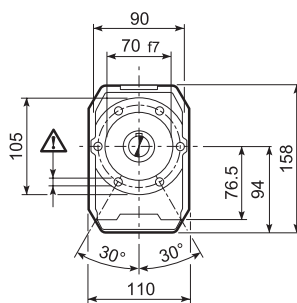
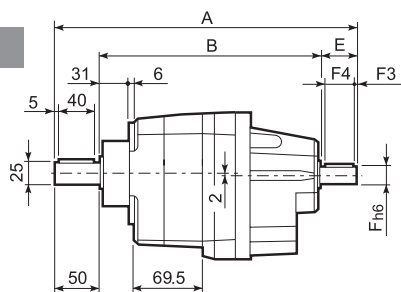
P



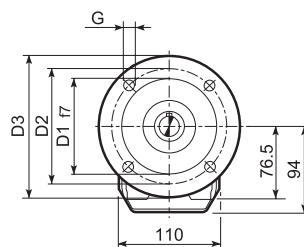
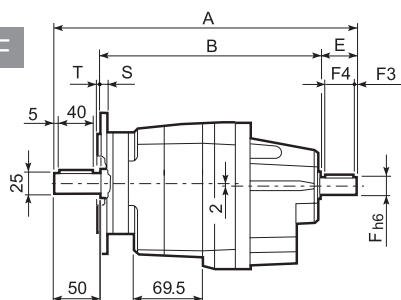
F



U



UF



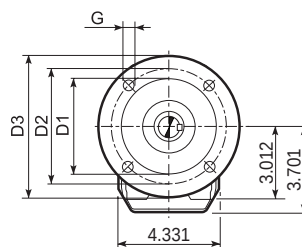
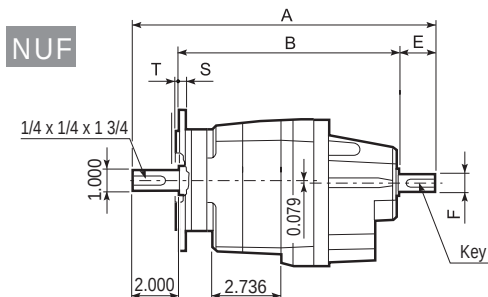
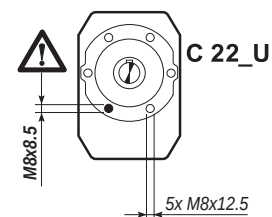
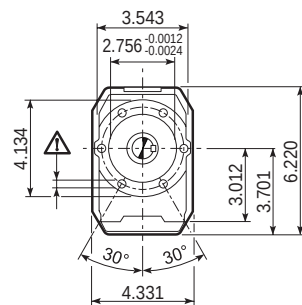
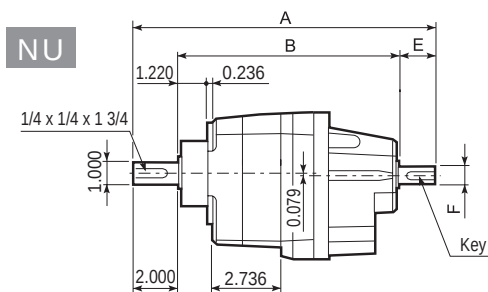
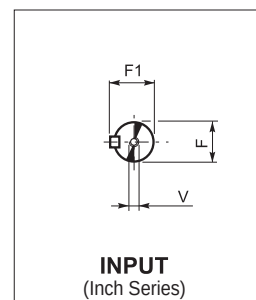
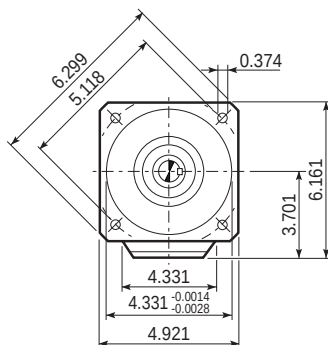
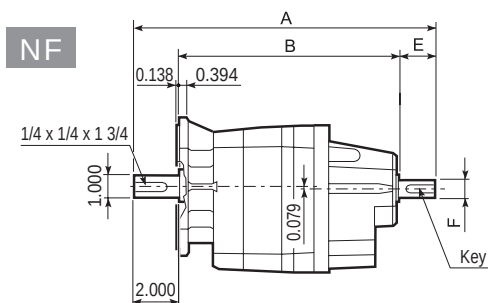
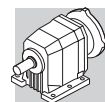
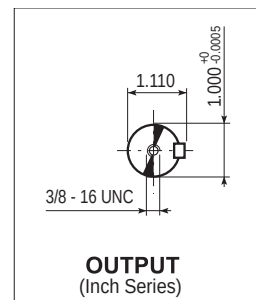
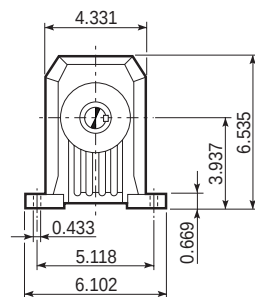
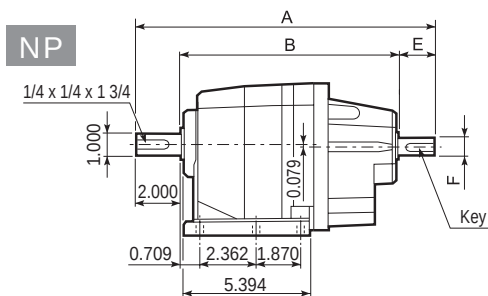
C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 22 2	HS	323	233	40	19	21.5	6	2.5	35	M6x16	7.2
C 22 3		335.5	245.5	40	16	18	6	2.5	36	M6x16	7.5

Metric output versions available also in combination with NHS input

C 22...NHS



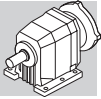
C 22 NU						
	D1	D2	D3	G	T	S
FA	3.740 <i>-0.0014 -0.0028</i>	4.528	5.512	0.354	0.118	0.394
FB	4.331 <i>-0.0014 -0.0028</i>	5.118	6.299	0.354	0.118	0.394
FC	5.118 <i>-0.0017 -0.0033</i>	6.496	7.874	0.433	0.138	0.433

Dimensions are in Inch except when shown in *italics [mm]*

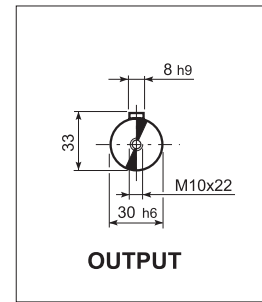
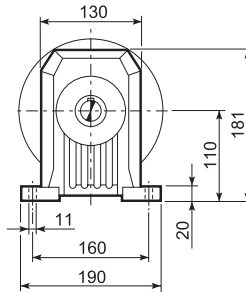
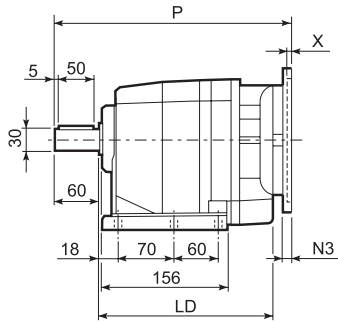
		A	B	E	F	F1	V	Key	lbs
C 22 2	NHS	12.748	9.173	1.575	0.750 <i>+0 -0.0005</i>	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	16
C 22 3		13.240	9.665	1.575	0.625 <i>+0 -0.0004</i>	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	17

Imperial output versions available also in combination with HS input

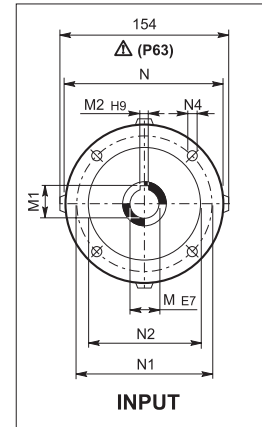
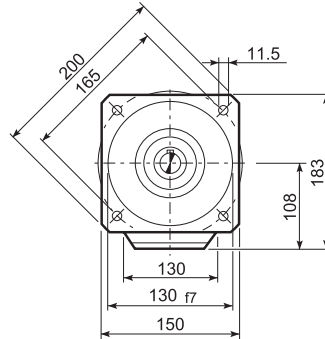
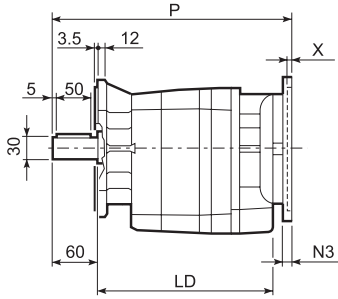
C 32...P(IEC)



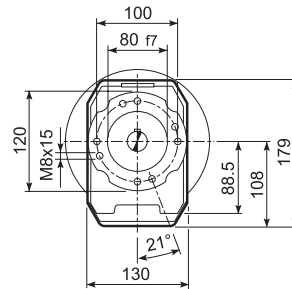
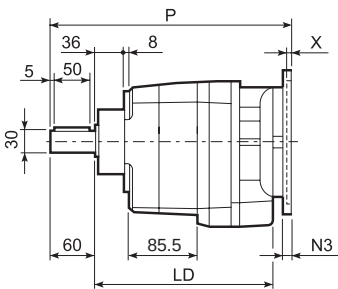
P



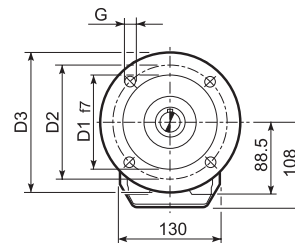
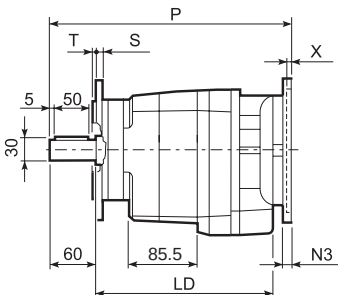
F



U



UF



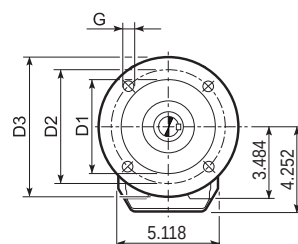
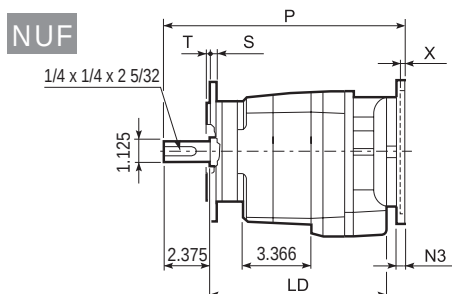
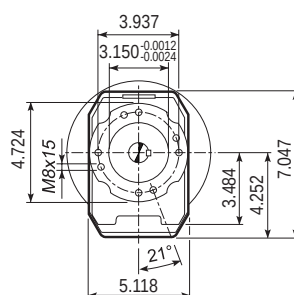
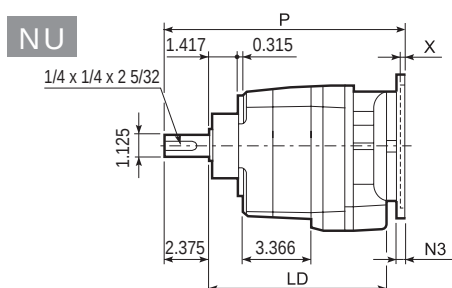
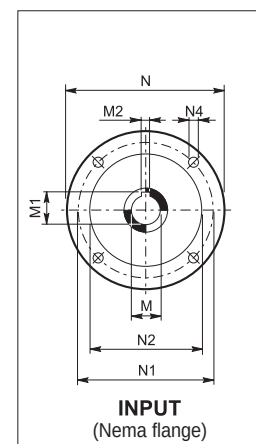
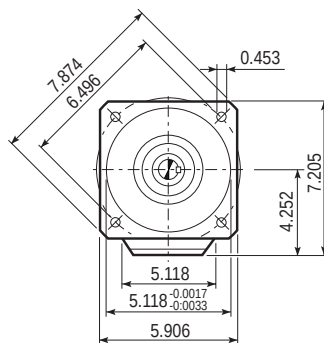
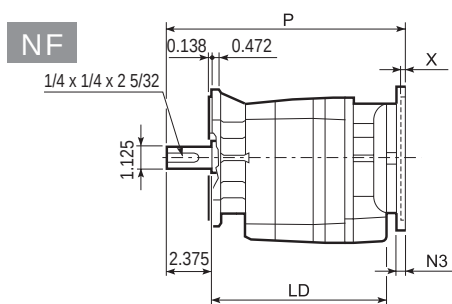
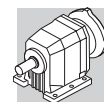
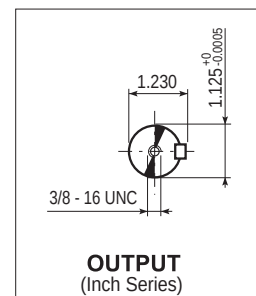
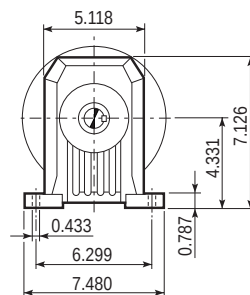
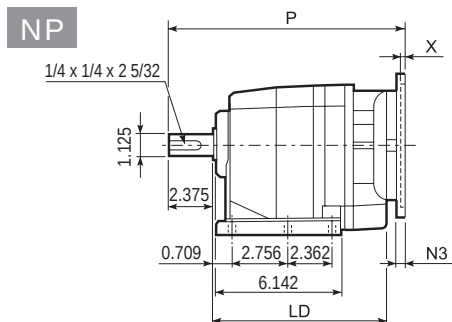
C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	Ⓚ Kg
C 32 2	P63	217.5	11	12.8	4	140	115	95	—	M8x19	4	307.5	9
C 32 2	P71	217.5	14	16.3	5	160	130	110	—	M8x16	4.5	307.5	9
C 32 2	P80	227.5	19	21.8	6	200	165	130	—	M10x14.5	4	327	10
C 32 2	P90	227.5	24	27.3	8	200	165	130	—	M10x14.5	4	327	10
C 32 2	P100	227.5	28	31.3	8	250	215	180	—	M12x16	4.5	337	14
C 32 2	P112	227.5	28	31.3	8	250	215	180	—	M12x16	4.5	337	14
C 32 2	P132	—	38	41.3	10	300	265	230	16	14	5	373	17
C 32 3	P63	—	11	12.8	4	140	115	95	—	M8x19	4	365	10
C 32 3	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	365	10
C 32 3	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	384.5	11
C 32 3	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	384.5	11
C 32 3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	394.5	15
C 32 3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	394.5	15

Metric output versions available also in combination with NEMA motor adaptor

C 32...N(NEMA Input)



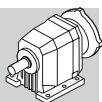
C 32 NU						
	D1	D2	D3	G	T	S
FA	4.331 ^{-0.0014} / _{-0.0028}	5.118	6.299	0.354	0.118	0.394
FB	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FC	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic* [mm]

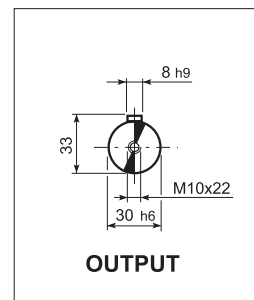
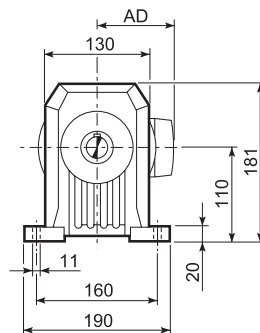
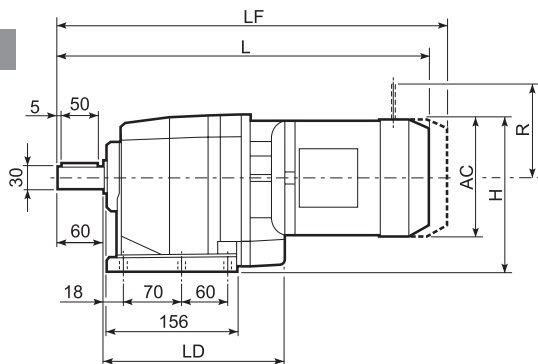
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 32 2	N56C	8.563	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.906	20
C 32 2	N140TC	8.563	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.906	22
C 32 2	N180TC	8.957	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	13.733	31
C 32 2	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	14.875	37
C 32 3	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.170	22
C 32 3	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.170	24
C 32 3	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	15.997	33

Imperial output versions available also in combination with IEC motor adaptor

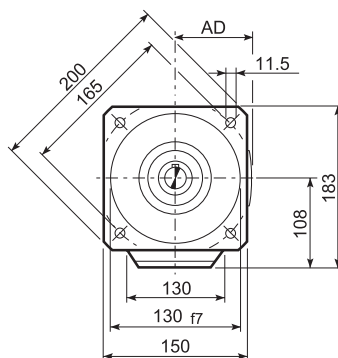
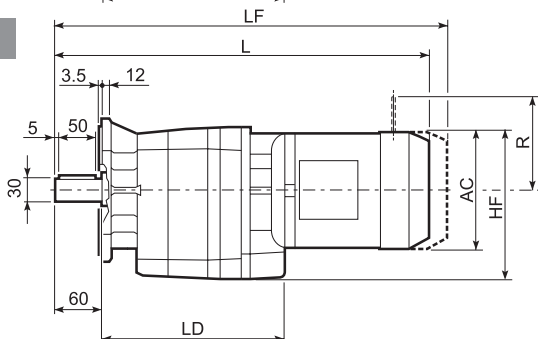
C 32...M/ME



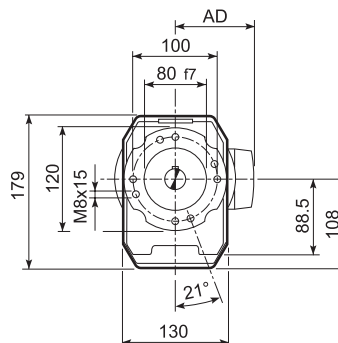
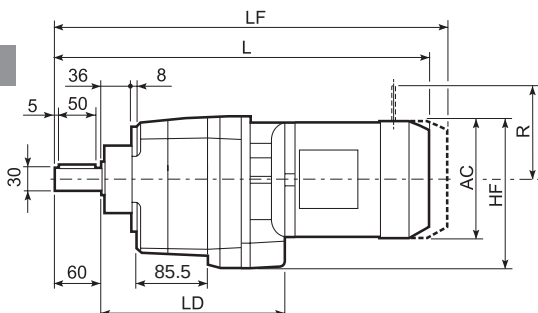
P



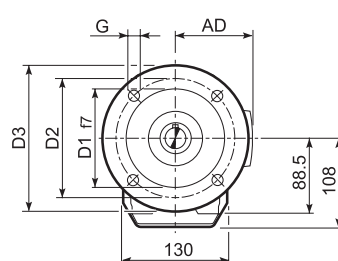
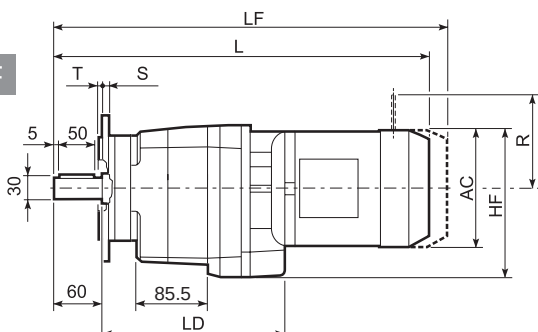
F



U



UF

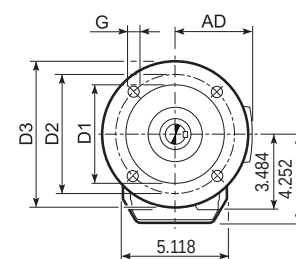
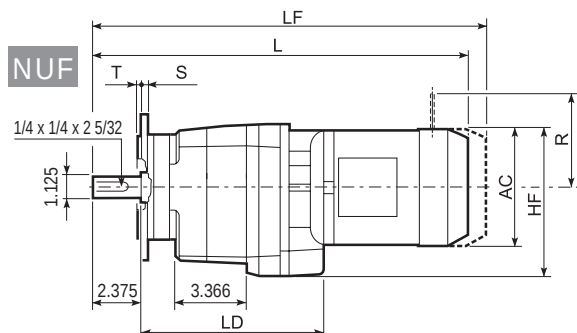
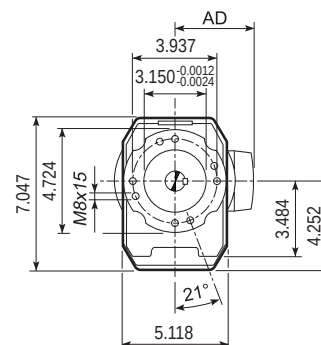
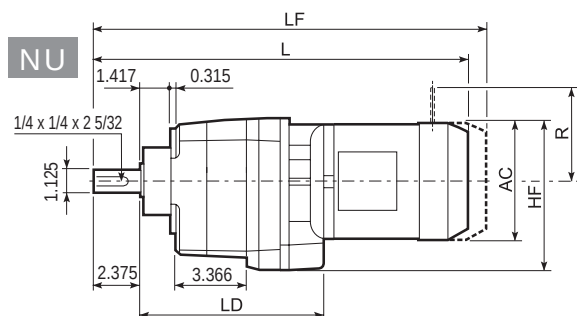
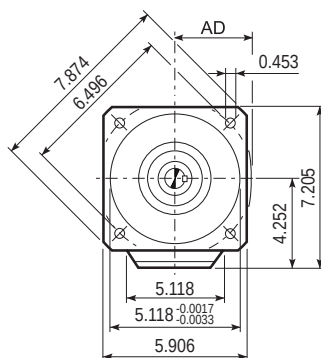
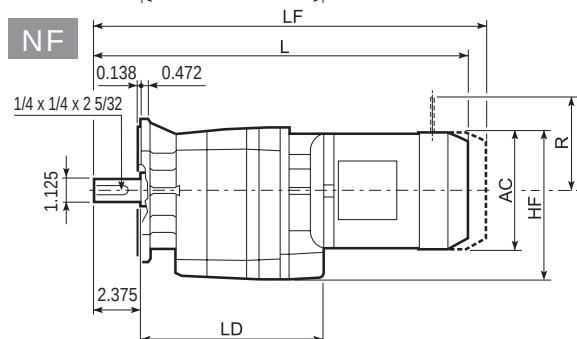
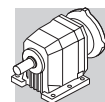
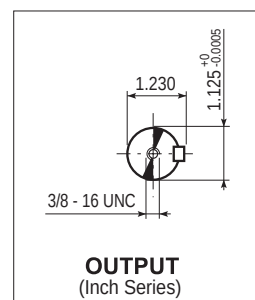
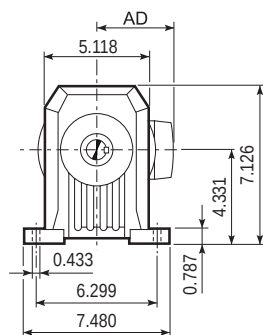
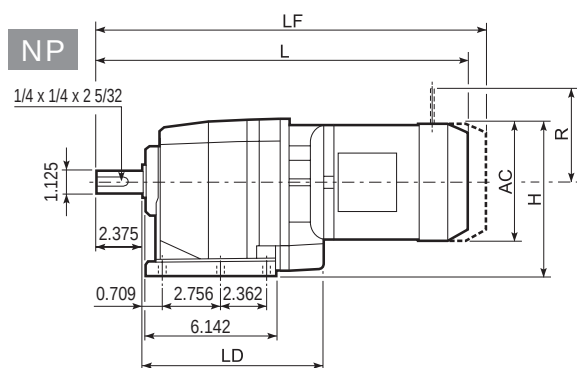


C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD	Kg	LF	Kg	R	AD	R	AD
C 32 2	S1	M1	138	179	177	462.5	205.5	108	14	523.5	16	103	135	124	108
C 32 2	S2	M2S	156	188	186	490.5	217.5	119	18	561.5	21	129	146	134	119
C 32 2	S2	ME2S	156	188	186	490.5	217.5	119	18	—	—	—	—	—	—
C 32 2	S3	ME3S	195	207.5	205.5	534.5	227.5	142	24.5	—	—	—	—	—	—
C 32 2	S3	ME3L	195	207.5	205.5	566.5	227.5	142	32	—	—	—	—	—	—
C 32 2	S4	ME4	258	239	237	674.5	—	193	66	—	—	—	—	—	—
C 32 2	S4	ME4LB	258	239	237	709.5	—	193	74	—	—	—	—	—	—
C 32 3	S05	M05	121	170.5	168.5	491	—	95	13	557	15	96	122	116	95
C 32 3	S1	M1	138	179	177	520	—	108	15	581	17	103	135	124	108
C 32 3	S2	ME2S	156	188	186	548	—	119	18	—	—	—	—	—	—
C 32 3	S3	ME3S	195	207.5	205.5	592	—	142	25.5	—	—	—	—	—	—
C 32 3	S3	ME3L	195	207.5	205.5	624	—	142	33	—	—	—	—	—	—

C 32...M/ME

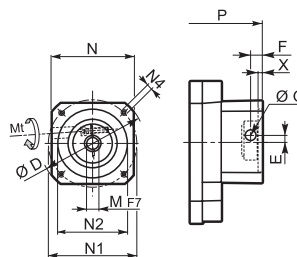
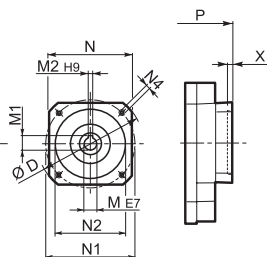
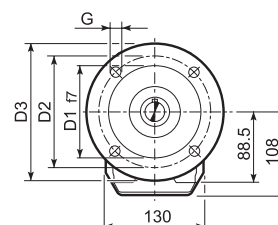
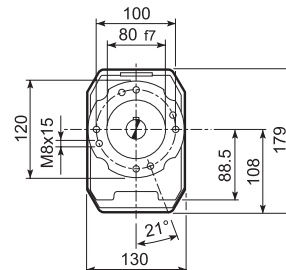
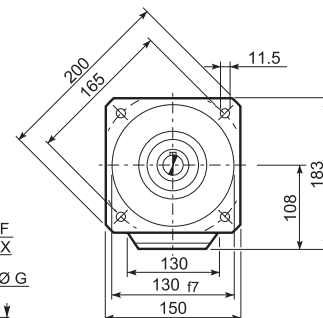
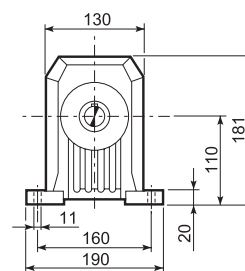
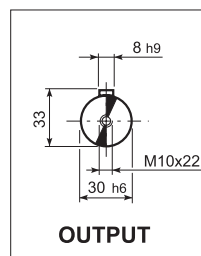
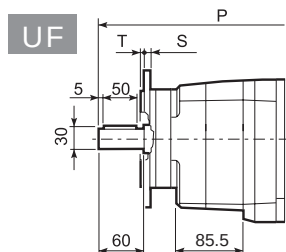
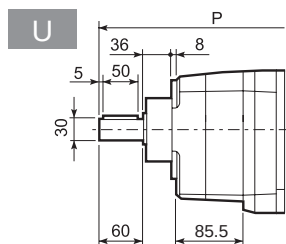
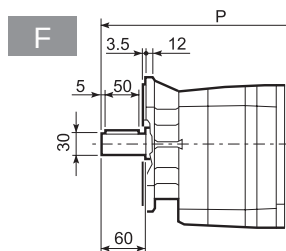
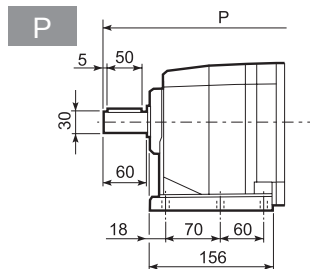
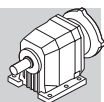


C 32 NU						
	D1	D2	D3	G	T	S
FA	4.331-0.0014 -0.0028	5.118	6.299	0.354	0.118	0.394
FB	5.118-0.0017 -0.0033	6.496	7.874	0.433	0.138	0.433
FC	7.087-0.0017 -0.0033	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic [mm]*

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD		LF		R	AD	R	AD
C 32 2	S1	M1	5.433	7.047	6.969	18.221	8.091	4.252	31	20.623	35	4.055	5.315	4.882	4.252
C 32 2	S2	M2S	6.142	7.402	7.323	19.324	8.563	4.685	40	22.119	46	5.079	5.748	5.276	4.685
C 32 2	S2	ME2S	6.142	7.402	7.323	19.324	8.563	4.685	40	—	—	—	—	—	—
C 32 2	S3	ME3S	7.677	8.169	8.091	21.056	8.957	5.591	54	—	—	—	—	—	—
C 32 2	S3	ME3L	7.677	8.169	8.091	22.316	8.957	5.591	71	—	—	—	—	—	—
C 32 2	S4	ME4	10.157	9.409	9.331	26.568	—	7.598	146	—	—	—	—	—	—
C 32 2	S4	ME4LB	10.157	9.409	9.331	27.946	—	7.598	163	—	—	—	—	—	—
C 32 3	S05	M05	4.764	6.713	6.634	19.344	—	3.740	29	21.942	33	3.780	4.803	4.567	3.740
C 32 3	S1	M1	5.433	7.047	6.969	20.485	—	4.252	33	22.887	37	4.055	5.315	4.882	4.252
C 32 3	S2	ME2S	6.142	7.402	7.323	21.588	—	4.685	40	—	—	—	—	—	—
C 32 3	S3	ME3S	7.677	8.169	8.091	23.320	—	5.591	56	—	—	—	—	—	—
C 32 3	S3	ME3L	7.677	8.169	8.091	24.580	—	5.591	73	—	—	—	—	—	—

C 32...SK / SC



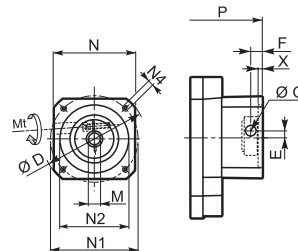
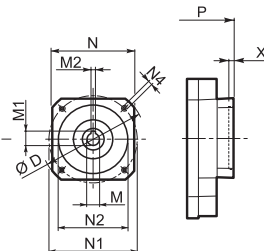
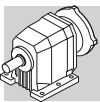
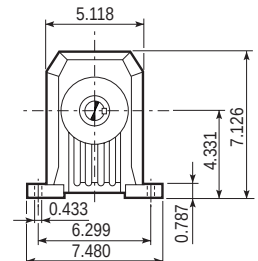
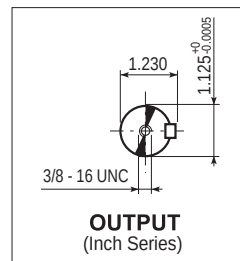
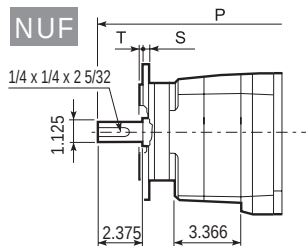
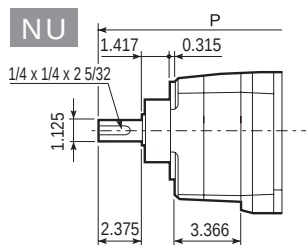
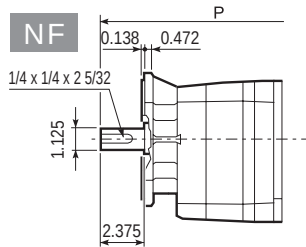
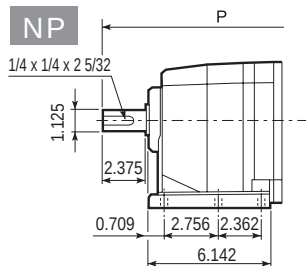
C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	P		Kg
											2x	3x	
C 32 2/3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	279	336.5	8/9
C 32 2/3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	286	343.5	9/10
C 32 2/3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	286	343.5	9/10
C 32 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	327	384.5	10/11
C 32 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	327	384.5	10/11
C 32 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	327	384.5	10/11
C 32 2	SK130A	188	24	27.3	8	142	165	130	M10x20	5	327	—	11

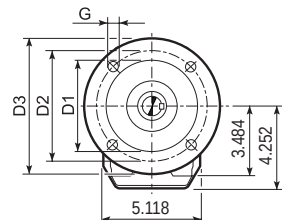
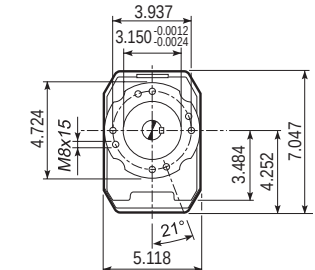
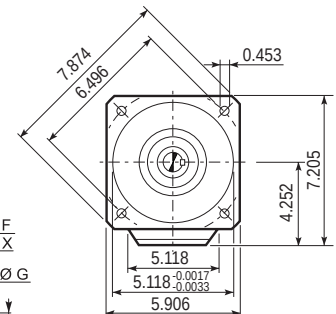
		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		Kg
													2x	3x	
C 32 2/3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	306	363.5	9/10
C 32 2/3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	306	363.5	10/11
C 32 2/3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	306	363.5	10/11
C 32 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	350.5	408	11/12
C 32 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	350.5	408	12/13
C 32 2/3	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	350.5	408	12/13
C 32 2	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	350.5	—	13

C 32...SK / SC



SK...

SC...



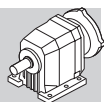
C 32 NU						
	D1	D2	D3	G	T	S
FA	4.331	5.118	6.299	0.354	0.118	0.394
FB	5.118	6.496	7.874	0.433	0.138	0.433
FC	7.087	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic* [mm]

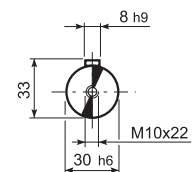
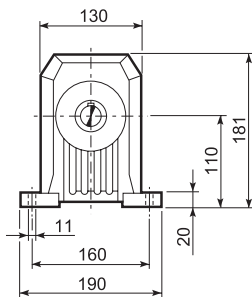
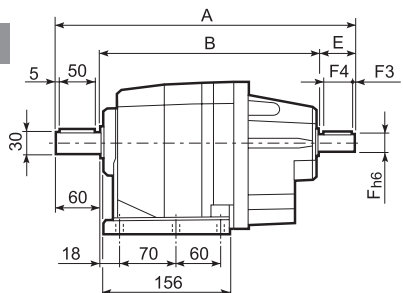
		D	M	M1	M2	N	N1	N2	N4	X	2x	3x	lbs
C 32 2/3	SK60A	4.016	0.433	0.504	0.157	3.228	2.953	2.362	M5x10	0.138	11.309	13.573	18/20
C 32 2/3	SK60B	4.016	0.551	0.642	0.197	3.228	2.953	2.362	M5x10	0.157	11.585	13.849	20/22
C 32 2/3	SK80A	4.528	0.551	0.642	0.197	3.543	3.937	3.150	M6x12	0.157	11.585	13.849	20/22
C 32 2/3	SK80C	4.724	0.748	0.858	0.236	3.780	3.937	3.150	M6x12	0.157	13.199	15.463	22/24
C 32 2/3	SK95A	5.118	0.551	0.642	0.197	4.016	4.528	3.740	M8x12	0.157	13.199	15.463	22/24
C 32 2/3	SK95B	5.118	0.748	0.858	0.236	4.016	4.528	3.740	M8x12	0.157	13.199	15.463	22/24
C 32 2/3	SK95C	5.118	0.945	1.075	0.315	4.016	4.528	3.740	M8x12	0.157	13.199	15.463	22/24
C 32 2/3	SK110A	5.906	0.748	0.858	0.236	4.724	5.118	4.331	M8x12	0.197	13.199	15.463	22/24
C 32 2/3	SK110B	5.906	0.945	1.075	0.315	4.724	5.118	4.331	M8x12	0.197	13.199	15.463	22/24
C 32 2	SK130A	7.402	0.945	1.075	0.315	5.591	6.496	5.118	M10x20	0.197	13.199	—	24

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	2x	3x	lbs
C 32 2/3	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433	3.228	2.953	2.362	M5x10	0.157	12.372	14.636	20/22
C 32 2/3	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551	3.228	2.953	2.362	M5x10	0.157	12.372	14.636	22/24
C 32 2/3	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551	3.543	3.937	3.150	M6x12	0.157	12.372	14.636	22/24
C 32 2/3	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748	3.780	3.937	3.150	M6x12	0.157	14.124	16.388	24/26
C 32 2/3	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551	4.016	4.528	3.740	M8x16	0.157	14.124	16.388	24/26
C 32 2/3	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748	4.016	4.528	3.740	M8x16	0.157	14.124	16.388	24/26
C 32 2/3	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945	4.016	4.528	3.740	M8x16	0.157	14.124	16.388	24/26
C 32 2/3	SC 110A	M6 133	5.906	0.650	0.630	0.699	0.748	4.724	5.118	4.331	M8x16	0.197	14.124	16.388	26/29
C 32 2/3	SC 110B	M6 133	5.906	0.650	0.630	0.699	0.945	4.724	5.118	4.331	M8x16	0.197	14.124	16.388	26/29
C 32 2	SC 130A	M6 133	7.402	0.748	0.630	0.699	0.945	5.591	6.496	5.118	M10x20	0.197	14.124	—	29

C 32...HS

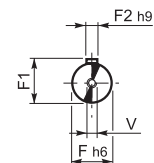
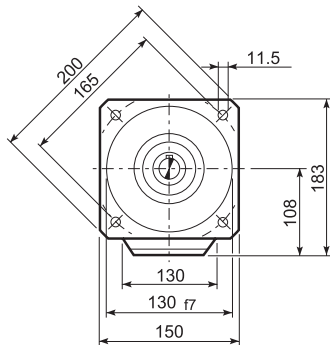
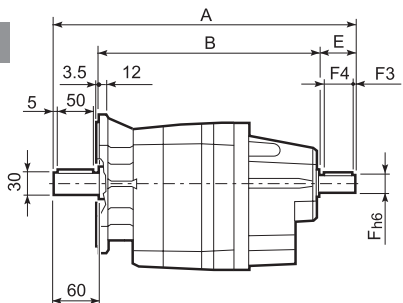


P



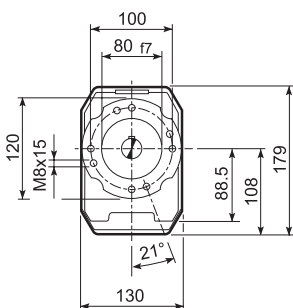
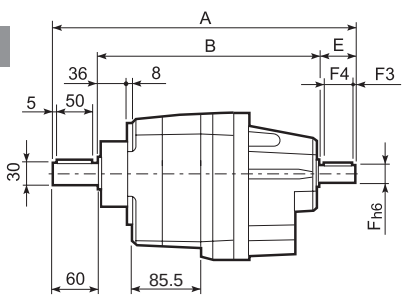
OUTPUT

F

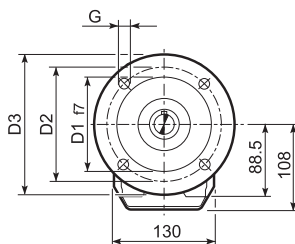
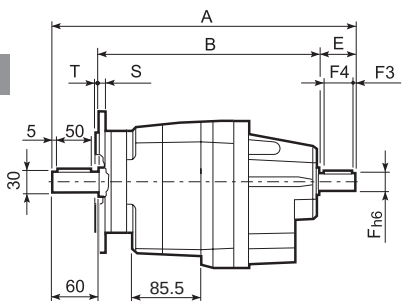


INPUT

U



UF



C 32_U

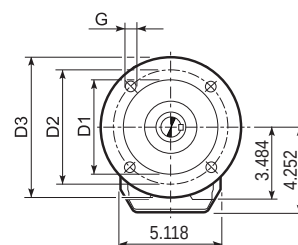
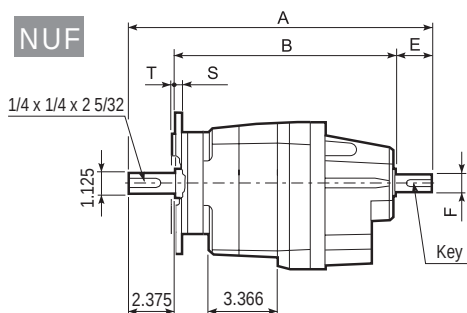
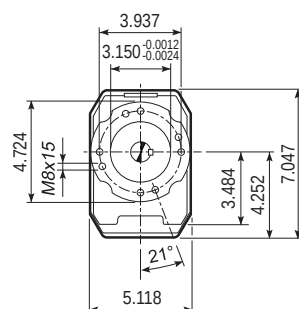
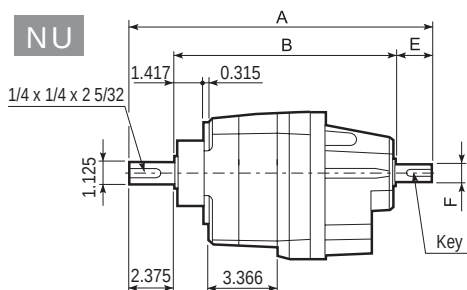
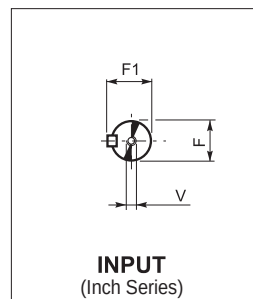
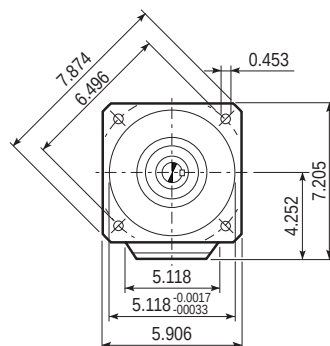
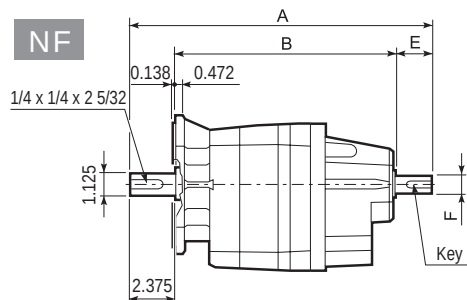
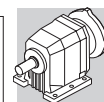
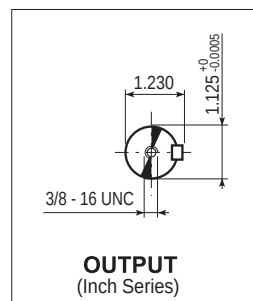
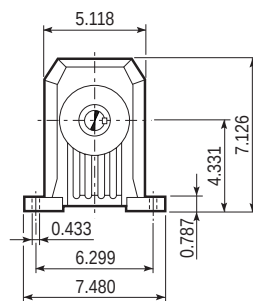
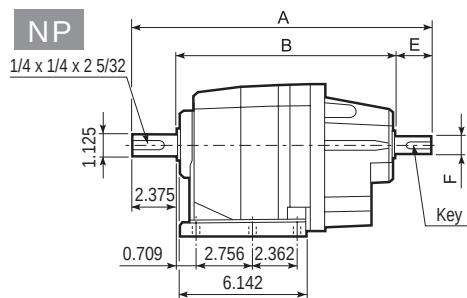
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 32 2	HS	357.5	257.5	40	19	21.5	6	2.5	35	M6x16	11.1
C 32 3		372	272	40	16	18	5	2.5	35	M6x16	10.6

Metric output versions available also in combination with NHS input

C 32...NHS



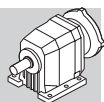
C 32 NU						
	D1	D2	D3	G	T	S
FA	4.331 ^{-0.0014} / _{-0.0028}	5.118	6.299	0.354	0.118	0.394
FB	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FC	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic* [mm]

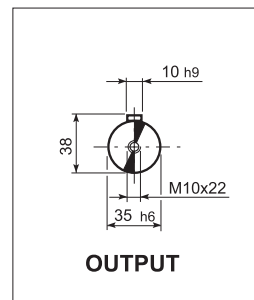
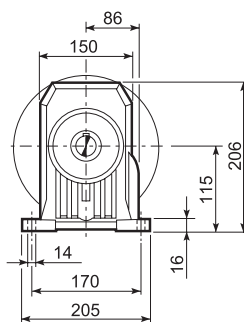
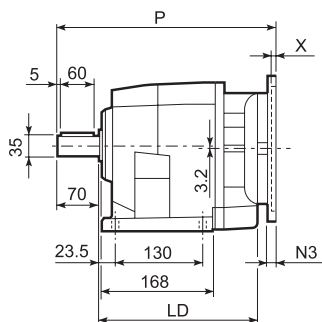
		A	B	E	F	F1	V	Key	lbs
	NHS	14.088	10.138	1.575	0.750 ⁺⁰ / _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	24
		14.658	10.709	1.575	0.625 ⁺⁰ / _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	23

Imperial output versions available also in combination with HS input

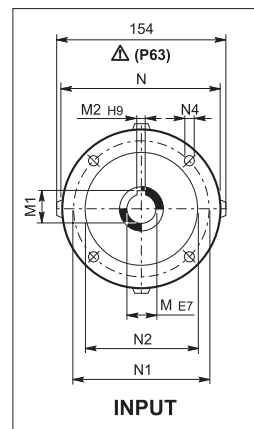
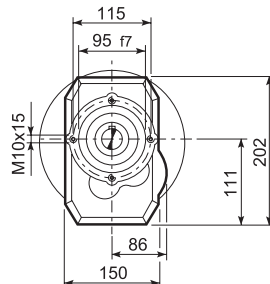
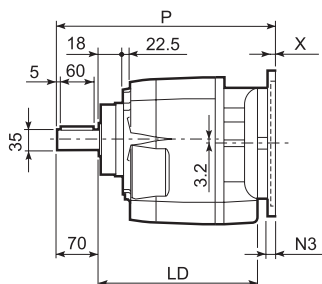
C 36...P(IEC)



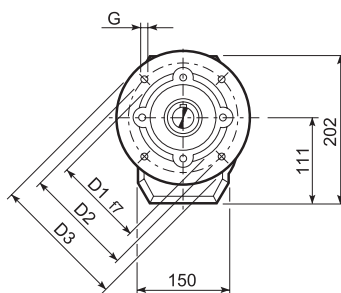
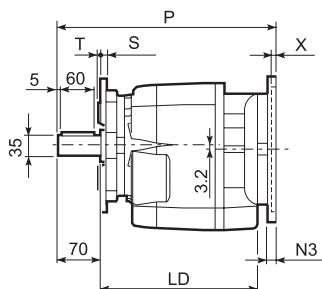
P



U



UF



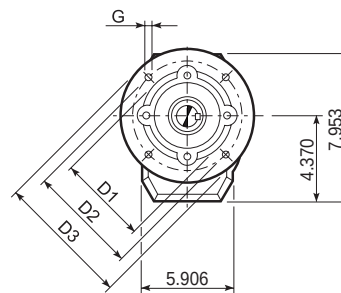
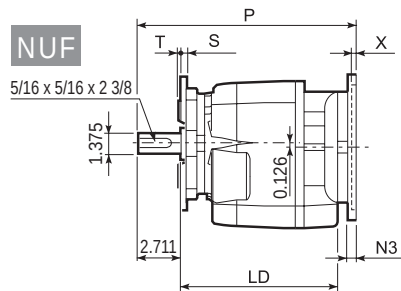
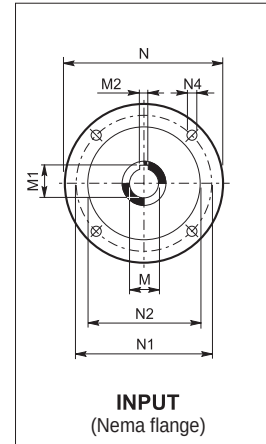
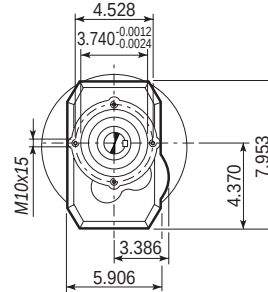
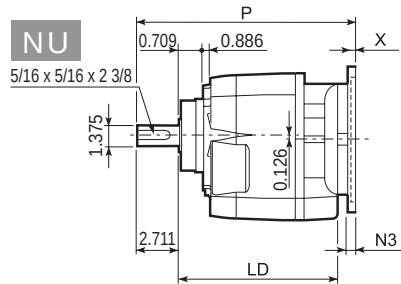
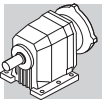
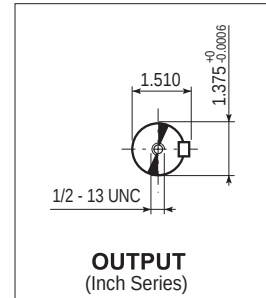
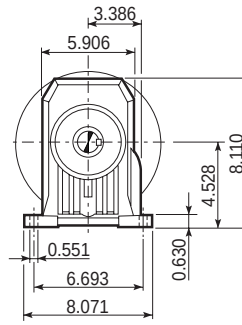
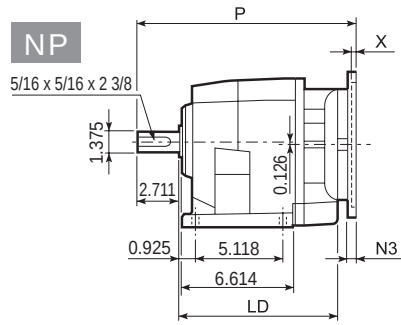
C 36_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	14

Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	kg
C 36 2/3	P63	226	11	12.8	4	140	115	95	—	M8x19	4	326	17
C 36 2/3	P71	226	14	16.3	5	160	130	110	—	M8x16	4.5	326	17
C 36 2/3	P80	236	19	21.8	6	200	165	130	—	M10x14.5	4	345.5	18
C 36 2/3	P90	236	24	27.3	8	200	165	130	—	M10x14.5	4	345.5	18
C 36 2/3	P100	236	28	31.3	8	250	215	180	—	M12x16	4.5	355.5	22
C 36 2/3	P112	236	28	31.3	8	250	215	180	—	M12x16	4.5	355.5	22
C 36 2/3	P132	—	38	41.3	10	300	265	230	16	14	5	392.5	25
C 36 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	383.5	20
C 36 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	383.5	20
C 36 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	403	21
C 36 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	403	21
C 36 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	413	25
C 36 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	413	25

Metric output versions available also in combination with NEMA motor adaptor

C 36...N(NEMA Input)



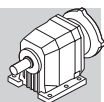
C 36 NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.551

Dimensions are in Inch except when shown in *italic* [mm]

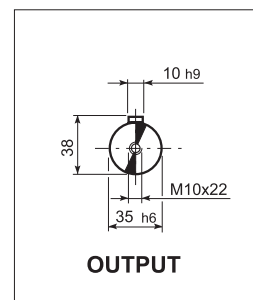
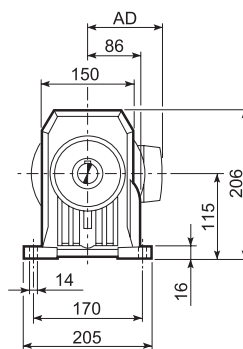
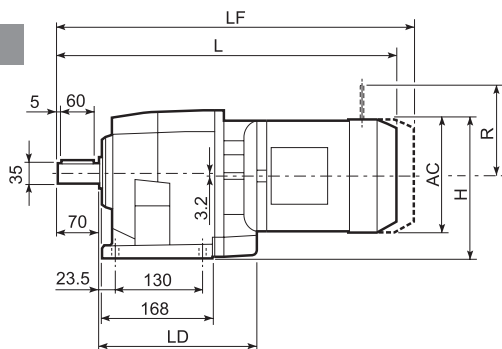
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
C 36 2/3	N56C	8.898	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.577	37
C 36 2/3	N140TC	8.898	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.577	40
C 36 2/3	N180TC	9.291	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	14.404	49
C 36 2/3	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	15.585	55
C 36 4	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.841	44
C 36 4	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.841	46
C 36 4	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	16.667	55

Imperial output versions available also in combination with IEC motor adaptor

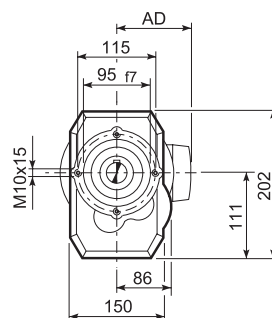
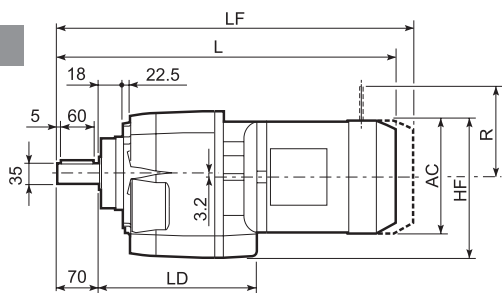
C 36...M/ME



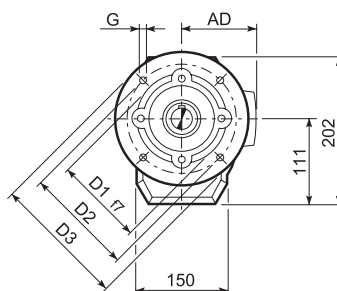
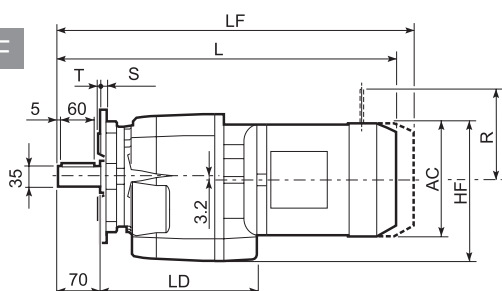
P



U



UF

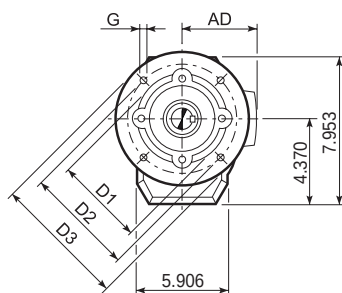
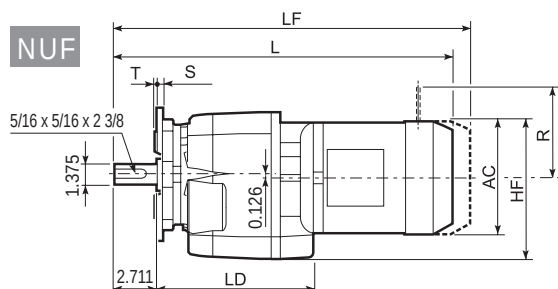
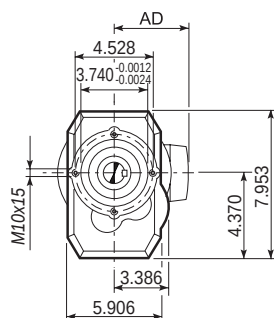
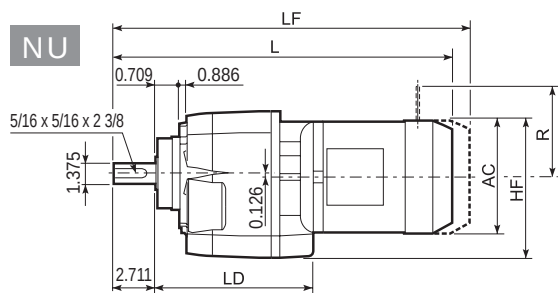
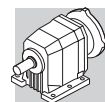
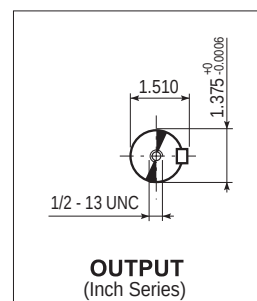
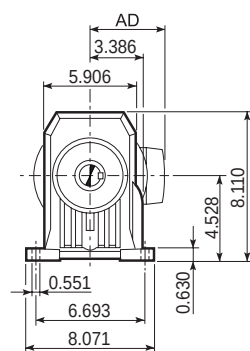
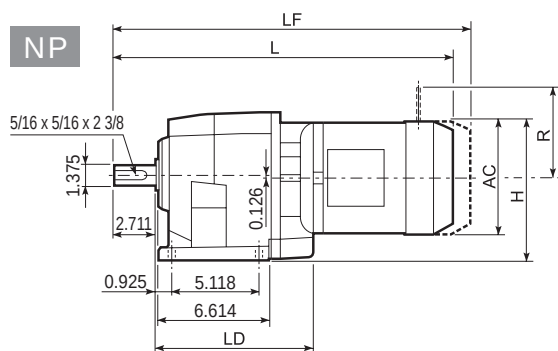


C 36_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	14

Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD	Kg	LF	Kg	R	AD	R	AD
C 36 2/3	S1	M1	138	184	177	481	214	108	20	542	21	103	135	124	108
C 36 2/3	S2	ME2S	156	193	186	509	226	119	23	—	—	—	—	—	—
C 36 2/3	S3	ME3S	195	212.5	205.5	553	236	142	29.5	—	—	—	—	—	—
C 36 2/3	S3	ME3L	195	212.5	205.5	585	236	142	37	—	—	—	—	—	—
C 36 2/3	S4	ME4	258	244	240	693.5	—	193	71	—	—	—	—	—	—
C 36 2/3	S4	ME4LB	258	244	240	728.5	—	193	79	—	—	—	—	—	—
C 36 4	S05	M05	121	175.5	168.5	509.5	—	95	19	575.5	20	96	122	116	95
C 36 4	S1	M1	138	184	177	538.5	—	108	21	599.5	22	103	135	124	108
C 36 4	S2	ME2S	156	193	186	566.5	—	119	24	—	—	—	—	—	—
C 36 4	S3	ME3S	195	212.5	205.5	610.5	—	142	30.5	—	—	—	—	—	—
C 36 4	S3	ME3L	195	212.5	205.5	642.5	—	142	38	—	—	—	—	—	—

C 36...M/ME

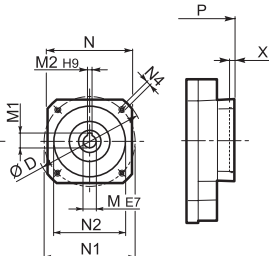
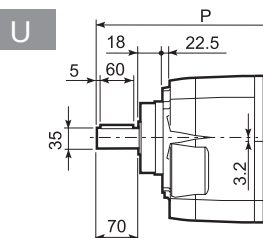
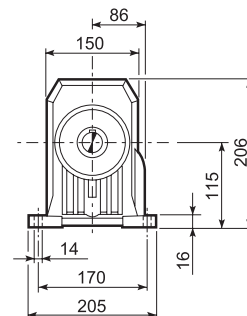
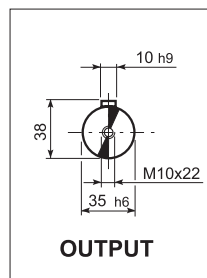
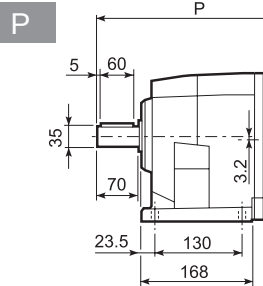
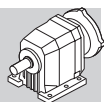


C 36_NU						
	D1	D2	D3	G	T	S
FA	5.118 -0.0017 -0.0033	6.496	7.874	0.433	0.138	0.433
FB	7.087 -0.0017 -0.0033	8.465	9.843	0.551	0.157	0.551

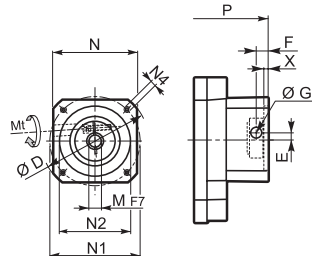
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	HF	L	LD	AD	lbs	M...FD M...FA		M...FD		M...FA	
										LF	lbs	R	AD	R	AD
C 36 2/3	S1	M1	5.433	7.244	6.969	18.892	8.425	4.252	44	21.293	46	4.055	5.315	4.882	4.252
C 36 2/3	S2	ME2S	6.142	7.598	7.323	19.994	8.898	4.685	51	—	—	—	—	—	—
C 36 2/3	S3	ME3S	7.677	8.366	8.091	21.726	9.291	5.591	65	—	—	—	—	—	—
C 36 2/3	S3	ME3L	7.677	8.366	8.091	22.986	9.291	5.591	82	—	—	—	—	—	—
C 36 2/3	S4	ME4	10.157	9.606	9.449	27.303	—	7.598	157	—	—	—	—	—	—
C 36 2/3	S4	ME4LB	10.157	9.606	9.449	28.636	—	7.598	174	—	—	—	—	—	—
C 36 4	S05	M05	4.764	6.909	6.634	20.014	—	3.740	42	22.612	44	3.780	4.803	4.567	3.740
C 36 4	S1	M1	5.433	7.244	6.969	21.156	—	4.252	46	23.557	49	4.055	5.315	4.882	4.252
C 36 4	S2	ME2S	6.142	7.598	7.323	22.258	—	4.685	53	—	—	—	—	—	—
C 36 4	S3	ME3S	7.677	8.366	8.091	23.990	—	5.591	67	—	—	—	—	—	—
C 36 4	S3	ME3L	7.677	8.366	8.091	25.250	—	5.591	84	—	—	—	—	—	—

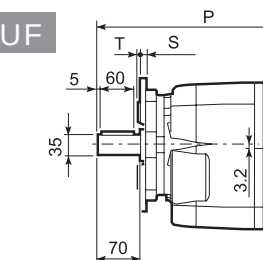
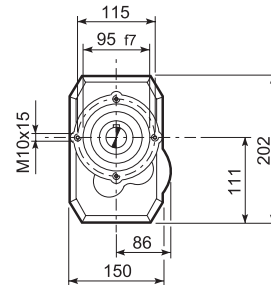
C 36...SK / SC



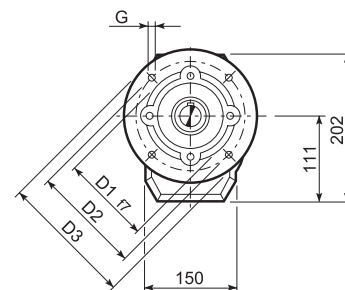
SK...



SC...



C 36_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	14

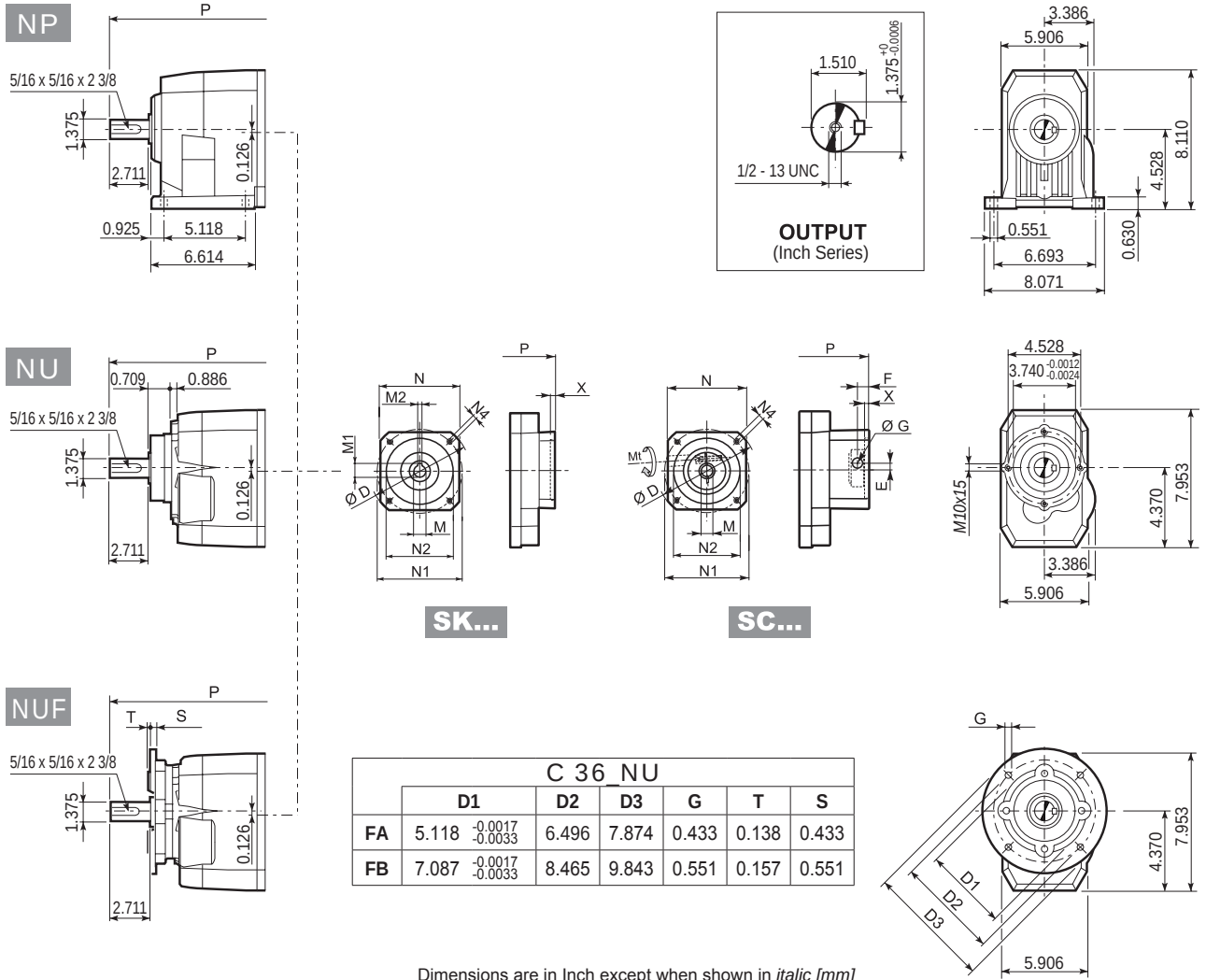


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x	Kg
C 36 2/3/4	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	297.5	355	16/16/19
C 36 2/3/4	SK60B	102	14	16.3	5	82	75	60	M5x10	4	304.5	362	17/17/20
C 36 2/3/4	SK80A	115	14	16.3	5	90	100	80	M6x12	4	304.5	362	18/18/21
C 36 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	304.5	403	18/18/21
C 36 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	345.5	403	18/18/21
C 36 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	345.5	403	18/18/21
C 36 2/3	SK130A	188	24	27.3	8	142	165	130	M10x20	5	345.5	—	19/19

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x	Kg
C 36 2/3/4	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	324.5	382	17/17/20
C 36 2/3/4	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	324.5	382	18/18/21
C 36 2/3/4	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	324.5	426.5	18/18/21
C 36 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	369	426.5	19/19/22
C 36 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	369	426.5	21/21/24
C 36 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	369	426.5	21/21/24
C 36 2/3	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	369	—	22/22

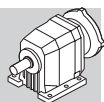
C 36...SK / SC



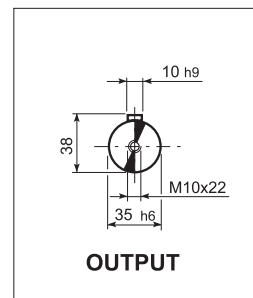
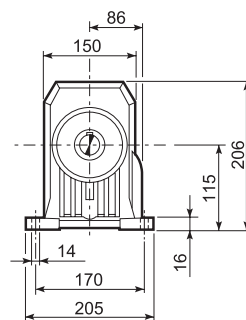
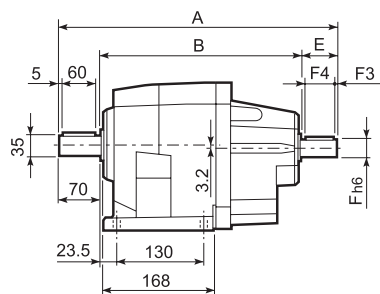
		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x	lbs
C 36 2/3/4	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	11.667	13.931	35/35/42
C 36 2/3/4	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	11.943	14.207	37/37/44
C 36 2/3/4	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	11.943	14.207	40/40/46
C 36 2/3/4	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	11.943	15.821	40/40/46
C 36 2/3/4	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.557	15.821	40/40/46
C 36 2/3/4	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.557	15.821	40/40/46
C 36 2/3/4	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.557	15.821	40/40/46
C 36 2/3/4	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	13.557	15.821	40/40/46
C 36 2/3/4	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	13.557	15.821	40/40/46
C 36 2/3	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	13.557	—	42/42

			Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x	lbs
C 36 2/3/4	SC60A	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	12.730	14.994	37/37/44
C 36 2/3/4	SC60B	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	12.730	14.994	40/40/46
C 36 2/3/4	SC80A	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	12.730	16.746	40/40/46
C 36 2/3/4	SC80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	14.482	16.746	42/42/49
C 36 2/3/4	SC95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	14.482	16.746	42/42/49
C 36 2/3/4	SC95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.482	16.746	42/42/49
C 36 2/3/4	SC95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.482	16.746	42/42/49
C 36 2/3/4	SC110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.482	16.746	46/46/53
C 36 2/3/4	SC110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.482	16.746	46/46/53
C 36 2/3	SC130A	M6	133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	14.482	—	49/49

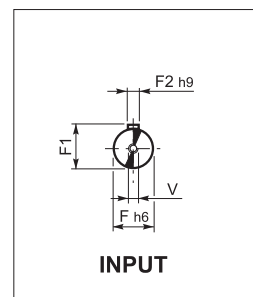
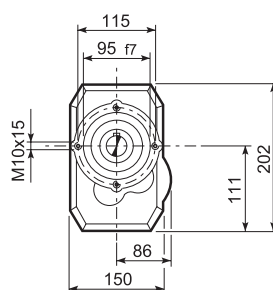
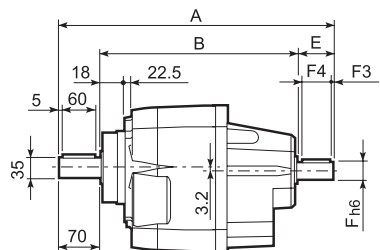
C 36...HS



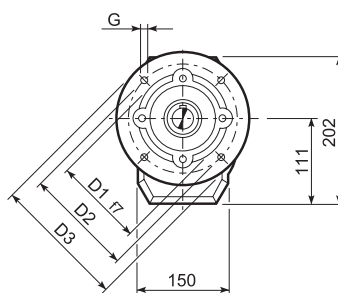
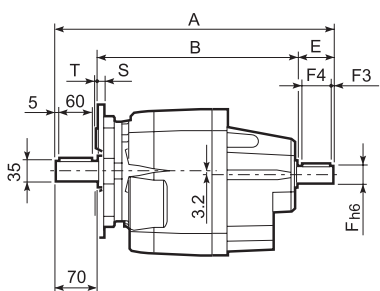
P



U



UF



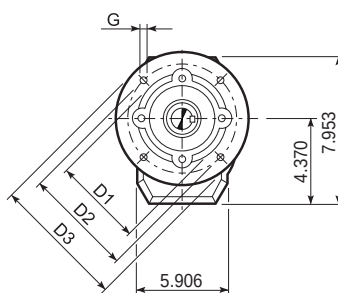
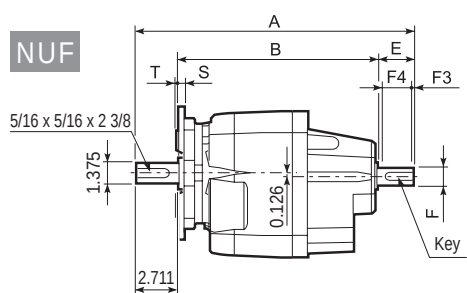
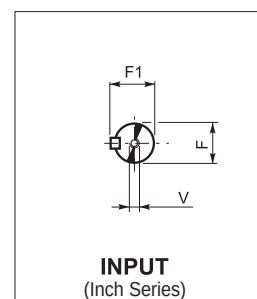
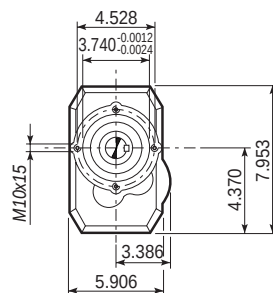
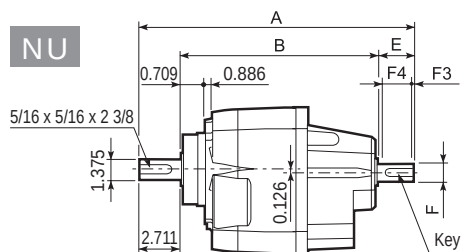
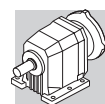
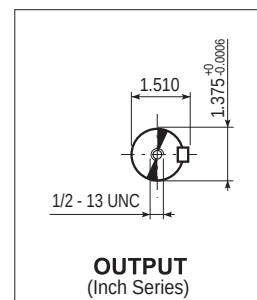
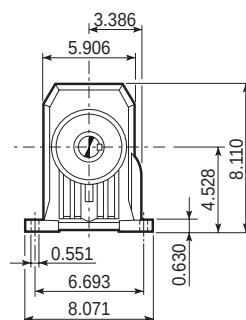
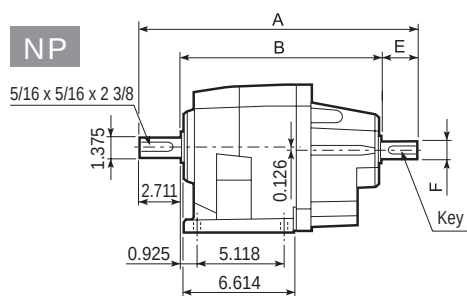
C 36_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	14

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 36 2	HS	415.5	295.5	50	24	27	8	2.5	45	M8x19	25.5
C 36 3		415.5	295.5	50	24	27	8	2.5	45	M8x19	25.5
C 36 4		390.5	280.5	40	16	18	5	2.5	36	M6x16	26.5

Metric output versions available also in combination with NHS input

C 36...NHS



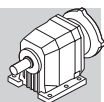
C 36 NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.551

Dimensions are in Inch except when shown in *italic [mm]*

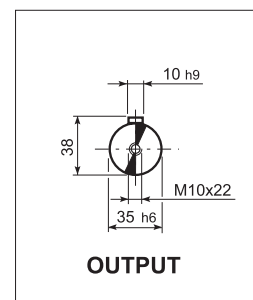
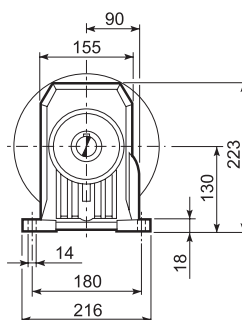
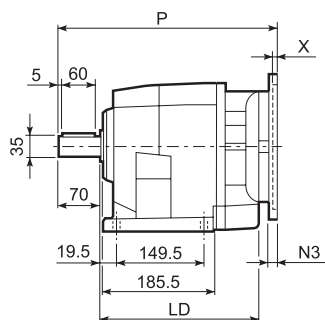
		A	B	E	F	F1	V	Key	lbs
	NHS	16.313	11.634	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	56
C 36 2		16.313	11.634	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	56
C 36 3		15.329	11.043	1.575	0.625 ⁺⁰ / _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	58

Imperial output versions available also in combination with HS input

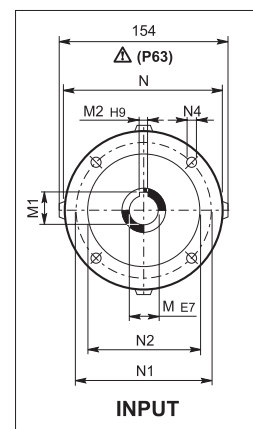
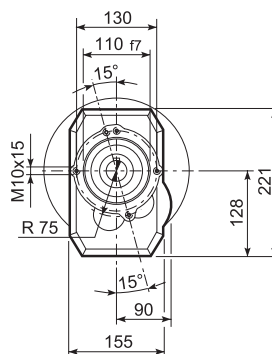
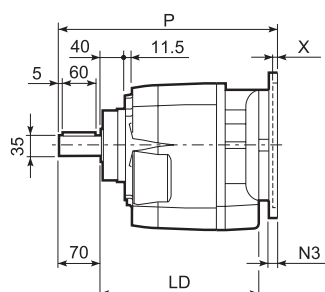
C 41...P(IEC)



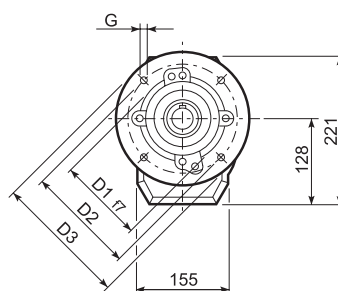
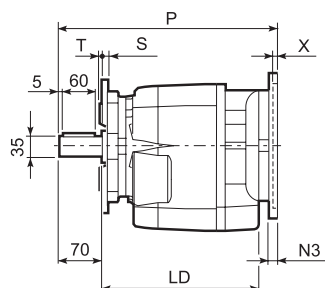
P



U



UF



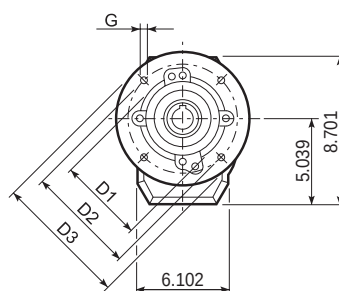
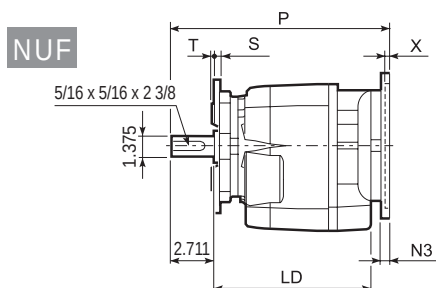
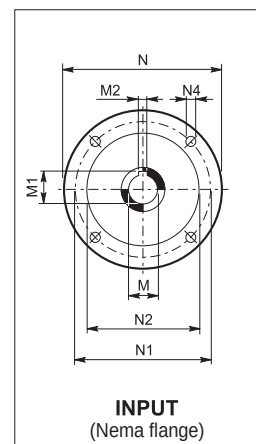
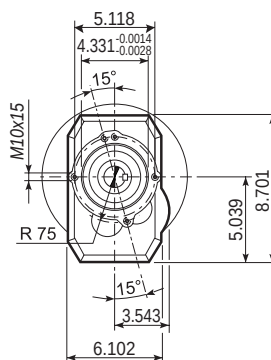
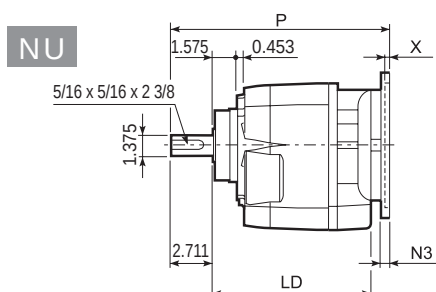
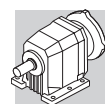
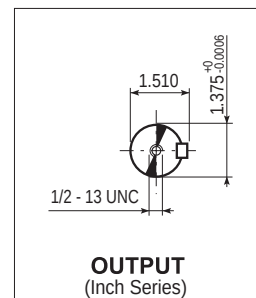
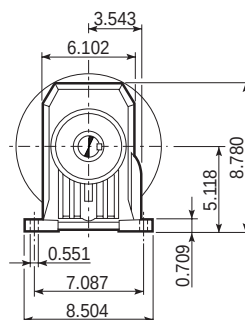
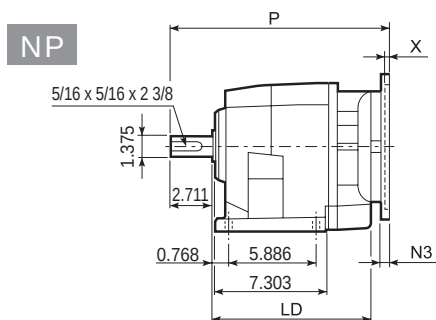
C 41_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	13

Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	kg
C 41 2/3	P63	235.5	11	12.8	4	140	115	95	—	M8x19	4	336.5	27
C 41 2/3	P71	235.5	14	16.3	5	160	130	110	—	M8x16	4.5	336.5	28
C 41 2/3	P80	251.5	19	21.8	6	200	165	130	—	M10x14.5	4	356	29
C 41 2/3	P90	251.5	24	27.3	8	200	165	130	—	M10x14.5	4	356	29
C 41 2/3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	366	33
C 41 2/3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	366	33
C 41 2/3	P132	—	38	41.3	10	300	265	230	16	14	5	402.5	35
C 41 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	395	30
C 41 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	395	31
C 41 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	414.5	32
C 41 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	414.5	32
C 41 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	424.5	36
C 41 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	424.5	36

Metric output versions available also in combination with NEMA motor adaptor

C 41...N(NEMA Input)



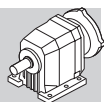
C 41 NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic* [mm]

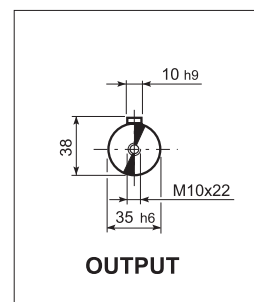
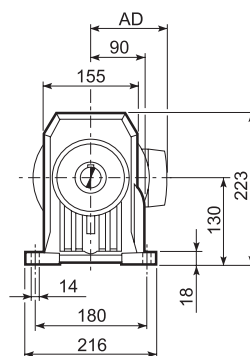
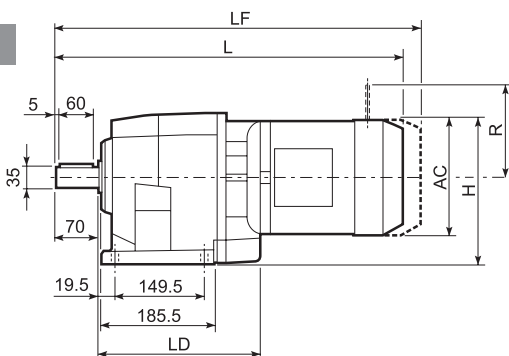
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 41 2/3	N56C	9.272	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.990	62
C 41 2/3	N140TC	9.272	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.990	64
C 41 2/3	N180TC	9.902	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	14.738	73
C 41 2/3	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	15.978	77
C 41 4	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.293	68
C 41 4	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.293	71
C 41 4	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	17.120	79

Imperial output versions available also in combination with IEC motor adaptor

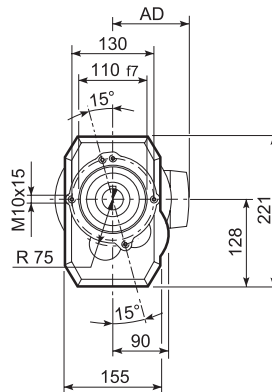
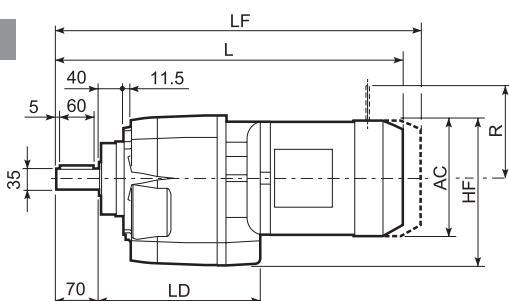
C 41...M/ME



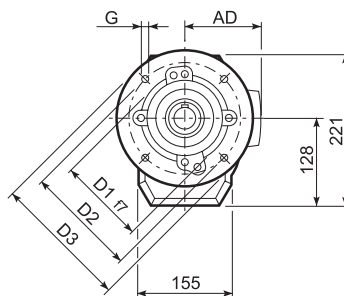
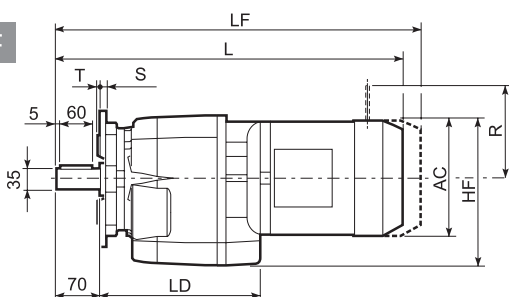
P



U



UF

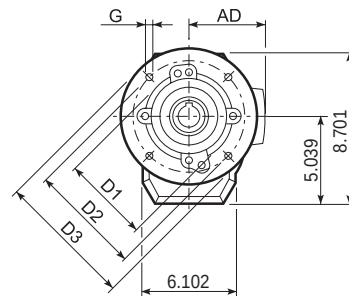
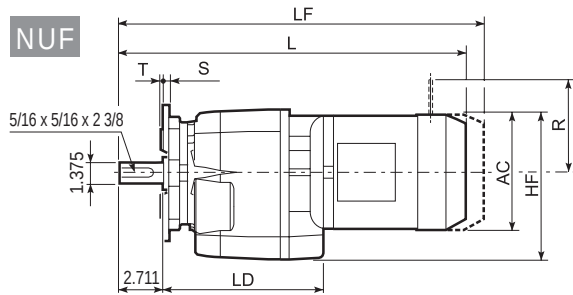
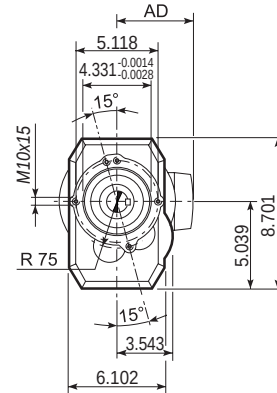
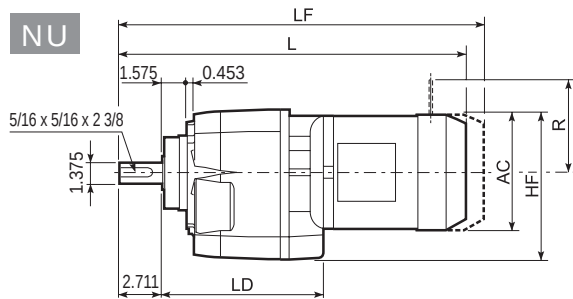
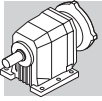
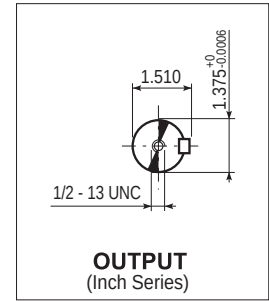
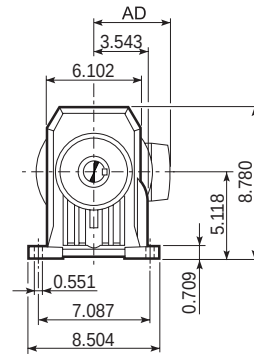
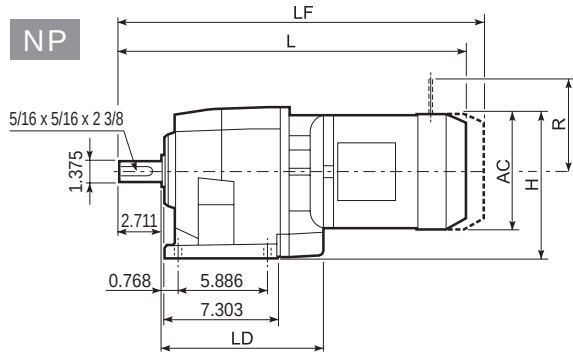


C 41_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	13

Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD	Kg	LF	Kg	R	AD	R	AD
C 41 2/3	S1	M1	138	199	197	491.5	220	108	25	552.5	28	103	135	124	108
C 41 2/3	S2	ME2S	156	208	206	519.5	235.5	119	31	—	—	—	—	—	—
C 41 2/3	S3	ME3S	195	227.5	225.5	563.5	251.5	142	37.5	—	—	—	—	—	—
C 41 2/3	S3	ME3L	195	227.5	225.5	595.5	251.5	142	45	—	—	—	—	—	—
C 41 2/3	S4	ME4	258	259	257	703.5	—	193	71	—	—	—	—	—	—
C 41 2/3	S4	ME4LB	258	259	257	739	—	193	78	—	—	—	—	—	—
C 41 4	S05	M05	231	245.5	243.5	524	—	95	27	590	28	96	122	116	95
C 41 4	S1	M1	138	199	197	553	—	108	28	614	31	103	135	124	108
C 41 4	S2	ME2S	156	208	206	581	—	119	34	—	—	—	—	—	—
C 41 4	S3	ME3S	195	227.5	225.5	625	—	142	40.5	—	—	—	—	—	—
C 41 4	S3	ME3L	195	227.5	225.5	657	—	142	48	—	—	—	—	—	—

C 41...M/ME

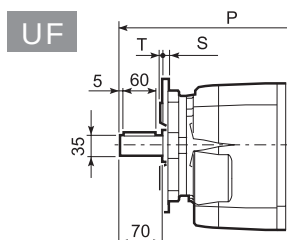
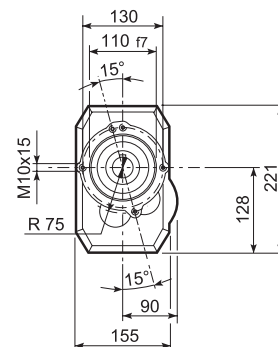
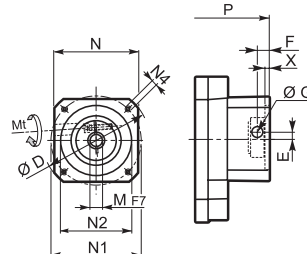
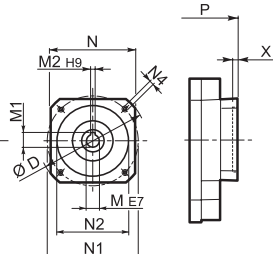
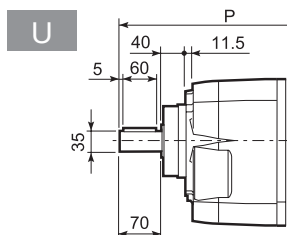
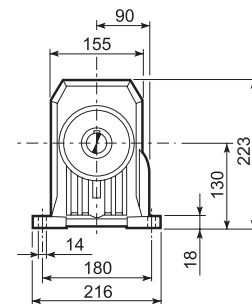
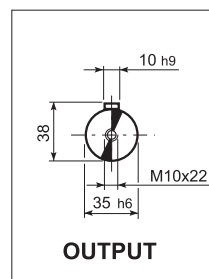
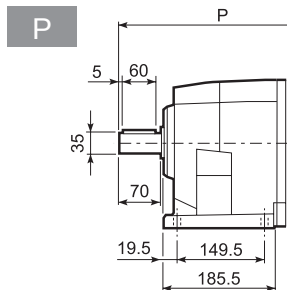
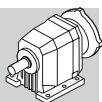


C 41 NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic [mm]*

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD	lbs	LF	lbs	R	AD	R	AD
C 41 2/3	S1	M1	5.433	7.835	7.756	19.305	8.661	4.252	55	21.707	62	4.055	5.315	4.882	4.252
C 41 2/3	S2	ME2S	6.142	8.189	8.110	20.407	9.272	4.685	68	—	—	—	—	—	—
C 41 2/3	S3	ME3S	7.677	8.957	8.878	22.140	9.902	5.591	83	—	—	—	—	—	—
C 41 2/3	S3	ME3L	7.677	8.957	8.878	23.400	9.902	5.591	99	—	—	—	—	—	—
C 41 2/3	S4	ME4	10.157	10.197	10.118	27.652	—	7.598	157	—	—	—	—	—	—
C 41 2/3	S4	ME4LB	10.157	10.197	10.118	29.049	—	7.598	172	—	—	—	—	—	—
C 41 4	S05	M05	9.094	9.665	9.587	20.585	—	3.740	60	23.183	62	3.780	4.803	4.567	3.740
C 41 4	S1	M1	5.433	7.835	7.756	21.726	—	4.252	62	24.128	68	4.055	5.315	4.882	4.252
C 41 4	S2	ME2S	6.142	8.189	8.110	22.829	—	4.685	75	—	—	—	—	—	—
C 41 4	S3	ME3S	7.677	8.957	8.878	24.561	—	5.591	89	—	—	—	—	—	—
C 41 4	S3	ME3L	7.677	8.957	8.878	25.821	—	5.591	106	—	—	—	—	—	—

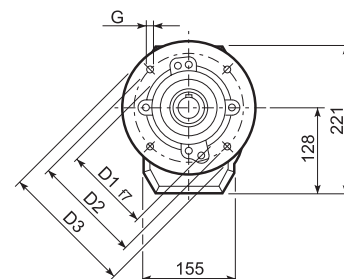
C 41...SK / SC



SK...

SC...

C 41_U					
	D1	D2	D3	G	T S
FA	130	165	200	11	3.5 11
FB	180	215	250	14	4 13

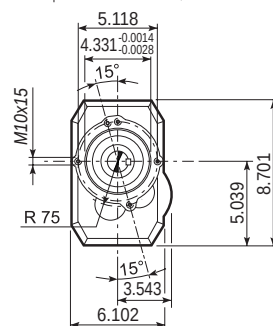
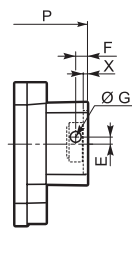
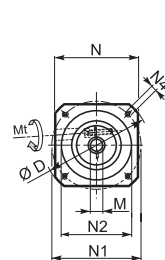
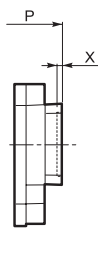
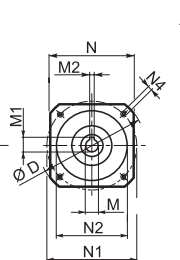
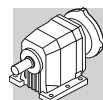
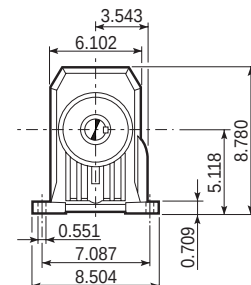
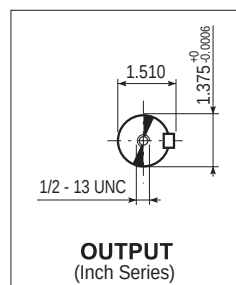
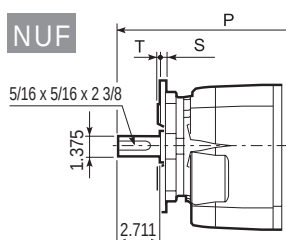
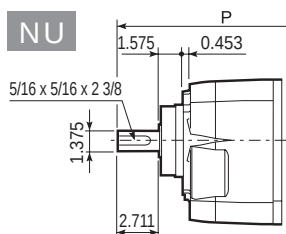
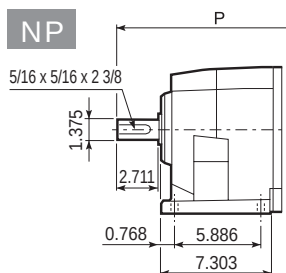


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	P 2/3x 4x	Kg
C41 4	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	—	31
C41 4	SK60B	102	14	16.3	5	82	75	60	M5x10	4	—	32
C41 4	SK80A	115	14	16.3	5	90	100	80	M6x12	4	—	32
C41 2/3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	356.5	29/29
C41 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	356.5	29/29/32
C41 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	356.5	29/29/32
C41 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	356.5	29/29/33
C41 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	356.5	29/29/36
C41 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	356.5	29/29/36
C41 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	356.5	29/29/36
C41 2/3	SK130A	188	24	27.3	8	142	165	130	M10x20	5	356.5	31/31
C41 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	403	33/33
C41 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	403	33/33
C41 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	403	38/38

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P 2/3x 4x	Kg
C41 4	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	397
C41 4	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	397
C41 4	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	397
C41 2/3	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	380
C41 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	380
C41 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	380
C41 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	380
C41 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	380
C41 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	380
C41 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	380
C41 2/3	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	380
C41 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	426
C41 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	430
C41 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	430

C 41...SK / SC



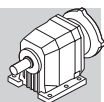
C 41 NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic* [mm]

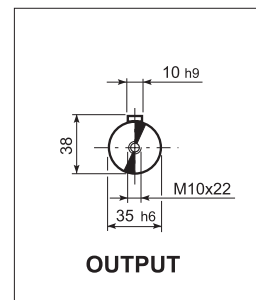
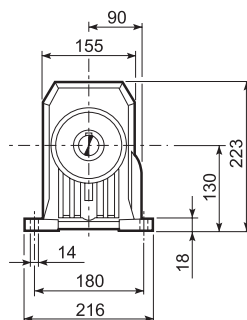
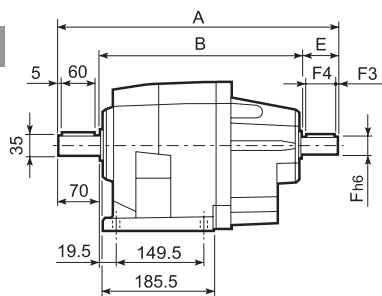
		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x	lbs
C41 4	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	—	14.522	68
C41 4	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	—	14.797	71
C41 4	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	—	14.797	71
C41 2/3	SK80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	13.990	—	64/64
C41 2/3/4	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	13.990	16.411	64/64/71
C41 2/3/4	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.990	16.411	64/64/71
C41 2/3/4	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.990	16.411	64/64/73
C41 2/3/4	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	13.990	16.411	64/64/79
C41 2/3/4	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	13.990	16.411	64/64/79
C41 2/3/4	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	13.990	16.411	64/64/79
C41 2/3	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	13.990	—	68/68
C41 2/3	SK130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	15.821	—	73/73
C41 2/3	SK180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	15.821	—	73/73
C41 2/3	SK180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	15.821	—	84/84

			Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x	lbs
C41 4	SC60A	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	15.585	71
C41 4	SC60B	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	15.585	73
C41 4	SC80A	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	—	15.585	73
C41 2/3	SC80B	M6	133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	14.915	—	66/66
C41 2/3/4	SC80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	14.915	17.337	66/66/73
C41 2/3/4	SC95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	14.915	17.337	66/66/75
C41 2/3/4	SC95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.915	17.337	66/66/75
C41 2/3/4	SC95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.915	17.337	66/66/77
C41 2/3/4	SC110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.915	17.337	68/68/86
C41 2/3/4	SC110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.915	17.337	68/68/86
C41 2/3	SC130A	M6	133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	14.915	—	71/71
C41 2/3	SC130B	M8	319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	16.726	—	79/79
C41 2/3	SC180A	M8	319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	16.884	—	79/79
C41 2/3	SC180B	M8	319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	16.884	—	77/77

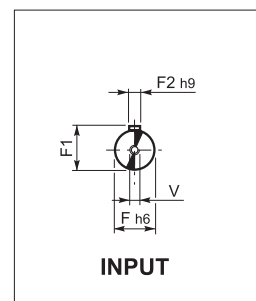
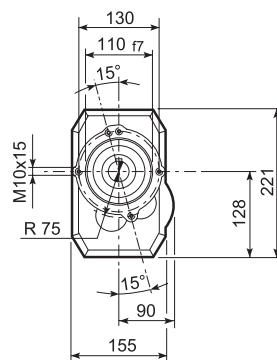
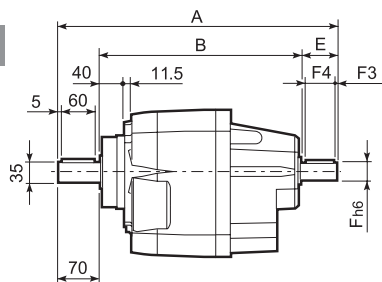
C 41...HS



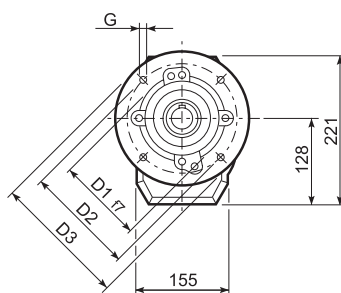
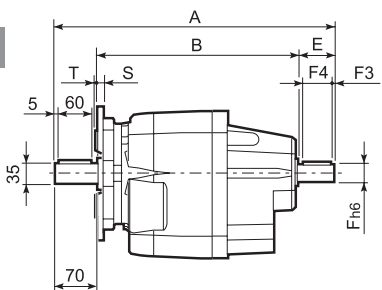
P



U



UF



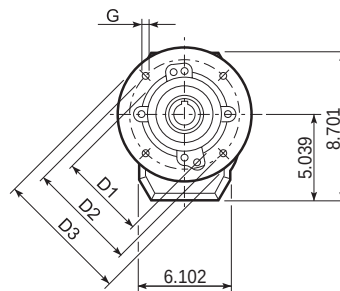
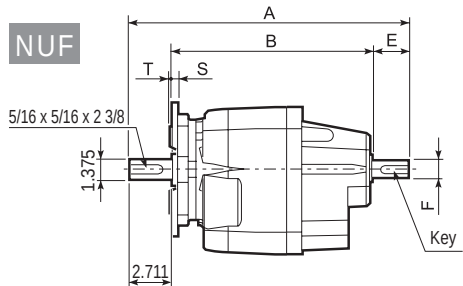
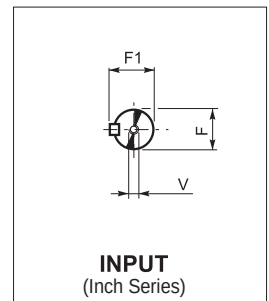
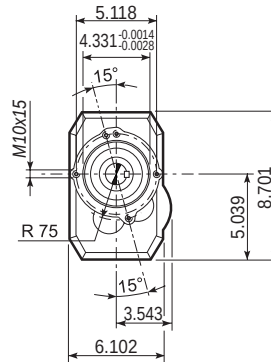
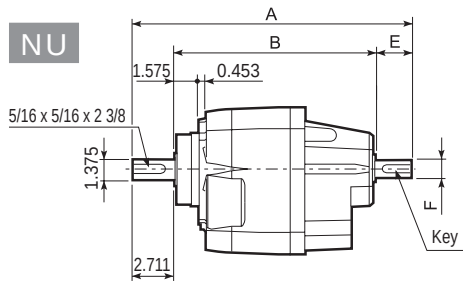
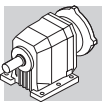
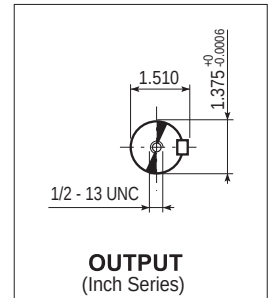
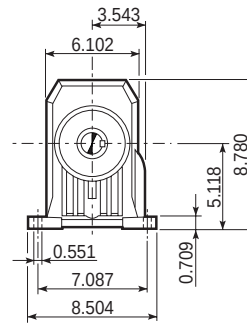
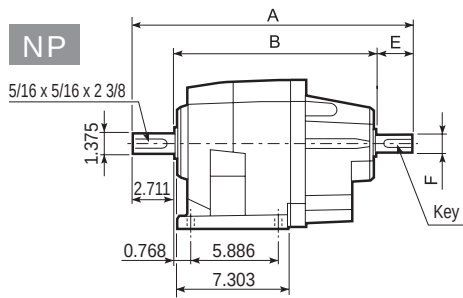
C 41_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	13

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 41 2	HS	425.5	305.5	50	24	27	8	2.5	45	M8x19	30
C 41 3		425.5	305.5	50	24	27	8	2.5	45	M8x19	30
C 41 4		448	338	40	19	21.5	6	2.5	35	M6x16	33

Metric output versions available also in combination with NHS input

C 41...NHS



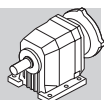
C 41_NU						
	D1	D2	D3	G	T	S
FA	5.118 ^{-0.0017} / _{-0.0033}	6.496	7.874	0.433	0.138	0.433
FB	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512

Dimensions are in Inch except when shown in *italic [mm]*

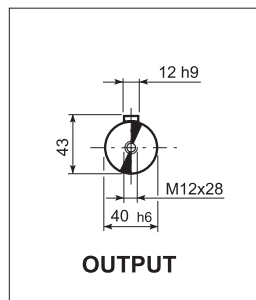
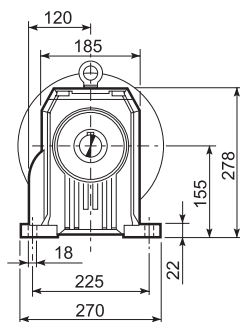
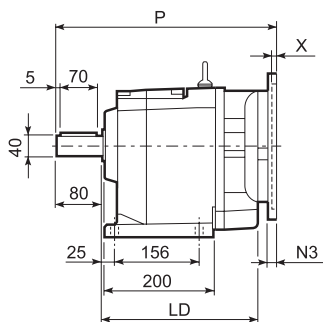
		A	B	E	F	F1	V	Key	lbs
	NHS	16.707	12.028	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	66
		16.707	12.028	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	66
		17.593	13.307	1.575	0.750 ⁺⁰ / _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	73

Imperial output versions available also in combination with HS input

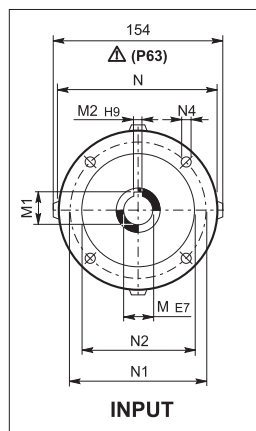
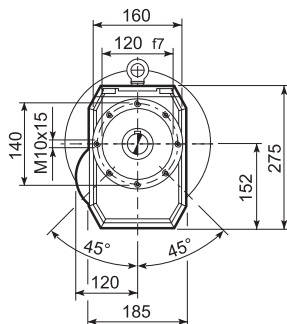
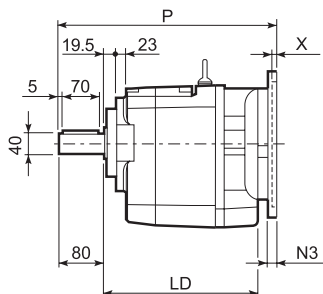
C 51...P(IEC)



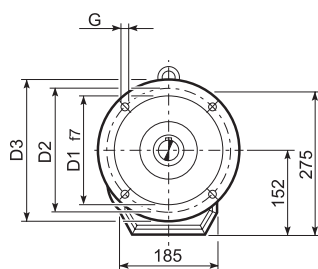
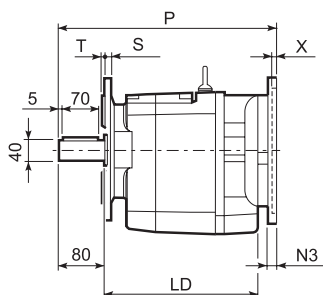
P



U



UF



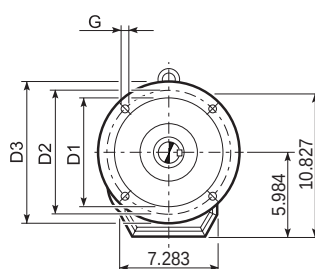
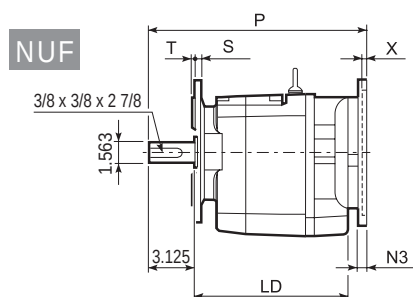
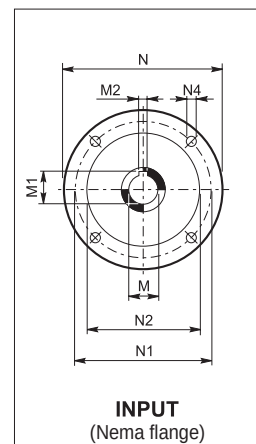
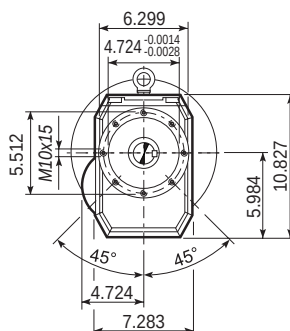
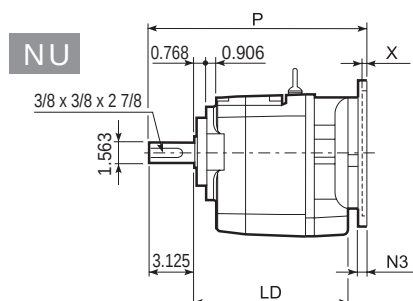
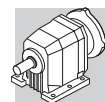
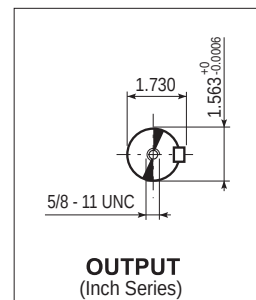
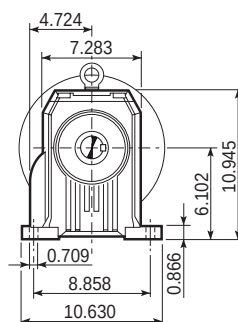
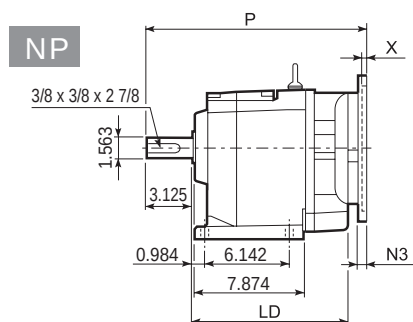
C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	⊙ Kg
C 51 2/3	P63	252.5	11	12.8	4	140	115	95	—	M8x19	4	362.5	45
C 51 2/3	P71	252.5	14	16.3	5	160	130	110	—	M8x16	4.5	362.5	45
C 51 2/3	P80	267.5	19	21.8	6	200	165	130	—	M10x14.5	4	382	47
C 51 2/3	P90	267.5	24	27.3	8	200	165	130	—	M10x14.5	4	382	47
C 51 2/3	P100	252.5	28	31.3	8	250	215	180	—	M12x16	4.5	392	51
C 51 2/3	P112	252.5	28	31.3	8	250	215	180	—	M12x16	4.5	392	51
C 51 2/3	P132	252.5	38	41.3	10	300	265	230	16	14	5	428.5	54
C 51 2/3	P160	—	42	45.3	12	350	300	250	23	18	5.5	479	58
C 51 2/3	P180	—	48	51.8	14	350	300	250	23	18	5.5	479	58
C 51 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	434	47
C 51 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	434	47
C 51 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	453.5	49
C 51 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	463.5	49
C 51 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	463.5	53
C 51 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	463.5	53
C 51 4	P132	—	38	41.3	10	300	265	230	16	14	5	500	62

Metric output versions available also in combination with NEMA motor adaptor

C 51...N(NEMA Input)



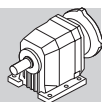
C 51_NU						
	D1	D2	D3	G	T	S
FA	7.087 ^{+0.0017} _{-0.0033}	8.465	9.843	0.551	0.157	0.512
FB	9.055 ^{+0.0020} _{-0.0038}	10.433	11.811	0.551	0.157	0.630

Dimensions are in Inch except when shown in *italic* [mm]

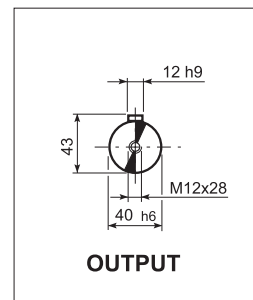
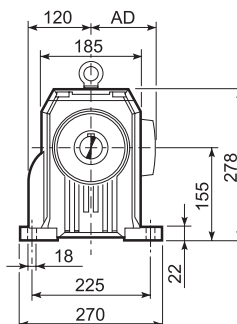
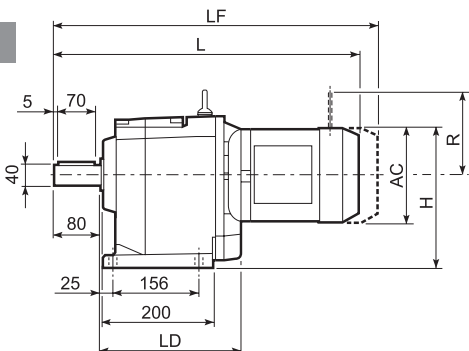
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
	C 51 2/3												
	N56C	9.941	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.034	99
	N140TC	9.941	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	15.034	104
	N180TC	10.531	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	15.782	112
	N210TC	9.941	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	17.023	119
	N250TC	—	1.625 ^{+0.0030} _{+0.0020}	1.796	0.375 ^{+0.0014} ₊₀	13.780	7.250	8.500	—	0.551	0.217	19.818	158
	N280TC	—	1.875 ^{+0.0030} _{+0.0020}	2.102	0.500 ^{+0.0017} ₊₀	13.740	10.500	9.000	—	0.551	0.217	20.015	161
	C 51 4												
	N56C	—	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.849	104
	N140TC	—	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.849	108
	N180TC	—	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	18.676	117
	N210TC	—	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	19.838	137

Imperial output versions available also in combination with IEC motor adaptor

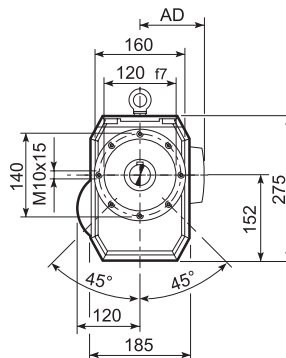
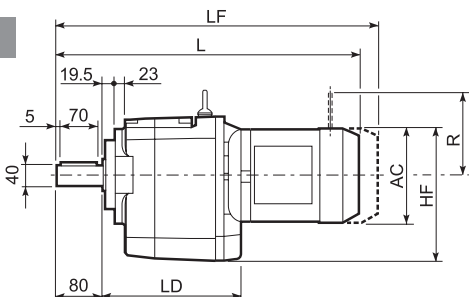
C 51...M/ME



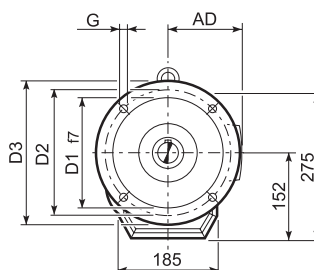
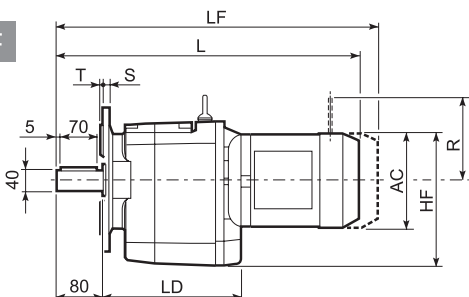
P



U



UF

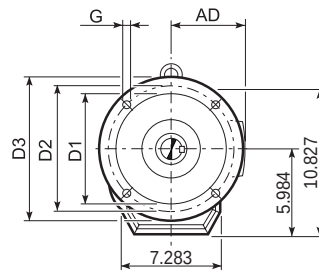
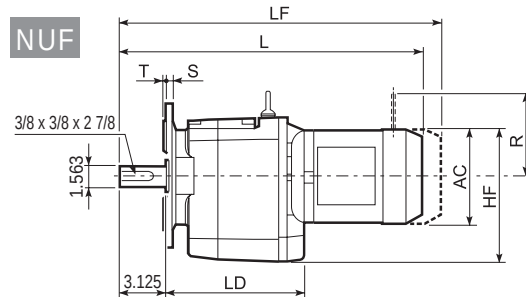
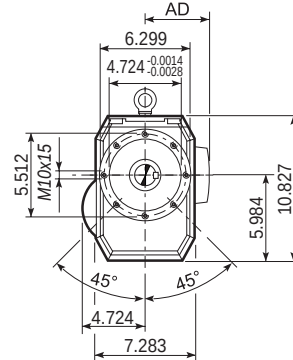
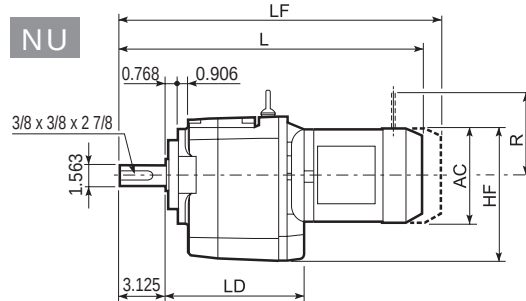
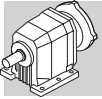
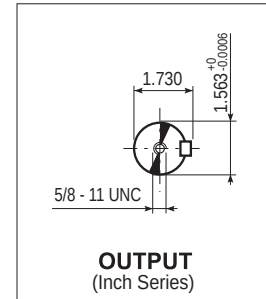
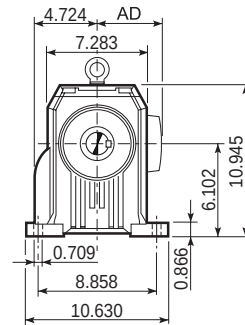
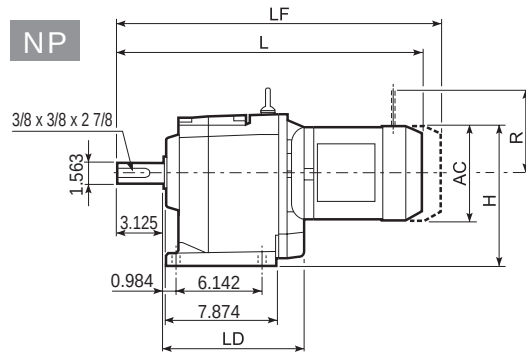


C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	LD	AD		LF		R	AD	R	AD
C 51 2/3	S1	M1	138	224	221	517.5	—	108	49	578.5	52	103	135	124	108
C 51 2/3	S2	ME2S	156	233	230	545.5	252.5	119	53	—	—	—	—	—	—
C 51 2/3	S3	ME3S	195	252.5	249.5	589.5	267.5	142	59.5	—	—	—	—	—	—
C 51 2/3	S3	ME3L	195	252.5	249.5	621.5	267.5	142	65	—	—	—	—	—	—
C 51 2/3	S4	ME4	258	284	281	729.5	—	193	99	—	—	—	—	—	—
C 51 2/3	S4	ME4LB	258	284	281	764.5	—	193	107	—	—	—	—	—	—
C 51 2/3	S5	ME5S	310	310	307	816	—	245	127	—	—	—	—	—	—
C 51 2/3	S5	ME5L	310	310	307	860	—	245	143	—	—	—	—	—	—
C 51 4	S1	M1	138	224	221	589	—	108	52	650	55	103	135	124	108
C 51 4	S2	ME2S	156	233	230	617	—	119	56	—	—	—	—	—	—
C 51 4	S3	ME3S	195	252.5	249.5	661	—	142	62.5	—	—	—	—	—	—
C 51 4	S3	ME3L	195	252.5	249.5	693	—	142	68	—	—	—	—	—	—
C 51 4	S4	ME4	258	284	281	801	—	193	98	—	—	—	—	—	—
C 51 4	S4	ME4LB	258	284	281	836	—	193	112	—	—	—	—	—	—

C 51...M/ME

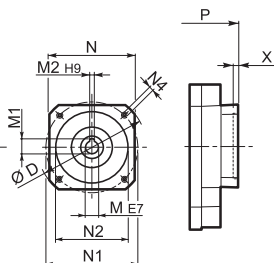
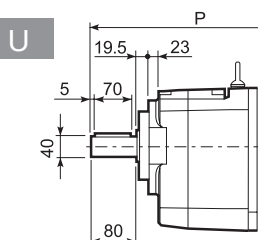
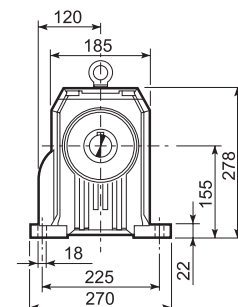
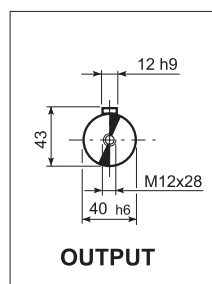
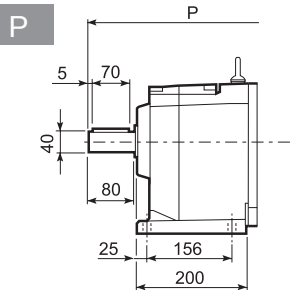
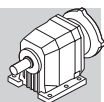


C 51 NU						
	D1	D2	D3	G	T	S
FA	7.087 ^{-0.0017} _{-0.0033}	8.465	9.843	0.551	0.157	0.512
FB	9.055 ^{-0.0020} _{-0.0038}	10.433	11.811	0.551	0.157	0.630

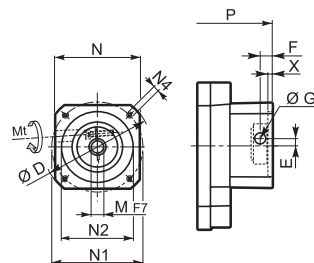
Dimensions are in Inch except when shown in *italics* [mm]

			AC	H	HF	L	LD	AD	lbs	M...FD M...FA		M...FD		M...FA	
										LF	lbs	R	AD	R	AD
C 51 2/3	S1	M1	5.433	8.819	8.701	20.349	—	4.252	108	22.751	115	4.055	5.315	4.882	4.252
C 51 2/3	S2	ME2S	6.142	9.173	9.055	21.452	9.941	4.685	117	—	—	—	—	—	—
C 51 2/3	S3	ME3S	7.677	9.941	9.823	23.184	10.531	5.591	131	—	—	—	—	—	—
C 51 2/3	S3	ME3L	7.677	9.941	9.823	24.444	10.531	5.591	143	—	—	—	—	—	—
C 51 2/3	S4	ME4	10.157	11.181	11.063	28.696	—	7.598	218	—	—	—	—	—	—
C 51 2/3	S4	ME4LB	10.157	11.181	11.063	30.074	—	7.598	236	—	—	—	—	—	—
C 51 2/3	S5	ME5S	12.205	12.205	12.087	32.101	—	9.646	280	—	—	—	—	—	—
C 51 2/3	S5	ME5L	12.205	12.205	12.087	33.834	—	9.646	315	—	—	—	—	—	—
C 51 4	S1	M1	5.433	8.819	8.701	23.164	—	4.252	115	25.566	121	4.055	5.315	4.882	4.252
C 51 4	S2	ME2S	6.142	9.173	9.055	24.267	—	4.685	123	—	—	—	—	—	—
C 51 4	S3	ME3S	7.677	9.941	9.823	25.999	—	5.591	138	—	—	—	—	—	—
C 51 4	S3	ME3L	7.677	9.941	9.823	27.259	—	5.591	150	—	—	—	—	—	—
C 51 4	S4	ME4	10.157	11.181	11.063	31.511	—	7.598	216	—	—	—	—	—	—
C 51 4	S4	ME4LB	10.157	11.181	11.063	32.889	—	7.598	247	—	—	—	—	—	—

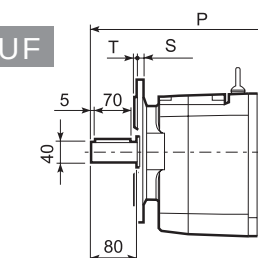
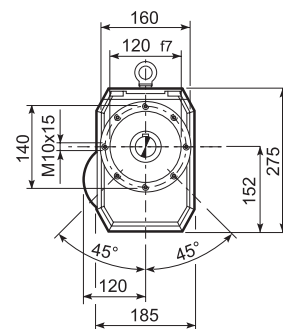
C 51...SK / SC



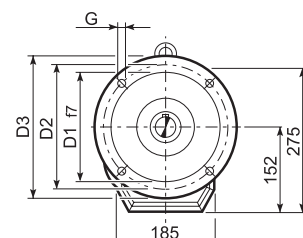
SK...



SC...



C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

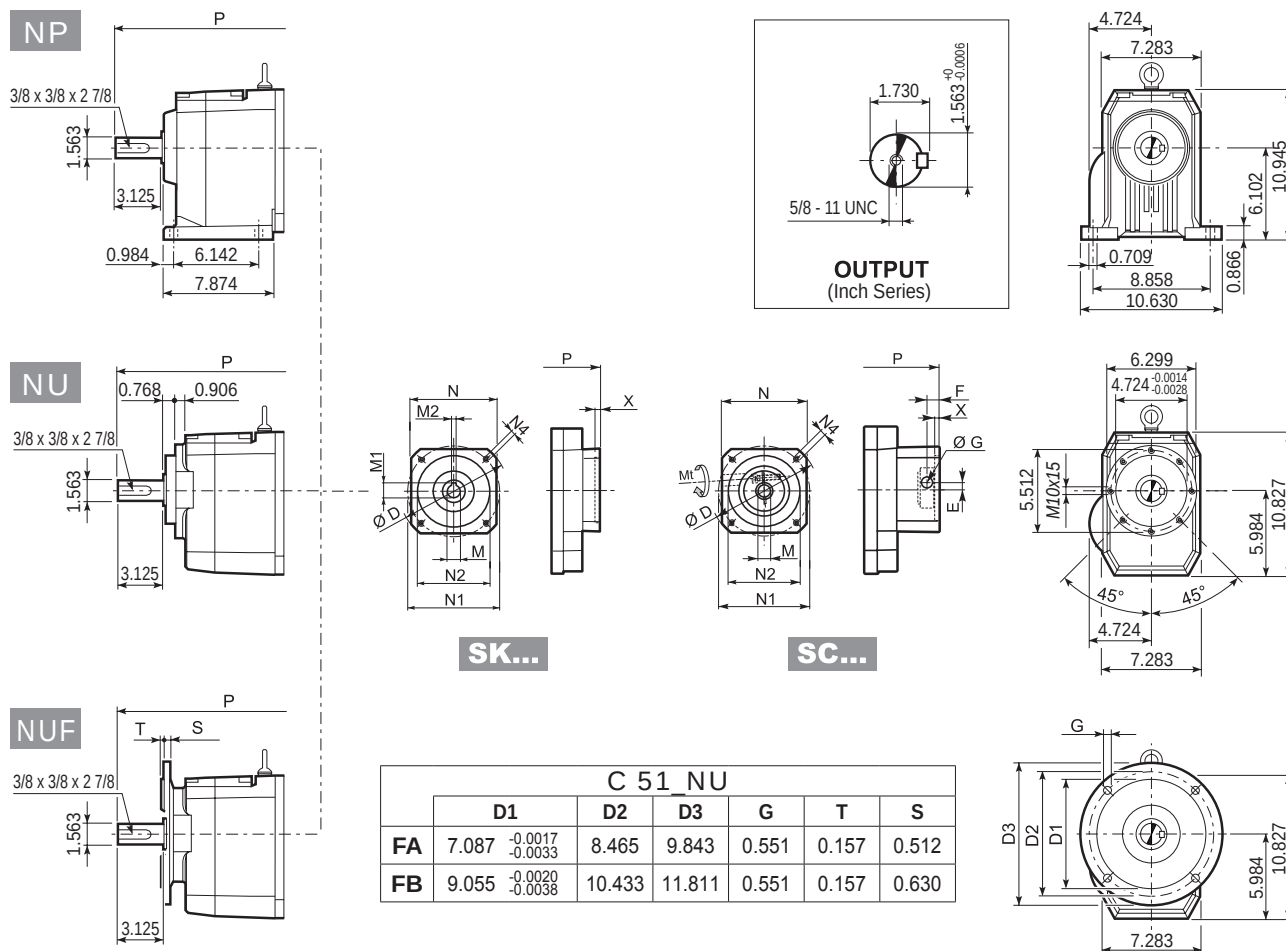


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	P	2/3x	4x	Kg
C 51 2/3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	382	—	—	46/46
C 51 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	382	453.5	—	47/47/49
C 51 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	382	453.5	—	46/46/48
C 51 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	382	453.5	—	47/47/49
C 51 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	382	453.5	—	47/47/49
C 51 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	382	453.5	—	47/47/51
C 51 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	382	453.5	—	47/47/51
C 51 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	382	453.5	—	49/49/52
C 51 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	428.5	—	—	55/55
C 51 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	428.5	—	—	55/55
C 51 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	428.5	—	—	55/55

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	2/3x	4x	Kg
C 51 2/3	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	405.5	—	47/47
C 51 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	405.5	477	48/48/50
C 51 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	405.5	477	47/47/49
C 51 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	405.5	477	48/48/50
C 51 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	405.5	477	48/48/50
C 51 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	405.5	477	49/49/52
C 51 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	405.5	477	49/49/52
C 51 2/3/4	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	405.5	477	50/50/53
C 51 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	451.5	—	54/54
C 51 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	455.5	—	54/54
C 51 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	455.5	—	54/54

C 51...SK / SC



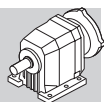
C 51 NU						
	D1	D2	D3	G	T	S
FA	7.087 ^{-0.0017} ^{-0.0033}	8.465	9.843	0.551	0.157	0.512
FB	9.055 ^{-0.0020} ^{-0.0038}	10.433	11.811	0.551	0.157	0.630

Dimensions are in Inch except when shown in *italic* [mm]

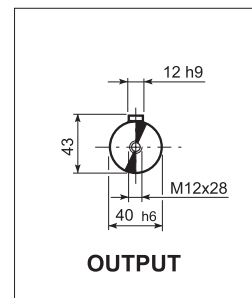
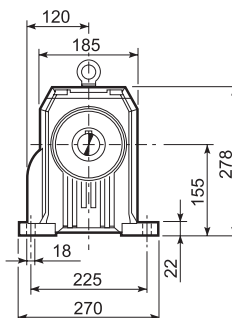
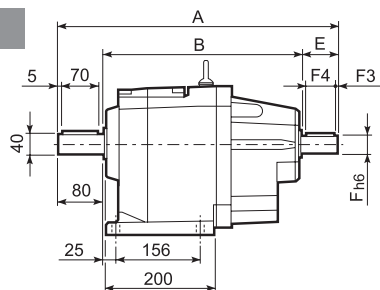
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x 	4x 	
C 51 2/3	SK80B	4.724	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	15.015	—	101/101
C 51 2/3/4	SK80C	4.724	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	15.015	17.830	104/104/108
C 51 2/3/4	SK95A	5.118	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.015	17.830	101/101/106
C 51 2/3/4	SK95B	5.118	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.015	17.830	104/104/108
C 51 2/3/4	SK95C	5.118	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.015	17.830	104/104/108
C 51 2/3/4	SK110A	5.906	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	4.724	5.118	4.331	M8x12	0.197	15.015	17.830	104/104/112
C 51 2/3/4	SK110B	5.906	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	4.724	5.118	4.331	M8x12	0.197	15.015	17.830	104/104/112
C 51 2/3/4	SK130A	7.402	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	5.591	6.496	5.118	M10x20	0.197	15.015	17.830	108/108/115
C 51 2/3	SK130B	7.441	1.260 ^{+0.0030} _{+0.0020}	1.390	0.394 ^{+0.0014} ₊₀	6.299	6.496	5.118	M10x20	0.197	16.845	—	121/121
C 51 2/3	SK180A	9.449	1.260 ^{+0.0030} _{+0.0020}	1.390	0.394 ^{+0.0014} ₊₀	7.559	8.465	7.087	M12x19	0.197	16.845	—	121/121
C 51 2/3	SK180B	9.449	1.496 ^{+0.0030} _{+0.0020}	1.626	0.394 ^{+0.0014} ₊₀	7.559	8.465	7.087	M12x19	0.197	16.845	—	121/121

		 Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P		 lbs
													2/3x 	4x 	
C 51 2/3	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013 +0.0006}	3.780	3.937	3.150	M6x12	0.157	15.940	—	104/104
C 51 2/3/4	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016 +0.0008}	3.780	3.937	3.150	M6x12	0.157	15.940	18.755	106/106/110
C 51 2/3/4	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013 +0.0006}	4.016	4.528	3.740	M8x16	0.157	15.940	18.755	104/104/108
C 51 2/3/4	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016 +0.0008}	4.016	4.528	3.740	M8x16	0.157	15.940	18.755	106/106/110
C 51 2/3/4	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016 +0.0008}	4.016	4.528	3.740	M8x16	0.157	15.940	18.755	106/106/110
C 51 2/3/4	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016 +0.0008}	4.724	5.118	4.331	M8x16	0.197	15.940	18.755	108/108/115
C 51 2/3/4	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016 +0.0008}	4.724	5.118	4.331	M8x16	0.197	15.940	18.755	108/108/115
C 51 2/3/4	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016 +0.0008}	5.591	6.496	5.118	M10x20	0.197	15.940	18.755	110/110/117
C 51 2/3	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020 +0.0010}	6.299	6.496	5.118	M10x20	0.197	17.751	—	119/119
C 51 2/3	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020 +0.0010}	7.559	8.465	7.087	M12x24	0.197	17.908	—	119/119
C 51 2/3	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020 +0.0010}	7.559	8.465	7.087	M12x24	0.197	17.908	—	119/119

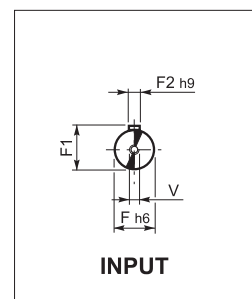
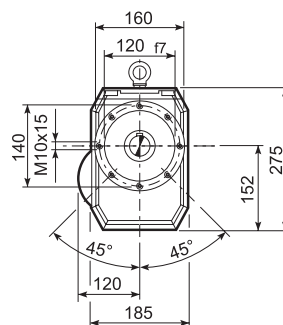
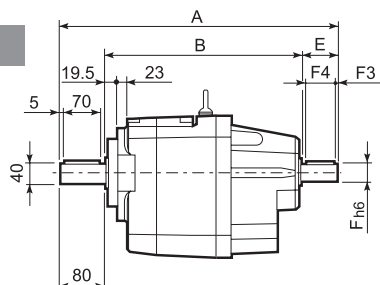
C 51...HS



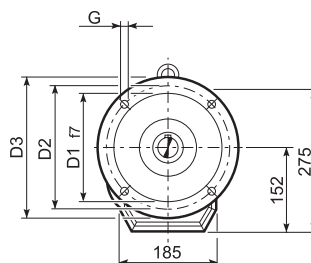
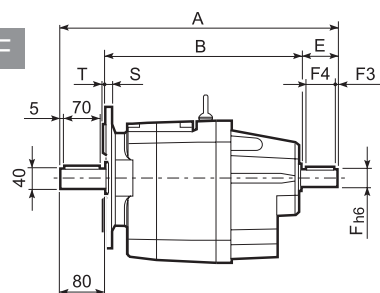
P



U



UF



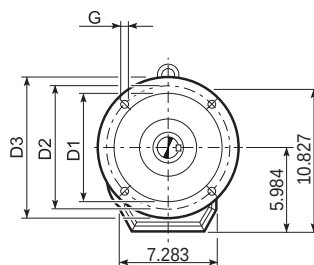
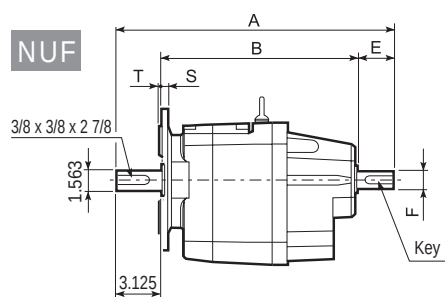
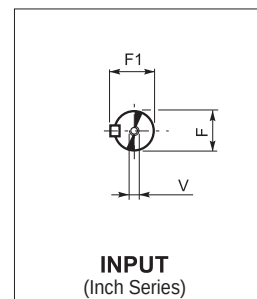
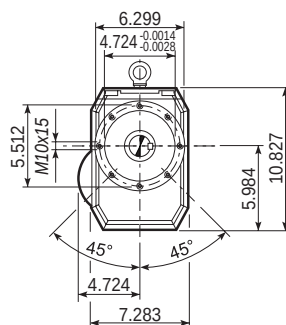
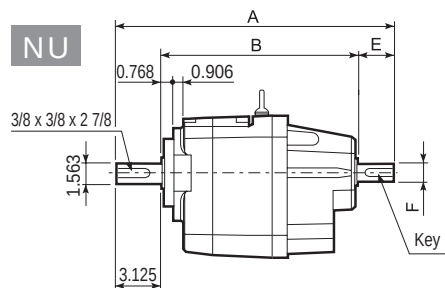
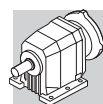
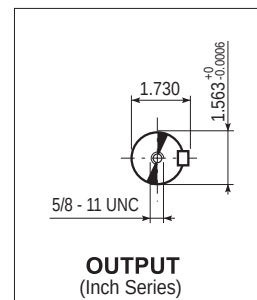
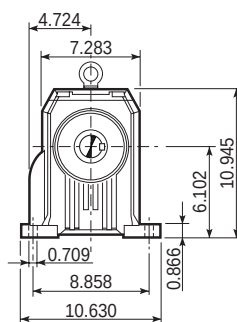
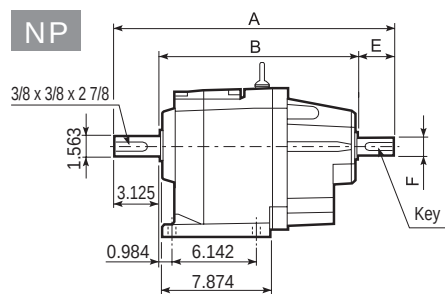
C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 51 2	HS	451.5	322	50	24	24	8	2.5	45	M8x19	45
C 51 3		451.5	322	50	24	24	8	2.5	45	M8x19	45
C 51 4		484	364	40	19	21.5	6	2.5	35	M6x16	48

Metric output versions available also in combination with NHS input

C 51...NHS



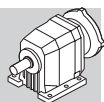
C 51 NU						
	D1	D2	D3	G	T	S
FA	7.087 ^{-0.0017} / _{-0.0033}	8.465	9.843	0.551	0.157	0.512
FB	9.055 ^{-0.0020} / _{-0.0038}	10.433	11.811	0.551	0.157	0.630

Dimensions are in Inch except when shown in *italic* [mm]

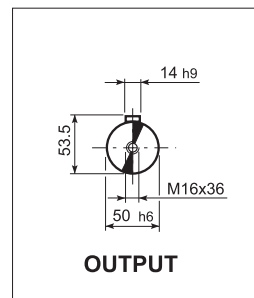
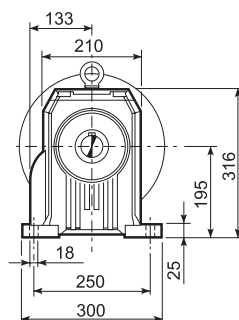
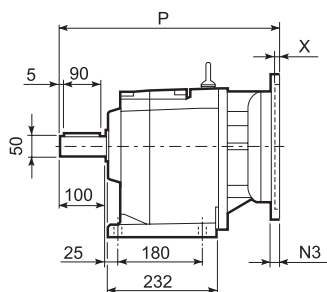
		A	B	E	F	F1	V	Key	lbs
	NHS	17.751	12.657	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	99
		17.751	12.657	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	99
		19.031	14.331	1.575	0.750 ⁺⁰ / _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	106

Imperial output versions available also in combination with HS input

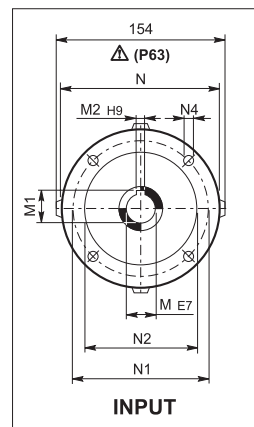
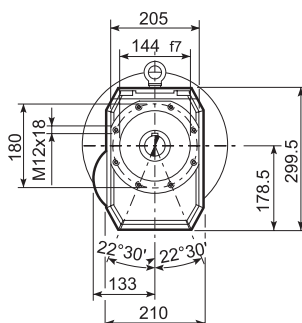
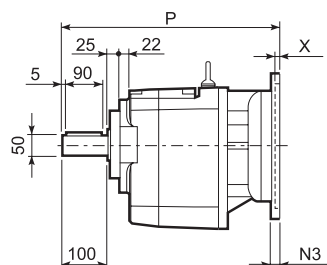
C 61...P(IEC)



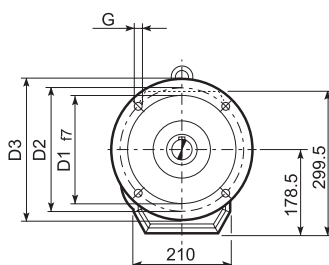
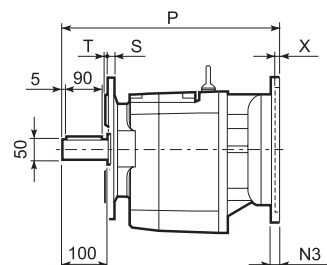
P



U



UF



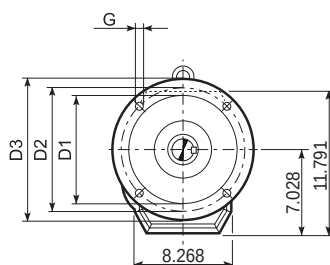
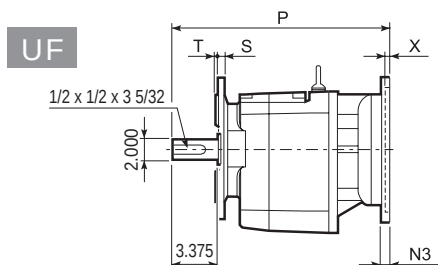
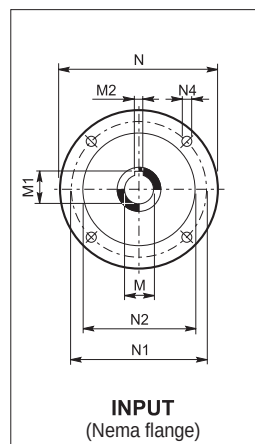
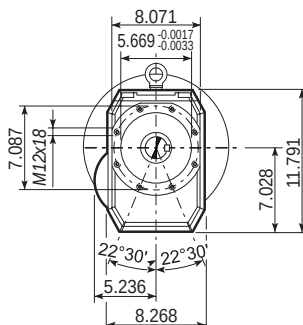
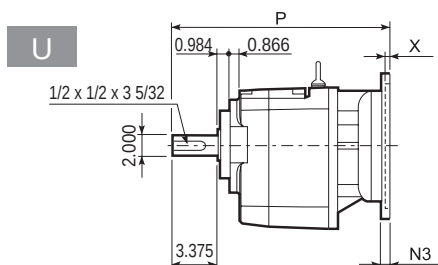
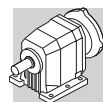
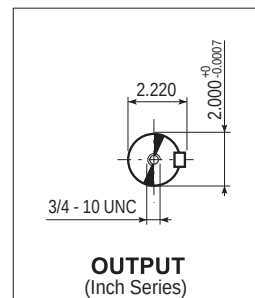
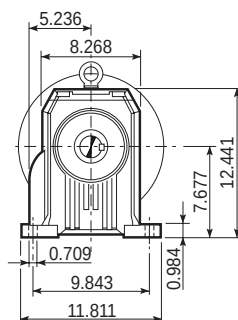
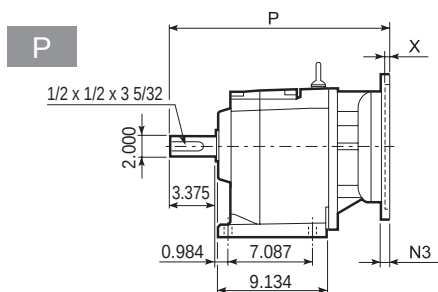
C 61_U						
	D1	D2	D3	G	T	S
FA	230	265	300	14	4	16
FB	250	300	350	18	5	18

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 61 2/3	P63	11	12.8	4	140	115	95	—	M8x19	4	415.5	55
C 61 2/3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	415.5	57
C 61 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	435	61
C 61 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	435	61
C 61 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	444	65
C 61 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	444	65
C 61 2/3	P132	38	41.3	10	300	265	230	16	14	5	481.5	68
C 61 2/3	P160	42	45.3	12	350	300	250	23	18	5.5	532	73
C 61 2/3	P180	48	51.8	14	350	300	250	23	18	5.5	532	73
C 61 4	P63	11	12.8	4	140	115	95	—	M8x19	4	486	61
C 61 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	489	63
C 61 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	505.5	67
C 61 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	505.5	67
C 61 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	515.5	71
C 61 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	515.5	71

Metric output versions available also in combination with NEMA motor adaptor

C 61...N(NEMA Input)



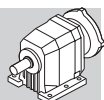
C 61 NU						
	D1	D2	D3	G	T	S
FA	9.055 ^{+0.0020} / _{-0.0038}	10.433	11.811	0.551	0.157	0.630
FB	9.843 ^{+0.0020} / _{-0.0038}	11.811	13.780	0.709	0.197	0.709

Dimensions are in Inch except when shown in *italic* [mm]

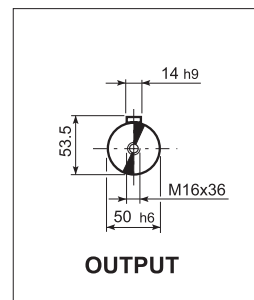
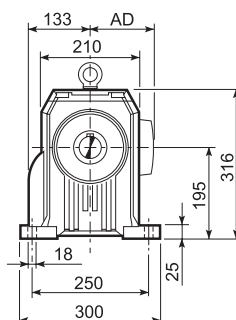
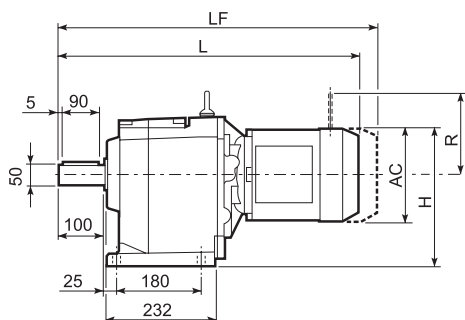
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 61 2/3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.584	126
C 61 2/3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.584	134
C 61 2/3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	17.332	143
C 61 2/3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	18.572	150
C 61 2/3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	21.367	191
C 61 2/3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	21.564	194
C 61 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	19.477	139
C 61 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	19.477	148
C 61 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	20.186	157

Imperial output versions available also in combination with IEC motor adaptor

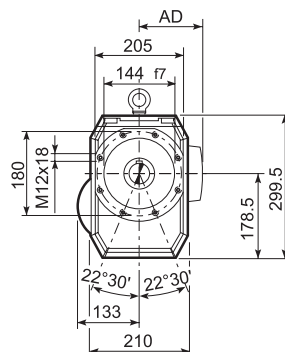
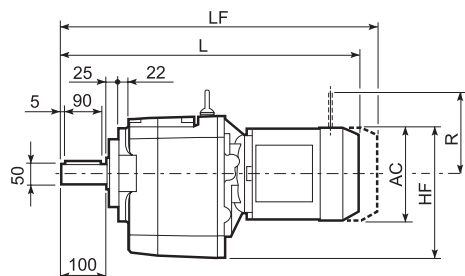
C 61...M/ME



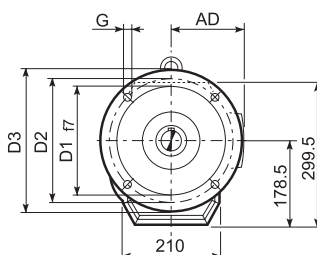
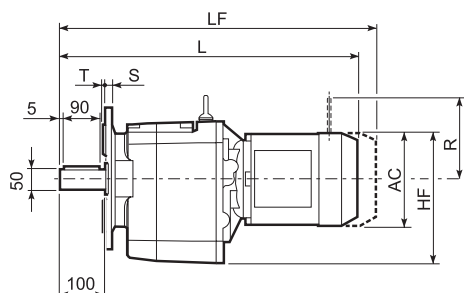
P



U



UF

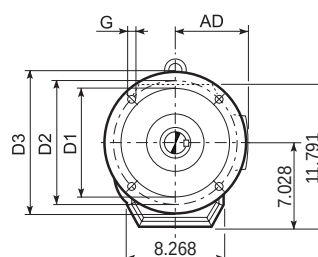
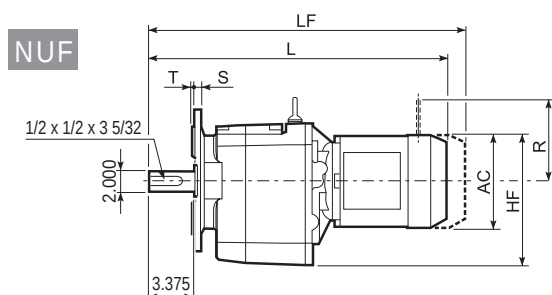
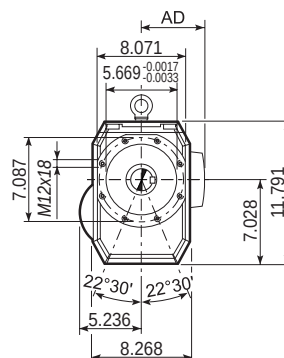
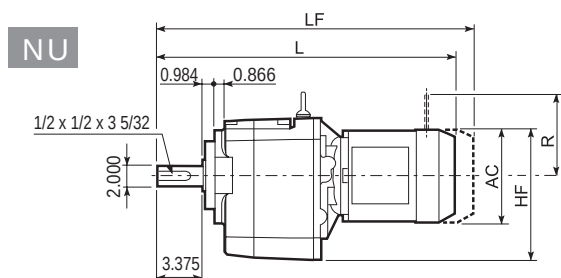
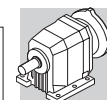
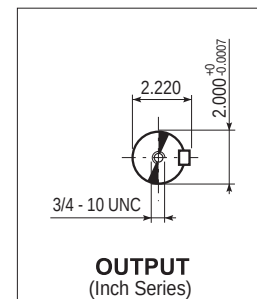
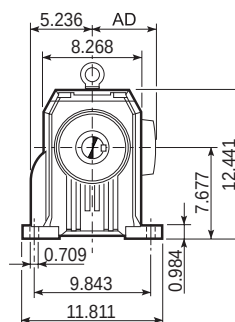
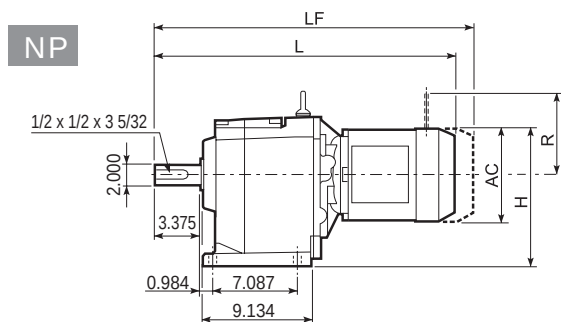


C 61_U						
	D1	D2	D3	G	T	S
FA	230	265	300	14	4	16
FB	250	300	350	18	5	18

Dimensions are in mm

			AC	H	HF	L	AD	Kg	M...FD M...FA		M...FD		M...FA	
									LF	Kg	R	AD	R	AD
C 61 2/3	S2	ME2S	156	273	256.5	598.5	119	61	—	—	—	—	—	—
C 61 2/3	S3	ME3S	195	292.5	276	642.5	142	67.5	—	—	—	—	—	—
C 61 2/3	S3	ME3L	195	292.5	276	674.5	142	74	—	—	—	—	—	—
C 61 2/3	S4	ME4	258	324	307.5	782.5	193	108	—	—	—	—	—	—
C 61 2/3	S4	ME4LB	258	324	307.5	817.5	193	116	—	—	—	—	—	—
C 61 2/3	S5	ME5S	310	350	333.5	869	245	136	—	—	—	—	—	—
C 61 2/3	S5	ME5L	310	350	333.5	913	245	152	—	—	—	—	—	—
C 61 4	S1	M1	138	264	247.5	641	108	71	702	74	103	135	124	108
C 61 4	S2	ME2S	156	273	256.5	669	119	75	—	—	—	—	—	—
C 61 4	S3	ME3S	195	292.5	276	713	142	80.5	—	—	—	—	—	—
C 61 4	S3	ME3L	195	292.5	276	745	142	87	—	—	—	—	—	—

C 61...M/ME

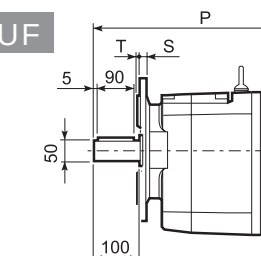
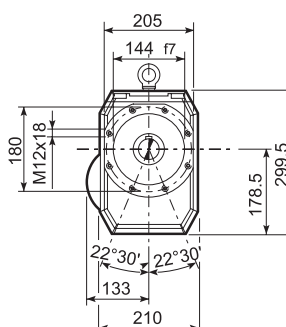
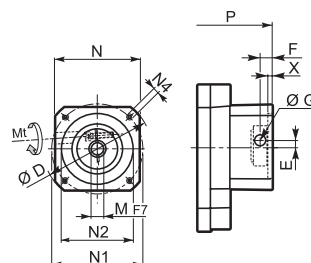
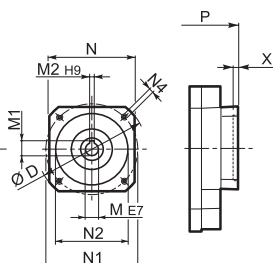
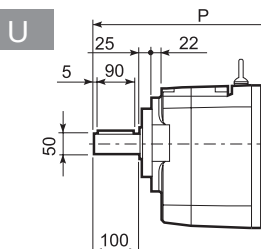
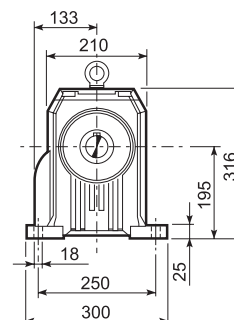
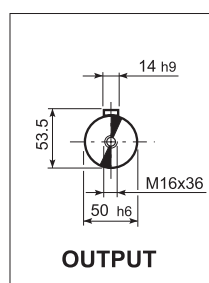
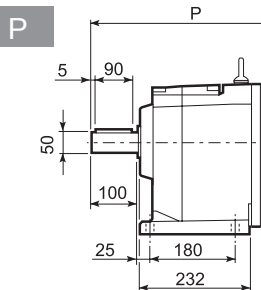
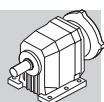


C 61 NU						
	D1	D2	D3	G	T	S
FA	9.055 <i>-0.0020 -0.0038</i>	10.433	11.811	0.551	0.157	0.630
FB	9.843 <i>-0.0020 -0.0038</i>	11.811	13.780	0.709	0.197	0.709

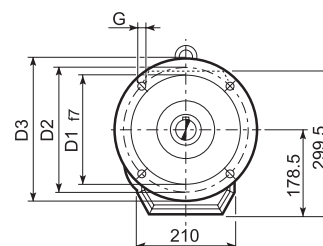
Dimensions are in Inch except when shown in *italic [mm]*

			AC	H	HF	L	AD	lbs	M...FD M...FA		M...FD		M...FA	
									LF	lbs	R	AD	R	AD
C 61 2/3	S2	ME2S	6.142	10.748	10.098	23.001	4.685	134	—	—	—	—	—	—
C 61 2/3	S3	ME3S	7.677	11.516	10.866	24.733	5.591	149	—	—	—	—	—	—
C 61 2/3	S3	ME3L	7.677	11.516	10.866	25.993	5.591	163	—	—	—	—	—	—
C 61 2/3	S4	ME4	10.157	12.756	12.106	30.245	7.598	238	—	—	—	—	—	—
C 61 2/3	S4	ME4LB	10.157	12.756	12.106	31.623	7.598	256	—	—	—	—	—	—
C 61 2/3	S5	ME5S	12.205	13.780	13.130	33.651	9.646	300	—	—	—	—	—	—
C 61 2/3	S5	ME5L	12.205	13.780	13.130	35.383	9.646	335	—	—	—	—	—	—
C 61 4	S1	M1	5.433	10.394	9.744	24.674	4.252	157	27.076	163	4.055	5.315	4.882	4.252
C 61 4	S2	ME2S	6.142	10.748	10.098	25.777	4.685	165	—	—	—	—	—	—
C 61 4	S3	ME3S	7.677	11.516	10.866	27.509	5.591	177	—	—	—	—	—	—
C 61 4	S3	ME3L	7.677	11.516	10.866	28.769	5.591	192	—	—	—	—	—	—

C 61...SK / SC



C 61_U					
	D1	D2	D3	G	T S
FA	230	265	300	14	4 16
FB	250	300	350	18	5 18

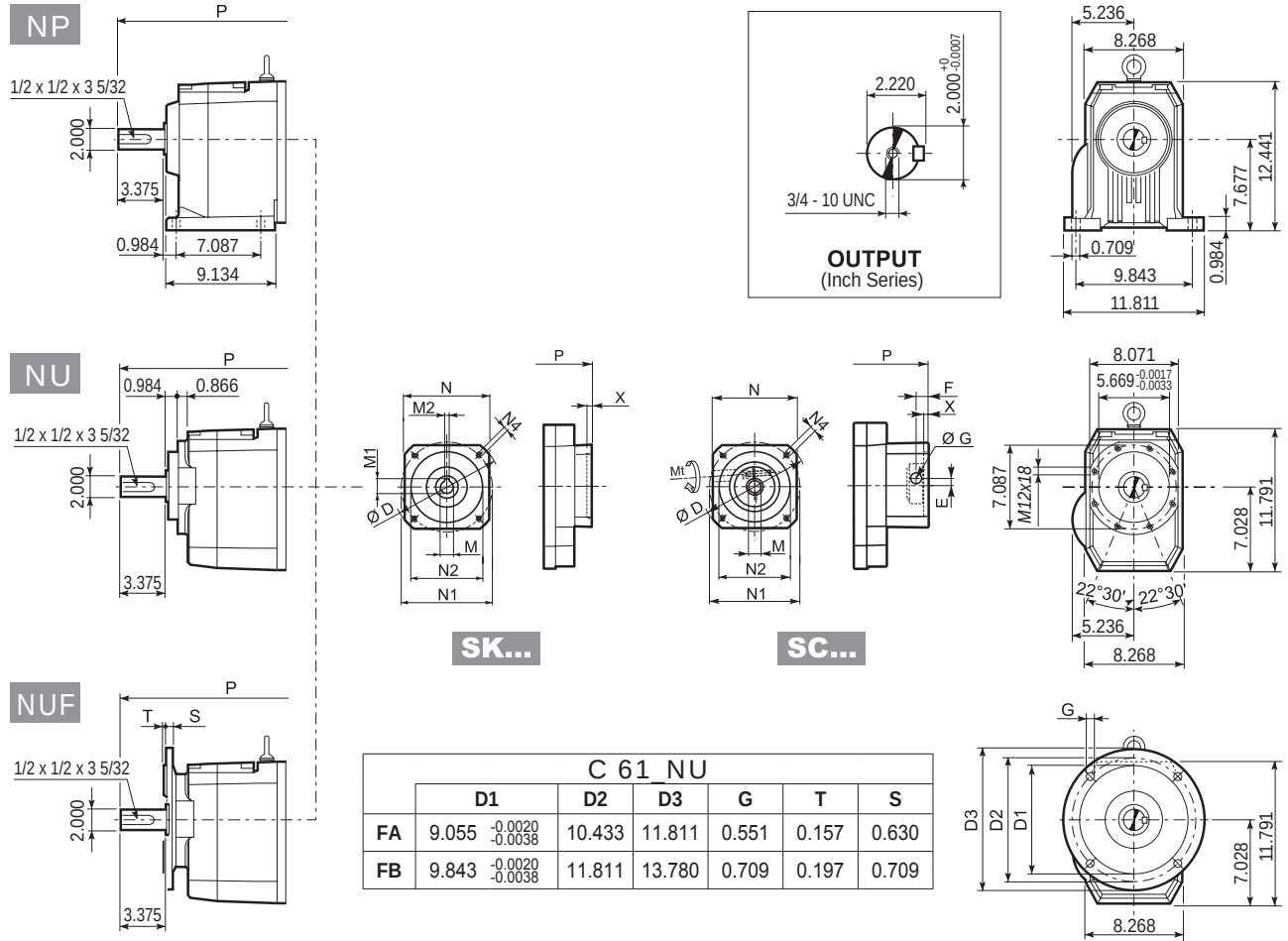


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x ^P	4x	Kg
C 61 4	SK80B	120	14	16.3	5	96	100	80	M6x12	4	—	505.5	62
C 61 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	435	505.5	63/63/69
C 61 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	435	505.5	60/60/67
C 61 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	435	505.5	63/63/69
C 61 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	435	505.5	63/63/69
C 61 2/3/4	SK110A	140	19	21.8	6	120	130	110	M8x12	5	435	505.5	63/63/69
C 61 2/3/4	SK110B	140	24	27.3	8	120	130	110	M8x12	5	435	505.5	63/63/69
C 61 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	435	505.5	67/67/80
C 61 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	481.5	—	72/72
C 61 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	481.5	—	72/72
C 61 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	481.5	—	66/66

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2/3x 	4x 	Kg
C 61 4	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	—	529	63
C 61 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	458.5	529	64/64/70
C 61 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	458.5	529	61/61/68
C 61 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	458.5	529	64/64/70
C 61 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	458.5	529	64/64/70
C 61 2/3/4	SC110A	M6	15	140	16.5	16	17.75	19	120	130	110	M8x16	5	458.5	529	65/65/70
C 61 2/3/4	SC110B	M6	15	140	16.5	16	17.75	24	120	130	110	M8x16	5	458.5	529	65/65/70
C 61 2/3/4	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	458.5	529	66/66/81
C 61 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	504.5	—	75/75
C 61 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	508.5	—	75/75
C 61 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	508.5	—	69/69

C 61...SK / SC

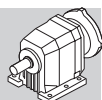


Dimensions are in Inch except when shown in *italic* [mm]

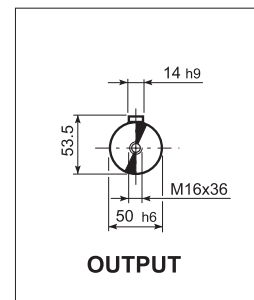
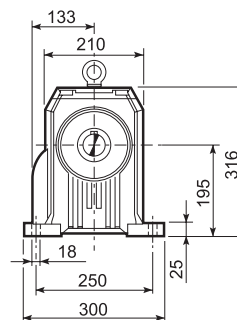
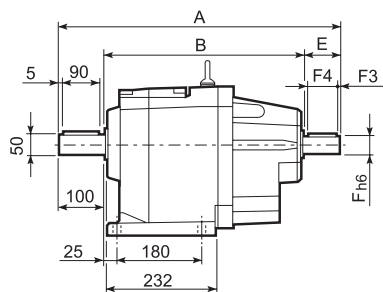
		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x	lbs
C 61 4	SK80B	4.724	0.551 $\begin{smallmatrix} +0.0020 \\ +0.0013 \end{smallmatrix}$	0.642	0.197 $\begin{smallmatrix} +0.0012 \\ +0 \end{smallmatrix}$	3.780	3.937	3.150	M6x12	0.157	—	19.340	137
C 61 2/3/4	SK80C	4.724	0.748 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	0.858	0.236 $\begin{smallmatrix} +0.0012 \\ +0 \end{smallmatrix}$	3.780	3.937	3.150	M6x12	0.157	16.564	19.340	139/139/152
C 61 2/3/4	SK95A	5.118	0.551 $\begin{smallmatrix} +0.0020 \\ +0.0013 \end{smallmatrix}$	0.642	0.197 $\begin{smallmatrix} +0.0012 \\ +0 \end{smallmatrix}$	4.016	4.528	3.740	M8x12	0.157	16.564	19.340	132/132/148
C 61 2/3/4	SK95B	5.118	0.748 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	0.858	0.236 $\begin{smallmatrix} +0.0012 \\ +0 \end{smallmatrix}$	4.016	4.528	3.740	M8x12	0.157	16.564	19.340	139/139/152
C 61 2/3/4	SK95C	5.118	0.945 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	1.075	0.315 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	4.016	4.528	3.740	M8x12	0.157	16.564	19.340	139/139/152
C 61 2/3/4	SK110A	5.512	0.748 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	0.858	0.236 $\begin{smallmatrix} +0.0012 \\ +0 \end{smallmatrix}$	4.724	5.118	4.331	M8x12	0.197	16.564	19.340	139/139/152
C 61 2/3/4	SK110B	5.512	0.945 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	1.075	0.315 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	4.724	5.118	4.331	M8x12	0.197	16.564	19.340	139/139/152
C 61 2/3/4	SK130A	7.402	0.945 $\begin{smallmatrix} +0.0024 \\ +0.0016 \end{smallmatrix}$	1.075	0.315 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	5.591	6.496	5.118	M10x20	0.197	16.564	19.340	148/148/176
C 61 2/3	SK130B	7.441	1.260 $\begin{smallmatrix} +0.0030 \\ +0.0020 \end{smallmatrix}$	1.390	0.394 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	6.299	6.496	5.118	M10x20	0.197	18.395	—	159/159
C 61 2/3	SK180A	9.449	1.260 $\begin{smallmatrix} +0.0030 \\ +0.0020 \end{smallmatrix}$	1.390	0.394 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	7.559	8.465	7.087	M12x19	0.197	18.395	—	159/159
C 61 2/3	SK180B	9.449	1.496 $\begin{smallmatrix} +0.0030 \\ +0.0020 \end{smallmatrix}$	1.626	0.394 $\begin{smallmatrix} +0.0014 \\ +0 \end{smallmatrix}$	7.559	8.465	7.087	M12x19	0.197	18.395	—	146/146

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x	lbs
C 61 4	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 $\begin{smallmatrix} +0.0013 \\ +0.0006 \end{smallmatrix}$	3.780	3.937	3.150	M6x12	0.157	—	20.265	139/104
C 61 2/3/4	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	3.780	3.937	3.150	M6x12	0.157	17.489	20.265	141/141/154
C 61 2/3/4	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 $\begin{smallmatrix} +0.0013 \\ +0.0006 \end{smallmatrix}$	4.016	4.528	3.740	M8x16	0.157	17.489	20.265	134/134/150
C 61 2/3/4	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	4.016	4.528	3.740	M8x16	0.157	17.489	20.265	141/141/154
C 61 2/3/4	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	4.016	4.528	3.740	M8x16	0.157	17.489	20.265	141/141/154
C 61 2/3/4	SC110A	M6 133	5.512	0.650	0.630	0.699	0.748 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	4.724	5.118	4.331	M8x16	0.197	17.489	20.265	143/143/154
C 61 2/3/4	SC110B	M6 133	5.512	0.650	0.630	0.699	0.945 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	4.724	5.118	4.331	M8x16	0.197	17.489	20.265	143/143/154
C 61 2/3/4	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 $\begin{smallmatrix} +0.0016 \\ +0.0008 \end{smallmatrix}$	5.591	6.496	5.118	M10x20	0.197	17.489	20.265	146/146/179
C 61 2/3	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 $\begin{smallmatrix} +0.0020 \\ +0.0010 \end{smallmatrix}$	6.299	6.496	5.118	M10x20	0.197	19.300	—	165/165
C 61 2/3	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 $\begin{smallmatrix} +0.0020 \\ +0.0010 \end{smallmatrix}$	7.559	8.465	7.087	M12x24	0.197	19.458	—	165/165
C 61 2/3	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 $\begin{smallmatrix} +0.0020 \\ +0.0010 \end{smallmatrix}$	7.559	8.465	7.087	M12x24	0.197	19.458	—	152/152

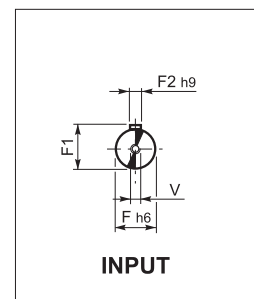
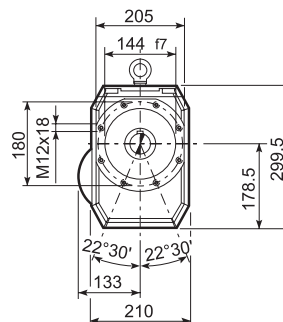
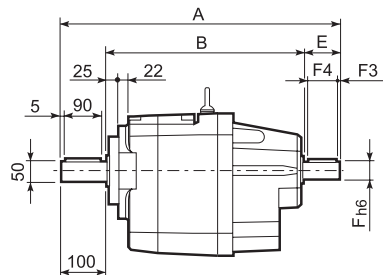
C 61...HS



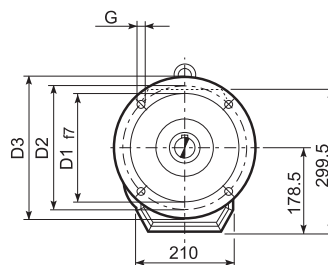
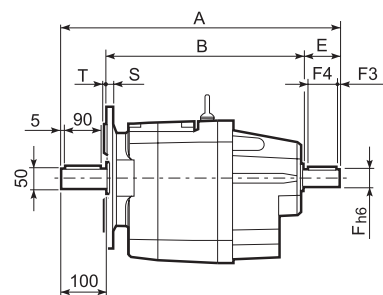
P



U



UF



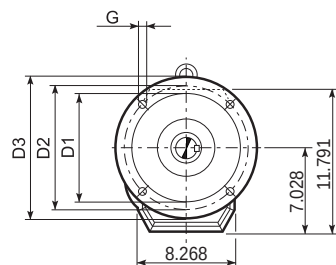
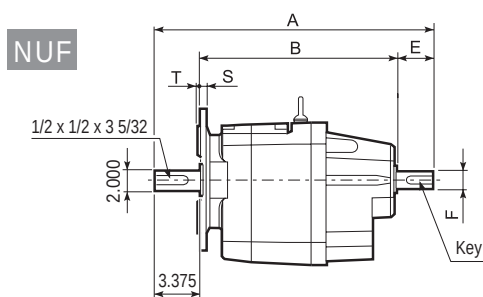
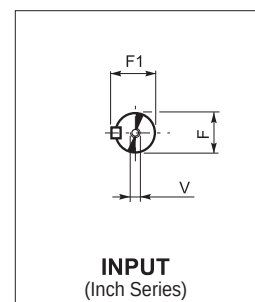
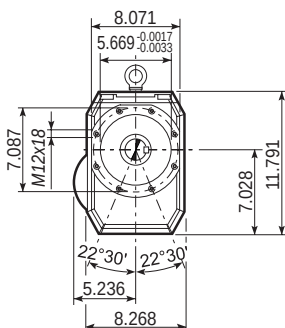
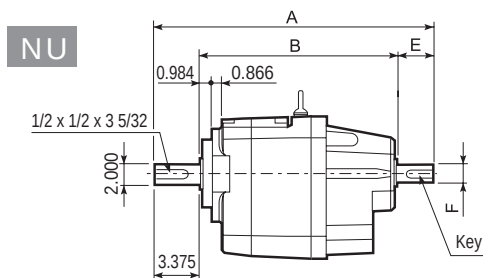
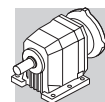
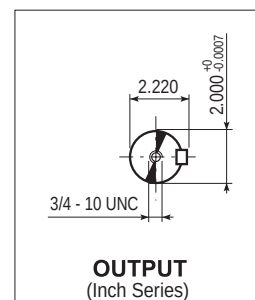
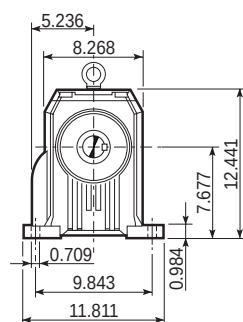
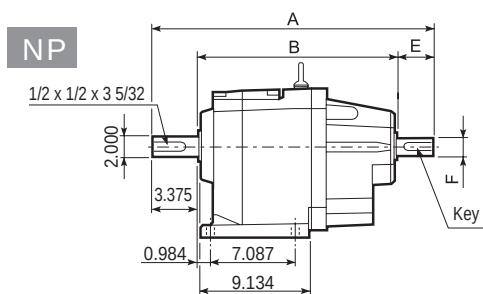
C 61_U						
	D1	D2	D3	G	T	S
FA	230	265	300	14	4	16
FB	250	300	350	18	5	18

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 61 2	HS	532	372	60	28	31	8	5	50	M10x22	66
C 61 3		532	372	60	28	31	8	5	50	M10x22	66
C 61 4		575	425	50	24	27	8	2.5	45	M8x19	72

Metric output versions available also in combination with NHS input

C 61...NHS



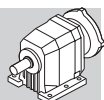
C 61 NU						
	D1	D2	D3	G	T	S
FA	9.055 ^{-0.0020} / _{-0.0038}	10.433	11.811	0.551	0.157	0.630
FB	9.843 ^{-0.0020} / _{-0.0038}	11.811	13.780	0.709	0.197	0.709

Dimensions are in Inch except when shown in *italic [mm]*

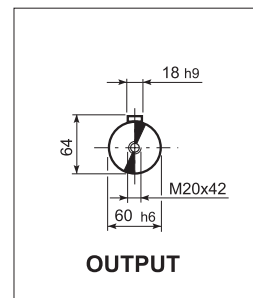
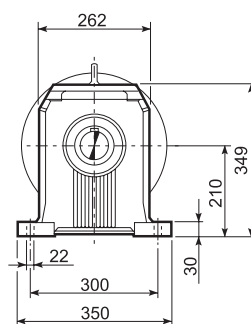
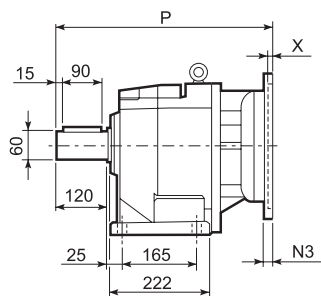
		A	B	E	F	F1	V	Key	lbs
C 61 2	NHS	20.383	14.646	2.362	1.125 ⁺⁰ / _{-0.0005}	1.236	3/8 - 16 UNC	1/4 x 1/4 x 2 5/32	146
C 61 3		20.383	14.646	2.362	1.125 ⁺⁰ / _{-0.0005}	1.236	3/8 - 16 UNC	1/4 x 1/4 x 2 5/32	146
C 61 4		22.076	16.732	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	159

Imperial output versions available also in combination with HS input

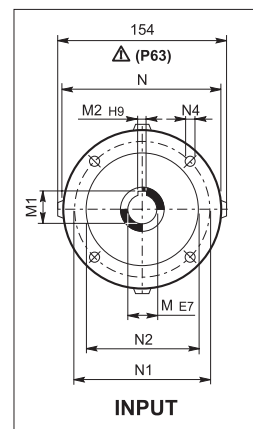
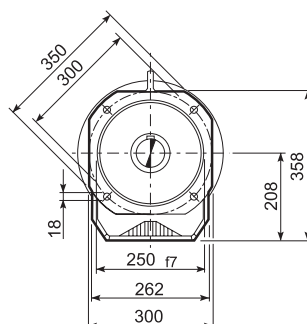
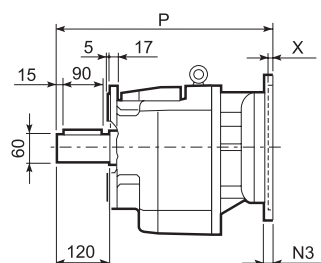
C 70...P(IEC)



P



F

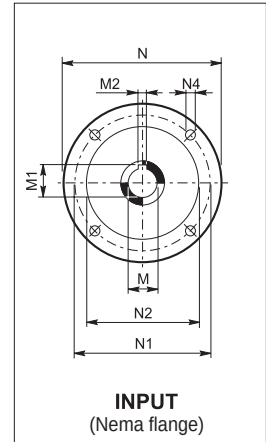
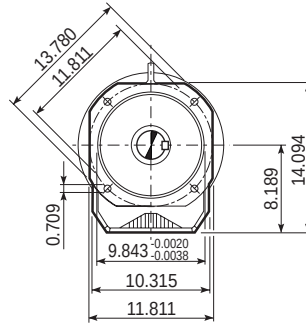
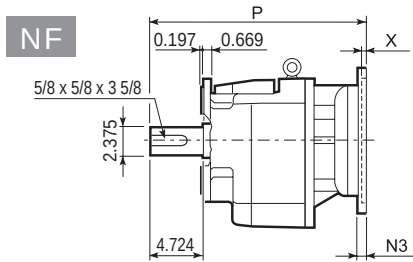
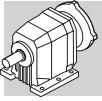
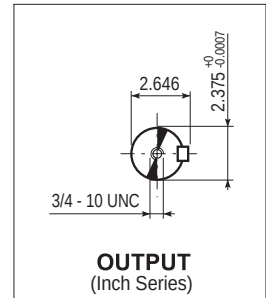
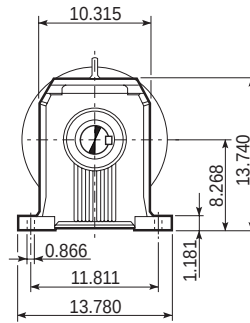
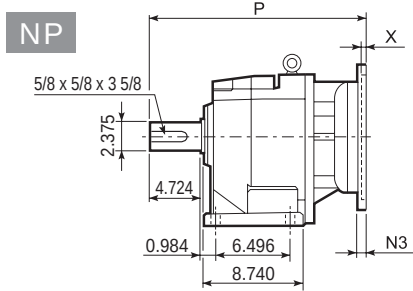


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 70 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	473	88
C 70 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	473	88
C 70 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	483	92
C 70 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	483	92
C 70 2/3	P132	38	41.3	10	300	265	230	16	14	5	519.5	95
C 70 2/3	P160	42	45.3	12	350	300	250	23	18	6	575	107
C 70 2/3	P180	48	51.8	14	350	300	250	23	18	6	575	107
C 70 2	P200	55	59.3	16	400	350	300	—	M16x25	7	600	129
C 70 4	P63	11	12.8	4	140	115	95	—	M8x19	4	504.5	91
C 70 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	504.5	91
C 70 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	524	92
C 70 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	524	92
C 70 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	534	96
C 70 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	534	96
C 70 4	P132	38	41.3	10	300	265	230	16	14	5	570.5	98

Metric output versions available also in combination with NEMA motor adaptor

C 70...N(NEMA Input)

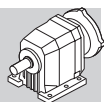


Dimensions are in Inch except when shown in *italic* [mm]

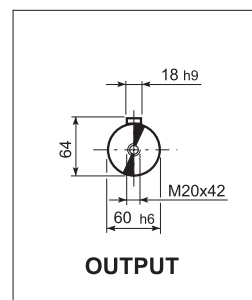
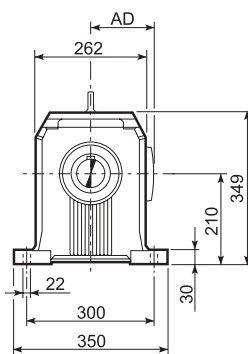
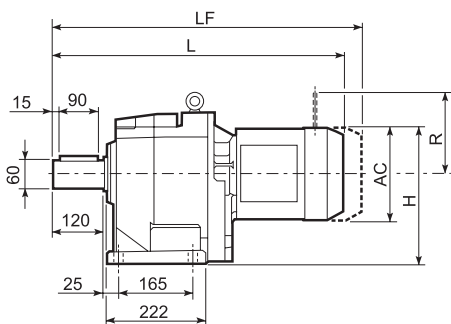
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 70 2/3	N140TC	0.875 +0.0024 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	18.819	194
C 70 2/3	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	19.390	203
C 70 2/3	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	20.630	209
C 70 2/3	N250TC	1.625 +0.0030 +0.0020	1.796	0.375 +0.0014 +0	13.780	7.250	8.500	—	0.551	0.217	23.622	266
C 70 2	N280TC	1.875 +0.0030 +0.0020	2.102	0.500 +0.0017 +0	13.740	10.500	9.000	—	0.551	0.217	23.819	269
C 70 4	N56C	0.625 +0.0020 +0.0013	0.710	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	20.650	201
C 70 4	N140TC	0.875 +0.0024 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	20.650	203
C 70 4	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	21.398	212
C 70 4	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	22.638	216

Imperial output versions available also in combination with IEC motor adaptor

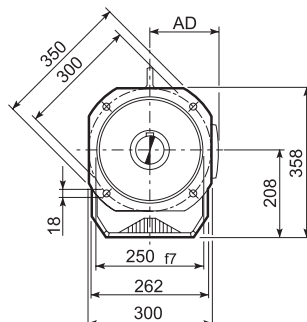
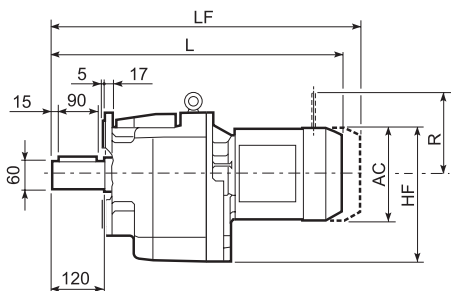
C 70...M/ME



P



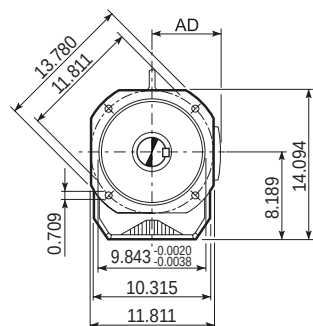
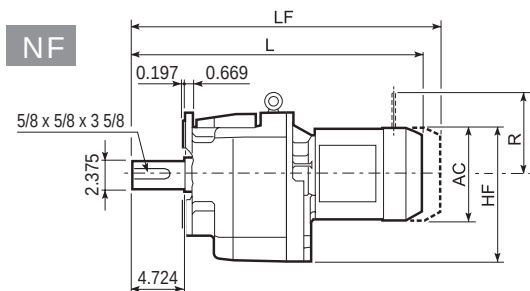
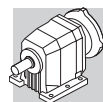
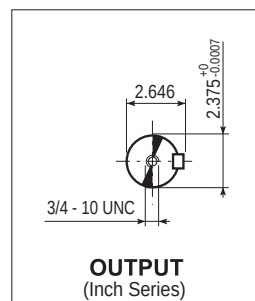
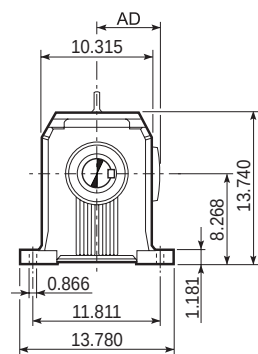
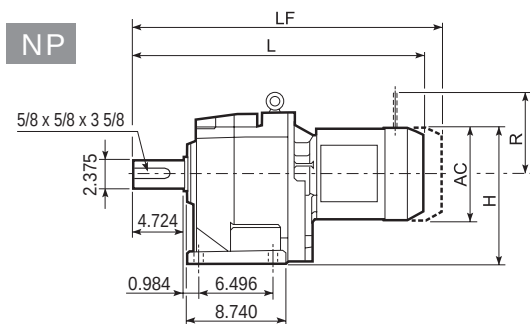
F



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD	Kg		LF	Kg	R	AD	R	AD
C 70 2/3	S2	ME2S	156	288	286	636.5	119	88	—	—	—	—	—	—	—
C 70 2/3	S3	ME3S	195	307.5	305.5	680.5	142	94.5	—	—	—	—	—	—	—
C 70 2/3	S3	ME3L	195	307.5	305.5	712.5	142	101	—	—	—	—	—	—	—
C 70 2/3	S4	ME4	258	339	337	820.5	193	135	—	—	—	—	—	—	—
C 70 2/3	S4	ME4LB	258	339	337	855.5	193	143	—	—	—	—	—	—	—
C 70 2/3	S5	ME5S	310	365	363	907	245	163	—	—	—	—	—	—	—
C 70 2/3	S5	ME5L	310	365	363	951	245	179	—	—	—	—	—	—	—
C 70 4	S1	M1	138	279	277	659.5	108	88	720.5	91	103	135	124	108	—
C 70 4	S2	ME2S	156	288	286	687.5	119	92	—	—	—	—	—	—	—
C 70 4	S3	ME3S	195	307.5	305.5	731.5	142	98.5	—	—	—	—	—	—	—
C 70 4	S3	ME3L	195	307.5	305.5	763.5	142	104	—	—	—	—	—	—	—
C 70 4	S4	ME4	258	339	337	871.5	193	138	—	—	—	—	—	—	—
C 70 4	S4	ME4LB	258	339	337	906.5	193	146	—	—	—	—	—	—	—

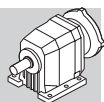
C 70...M/ME



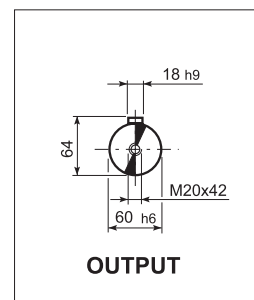
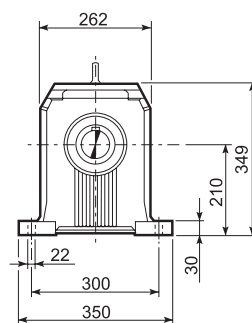
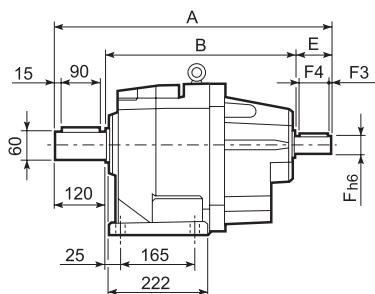
Dimensions are in Inch except when shown in *italics* [mm]

			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 70 2/3	S2	ME2S	6.142	11.339	11.260	25.059	4.685	194	—	—	—	—	—	—
C 70 2/3	S3	ME3S	7.677	12.106	12.028	26.791	5.591	208	—	—	—	—	—	—
C 70 2/3	S3	ME3L	7.677	12.106	12.028	28.051	5.591	223	—	—	—	—	—	—
C 70 2/3	S4	ME4	10.157	13.346	13.268	32.303	7.598	298	—	—	—	—	—	—
C 70 2/3	S4	ME4LB	10.157	13.346	13.268	33.681	7.598	315	—	—	—	—	—	—
C 70 2/3	S5	ME5S	12.205	14.370	14.291	35.709	9.646	359	—	—	—	—	—	—
C 70 2/3	S5	ME5L	12.205	14.370	14.291	37.441	9.646	395	—	—	—	—	—	—
C 70 4	S1	M1	5.433	10.984	10.906	25.965	4.252	194	28.366	201	4.055	5.315	4.882	4.252
C 70 4	S2	ME2S	6.142	11.339	11.260	27.067	4.685	203	—	—	—	—	—	—
C 70 4	S3	ME3S	7.677	12.106	12.028	28.799	5.591	217	—	—	—	—	—	—
C 70 4	S3	ME3L	7.677	12.106	12.028	30.059	5.591	229	—	—	—	—	—	—
C 70 4	S4	ME4	10.157	13.346	13.268	34.311	7.598	304	—	—	—	—	—	—
C 70 4	S4	ME4LB	10.157	13.346	13.268	35.689	7.598	322	—	—	—	—	—	—

C 70...HS

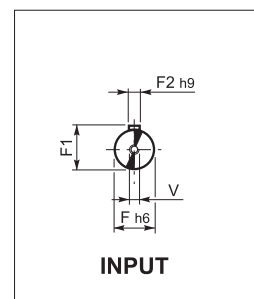
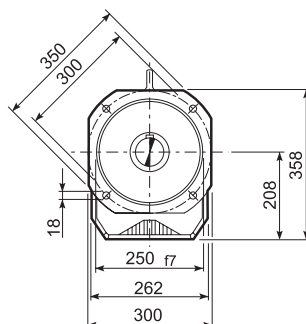
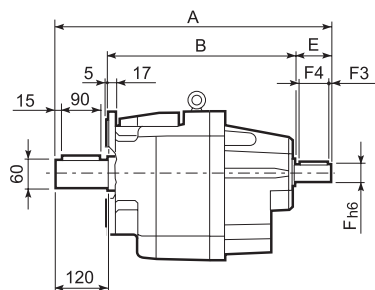


P



OUTPUT

F



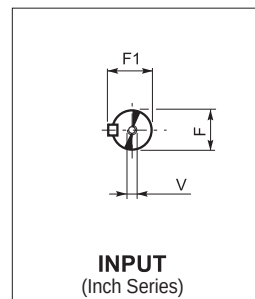
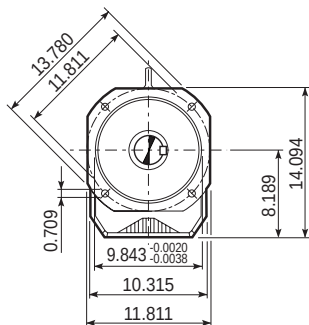
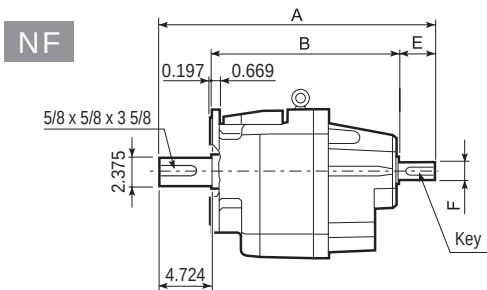
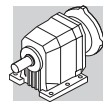
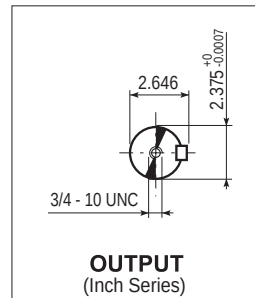
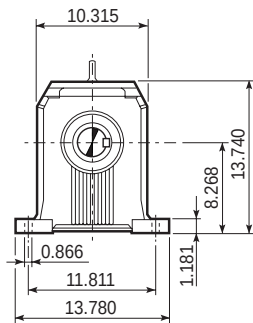
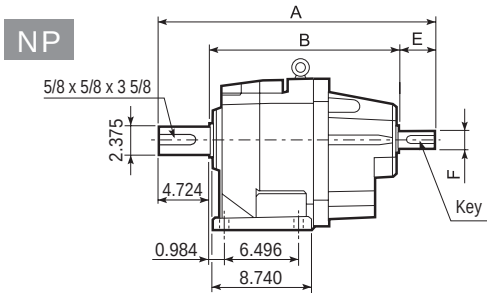
INPUT

Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 70 2	HS	657.5	427.5	110	42	45	12	10	90	M12x28	108
C 70 3		657.5	427.5	110	42	45	12	10	90	M12x28	108
C 70 4		593.5	423.5	50	24	27	8	2.5	45	M8x19	94

Metric output versions available also in combination with NHS input

C 70...NHS

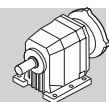


Dimensions are in Inch except when shown in *italic* [mm]

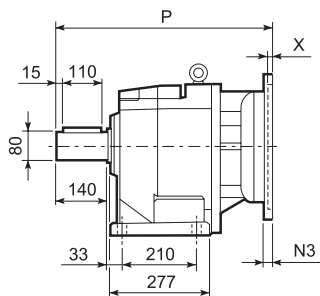
		A	B	E	F	F1	V	Key	lbs
C 70 2	NHS	25.805	16.831	4.250	1.625 ⁺⁰ / _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	238
C 70 3		25.805	16.831	4.250	1.625 ⁺⁰ / _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	238
C 70 4		23.366	16.673	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	207

Imperial output versions available also in combination with HS input

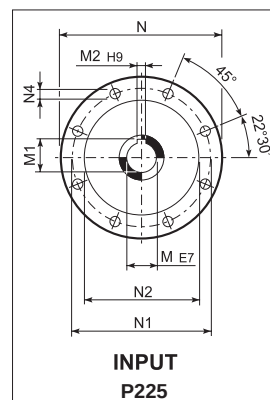
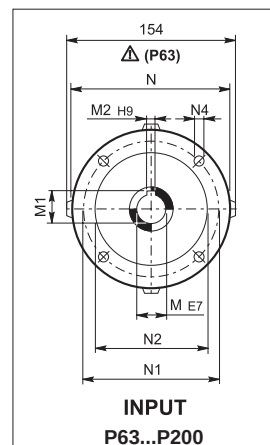
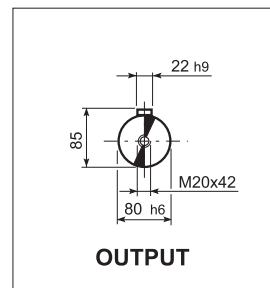
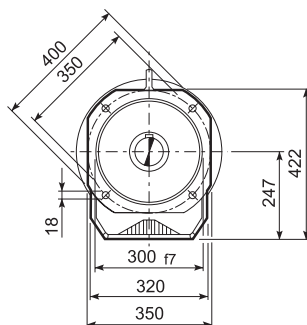
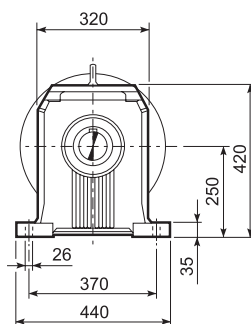
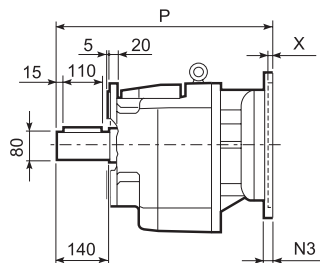
C 80...P(IEC)



P



F

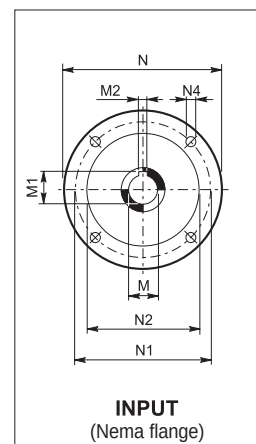
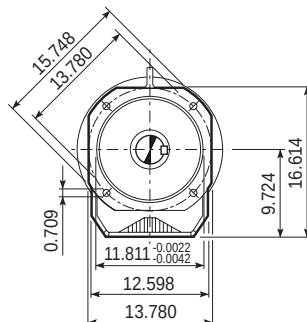
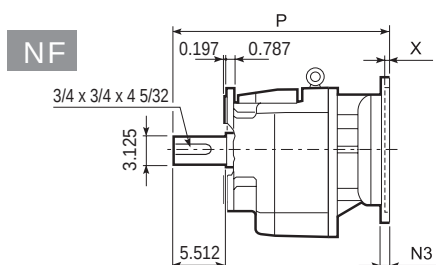
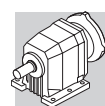
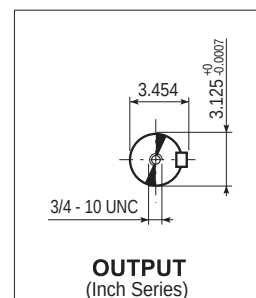
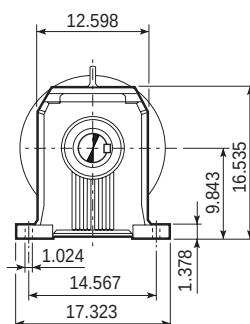
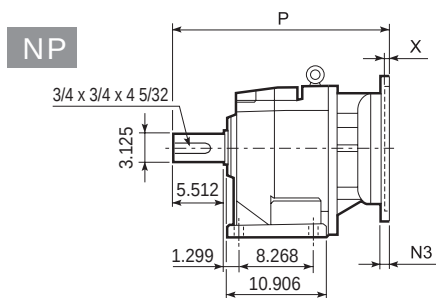


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 80 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	533	135
C 80 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	533	135
C 80 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	543	139
C 80 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	543	139
C 80 2/3	P132	38	41.3	10	300	265	230	16	14	5	579.5	141
C 80 2/3	P160	42	45.3	12	350	300	250	23	18	6	635	154
C 80 2/3	P180	48	51.8	14	350	300	250	23	18	6	635	154
C 80 2	P200	55	59.3	16	400	350	300	—	M16x25	7	660	176
C 80 2	P225	60	64.4	18	450	400	350	25	18	6	705.5	178
C 80 4	P63	11	12.8	4	140	115	95	—	M8x19	4	576.5	138
C 80 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	576.5	138
C 80 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	596	140
C 80 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	596	140
C 80 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	606	144
C 80 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	606	144
C 80 4	P132	38	41.3	10	300	265	230	16	M12x16	5	642.5	146

Metric output versions available also in combination with NEMA motor adaptor

C 80...N(NEMA Input)

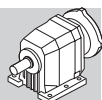


Dimensions are in Inch except when shown in *italic* [mm]

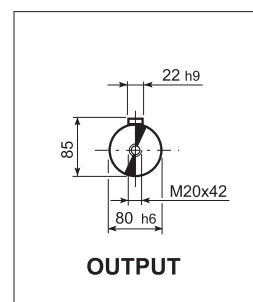
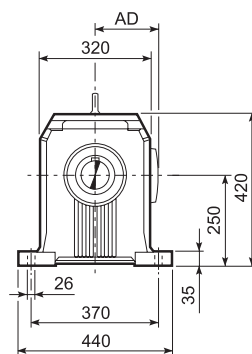
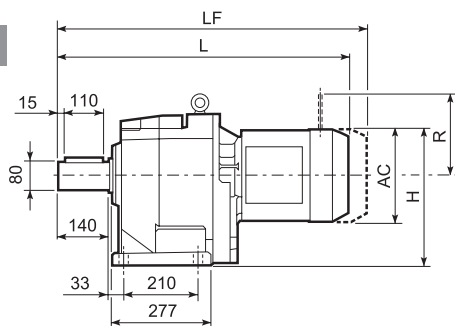
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 80 2/3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	21.752	306
C 80 2/3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	22.992	311
C 80 2/3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	25.984	369
C 80 2	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	26.181	373
C 80 2	N320TC	2.125 ^{+0.0035} / _{+0.0024}	2.350	0.500 ^{+0.0017} / ₊₀	17.677	11.000	12.500	—	0.669	0.217	29.035	459
C 80 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	23.484	304
C 80 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	23.484	309
C 80 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	24.232	317
C 80 4	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	25.472	322

Imperial output versions available also in combination with IEC motor adaptor

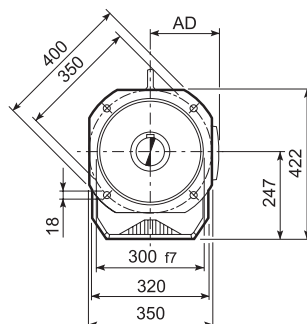
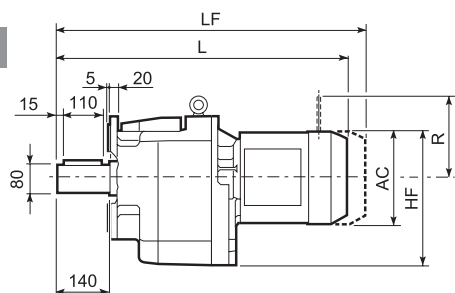
C 80...M/ME



P



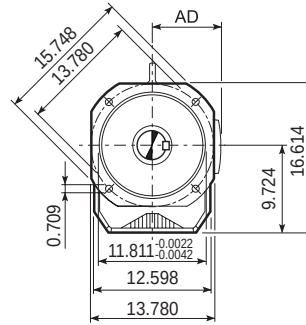
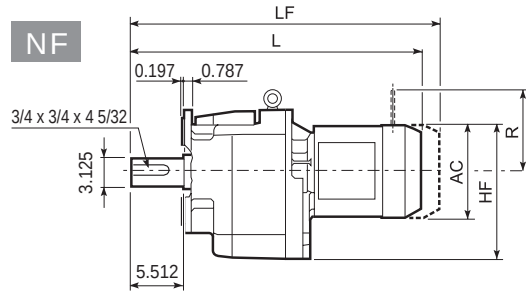
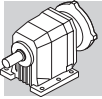
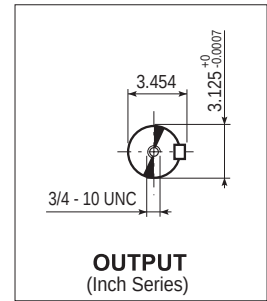
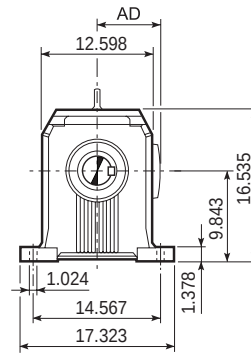
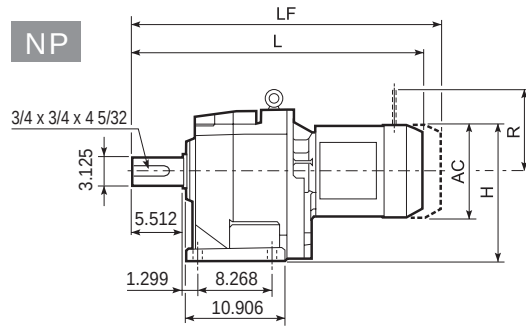
F



Dimensions are in mm

									M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD	Kg	LF	Kg	R	AD	R	AD
C 80 2/3	S3	ME3S	195	347.5	344.5	742.5	142	140.5	—	—	—	—	—	—
C 80 2/3	S3	ME3L	195	347.5	344.5	774.5	142	146	—	—	—	—	—	—
C 80 2/3	S4	ME4	258	379	376	882.5	193	180	—	—	—	—	—	—
C 80 2/3	S4	ME4LB	258	379	376	917.5	193	188	—	—	—	—	—	—
C 80 2/3	S5	ME5S	310	405	402	969	245	208	—	—	—	—	—	—
C 80 2/3	S5	ME5L	310	405	402	1013	245	224	—	—	—	—	—	—
C 80 4	S1	M1	138	319	316	733.5	108	133	794.5	136	103	135	124	108
C 80 4	S2	ME2S	156	328	325	761.5	119	137	—	—	—	—	—	—
C 80 4	S3	ME3S	195	347.5	344.5	805.5	142	143.5	—	—	—	—	—	—
C 80 4	S3	ME3L	195	347.5	344.5	837.5	142	149	—	—	—	—	—	—
C 80 4	S4	ME4	258	379	376	945.5	193	183	—	—	—	—	—	—
C 80 4	S4	ME4LB	258	379	376	980.5	193	191	—	—	—	—	—	—

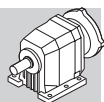
C 80...M/ME



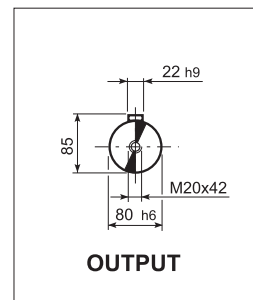
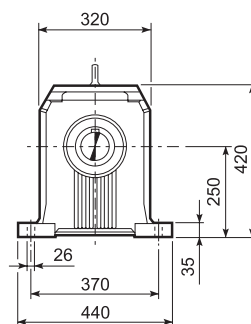
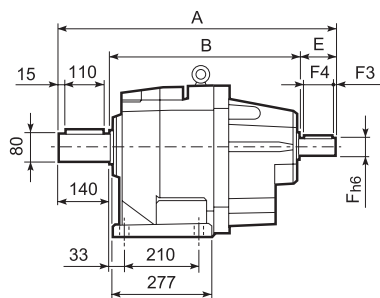
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	HF	L	AD	lbs	M...FD M...FA		M...FD		M...FA	
									LF	lbs	R	AD	R	AD
C 80 2/3	S3	ME3S	7.677	13.681	13.563	29.232	5.591	310	—	—	—	—	—	—
C 80 2/3	S3	ME3L	7.677	13.681	13.563	30.492	5.591	322	—	—	—	—	—	—
C 80 2/3	S4	ME4	10.157	14.921	14.803	34.744	7.598	397	—	—	—	—	—	—
C 80 2/3	S4	ME4LB	10.157	14.921	14.803	36.122	7.598	414	—	—	—	—	—	—
C 80 2/3	S5	ME5S	12.205	15.945	15.827	38.150	9.646	459	—	—	—	—	—	—
C 80 2/3	S5	ME5L	12.205	15.945	15.827	39.882	9.646	494	—	—	—	—	—	—
C 80 4	S1	M1	5.433	12.559	12.441	28.878	4.252	293	31.280	300	4.055	5.315	4.882	4.252
C 80 4	S2	ME2S	6.142	12.913	12.795	29.980	4.685	302	—	—	—	—	—	—
C 80 4	S3	ME3S	7.677	13.681	13.563	31.713	5.591	316	—	—	—	—	—	—
C 80 4	S3	ME3L	7.677	13.681	13.563	32.972	5.591	328	—	—	—	—	—	—
C 80 4	S4	ME4	10.157	14.921	14.803	37.224	7.598	403	—	—	—	—	—	—
C 80 4	S4	ME4LB	10.157	14.921	14.803	38.602	7.598	421	—	—	—	—	—	—

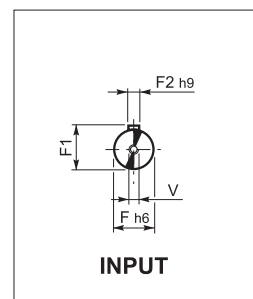
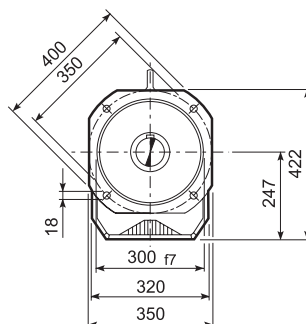
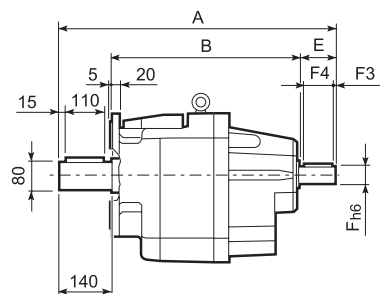
C 80...HS



P



F

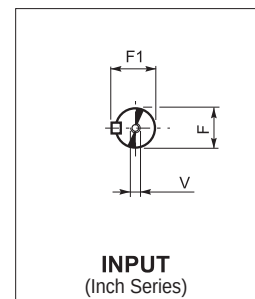
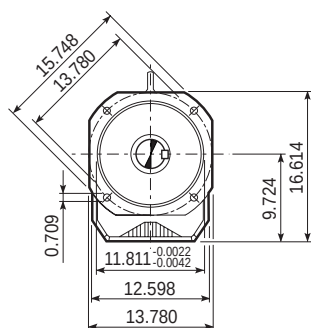
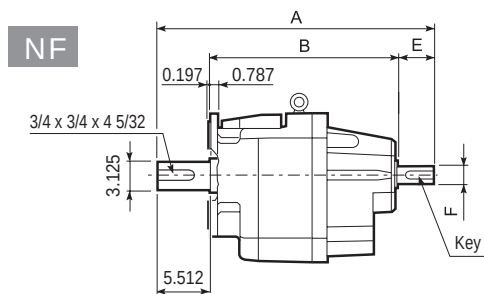
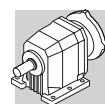
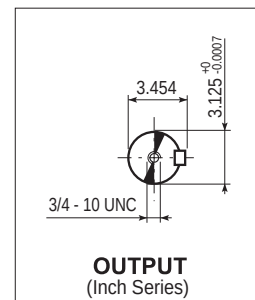
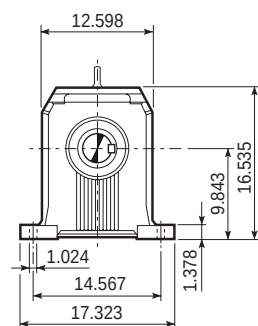
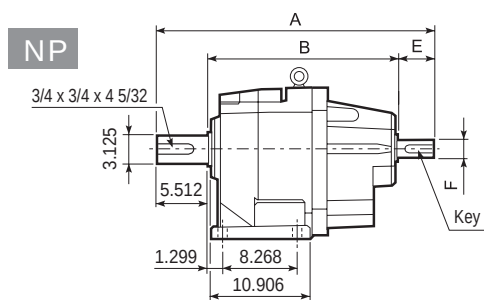


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 80 2	HS	718.5	468.5	110	42	45	12	10	90	M12x28	154
C 80 3		718.5	468.5	110	42	45	12	10	90	M12x28	154
C 80 4		666.5	476.5	50	24	27	8	2.5	45	M8x19	141

Metric output versions available also in combination with NHS input

C 80...NHS

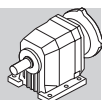


Dimensions are in Inch except when shown in *italic* [mm]

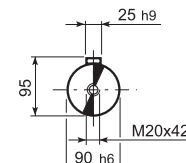
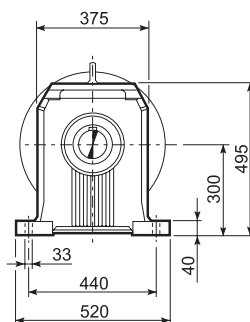
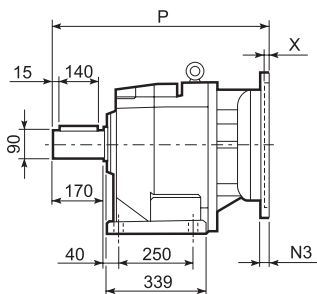
		A	B	E	F	F1	V	Key	lbs
									
C 80 2	NHS	28.207	18.445	4.250	1.625 ⁺⁰ / _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	340
C 80 3		28.207	18.445	4.250	1.625 ⁺⁰ / _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	340
C 80 4		26.240	18.760	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	311

Imperial output versions available also in combination with HS input

C 90...P(IEC)

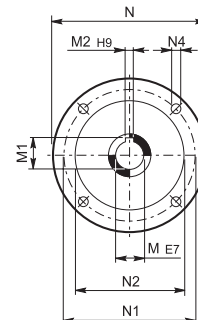
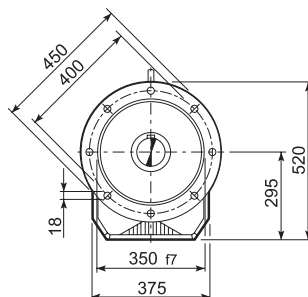
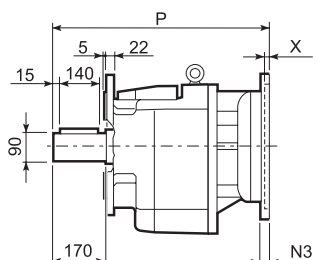


P



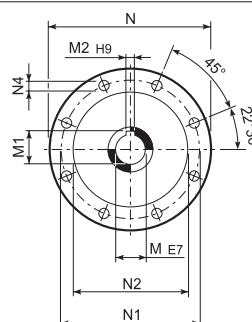
OUTPUT

F



INPUT

P71...P200



INPUT

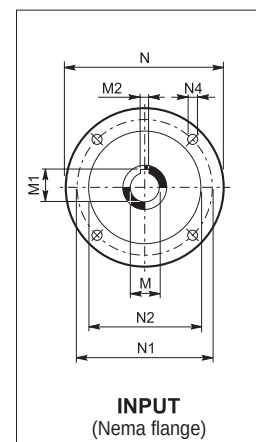
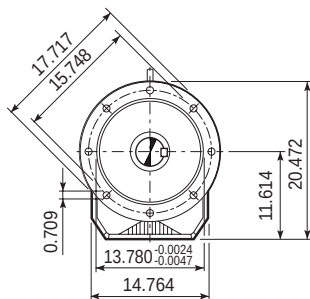
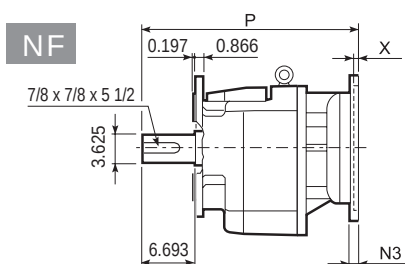
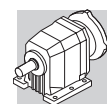
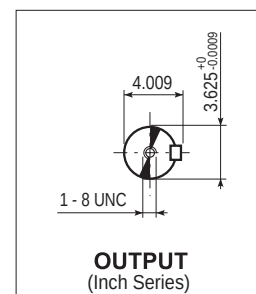
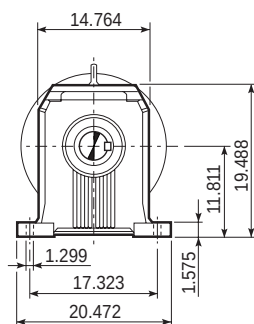
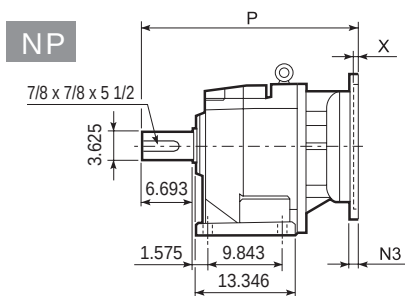
P225...P250

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 90 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	644.5	229
C 90 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	644.5	229
C 90 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	654.5	234
C 90 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	654.5	234
C 90 2/3	P132	38	41.3	10	300	265	230	16	14	5	691	236
C 90 2/3	P160	42	45.3	12	350	300	250	23	18	6	746.5	251
C 90 2/3	P180	48	51.8	14	350	300	250	23	18	6	746.5	251
C 90 2/3	P200	55	59.3	16	400	350	300	—	M16x25	7	771.5	272
C 90 2/3	P225	60	64.4	18	450	400	350	30	18	6	817	273
C 90 2/3	P250	65	69.4	18	550	500	450	30	18	6	847	295
C 90 4	P63	11	12.8	4	140	115	95	—	M8x19	4	707.5	236
C 90 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	707.5	236
C 90 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	727	238
C 90 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	727	238
C 90 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	737	242
C 90 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	737	242
C 90 4	P132	38	41.3	10	300	265	230	16	14	5	773.5	244
C 90 4	P160	42	45.3	12	350	300	250	23	18	5.5	824	248
C 90 4	P180	48	51.8	14	350	300	250	23	18	5.5	824	248

Metric output versions available also in combination with NEMA motor adaptor

C 90...N(NEMA Input)

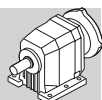


Dimensions are in Inch except when shown in *italic* [mm]

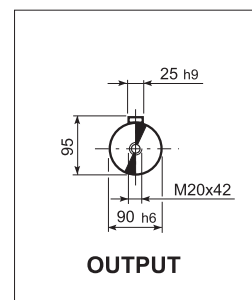
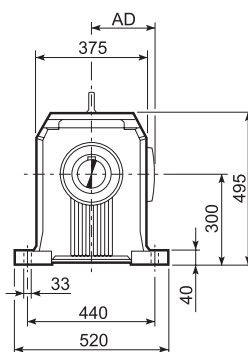
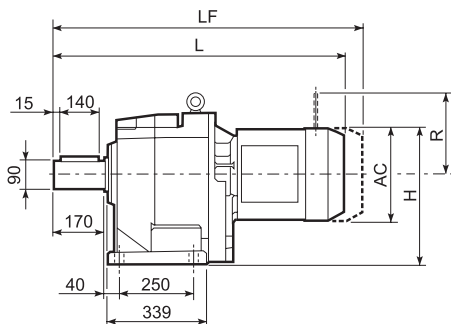
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
		1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	26.142	516
C 90 2/3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	27.382	520
C 90 2/3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	30.374	583
C 90 2/3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	30.571	587
C 90 2/3	N320TC	2.125 ^{+0.0035} / _{+0.0024}	2.350	0.500 ^{+0.0017} / ₊₀	17.677	11.000	12.500	—	0.669	0.217	33.425	668
C 90 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	28.642	520
C 90 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	28.642	525
C 90 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	29.390	534
C 90 4	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	30.630	538
C 90 4	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	33.425	577
C 90 4	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	33.622	580

Imperial output versions available also in combination with IEC motor adaptor

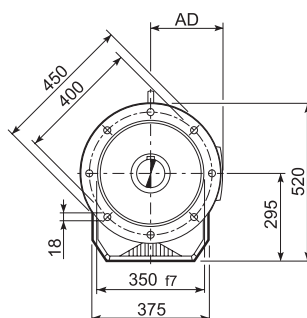
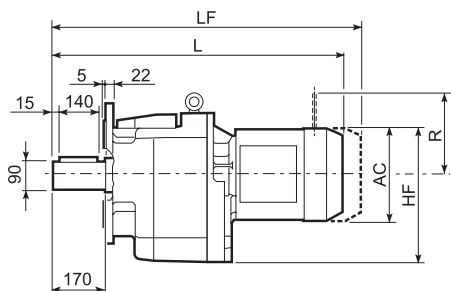
C 90...M/ME



P



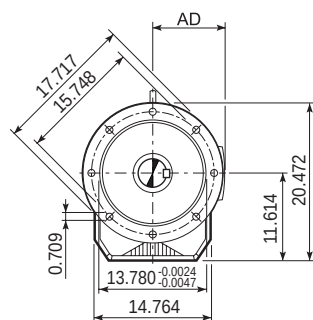
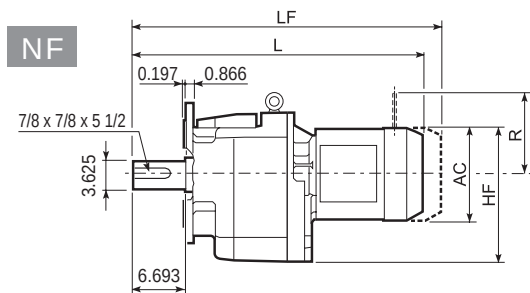
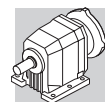
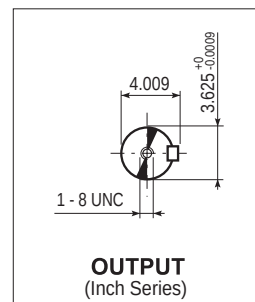
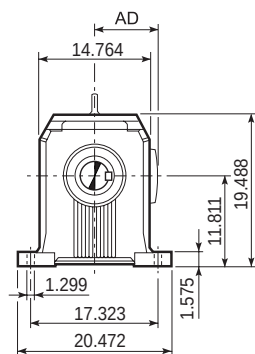
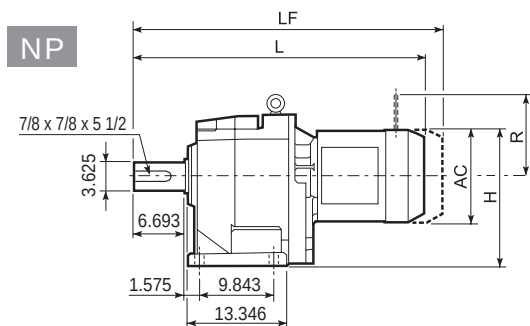
F



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	HF	L	AD	Kg		LF	Kg	R	AD	R	AD
C 90 2/3	S3	ME3S	195	397.5	392.5	852	142	229.5	—	—	—	—	—	—	—
C 90 2/3	S3	ME3L	195	397.5	392.5	884	142	236	—	—	—	—	—	—	—
C 90 2/3	S4	ME4	258	429	424	992	193	270	—	—	—	—	—	—	—
C 90 2/3	S4	ME4LB	258	429	424	1027	193	278	—	—	—	—	—	—	—
C 90 2/3	S5	ME5S	310	455	450	1078.5	245	298	—	—	—	—	—	—	—
C 90 2/3	S5	ME5L	310	455	450	1122.5	245	314	—	—	—	—	—	—	—
C 90 4	S1	M1	138	369	364	862	108	226	923	228	103	135	124	108	
C 90 4	S2	M2S	156	378	373	891	119	234	962	238	129	146	134	119	
C 90 4	S2	ME2S	156	378	373	891	119	234	—	—	—	—	—	—	—
C 90 4	S3	ME3S	195	397.5	392.5	935	142	240.5	—	—	—	—	—	—	—
C 90 4	S3	ME3L	195	397.5	392.5	967	142	246	—	—	—	—	—	—	—
C 90 4	S4	ME4	258	429	424	1075	193	280	—	—	—	—	—	—	—
C 90 4	S4	ME4LB	258	429	424	1126.5	193	288	—	—	—	—	—	—	—

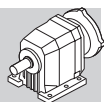
C 90...M/ME



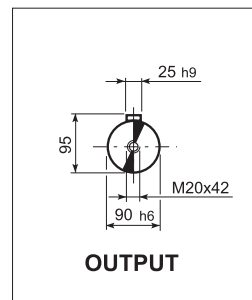
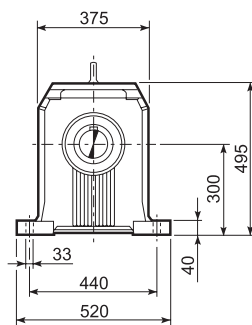
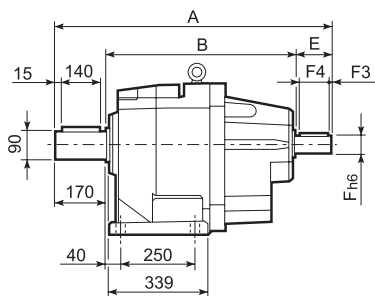
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 90 2/3	S3	ME3S	7.677	15.650	15.453	33.543	5.591	506	—	—	—	—	—	—
C 90 2/3	S3	ME3L	7.677	15.650	15.453	34.803	5.591	520	—	—	—	—	—	—
C 90 2/3	S4	ME4	10.157	16.890	16.693	39.055	7.598	595	—	—	—	—	—	—
C 90 2/3	S4	ME4LB	10.157	16.890	16.693	40.433	7.598	613	—	—	—	—	—	—
C 90 2/3	S5	ME5S	12.205	17.913	17.717	42.461	9.646	657	—	—	—	—	—	—
C 90 2/3	S5	ME5L	12.205	17.913	17.717	44.193	9.646	692	—	—	—	—	—	—
C 90 4	S1	M1	5.433	14.528	14.331	33.937	4.252	498	36.339	503	4.055	5.315	4.882	4.252
C 90 4	S2	M2S	6.142	14.882	14.685	35.079	4.685	516	37.874	525	5.079	5.748	5.276	4.685
C 90 4	S2	ME2S	6.142	14.882	14.685	35.079	4.685	516	—	—	—	—	—	—
C 90 4	S3	ME3S	7.677	15.650	15.453	36.811	5.591	530	—	—	—	—	—	—
C 90 4	S3	ME3L	7.677	15.650	15.453	38.071	5.591	542	—	—	—	—	—	—
C 90 4	S4	ME4	10.157	16.890	16.693	42.323	7.598	617	—	—	—	—	—	—
C 90 4	S4	ME4LB	10.157	16.890	16.693	44.350	7.598	635	—	—	—	—	—	—

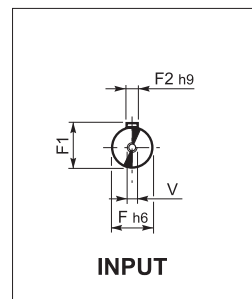
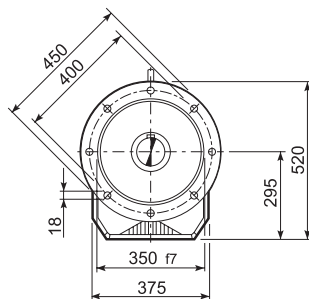
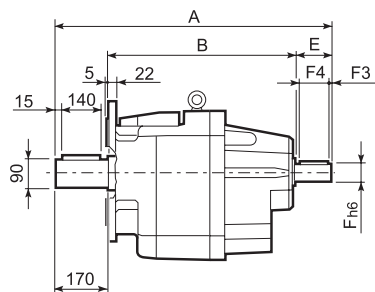
C 90...HS



P



F

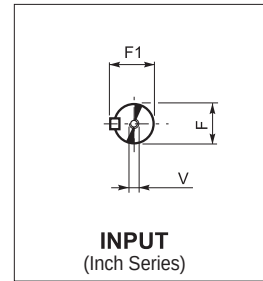
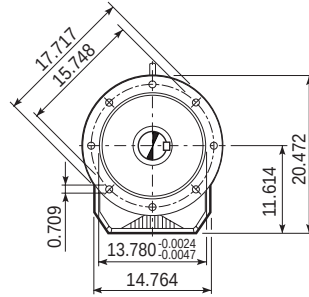
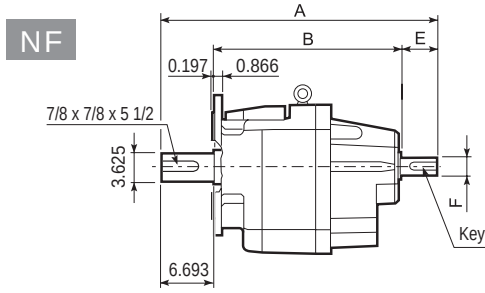
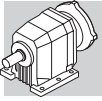
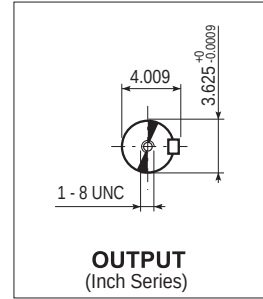
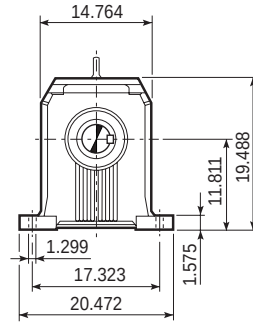
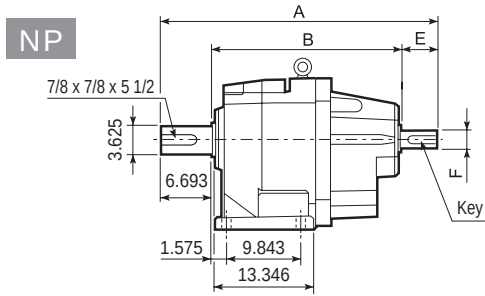


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 90 2	HS	930.5	620.5	140	60	64	18	10	120	M16x36	273
C 90 3		930.5	620.5	140	60	64	18	10	120	M16x36	273
C 90 4		797	577	50	24	27	8	2.5	45	M8x19	240

Metric output versions available also in combination with NHS input

C 90...NHS

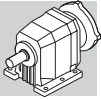


Dimensions are in Inch except when shown in *italic* [mm]

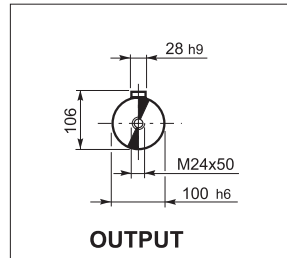
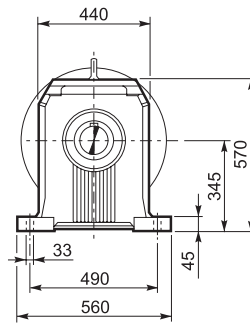
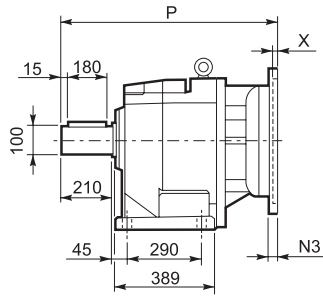
		A	B	E	F	F1	V	Key	lbs
C 90 2	NHS	36.122	24.429	5.000	2.125 ⁺⁰ / _{-0.0007}	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	602
C 90 3		36.122	24.429	5.000	2.125 ⁺⁰ / _{-0.0007}	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	602
C 90 4		31.378	22.717	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	529

Imperial output versions available also in combination with HS input

C 100...P(IEC)

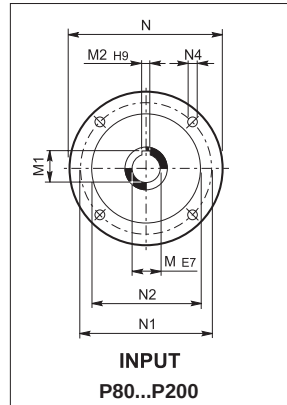
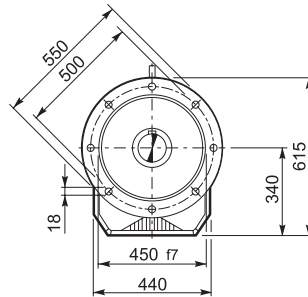
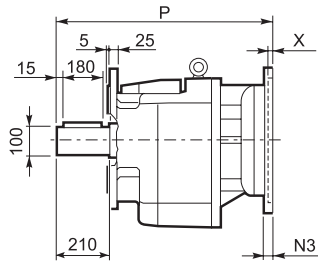


P



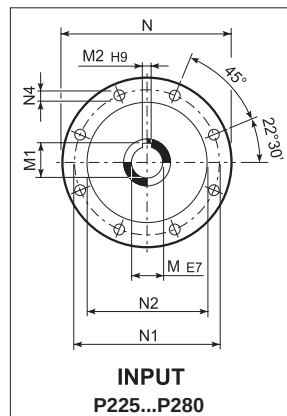
OUTPUT

F



INPUT

P80...P200



INPUT

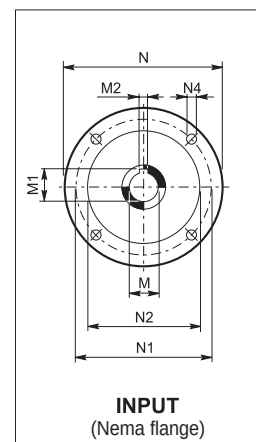
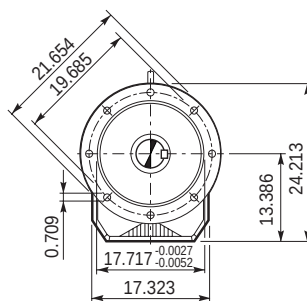
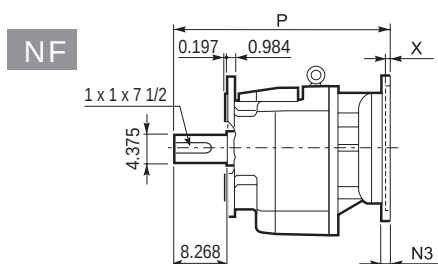
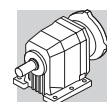
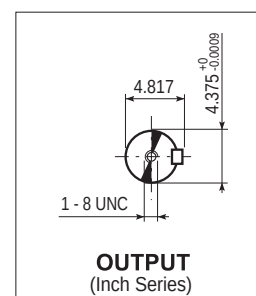
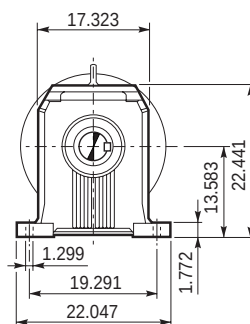
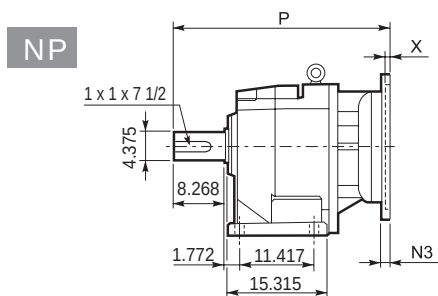
P225...P280

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
C 100 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	749.5	364
C 100 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	749.5	364
C 100 2/3	P132	38	41.3	10	300	265	230	16	14	5	786	367
C 100 2/3	P160	42	45.3	12	350	300	250	23	18	6	841.5	382
C 100 2/3	P180	48	51.8	14	350	300	250	23	18	6	841.5	382
C 100 2/3	P200	55	59.3	16	400	350	300	—	M16x25	7	866.5	403
C 100 2/3	P225	60	64.4	18	450	400	350	30	18	7	912	403
C 100 2/3	P250	65	69.4	18	550	500	450	30	18	7	942	426
C 100 2/3	P280	75	79.9	20	550	500	450	30	18	6	942	426
C 100 4	P63	11	12.8	4	140	115	95	—	M8x19	4	803	369
C 100 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	803	369
C 100 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	822.5	371
C 100 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	822.5	371
C 100 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	832.5	375
C 100 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	832.5	375
C 100 4	P132	38	41.3	10	300	265	230	16	14	5	869	377
C 100 4	P160	42	45.3	12	350	300	250	23	18	5.5	919.5	381
C 100 4	P180	48	51.8	14	350	300	250	23	18	5.5	919.5	381

Metric output versions available also in combination with NEMA motor adaptor

C 100...N(NEMA Input)

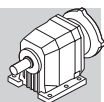


Dimensions are in Inch except when shown in *italic* [mm]

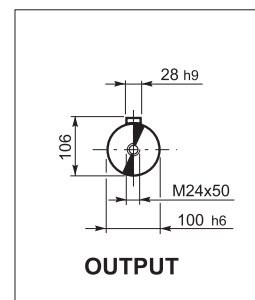
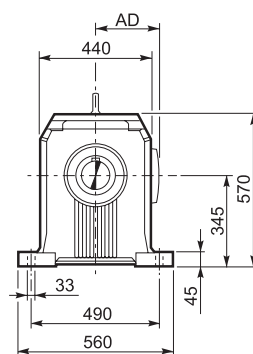
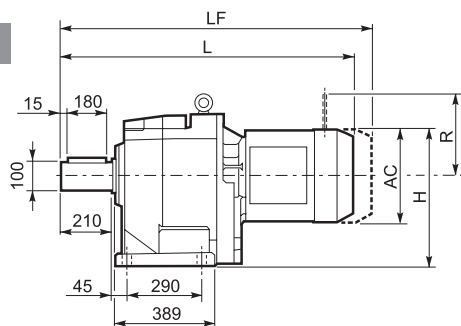
		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
C 100 2/3	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	31.122	809
C 100 2/3	N250TC	1.625 +0.0030 +0.0020	1.796	0.375 +0.0014 +0	13.780	7.250	8.500	—	0.551	0.217	34.114	872
C 100 2/3	N280TC	1.875 +0.0030 +0.0020	2.102	0.500 +0.0017 +0	13.740	10.500	9.000	—	0.551	0.217	34.311	875
C 100 2/3	N320TC	2.125 +0.0035 +0.0024	2.350	0.500 +0.0017 +0	17.677	11.000	12.500	—	0.669	0.217	37.165	955
C 100 4	N56C	0.625 +0.0020 +0.0013	0.710	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	32.402	813
C 100 4	N140TC	0.875 +0.0024 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	32.402	818
C 100 4	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	33.150	827
C 100 4	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	34.390	831
C 100 4	N250TC	1.625 +0.0030 +0.0020	1.796	0.375 +0.0014 +0	13.780	7.250	8.500	—	0.551	0.217	37.185	870
C 100 4	N280TC	1.875 +0.0030 +0.0020	2.102	0.500 +0.0017 +0	13.740	10.500	9.000	—	0.551	0.217	37.382	873

Imperial output versions available also in combination with IEC motor adaptor

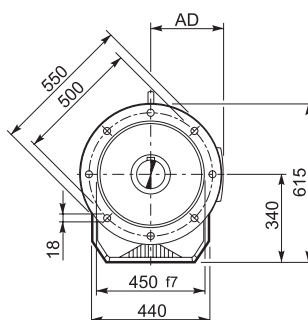
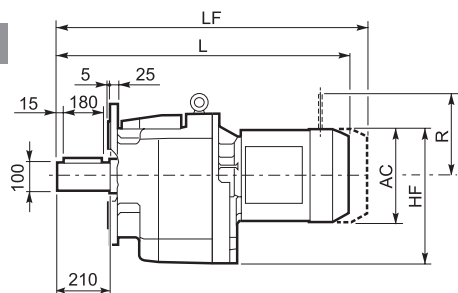
C 100...M/ME



P



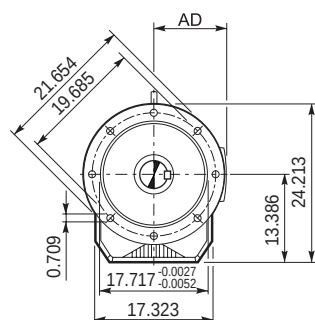
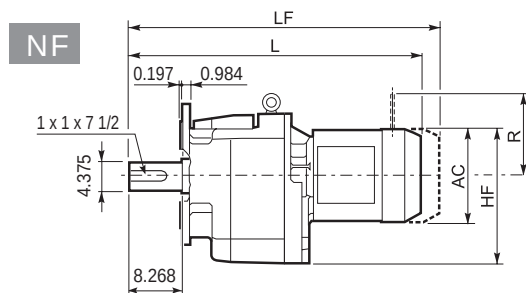
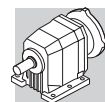
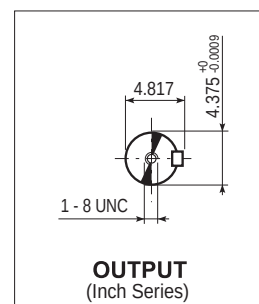
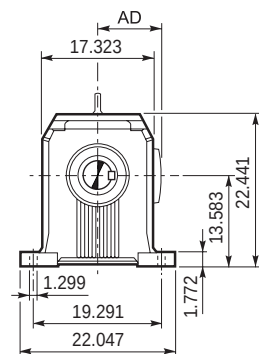
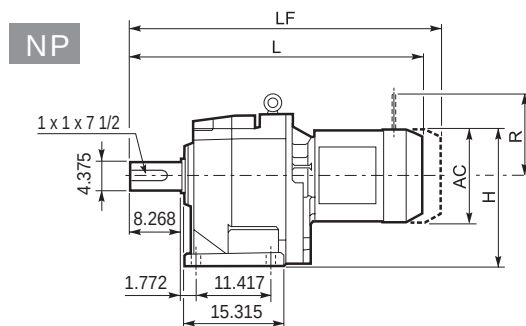
F



Dimensions are in mm

			AC	H	HF	L	AD	Kg	M...FD M...FA		M...FD		M...FA	
									LF	Kg	R	AD	R	AD
C 100 2/3	S4	ME4	258	474	469	1087	193	392	—	—	—	—	—	—
C 100 2/3	S4	ME4LB	258	474	469	1122	193	400	—	—	—	—	—	—
C 100 2/3	S5	ME5S	310	500	495	1173.5	245	420	—	—	—	—	—	—
C 100 2/3	S5	ME5L	310	500	495	1217.5	245	436	—	—	—	—	—	—
C 100 4	S1	M1	138	414	409	956.5	108	346	1027.5	348	103	135	124	108
C 100 4	S2	M2S	156	423	418	985.5	119	354	1056.5	357	129	146	134	119
C 100 4	S2	ME2S	156	423	418	985.5	119	354	—	—	—	—	—	—
C 100 4	S3	ME3S	195	442.5	437.5	1029.5	142	359.5	—	—	—	—	—	—
C 100 4	S3	ME3L	195	442.5	437.5	1061.5	142	366	—	—	—	—	—	—
C 100 4	S4	ME4	258	474	469	1169.5	193	400	—	—	—	—	—	—
C 100 4	S4	ME4LB	258	474	469	1204.5	245	408	—	—	—	—	—	—

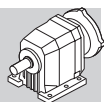
C 100...M/ME



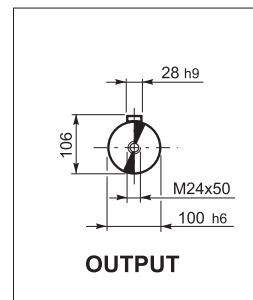
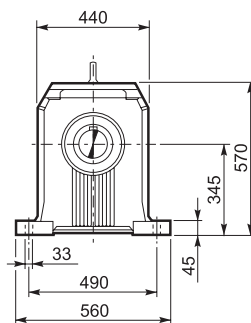
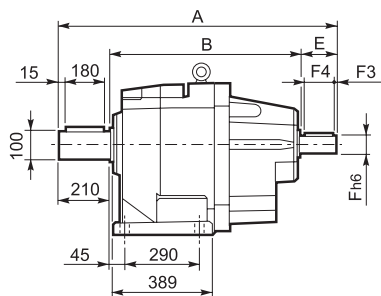
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 100 2/3	S4	ME4	10.157	18.661	18.465	42.795	7.598	864	—	—	—	—	—	—
C 100 2/3	S4	ME4LB	10.157	18.661	18.465	44.173	7.598	882	—	—	—	—	—	—
C 100 2/3	S5	ME5S	12.205	19.685	19.488	46.201	9.646	926	—	—	—	—	—	—
C 100 2/3	S5	ME5L	12.205	19.685	19.488	47.933	9.646	961	—	—	—	—	—	—
C 100 4	S1	M1	5.433	16.299	16.102	37.657	4.252	763	40.453	767	4.055	5.315	4.882	4.252
C 100 4	S2	M2S	6.142	16.654	16.457	38.799	4.685	780	41.594	787	5.079	5.748	5.276	4.685
C 100 4	S2	ME2S	6.142	16.654	16.457	38.799	4.685	780	—	—	—	—	—	—
C 100 4	S3	ME3S	7.677	17.421	17.224	40.531	5.591	793	—	—	—	—	—	—
C 100 4	S3	ME3L	7.677	17.421	17.224	41.791	5.591	807	—	—	—	—	—	—
C 100 4	S4	ME4	10.157	18.661	18.465	46.043	7.598	882	—	—	—	—	—	—
C 100 4	S4	ME4LB	10.157	18.661	18.465	47.421	9.646	899	—	—	—	—	—	—

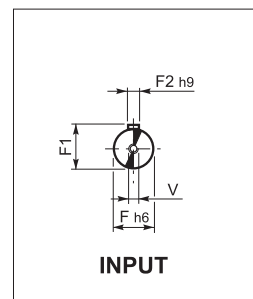
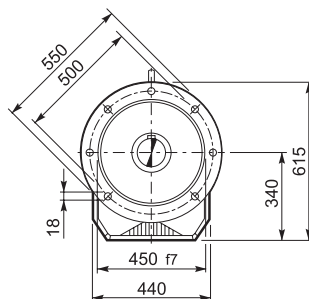
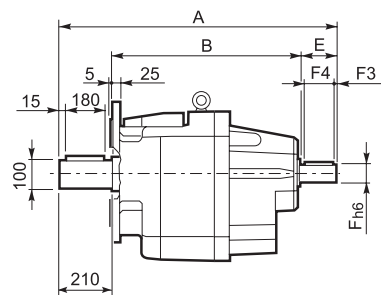
C 100...HS



P



F

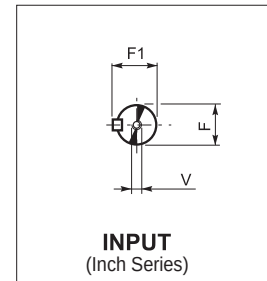
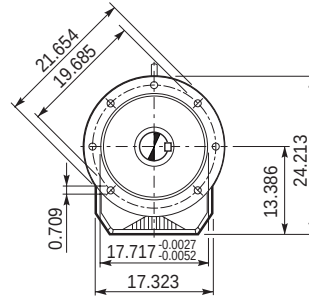
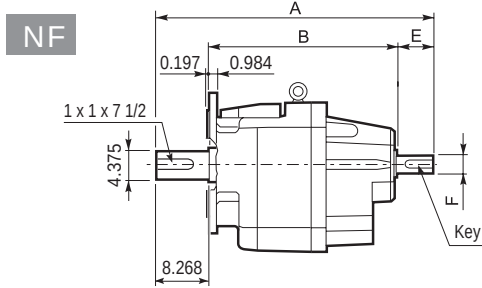
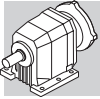
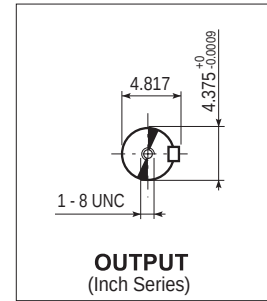
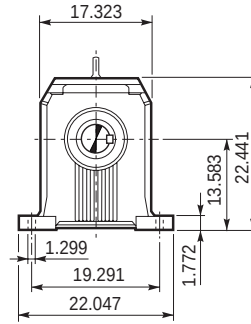
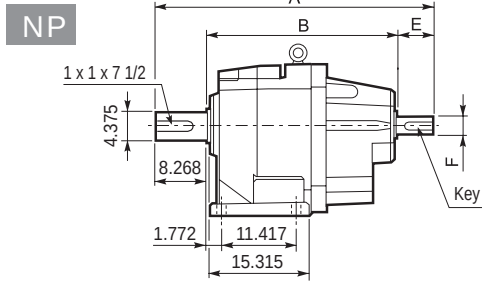


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
C 100 2	HS	1025.5	676	140	60	64	18	10	120	M16x36	409
C 100 3		1025.5	676	140	60	64	18	10	120	M16x36	409
C 100 4		892	632	50	24	27	8	2.5	45	M8x19	372

Metric output versions available also in combination with NHS input

C 100...NHS



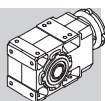
Dimensions are in Inch except when shown in *italic* [mm]

		A	B	E	F	F1	V	Key	lbs
									
C 100 2	NHS	39.862	26.594	5.000	2.125 ⁺⁰ / _{-0.0007}	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	902
C 100 3		39.862	26.594	5.000	2.125 ⁺⁰ / _{-0.0007}	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	902
C 100 4		35.118	24.882	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	820

Imperial output versions available also in combination with HS input

HELICAL BEVEL GEAR UNITS SERIES A

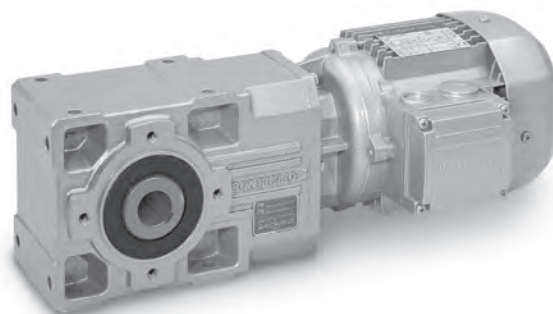
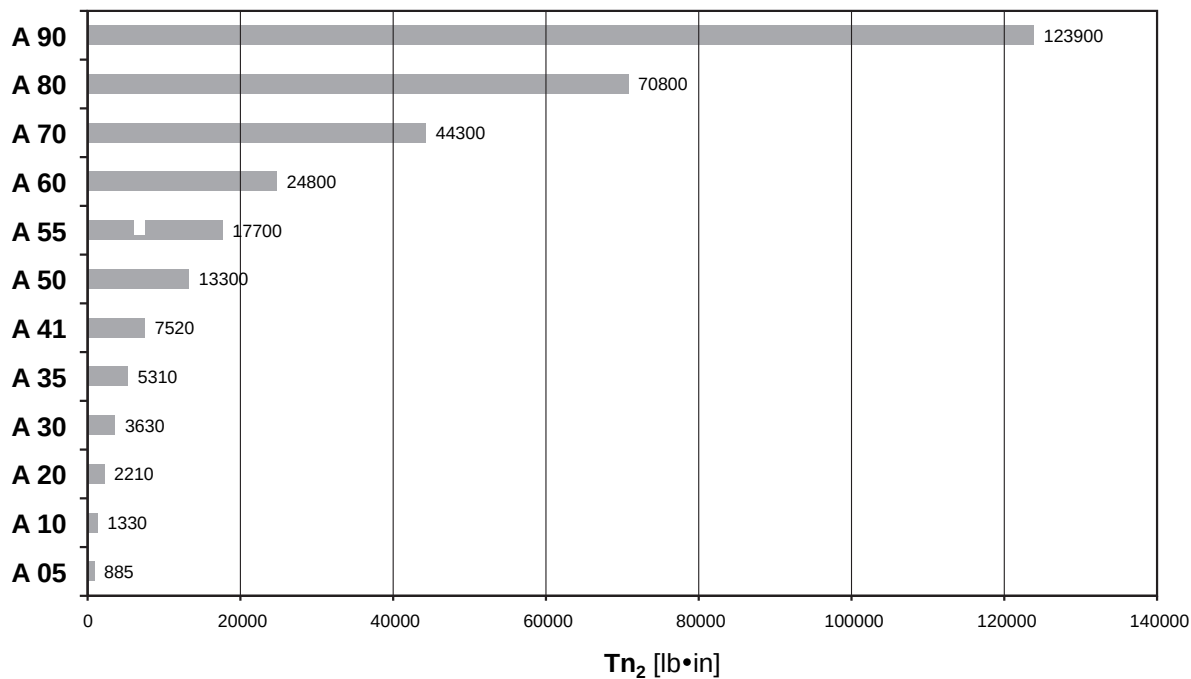
31 DESIGN FEATURES

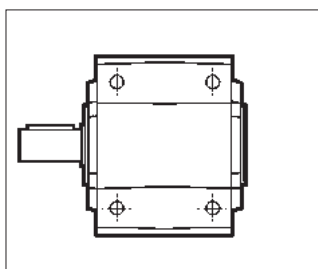


The main design characteristics are:

- modularity
- space effective
- universal mounting
- high efficiency
- quiet operation
- gears in hardened and case-hardened steel
- bare aluminium housing for sizes 05, 10, 20, 30, unpainted high strength painted cast-iron housings for larger frame sizes
- input and output shafts from high grade steel.

(C 26)

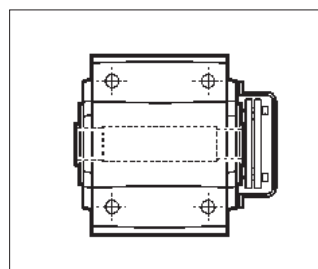




UR / NUR

Single extension
output shaft

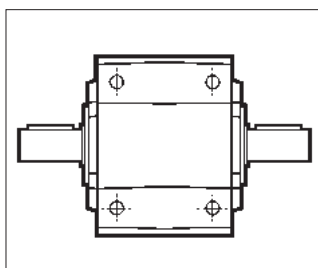
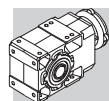
A 05 ... A 90



US

Hollow output shaft
and shrink disc

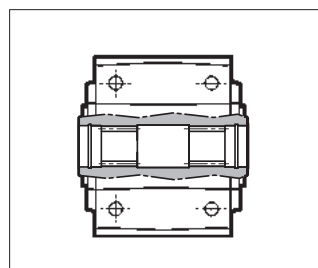
A 05 ... A 90



UD / NUD

Double extended
output shaft

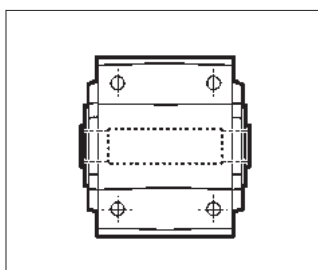
A 05 ... A 90



UV

Splined hollow shaft
DIN 5480

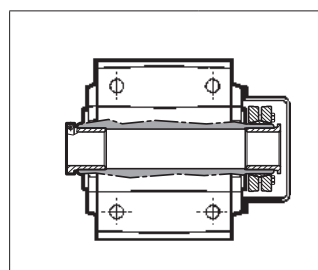
A 20 ... A 60



UH / NUH

Hollow output shaft
and keyway

A 05 ... A 90



QF / NQF (Quick-fit)

Hollow shaft with
adapter bushings
and shrink disc

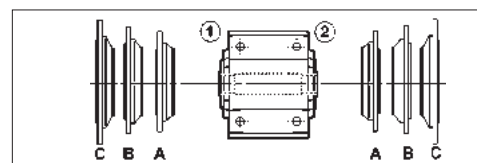
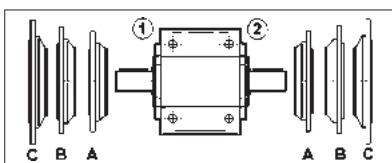
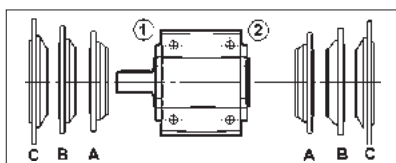
A 10 ... A 60

$T_{n2 \max}$ [lb·in]	
A 35 QF35	4872
A 35 NQF 1-3/8	
A 55 QF55	16830

Basic versions with bolted flange

The sketches show the applicable flanges to the basic versions and their positions, designated with either ① or ②.

UR/NUR F1... UR/NUR F2... UD/NUD F1... UD/NUD F2... UH/NUH... F1... UH/NUH... F2...



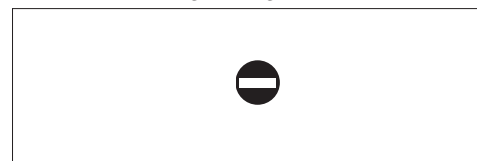
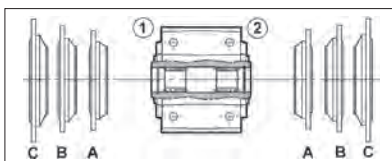
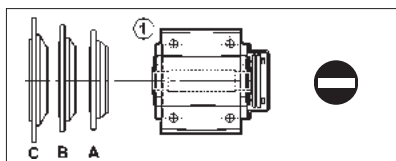
US F1...

US F2...

UV F1...

UV F2...

QF/NQF...



33 DESIGNATION

GEAR UNIT

A 35 2 NUH F1A 49.1 S1 VA

OPTIONS

MOUNTING POSITION

B3 (Standard), B6, B7, B8, VA, VB

INPUT CONFIGURATION



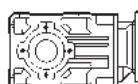
S05 ... S5



M



ME



IEC

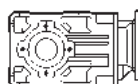
P63 ... P180



BN



BE



NEMA

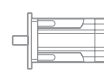
N56C ... N320TC



SK



SC



HS

NHS

GEAR RATIO

OUTPUT FLANGE SIZE AND POSITION

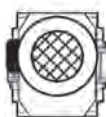
(specify only if requested)

F = Flanged version

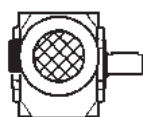
1, 2 = Flange position

A, B, C = Flange size

VERSION

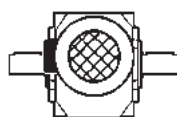


UH_ / NUH



UR / NUR

(A 05...A 90)



UD / NUD

(A 05...A 90)



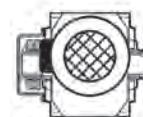
US

(A 05...A 90)



UV

(A 20...A 60)



QF / NQF

(A 10...A 60)

A 05	A 10	A 20	A 30	A 35	A 41	A 50	A 55	A 60	A 70	A 80	A 90
UH25	UH25	UH30	UH35	UH40	UH45	UH50	UH60	UH60	UH70	UH80	UH90
—	UH30	UH35	UH40	UH35	UH40	UH55	UH50	UH70	UH80	UH90	UH100

REDUCTIONS

2 (A 05...A 60), 3 (A 20...A 90), 4 (A 50...A 90)

GEAR FRAME SIZE

05, 10, 20, 30, 35, 41, 50, 55, 60, 70, 80, 90

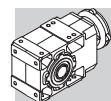
TYPE: A = Helical bevel gear units

MOTOR							BRAKE			
M	1 LA	4	230/400-60	IP54	CLF		W	FD	7.5 R	SB 220 SA
										OPTIONS
										BRAKE SUPPLY
										RECTIFIER TYPE AC/DC NB, SB, NBR, SBR
										BRAKE HAND RELEASE R, RM
										BRAKE TORQUE (specify Nm!) [1 ft·lb = 1.356 Nm]
										BRAKE TYPE FD (d.c. brake) FA (a.c. brake)
										TERMINAL BOX POSITION W (default), N, E, S
										MOTOR MOUNTING — (compact motor) B5 (IEC - motor)
										INSULATION CLASS CL F standard CL H option
										DEGREE OF PROTECTION IP55 standard (IP56 option) IP54, IP55 brake motor
										VOLTAGE - FREQUENCY
										POLE NUMBER 2, 4, 6
										MOTOR SIZE 0B ... 5LA (compact motor) 63A ... 280M (IEC motor)

MOTOR TYPE

ME = compact 3-phase, class IE2 **M** = compact 3-phase
BE = IEC 3-phase, class IE2 **BN** = IEC 3-phase

NEMA motors to be specified thru their ordering numbers



33.1 Gearbox options

AL, AR

On request the gear unit can be provided complete with a backstop device allowing the output shaft to rotate only in the direction specified at the time of ordering. The following table shows the gearboxes in which the anti-run back device can be installed. Anti-run back device exclude RB option.

(C 27)

A 30 2*	A 35 2* ● (5.4_11.8)	A 41 2 ● (5.2; 10.1)	A 50 3	A 55 3	A 60 3	A 70 3	A 80 3	A 90 3
			A 50 4	A 55 4	A 60 4	A 70 4	A 80 4	A 90 4

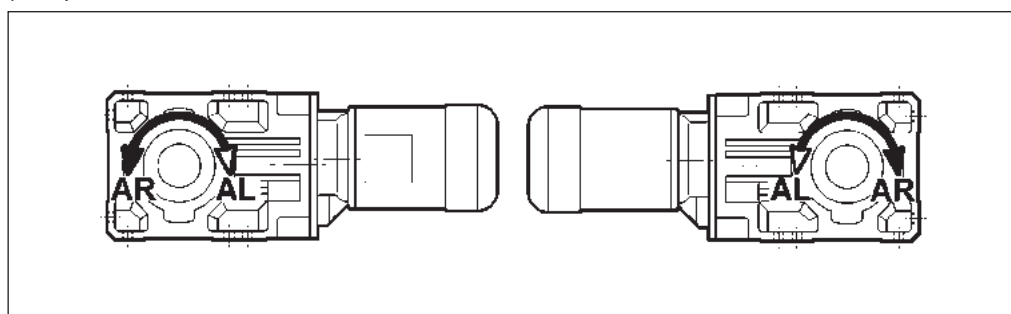
* The supply of the backstop will ban the configuration of servomotor adapters type S_60A, S_60B, S_80A.

When ordering the gear unit, the direction of free rotation must be specified through either the AR or the AL option (Table C28).



N.B. When the anti-run back device operates very frequently make sure that the torque backdriving the gearbox does not exceed 70% of the rated torque T_{n2} for the captioned gear unit.

(C 28)



SO

Gear units A05, A10, A20, A30, A35 and A41, usually factory filled with oil, are, in this case, supplied unlubricated.

LO

Gearboxes A50, A55, A60, A70, A80 and A90, usually supplied without oil, to be supplied with synthetic oil currently used by BONFIGLIOLI RIDUTTORI and filled according to the mounting position specified.

DV

Dual oil seals on input shaft. (Only available for integral gearmotors).

VV

Fluoro elastomer oil seal on input shaft.

PV

All oil seals in Fluoro elastomer material.

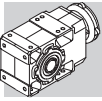
TKL

Taconite seals are available, for output axis of gearboxes sizes (from) A70 to A90, to use in environments characterized by the presence of abrasive dust or powders. Taconite seals incorporate a combination of sealing rings, labyrinths and a grease chamber.

Greasing must be ensured as part of the scheduled maintenance programme.

This option includes fluoro elastomer oil seals on all axes.

For mounting position B6 please consult Bonfiglioli's Technical service.



HDB

Certain gearboxes are available with increased overhung load ratings for use in applications characterised by high overhung loads beyond the capacity of the standard gearboxes. Specify the HDB option when ordering to obtain this increased overhung load capacity. The HDB option is available for gearbox sizes A10 to A50 with a single sided or through solid output shaft.

The following table specifies the maximum loads for HDB reinforced gearbox versions.

Figures refer to forces along the centreline of the output shaft.

(C 29)

HDB	R_{N2}					
	A 10	A 20	A 30	A 35	A 41	A 50
$n1 = 1800$	1236 [lbs]	1394 [lbs]	2158 [lbs]	2698 [lbs]	3372 [lbs]	4496 [lbs]
$n1 = 1200$	1236 [lbs]	1394 [lbs]	2158 [lbs]	2698 [lbs]	3372 [lbs]	4496 [lbs]

Reinforced bearings also allow these versions to withstand increased thrust loads, and in particular.

$$A_{N2} = 0.35 \times R_{N2} \quad (24)$$

In applications free from overhung load, thrust load capacity increases to:

$$A_{N2} = 0.70 \times R_{N2} \quad (25)$$

If load is applied simultaneously to both ends of a through output shaft, contact the Bonfiglioli Technical Service to verify the application.

RB

Gear units A10, A20, A30, A35, A41, A50, A55 and A60, usually supplied with standard values of angular backlash, are, in this case, supplied with reduced angular backlash values (excludes gear units options AL and AR described in this paragraph).

The following table specifies the corresponding figures of angular backlash.

(C 30)

		standard		RB	
A05	i =	5.5_12.3 - $\ominus$ (10.6)	10.6_91.6 - $\ominus$ (12.3)	—	
	φ [°]	28	18		
A10	i =	5.5_12.3 - $\ominus$ (10.6)	10.6_91.6 - $\ominus$ (12.3)	5.5_12.3 - $\ominus$ (10.6)	10.6_91.6 - $\ominus$ (12.3)
	φ [°]	27	17	12	8
A20	i =	5.4_12 - $\ominus$ (10.3)	10.3_380.9 - $\ominus$ (12)	5.4_12 - $\ominus$ (10.3)	10.3_380.9 - $\ominus$ (12)
	φ [°]	23	15	11	7
A30	i =	5.4_11.8 - $\ominus$ (10.5)	10.5_400.8 - $\ominus$ (11.8)	5.4_11.8 - $\ominus$ (10.5)	10.5_400.8 - $\ominus$ (11.8)
	φ [°]	22	15	10	7
A35	i =	5.4_11.8	13.1_393.2	5.4_11.8	13.1_393.2
	φ [°]	20	11	9	6
A41	i =	5.2_11.7 - $\ominus$ (10.1)	10.1_376.8 - $\ominus$ (11.7)	5.2_11.7 - $\ominus$ (10.1)	10.1_376.8 - $\ominus$ (11.7)
	φ [°]	19	13	9	6
A50	i =	7.7_778.2		7.7_778.2	
	φ [°]	16		7	
A55	i =	4.9_19.2	23.8_793	4.9_19.2	23.8_793
	φ [°]	17	11	8	6
A60	i =	7.9_20.6	25.7_755.4	7.9_20.6	25.7_755.4
	φ [°]	12	9	5	4
A70	i =	9.4_21.3	23.5_1715	—	
	φ [°]	14	12		
A80	i =	9.8_20.9	22.6_1558	—	
	φ [°]	13	11		
A90	i =	9.7_21	22.3_1632	—	
	φ [°]	12	10		

For the delivery timeframe contact the Bonfiglioli's sales network

SURFACE PROTECTION

When no specific protection class is requested, the painted (ferrous) surfaces of gearboxes are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, gearboxes can be delivered with **C3** and **C4** surface protection, obtained by painting the complete gearbox.

(C 31)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C [248 F°]	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C [248 F°]	C4

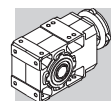
Gearboxes with optional protection to class **C3** or **C4** are available in a choice of colours. If no specific colour is requested (see the "PAINTING" option) gearboxes are finished in RAL 7042. Gearboxes can also be supplied with surface protection for corrosivity class **C5** according to UNI EN ISO 12944-2. Contact our Technical Service for further details.

PAINTING

Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(C 32)

PAINTING	Colour	RAL number
RAL7042*	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010



* Gearboxes are supplied in this standard colour if no other colour is specified.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.

CERTIFICATES

AC - Certificate of compliance

The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

CC - Inspection certificate

The document entails checking on order compliance, the visual inspection of external conditions and of mating dimensions. Checking on main functional parameters in unloaded conditions is also performed along with oil seal proofing, both in static and in running conditions. Units inspected are sampled within the shipping batch and marked individually.

33.2 Accessories

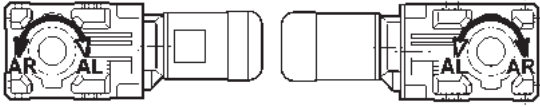
See chapter 44 of this catalogue.

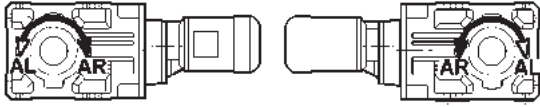
33.3 Motor options

AL, AR

A backstop device on the motor itself, as described in the electric motors section of this catalogue, is available for gearmotors with integral M and ME Series motors. The following table shows the direction of free rotation of the gearbox, on the basis of which the correct option must be selected.

(C 33)

									
2x 	A 05	A 10	A 20	A 30	A 35	A 41	A 50	A 60	
3x 	A 60	A 70	A 80	A 90					
4x 	A 50	A 55							

									
2x 	A 55								
3x 	A 20	A 30	A 35	A 41	A 50	A 55			
4x 	A 60	A 70	A 80	A 90					

For further information on options, consult the electric motors section.

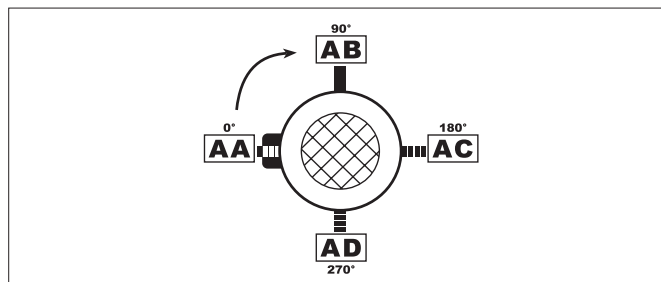
34 MOUNTING POSITION AND TERMINAL BOX ANGULAR LOCATION

Location of motor terminal box can be specified by viewing the motor from the fan side; standard location is shown in black (W).

Angular location of the brake release lever.

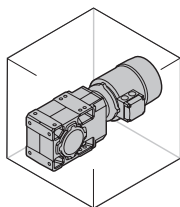
Unless otherwise specified, brake motors have the manual device side located, 90° apart from terminal box. Different angles can be specified through the relevant options available.

(C 34)

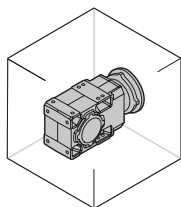


A ...

B3



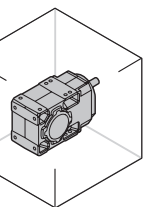
_S



_P(IEC)

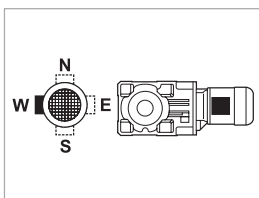
_N(NEMA)

_SK / _SC

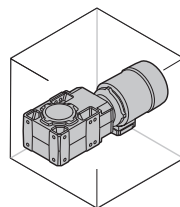


_HS

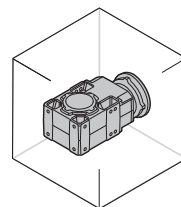
_NHS



B6



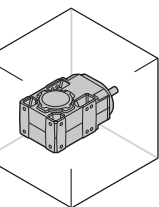
_S



_P(IEC)

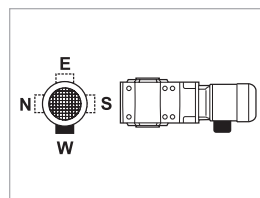
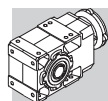
_N(NEMA)

_SK / _SC

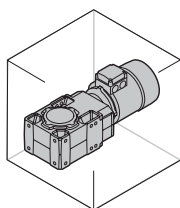


_HS

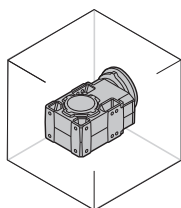
_NHS



B7



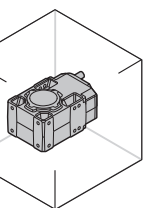
_S



_P(IEC)

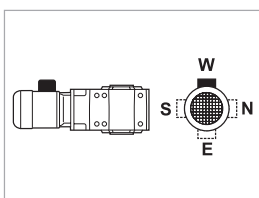
_N(NEMA)

_SK / _SC

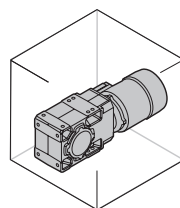


_HS

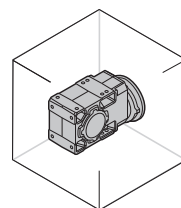
_NHS



B8



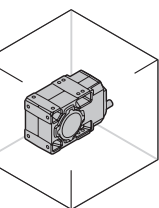
_S



_P(IEC)

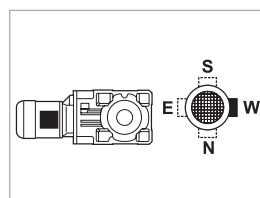
_N(NEMA)

_SK / _SC

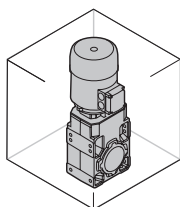


_HS

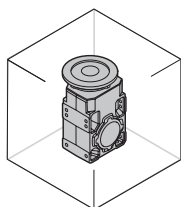
_NHS



VA



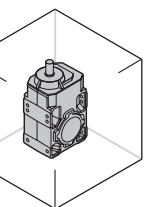
_S



_P(IEC)

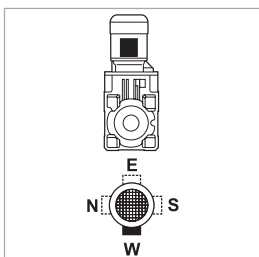
_N(NEMA)

_SK / _SC

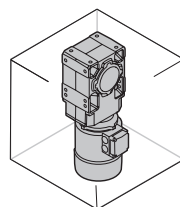


_HS

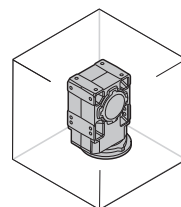
_NHS



VB



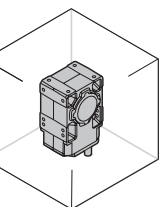
_S



_P(IEC)

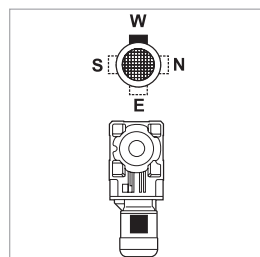
_N(NEMA)

_SK / _SC



_HS

_NHS



W = Default

35 OVERHUNG LOADS

External transmissions keyed onto input and/or output shaft generate loads that act radially onto same shaft.

Resulting shaft loading must be compatible with both the bearing and the shaft capacity. Namely shaft loading (R_{c1} for input shaft, R_{c2} for output shaft), must be equal or lower than admissible overhung load capacity for shaft under study (R_{n1} for input shaft, R_{n2} for output shaft). OHL capability listed in the rating chart section.

In the formulas given below, index (1) applies to parameters relating to input shaft, whereas index (2) refers to output shaft.

The load generated by an external transmission can be calculated with close approximation by the following equations:

$$R_{c1} [\text{lbs}] = \frac{2 \cdot T_1 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad ; \quad R_{c2} [\text{lbs}] = \frac{2 \cdot T_2 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad (26)$$

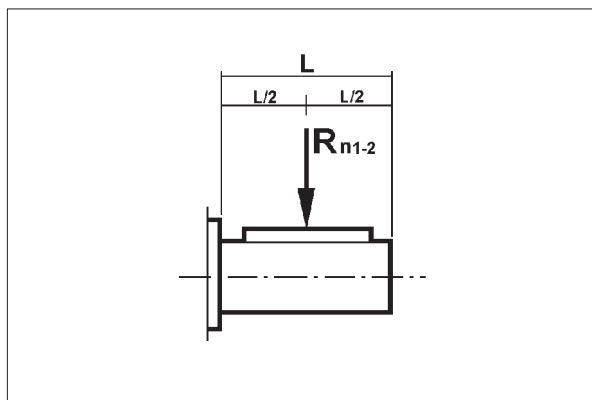
(C 35)

T_1 [lb·in]	Torque applied to input shaft
T_2 [lb·in]	Torque drawn at output shaft
d [in]	Pitch diameter of element keyed onto shaft
$K_r = 1$	Chain transmission

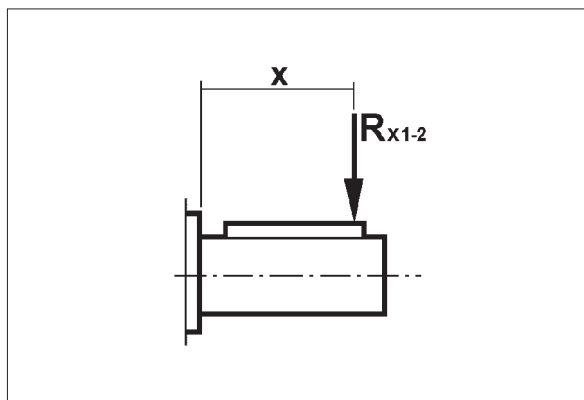
$K_r = 1.25$	Gear transmission
$K_r = 1.5$	V-belt transmission
$K_r = 2.0$	Flat belt transmission

Verification of OHL capability varies depending on whether load applies at midpoint of shaft or it is shifted further out:

(C 36)



(C 37)



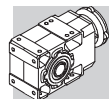
a) Load applied at midpoint of shaft, tab. (C36)

A comparison of shaft loading with catalogue OHL ratings should verify the following condition:

$$R_{c1} \leq R_{n1} \quad [\text{input shaft}]$$

or

$$R_{c2} \leq R_{n2} \quad [\text{output shaft}]$$



b) Load off the midpoint tab. (C37)

When load is shifted at an “x” distance from shaft shoulder, permissible load must be calculated for that distance.

Revised permissible overhung loads R_{x1} (input) and R_{x2} (output) are calculated respectively from original rated values R_{n1} and R_{n2} through factor:

$$\frac{a}{b+x} \quad (27)$$

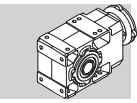
(C 38)

	Load location factors [in]					
	Output shaft			Input shaft		
	a	b	c	a	b	c
A 05 2	4.6	3.4	17.7	—	—	—
A 10 2	4.8	4.0	23.6	0.8	0	11.8
A 20 2	5.9	4.7	29.5	1.6	0.8	13.8
A 20 3	5.9	4.7	29.5	0.8	0	11.8
A 30 2	6.6	5.4	35.4	1.5	0.7	13.8
A 30 3	6.6	5.4	35.4	0.8	0	11.8
A 35 2	7.2	5.8	37.4	1.5	0.7	13.8
A 35 3	7.2	5.8	37.4	0.8	0	11.8
A 41 2	7.8	6.2	41.3	1.9	1.0	17.7
A 41 3	7.8	6.2	41.3	1.6	0.8	13.8
A 50 2 - A 50 3	9.5	7.9	51.2	1.9	1.0	17.7
A 50 4	9.5	7.9	51.2	1.5	0.7	13.8
A 55 2 - A 55 3	9.1	7.0	51.2	1.9	1.0	17.7
A 55 4	9.1	7.0	51.2	1.5	0.7	13.8
A 60 2 - A 60 3	9.5	7.5	61.0	2.2	1.0	23.6
A 60 4	9.5	7.5	61.0	1.9	1.0	17.7
A 70 3	11.6	9.1	74.8	3.4	1.2	39.4
A 70 4	11.6	9.1	74.8	1.9	1.0	17.7
A 80 3	13.6	11.0	94.5	3.4	1.2	39.4
A 80 4	13.6	11.0	94.5	1.9	1.0	17.7
A 90 3	17.0	12.9	118.1	4.6	1.8	55.1
A 90 4	17.0	12.9	118.1	1.9	1.0	17.7

Verification procedure is described here after.

INPUT SHAFT

1. Calculate:



$$R_{x1} = R_{n1} \cdot \frac{a}{b+x} \quad (28)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (29)$$

Finally, the following condition must be verified:

$$R_{c1} \leq R_{x1} \quad (30)$$

OUTPUT SHAFT

1. Calculate:

$$R_{x2} = R_{n2} \cdot \frac{a}{b+x} \quad (31)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (32)$$

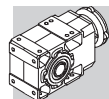
Finally, the following condition must be verified:

$$R_{c2} \leq R_{x2} \quad (33)$$

36 THRUST LOADS, A_{n1} , A_{n2}

Permissible thrust loads on input [A_{n1}] and output [A_{n2}] shafts are obtained from the radial loading for the shaft under consideration [R_{n1}] and [R_{n2}] through the following equation:

$$\begin{aligned} A_{n1} &= R_{n1} \cdot 0.2 \\ A_{n2} &= R_{n2} \cdot 0.2 \end{aligned} \quad (34)$$



The thrust loads calculated through these formulas apply to thrust forces occurring at the same time as rated radial loads.

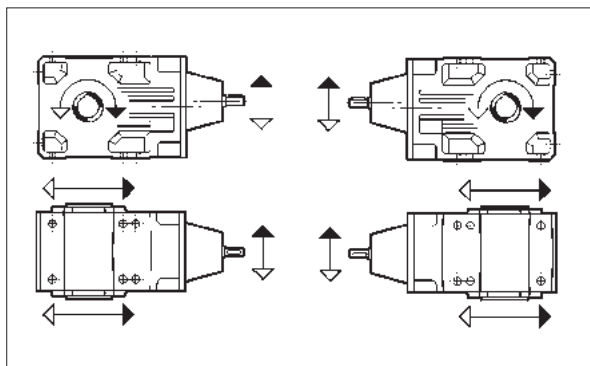
In the only case that no overhung load acts on the shaft the value of the admissible thrust load [A_n] amounts to 50% of rated OHL [R_n] on same shaft.

Where thrust loads exceed permissible value or largely prevail over radial loads, contact Bonfiglioli Riduttori for an in-depth analysis of the application.

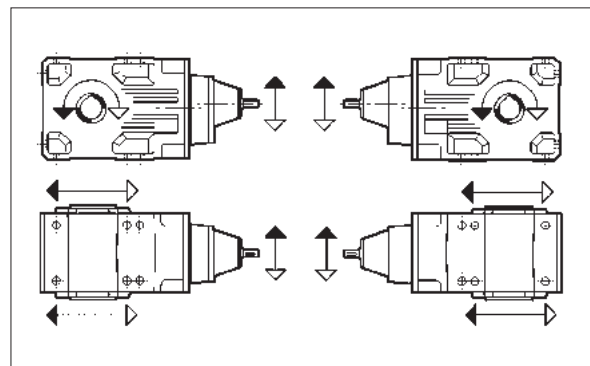
37 SHAFTS ARRANGEMENT

The following table shows standard directions of rotation for 2, 3 and 4 stage helical-bevel gearboxes.

(C 39)



2x		A 05	A 10	A 20	A 30	A 35	A 41	A 50	A 60
3x		A 60	A 70	A 80	A 90				
4x		A 50	A 55						



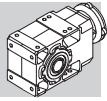
2x		A 55							
3x		A 20	A 30	A 35	A 41	A 50	A 55		
4x		A 60	A 70	A 80	A 90				

38 GEARMOTOR RATING CHARTS

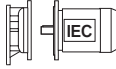


The selection of motors without brake takes into account the requirements of Regulation EC 640/2009 (see section **M** of this catalogue. When the motor rated power is below 0.75kW (1 HP), BN/M motors can be provided.

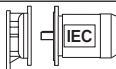
Considering that the Regulation EC 640/2009 shall not apply to the motors equipped with brake, the brakemotor selection takes into account BN/M motors only, without taking into account the rated power. BE/ME brakemotors are available on request.



0.16 hp

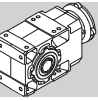
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
4.2	2195	1.3	400.8	1977	A303_400.8	S05 + M05A4	P63 + BN63A4	N56C	322...325
4.3	2154	1.8	393.2	2498	A353_393.2	S05 + M05A4	P63 + BN63A4	N56C	332...335
4.4	2086	1.0	380.8	1277	A203_380.8	S05 + M05A4	P63 + BN63A4	N56C	312...315
4.7	1951	1.6	356.3	1977	A303_356.3	S05 + M05A4	P63 + BN63A4	N56C	322...325
5.0	1859	2.3	339.3	2498	A353_339.3	S05 + M05A4	P63 + BN63A4	N56C	332...335
5.1	1804	1.1	329.4	1277	A203_329.4	S05 + M05A4	P63 + BN63A4	N56C	312...315
5.4	1723	1.9	314.6	1977	A303_314.6	S05 + M05A4	P63 + BN63A4	N56C	322...325
5.8	1604	1.3	292.8	1277	A203_292.8	S05 + M05A4	P63 + BN63A4	N56C	312...315
6.2	1487	2.1	271.5	1977	A303_271.5	S05 + M05A4	P63 + BN63A4	N56C	322...325
6.5	1427	1.4	260.5	1277	A203_260.5	S05 + M05A4	P63 + BN63A4	N56C	312...315
6.9	1338	2.3	244.3	1977	A303_244.3	S05 + M05A4	P63 + BN63A4	N56C	322...325
7.6	1212	1.7	221.3	1277	A203_221.3	S05 + M05A4	P63 + BN63A4	N56C	312...315
7.8	1186	2.5	216.6	1977	A303_216.6	S05 + M05A4	P63 + BN63A4	N56C	322...325
8.5	1091	1.9	199.2	1277	A203_199.2	S05 + M05A4	P63 + BN63A4	N56C	312...315
8.5	1087	2.6	198.5	1977	A303_198.5	S05 + M05A4	P63 + BN63A4	N56C	322...325
9.5	978	2.9	178.5	1977	A303_178.5	S05 + M05A4	P63 + BN63A4	N56C	322...325
9.5	976	2.1	178.3	1277	A203_178.3	S05 + M05A4	P63 + BN63A4	N56C	312...315
10.3	895	2.2	163.4	1277	A203_163.4	S05 + M05A4	P63 + BN63A4	N56C	312...315
11.6	800	2.4	146.1	1277	A203_146.1	S05 + M05A4	P63 + BN63A4	N56C	312...315
13.1	707	2.5	129.1	1277	A203_129.1	S05 + M05A4	P63 + BN63A4	N56C	312...315
14.0	660	2.6	120.5	1277	A203_120.5	S05 + M05A4	P63 + BN63A4	N56C	312...315
15.5	598	2.8	109.2	1277	A203_109.2	S05 + M05A4	P63 + BN63A4	N56C	312...315
18.4	518	1.7	91.6	898	A052_91.6	S05 + M05A4	P63 + BN63A4	N56C	296, 297
18.4	518	2.2	91.6	1118	A102_91.6	S05 + M05A4	P63 + BN63A4	N56C	302...305
22.1	432	2.0	76.4	860	A052_76.4	S05 + M05A4	P63 + BN63A4	N56C	296, 297
25.6	373	2.4	65.9	827	A052_65.9	S05 + M05A4	P63 + BN63A4	N56C	296, 297
28.8	332	2.7	58.6	803	A052_58.6	S05 + M05A4	P63 + BN63A4	N56C	296, 297

0.25 hp

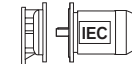
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.1	6621	2.7	793.0	6245	A554_793.0		P63 + BN63B4	N56C	362...365
2.1	6498	2.0	778.2	4119	A504_778.2		P63 + BN63B4	N56C	352...355
2.3	5968	2.9	714.7	6245	A554_714.7		P63 + BN63B4	N56C	362...365
2.4	5911	2.2	707.9	4119	A504_707.9		P63 + BN63B4	N56C	352...355

0.25 hp

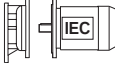
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.6	5271	2.5	631.2	4119	A504_631.2		P63 + BN63B4	N56C	352...355
2.9	4795	2.8	574.2	4119	A504_574.2		P63 + BN63B4	N56C	352...355
4.2	3357	1.1	393.2	2498	A353_393.2	S05 + M05B4	P63 + BN63B4	N56C	332...335
4.4	3217	2.3	376.8	3092	A413_376.8	S05 + M05B4	P63 + BN63B4	N56C	342...345
4.7	3042	1.0	356.3	1977	A303_356.3	S05 + M05B4	P63 + BN63B4	N56C	322...325
4.9	2897	1.5	339.3	2498	A353_339.3	S05 + M05B4	P63 + BN63B4	N56C	332...335
5.2	2768	2.7	324.2	3092	A413_324.2	S05 + M05B4	P63 + BN63B4	N56C	342...345
5.3	2686	1.2	314.6	1977	A303_314.6	S05 + M05B4	P63 + BN63B4	N56C	322...325
5.5	2607	2.0	305.4	2498	A353_305.4	S05 + M05B4	P63 + BN63B4	N56C	332...335
6.2	2318	1.3	271.5	1977	A303_271.5	S05 + M05B4	P63 + BN63B4	N56C	322...325
6.2	2311	2.2	270.7	2498	A353_270.7	S05 + M05B4	P63 + BN63B4	N56C	332...335
6.4	2224	0.9	260.5	1277	A203_260.5	S05 + M05B4	P63 + BN63B4	N56C	312...315
6.7	2119	2.4	248.1	2498	A353_248.1	S05 + M05B4	P63 + BN63B4	N56C	332...335
6.8	2086	1.5	244.3	1977	A303_244.3	S05 + M05B4	P63 + BN63B4	N56C	322...325
7.5	1905	2.6	223.2	2498	A353_223.2	S05 + M05B4	P63 + BN63B4	N56C	332...335
7.5	1889	1.1	221.3	1277	A203_221.3	S05 + M05B4	P63 + BN63B4	N56C	312...315
7.7	1849	1.6	216.6	1977	A303_216.6	S05 + M05B4	P63 + BN63B4	N56C	322...325
8.3	1723	2.9	201.8	2498	A353_201.8	S05 + M05B4	P63 + BN63B4	N56C	332...335
8.4	1701	1.2	199.2	1277	A203_199.2	S05 + M05B4	P63 + BN63B4	N56C	312...315
8.4	1695	1.7	198.5	1977	A303_198.5	S05 + M05B4	P63 + BN63B4	N56C	322...325
9.4	1524	1.9	178.5	1977	A303_178.5	S05 + M05B4	P63 + BN63B4	N56C	322...325
9.4	1522	1.3	178.3	1277	A203_178.3	S05 + M05B4	P63 + BN63B4	N56C	312...315
10.2	1395	1.4	163.4	1277	A203_163.4	S05 + M05B4	P63 + BN63B4	N56C	312...315
10.3	1378	2.0	161.4	1977	A303_161.4	S05 + M05B4	P63 + BN63B4	N56C	322...325
11.1	1286	2.1	150.7	1977	A303_150.7	S05 + M05B4	P63 + BN63B4	N56C	322...325
11.4	1248	1.5	146.1	1277	A203_146.1	S05 + M05B4	P63 + BN63B4	N56C	312...315
12.2	1173	2.2	137.4	1977	A303_137.4	S05 + M05B4	P63 + BN63B4	N56C	322...325
12.9	1103	1.6	129.1	1277	A203_129.1	S05 + M05B4	P63 + BN63B4	N56C	312...315
13.9	1029	1.7	120.5	1277	A203_120.5	S05 + M05B4	P63 + BN63B4	N56C	312...315
13.9	1028	2.4	120.5	1977	A303_120.5	S05 + M05B4	P63 + BN63B4	N56C	322...325
15.3	932	1.8	109.2	1277	A203_109.2	S05 + M05B4	P63 + BN63B4	N56C	312...315
15.3	931	2.6	109.1	1977	A303_109.1	S05 + M05B4	P63 + BN63B4	N56C	322...325
18.1	814	2.0	92.3	1277	A202_92.3	S05 + M05B4	P63 + BN63B4	N56C	312...315
18.2	808	1.1	91.6	837	A052_91.6	S05 + M05B4	P63 + BN63B4	N56C	296, 297
18.2	808	1.4	91.6	1118	A102_91.6	S05 + M05B4	P63 + BN63B4	N56C	302...305
20.9	704	2.4	79.9	1277	A202_79.9	S05 + M05B4	P63 + BN63B4	N56C	312...315
21.9	674	1.3	76.4	809	A052_76.4	S05 + M05B4	P63 + BN63B4	N56C	296, 297
21.9	674	2.0	76.4	1118	A102_76.4	S05 + M05B4	P63 + BN63B4	N56C	302...305
23.5	626	2.8	71.0	1277	A202_71.0	S05 + M05B4	P63 + BN63B4	N56C	312...315
25.3	581	1.5	65.9	784	A052_65.9	S05 + M05B4	P63 + BN63B4	N56C	296, 297
25.3	581	2.3	65.9	1118	A102_65.9	S05 + M05B4	P63 + BN63B4	N56C	302...305
28.5	517	1.7	58.6	764	A052_58.6	S05 + M05B4	P63 + BN63B4	N56C	296, 297
28.5	517	2.6	58.6	1118	A102_58.6	S05 + M05B4	P63 + BN63B4	N56C	302...305
32.6	452	2.0	51.3	740	A052_51.3	S05 + M05B4	P63 + BN63B4	N56C	296, 297
32.6	452	2.9	51.3	1118	A102_51.3	S05 + M05B4	P63 + BN63B4	N56C	302...305
36.8	400	2.2	45.4	719	A052_45.4	S05 + M05B4	P63 + BN63B4	N56C	296, 297
40.9	360	2.5	40.9	699	A052_40.9	S05 + M05B4	P63 + BN63B4	N56C	296, 297
47.6	310	2.9	35.1	673	A052_35.1	S05 + M05B4	P63 + BN63B4	N56C	296, 297



0.33 hp

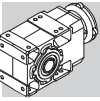
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.0	18914	2.3	1715.0	10420	A704_1715		P71 + BN71A4	N56C	382...385
1.1	17459	2.5	1583.1	10420	A704_1583		P71 + BN71A4	N56C	382...385

0.33 hp

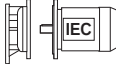
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
1.2	14843	3.0	1345.9	10420	A704_1346		P71 + BN71A4	N56C	382...385
2.1	8745	2.0	793.0	6245	A554_793.0		P71 + BN71A4	N56C	362...365
2.1	8583	1.5	778.2	4119	A504_778.2		P71 + BN71A4	N56C	352...355
2.2	8331	3.0	755.4	6252	A604_755.4		P71 + BN71A4	N56C	372...375
2.3	7882	2.2	714.7	6245	A554_714.7		P71 + BN71A4	N56C	362...365
2.4	7807	1.7	707.9	4119	A504_707.9		P71 + BN71A4	N56C	352...355
2.5	7225	2.4	655.1	6245	A554_655.1		P71 + BN71A4	N56C	362...365
2.6	6962	1.9	631.2	4119	A504_631.2		P71 + BN71A4	N56C	352...355
2.8	6611	2.6	599.5	6245	A554_599.5		P71 + BN71A4	N56C	362...365
2.9	6333	2.1	574.2	4119	A504_574.2		P71 + BN71A4	N56C	352...355
3.1	5977	2.8	542.0	6245	A554_542.0		P71 + BN71A4	N56C	362...365
3.2	5839	2.3	529.5	4119	A504_529.5		P71 + BN71A4	N56C	352...355
3.5	5312	2.5	481.6	4119	A504_481.6		P71 + BN71A4	N56C	352...355
3.7	4928	2.7	446.8	4119	A504_446.8		P71 + BN71A4	N56C	352...355
4.1	4482	3.0	406.4	4119	A504_406.4		P71 + BN71A4	N56C	352...355
4.4	4249	1.8	376.8	3092	A413_376.8	S05 + M05C4	P71 + BN71A4	N56C	342...345
4.9	3826	1.1	339.3	2498	A353_339.3	S05 + M05C4	P71 + BN71A4	N56C	332...335
5.2	3655	2.1	324.2	3092	A413_324.2	S05 + M05C4	P71 + BN71A4	N56C	342...345
5.3	3547	0.9	314.6	1977	A303_314.6	S05 + M05C4	P71 + BN71A4	N56C	322...325
5.5	3444	1.5	305.4	2498	A353_305.4	S05 + M05C4	P71 + BN71A4	N56C	332...335
5.7	3290	2.3	291.7	3092	A413_291.7	S05 + M05C4	P71 + BN71A4	N56C	342...345
6.2	3061	1.0	271.5	1977	A303_271.5	S05 + M05C4	P71 + BN71A4	N56C	322...325
6.2	3052	1.7	270.7	2498	A353_270.7	S05 + M05C4	P71 + BN71A4	N56C	332...335
6.4	2960	2.5	262.5	3092	A413_262.5	S05 + M05C4	P71 + BN71A4	N56C	342...345
6.7	2798	1.8	248.1	2498	A353_248.1	S05 + M05C4	P71 + BN71A4	N56C	332...335
6.8	2755	1.1	244.3	1977	A303_244.3	S05 + M05C4	P71 + BN71A4	N56C	322...325
6.9	2713	2.8	240.6	3092	A413_240.6	S05 + M05C4	P71 + BN71A4	N56C	342...345
7.5	2517	2.0	223.2	2498	A353_223.2	S05 + M05C4	P71 + BN71A4	N56C	332...335
7.7	2442	1.2	216.6	1977	A303_216.6	S05 + M05C4	P71 + BN71A4	N56C	322...325
8.3	2275	2.2	201.8	2498	A353_201.8	S05 + M05C4	P71 + BN71A4	N56C	332...335
8.4	2246	0.9	199.2	1277	A203_199.2	S05 + M05C4	P71 + BN71A4	N56C	312...315
8.4	2238	1.3	198.5	1977	A303_198.5	S05 + M05C4	P71 + BN71A4	N56C	322...325
8.9	2124	2.3	188.3	2498	A353_188.3	S05 + M05C4	P71 + BN71A4	N56C	332...335
9.4	2013	1.4	178.5	1977	A303_178.5	S05 + M05C4	P71 + BN71A4	N56C	322...325
9.4	2010	1.0	178.3	1277	A203_178.3	S05 + M05C4	P71 + BN71A4	N56C	312...315
9.7	1937	2.5	171.8	2498	A353_171.8	S05 + M05C4	P71 + BN71A4	N56C	332...335
10.2	1843	1.0	163.4	1277	A203_163.4	S05 + M05C4	P71 + BN71A4	N56C	312...315
10.3	1820	1.5	161.4	1977	A303_161.4	S05 + M05C4	P71 + BN71A4	N56C	322...325
11.1	1699	1.6	150.7	1977	A303_150.7	S05 + M05C4	P71 + BN71A4	N56C	322...325
11.1	1698	2.9	150.6	2498	A353_150.6	S05 + M05C4	P71 + BN71A4	N56C	332...335
11.4	1648	1.1	146.1	1277	A203_146.1	S05 + M05C4	P71 + BN71A4	N56C	312...315
12.2	1550	1.7	137.4	1977	A303_137.4	S05 + M05C4	P71 + BN71A4	N56C	322...325
12.9	1456	1.2	129.1	1277	A203_129.1	S05 + M05C4	P71 + BN71A4	N56C	312...315
13.9	1359	1.3	120.5	1277	A203_120.5	S05 + M05C4	P71 + BN71A4	N56C	312...315
13.9	1358	1.8	120.5	1977	A303_120.5	S05 + M05C4	P71 + BN71A4	N56C	322...325
15.3	1231	1.4	109.2	1277	A203_109.2	S05 + M05C4	P71 + BN71A4	N56C	312...315
15.3	1230	2.0	109.1	1977	A303_109.1	S05 + M05C4	P71 + BN71A4	N56C	322...325
17.1	1136	2.3	97.5	1977	A302_97.5		P71 + BN71A4	N56C	322...325
18.1	1075	1.5	92.3	1277	A202_92.3	S05 + M05C4	P71 + BN71A4	N56C	312...315
18.2	1067	1.1	91.6	1118	A102_91.6	S05 + M05C4	P71 + BN71A4	N56C	302...305
19.3	1010	2.8	86.7	1977	A302_86.7		P71 + BN71A4	N56C	322...325
20.9	930	1.9	79.9	1277	A202_79.9	S05 + M05C4	P71 + BN71A4	N56C	312...315
21.9	890	1.0	76.4	786	A052_76.4	S05 + M05C4			296, 297
21.9	890	1.5	76.4	1118	A102_76.4	S05 + M05C4	P71 + BN71A4	N56C	302...305
23.5	827	2.1	71.0	1277	A202_71.0	S05 + M05C4	P71 + BN71A4	N56C	312...315
25.3	768	1.2	65.9	762	A052_65.9	S05 + M05C4			296, 297
25.3	768	1.7	65.9	1118	A102_65.9	S05 + M05C4	P71 + BN71A4	N56C	302...305

0.33 hp

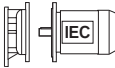
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
26.4	735	2.7	63.1	1277	A202_63.1	S05 + M05C4	P71 + BN71A4	N56C	312...315
28.5	683	1.3	58.6	748	A052_58.6	S05 + M05C4			296, 297
28.5	683	1.9	58.6	1118	A102_58.6	S05 + M05C4	P71 + BN71A4	N56C	302...305
32.6	597	1.5	51.3	701	A052_51.3	S05 + M05C4	P71 + BN71A4	N56C	296, 297
32.6	597	2.2	51.3	1118	A102_51.3	S05 + M05C4	P71 + BN71A4	N56C	302...305
36.8	529	1.7	45.4	685	A052_45.4	S05 + M05C4	P71 + BN71A4	N56C	296, 297
36.8	529	2.5	45.4	1118	A102_45.4	S05 + M05C4	P71 + BN71A4	N56C	302...305
40.9	476	1.9	40.9	669	A052_40.9	S05 + M05C4	P71 + BN71A4	N56C	296, 297
40.9	476	2.8	40.9	1118	A102_40.9	S05 + M05C4	P71 + BN71A4	N56C	302...305
47.6	409	2.2	35.1	646	A052_35.1	S05 + M05C4	P71 + BN71A4	N56C	296, 297
51.9	375	2.4	32.2	634	A052_32.2	S05 + M05C4	P71 + BN71A4	N56C	296, 297
58.5	333	2.7	28.6	616	A052_28.6	S05 + M05C4	P71 + BN71A4	N56C	296, 297
65.6	297	3.0	25.5	597	A052_25.5	S05 + M05C4	P71 + BN71A4	N56C	296, 297



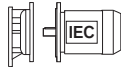
0.50 hp

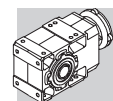
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.0	28236	1.6	1715.0	10420	A704_1715	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.1	26064	1.7	1583.1	10420	A704_1583	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.1	25645	2.8	1557.7	13561	A804_1558	S1 + M1SD4	P71 + BN71B4	N56C	390...393
1.2	23673	3.0	1437.8	13561	A804_1438	S1 + M1SD4	P71 + BN71B4	N56C	390...393
1.3	22158	2.0	1345.9	10420	A704_1346	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.4	20454	2.2	1242.3	10420	A704_1242	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.5	19123	2.3	1161.5	10420	A704_1161	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.6	17652	2.5	1072.1	10420	A704_1072	S1 + M1SD4	P71 + BN71B4	N56C	382...385
1.8	15255	2.9	926.5	10420	A704_926.5	S1 + M1SD4	P71 + BN71B4	N56C	382...385
2.1	13056	1.4	793.0	6245	A554_793.0	S1 + M1SD4	P71 + BN71B4	N56C	362...365
2.2	12813	1.0	778.2	4119	A504_778.2	S1 + M1SD4	P71 + BN71B4	N56C	352...355
2.3	12437	2.0	755.4	6252	A604_755.4	S1 + M1SD4	P71 + BN71B4	N56C	372...375
2.4	11766	1.5	714.7	6245	A554_714.7	S1 + M1SD4	P71 + BN71B4	N56C	362...365
2.4	11655	1.1	707.9	4119	A504_707.9	S1 + M1SD4	P71 + BN71B4	N56C	352...355
2.4	11480	2.2	697.3	6252	A604_697.3	S1 + M1SD4	P71 + BN71B4	N56C	372...375
2.6	10786	1.6	655.1	6245	A554_655.1	S1 + M1SD4	P71 + BN71B4	N56C	362...365
2.7	10448	2.4	634.6	6252	A604_634.6	S1 + M1SD4	P71 + BN71B4	N56C	372...375
2.7	10393	1.3	631.2	4119	A504_631.2	S1 + M1SD4	P71 + BN71B4	N56C	352...355
2.8	9870	1.7	599.5	6245	A554_599.5	S1 + M1SD4	P71 + BN71B4	N56C	362...365
2.9	9644	2.6	585.8	6252	A604_585.8	S1 + M1SD4	P71 + BN71B4	N56C	372...375
3.0	9454	1.4	574.2	4119	A504_574.2	S1 + M1SD4	P71 + BN71B4	N56C	352...355
3.1	8924	2.8	542.0	6252	A604_542.0	S1 + M1SD4	P71 + BN71B4	N56C	372...375
3.1	8923	1.9	542.0	6245	A554_542.0	S1 + M1SD4	P71 + BN71B4	N56C	362...365
3.2	8717	1.5	529.5	4119	A504_529.5	S1 + M1SD4	P71 + BN71B4	N56C	352...355
3.4	8329	2.0	505.9	6245	A554_505.9	S1 + M1SD4	P71 + BN71B4	N56C	362...365
3.5	7930	1.7	481.6	4119	A504_481.6	S1 + M1SD4	P71 + BN71B4	N56C	352...355
3.8	7356	1.8	446.8	4119	A504_446.8	S1 + M1SD4	P71 + BN71B4	N56C	352...355
4.1	6815	2.4	414.0	6245	A554_414.0	S1 + M1SD4	P71 + BN71B4	N56C	362...365
4.2	6691	2.0	406.4	4119	A504_406.4	S1 + M1SD4	P71 + BN71B4	N56C	352...355
4.5	6344	1.2	376.8	3092	A413_376.8	S1 + M1SD4	P71 + BN71B4	N56C	342...345
4.6	6020	2.2	365.6	4119	A504_365.6	S1 + M1SD4	P71 + BN71B4	N56C	352...355
5.1	5476	2.4	332.6	4119	A504_332.6	S1 + M1SD4	P71 + BN71B4	N56C	352...355
5.2	5457	1.4	324.2	3092	A413_324.2	S1 + M1SD4	P71 + BN71B4	N56C	342...345
5.6	5141	1.0	305.4	2498	A353_305.4	S1 + M1SD4	P71 + BN71B4	N56C	332...335
5.8	4911	1.5	291.7	3092	A413_291.7	S1 + M1SD4	P71 + BN71B4	N56C	342...345
5.9	4722	2.8	286.8	4119	A504_286.8	S1 + M1SD4	P71 + BN71B4	N56C	352...355

0.50 hp

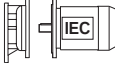
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
6.3	4557	1.1	270.7	2498	A353_270.7	S1 + M1SD4	P71 + BN71B4	N56C	332...335
6.5	4418	1.7	262.5	3092	A413_262.5	S1 + M1SD4	P71 + BN71B4	N56C	342...345
6.9	4177	1.2	248.1	2498	A353_248.1	S1 + M1SD4	P71 + BN71B4	N56C	332...335
7.1	4050	1.9	240.6	3092	A413_240.6	S1 + M1SD4	P71 + BN71B4	N56C	342...345
7.6	3757	1.3	223.2	2498	A353_223.2	S1 + M1SD4	P71 + BN71B4	N56C	332...335
7.8	3660	2.1	217.4	3092	A413_217.4	S1 + M1SD4	P71 + BN71B4	N56C	342...345
8.4	3397	1.4	201.8	2498	A353_201.8	S1 + M1SD4	P71 + BN71B4	N56C	332...335
8.6	3325	2.3	197.5	3092	A413_197.5	S1 + M1SD4	P71 + BN71B4	N56C	342...345
9.0	3170	1.6	188.3	2498	A353_188.3	S1 + M1SD4	P71 + BN71B4	N56C	332...335
9.2	3104	2.4	184.4	3092	A413_184.4	S1 + M1SD4	P71 + BN71B4	N56C	342...345
9.5	3006	0.9	178.5	1812	A303_178.5	S1 + M1SD4	P71 + BN71B4	N56C	322...325
9.9	2892	1.7	171.8	2498	A353_171.8	S1 + M1SD4	P71 + BN71B4	N56C	332...335
10.5	2717	1.0	161.4	1884	A303_161.4	S1 + M1SD4	P71 + BN71B4	N56C	322...325
11.3	2536	1.1	150.7	1977	A303_150.7	S1 + M1SD4	P71 + BN71B4	N56C	322...325
11.3	2535	1.9	150.6	2498	A353_150.6	S1 + M1SD4	P71 + BN71B4	N56C	332...335
12.4	2313	1.1	137.4	1977	A303_137.4	S1 + M1SD4	P71 + BN71B4	N56C	322...325
12.5	2295	2.1	136.3	2498	A353_136.3	S1 + M1SD4	P71 + BN71B4	N56C	332...335
14.1	2028	1.2	120.5	1977	A303_120.5	S1 + M1SD4	P71 + BN71B4	N56C	322...325
14.5	1968	2.3	116.9	2498	A353_116.9	S1 + M1SD4	P71 + BN71B4	N56C	332...335
15.6	1838	0.9	109.2	1163	A203_109.2	S1 + M1SD4	P71 + BN71B4	N56C	312...315
15.6	1836	1.3	109.1	1977	A303_109.1	S1 + M1SD4	P71 + BN71B4	N56C	322...325
16.1	1777	2.4	105.5	2498	A353_105.5	S1 + M1SD4	P71 + BN71B4	N56C	332...335
17.4	1695	1.6	97.5	1977	A302_97.5	S1 + M1SD4	P71 + BN71B4	N56C	322...325
17.8	1663	2.9	95.6	2498	A352_95.6	S1 + M1SD4	P71 + BN71B4	N56C	332...335
18.4	1605	1.0	92.3	1215	A202_92.3	S1 + M1SD4	P71 + BN71B4	N56C	312...315
19.6	1507	1.9	86.7	1977	A302_86.7		P71 + BN71B4	N56C	322...325
21.3	1389	1.2	79.9	1277	A202_79.9		P71 + BN71B4	N56C	312...315
22.2	1331	2.3	76.5	1977	A302_76.5		P71 + BN71B4	N56C	322...325
22.2	1329	1.0	76.4	1047	A102_76.4		P71 + BN71B4	N56C	302...305
23.9	1234	1.4	71.0	1277	A202_71.0	S1 + M1SD4	P71 + BN71B4	N56C	312...315
25.8	1146	1.2	65.9	1079	A102_65.9		P71 + BN71B4	N56C	302...305
26.9	1098	1.8	63.1	1277	A202_63.1		P71 + BN71B4	N56C	312...315
29.0	1019	1.3	58.6	1095	A102_58.6		P71 + BN71B4	N56C	302...305
32	933	2.4	53.7	1254	A202_53.7	S1 + M1SD4	P71 + BN71B4	N56C	312...315
33	891	1.0	51.3	630	A052_51.3	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
33	891	1.5	51.3	1116	A102_51.3	S1 + M1SD4	P71 + BN71B4	N56C	302...305
35	840	2.6	48.3	1223	A202_48.3	S1 + M1SD4	P71 + BN71B4	N56C	312...315
37	789	1.1	45.4	622	A052_45.4	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
37	789	1.7	45.4	1087	A102_45.4	S1 + M1SD4	P71 + BN71B4	N56C	302...305
39	752	2.9	43.2	1190	A202_43.2	S1 + M1SD4	P71 + BN71B4	N56C	312...315
42	710	1.2	40.9	614	A052_40.9	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
42	710	1.9	40.9	1118	A102_40.9	S1 + M1SD4	P71 + BN71B4	N56C	302...305
48	611	1.4	35.1	600	A052_35.1	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
48	611	2.2	35.1	1024	A102_35.1	S1 + M1SD4	P71 + BN71B4	N56C	302...305
53	560	1.6	32.2	589	A052_32.2	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
53	560	2.4	32.2	1118	A102_32.2	S1 + M1SD4	P71 + BN71B4	N56C	302...305
60	497	1.8	28.6	577	A052_28.6	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
60	497	2.7	28.6	973	A102_28.6	S1 + M1SD4	P71 + BN71B4	N56C	302...305
67	443	2.0	25.5	563	A052_25.5	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
67	443	3.0	25.5	1118	A102_25.5	S1 + M1SD4	P71 + BN71B4	N56C	302...305
72	413	2.1	23.8	555	A052_23.8	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
80	371	2.4	21.4	543	A052_21.4	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
92	323	2.6	18.6	526	A052_18.6	S1 + M1SD4	P71 + BN71B4	N56C	296, 297
103	286	2.9	16.4	510	A052_16.4	S1 + M1SD4	P71 + BN71B4	N56C	296, 297

0.75 hp

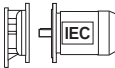
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.0	42151	1.0	1715.0	10420	A704_1715	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.1	38909	1.1	1583.1	10420	A704_1583	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.1	38284	1.8	1557.7	13561	A804_1558	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.2	35339	2.0	1437.8	13561	A804_1438	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.3	33078	1.3	1345.9	10420	A704_1346	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.3	32932	2.2	1339.9	13561	A804_1340	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.4	30534	1.4	1242.3	10420	A704_1242	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.4	30399	2.3	1236.9	13561	A804_1237	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.5	28547	1.6	1161.5	10420	A704_1161	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.6	26664	2.7	1084.9	13561	A804_1085	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.6	26351	1.7	1072.1	10420	A704_1072	S1 + M1LA4	P80 + BN80A4	N56C	382...385
1.7	24613	2.9	1001.4	13561	A804_1001	S1 + M1LA4	P80 + BN80A4	N56C	390...393
1.8	22772	1.9	926.5	10420	A704_926.5	S1 + M1LA4	P80 + BN80A4	N56C	382...385
2.0	21021	2.1	855.3	10420	A704_855.3	S1 + M1LA4	P80 + BN80A4	N56C	382...385
2.2	19490	0.9	793.0	6245	A554_793.0	S1 + M1LA4	P80 + BN80A4	N56C	362...365
2.2	18775	2.4	763.9	10420	A704_763.9	S1 + M1LA4	P80 + BN80A4	N56C	382...385
2.3	18566	1.3	755.4	6252	A604_755.4	S1 + M1LA4	P80 + BN80A4	N56C	372...375
2.4	17565	1.0	714.7	6245	A554_714.7	S1 + M1LA4	P80 + BN80A4	N56C	362...365
2.4	17331	2.6	705.1	10420	A704_705.1	S1 + M1LA4	P80 + BN80A4	N56C	382...385
2.5	17138	1.4	697.3	6252	A604_697.3	S1 + M1LA4	P80 + BN80A4	N56C	372...375
2.6	16101	1.1	655.1	6245	A554_655.1	S1 + M1LA4	P80 + BN80A4	N56C	362...365
2.7	15843	2.8	644.6	10420	A704_644.6	S1 + M1LA4	P80 + BN80A4	N56C	382...385
2.7	15597	1.6	634.6	6252	A604_634.6	S1 + M1LA4	P80 + BN80A4	N56C	372...375
2.9	14734	1.2	599.5	6245	A554_599.5	S1 + M1LA4	P80 + BN80A4	N56C	362...365
2.9	14397	1.7	585.8	6252	A604_585.8	S1 + M1LA4	P80 + BN80A4	N56C	372...375
3.0	14112	0.9	574.2	4119	A504_574.2	S1 + M1LA4	P80 + BN80A4	N56C	352...355
3.2	13321	1.9	542.0	6252	A604_542.0	S1 + M1LA4	P80 + BN80A4	N56C	372...375
3.2	13321	1.3	542.0	6245	A554_542.0	S1 + M1LA4	P80 + BN80A4	N56C	362...365
3.2	13014	1.0	529.5	4119	A504_529.5	S1 + M1LA4	P80 + BN80A4	N56C	352...355
3.4	12433	1.4	505.9	6245	A554_505.9	S1 + M1LA4	P80 + BN80A4	N56C	362...365
3.4	12297	2.0	500.3	6252	A604_500.3	S1 + M1LA4	P80 + BN80A4	N56C	372...375
3.6	11837	1.1	481.6	4119	A504_481.6	S1 + M1LA4	P80 + BN80A4	N56C	352...355
3.8	10982	1.2	446.8	4119	A504_446.8	S1 + M1LA4	P80 + BN80A4	N56C	352...355
3.9	10775	2.3	438.4	6252	A604_438.4	S1 + M1LA4	P80 + BN80A4	N56C	372...375
4.1	10174	1.6	414.0	6245	A554_414.0	S1 + M1LA4	P80 + BN80A4	N56C	362...365
4.2	9989	1.3	406.4	4119	A504_406.4	S1 + M1LA4	P80 + BN80A4	N56C	352...355
4.2	9946	2.5	404.7	6252	A604_404.7	S1 + M1LA4	P80 + BN80A4	N56C	372...375
4.7	8987	1.5	365.6	4119	A504_365.6	S1 + M1LA4	P80 + BN80A4	N56C	352...355
4.9	8632	2.9	351.2	6252	A604_351.2	S1 + M1LA4	P80 + BN80A4	N56C	372...375
5.1	8174	1.6	332.6	4119	A504_332.6	S1 + M1LA4	P80 + BN80A4	N56C	352...355
5.3	7981	2.1	324.7	6245	A554_324.7	S1 + M1LA4	P80 + BN80A4	N56C	362...365
5.3	8146	0.9	324.2	6252	A604_324.2	S1 + M1LA4	P80 + BN80A4	N56C	372...375
5.9	7331	1.0	291.7	3092	A413_291.7	S1 + M1LA4	P80 + BN80A4	N56C	342...345
6.0	7049	1.9	286.8	4119	A504_286.8	S1 + M1LA4	P80 + BN80A4	N56C	352...355
6.5	6455	2.5	262.6	6245	A554_262.6	S1 + M1LA4	P80 + BN80A4	N56C	362...365
6.5	6596	1.1	262.5	3092	A413_262.5	S1 + M1LA4	P80 + BN80A4	N56C	342...345
6.6	6412	2.1	260.9	4119	A504_260.9	S1 + M1LA4	P80 + BN80A4	N56C	352...355
7.1	6046	1.2	240.6	3092	A413_240.6	S1 + M1LA4	P80 + BN80A4	N56C	342...345
7.4	5702	2.3	232.0	4119	A504_232.0	S1 + M1LA4	P80 + BN80A4	N56C	352...355
7.9	5463	1.4	217.4	3092	A413_217.4	S1 + M1LA4	P80 + BN80A4	N56C	342...345
8.1	5186	2.6	211.0	4119	A504_211.0	S1 + M1LA4	P80 + BN80A4	N56C	352...355
8.5	5071	1.0	201.8	2498	A353_201.8	S1 + M1LA4	P80 + BN80A4	N56C	332...335
8.7	4964	1.5	197.5	3092	A413_197.5	S1 + M1LA4	P80 + BN80A4	N56C	342...345
9.0	4789	2.8	190.6	4119	A503_190.6	S1 + M1LA4	P80 + BN80A4	N56C	352...355
9.1	4733	1.0	188.3	2498	A353_188.3	S1 + M1LA4	P80 + BN80A4	N56C	332...335
9.3	4633	1.6	184.4	3092	A413_184.4	S1 + M1LA4	P80 + BN80A4	N56C	342...345
10.0	4317	1.1	171.8	2498	A353_171.8	S1 + M1LA4	P80 + BN80A4	N56C	332...335



0.75 hp

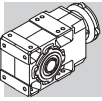
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs				NEMA	
11.4	3784	1.3	150.6	2498	A353_150.6	S1 + M1LA4	P80 + BN80A4	N56C	332...335
11.6	3691	2.0	146.9	3092	A413_146.9	S1 + M1LA4	P80 + BN80A4	N56C	342...345
12.5	3426	1.4	136.3	2498	A353_136.3	S1 + M1LA4	P80 + BN80A4	N56C	332...335
14.6	2938	1.6	116.9	2498	A353_116.9	S1 + M1LA4	P80 + BN80A4	N56C	332...335
14.8	2912	2.4	115.9	3092	A413_115.9	S1 + M1LA4	P80 + BN80A4	N56C	342...345
16.2	2652	1.6	105.5	2498	A353_105.5	S1 + M1LA4	P80 + BN80A4	N56C	332...335
17.5	2531	1.0	97.5	1977	A302_97.5		P80 + BN80A4	N56C	322...325
17.9	2483	1.9	95.6	2498	A352_95.6	S1 + M1LA4	P80 + BN80A4	N56C	332...335
18.4	2331	2.8	92.8	3092	A413_92.8	S1 + M1LA4	P80 + BN80A4	N56C	342...345
19.7	2250	1.3	86.7	1940	A302_86.7		P80 + BN80A4	N56C	322...325
20.7	2143	2.5	82.5	2498	A352_82.5	S1 + M1LA4	P80 + BN80A4	N56C	332...335
22.3	1986	1.6	76.5	1890	A302_76.5	S1 + M1LA4	P80 + BN80A4	N56C	322...325
23.0	1928	2.8	74.3	2498	A352_74.3	S1 + M1LA4	P80 + BN80A4	N56C	332...335
24.1	1843	0.9	71.0	1161	A202_71.0		P80 + BN80A4	N56C	312...315
25.9	1714	2.0	66.0	1829	A302_66.0	S1 + M1LA4	P80 + BN80A4	N56C	322...325
27.1	1639	1.2	63.1	1203	A202_63.1	S1 + M1LA4	P80 + BN80A4	N56C	312...315
28.8	1543	2.3	59.4	1783	A302_59.4	S1 + M1LA4	P80 + BN80A4	N56C	322...325
32	1393	1.6	53.7	1168	A202_53.7	S1 + M1LA4	P80 + BN80A4	N56C	312...315
32	1367	2.7	52.7	1732	A302_52.7	S1 + M1LA4	P80 + BN80A4	N56C	322...325
33	1331	1.0	51.3	990	A102_51.3	S1 + M1LA4	P80 + BN80A4	N56C	302...305
35	1253	1.8	48.3	1145	A202_48.3	S1 + M1LA4	P80 + BN80A4	N56C	312...315
35	1253	2.9	48.3	1695	A302_48.3	S1 + M1LA4	P80 + BN80A4	N56C	322...325
38	1178	1.1	45.4	998	A102_45.4	S1 + M1LA4	P80 + BN80A4	N56C	302...305
40	1122	2.0	43.2	1120	A202_43.2	S1 + M1LA4	P80 + BN80A4	N56C	312...315
42	1061	1.3	40.9	1118	A102_40.9	S1 + M1LA4	P80 + BN80A4	N56C	302...305
43	1028	2.2	39.6	1100	A202_39.6	S1 + M1LA4	P80 + BN80A4	N56C	312...315
48	920	2.4	35.4	1071	A202_35.4	S1 + M1LA4	P80 + BN80A4	N56C	312...315
49	912	1.0	35.1	539	A052_35.1	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
49	912	1.5	35.1	955	A102_35.1	S1 + M1LA4	P80 + BN80A4	N56C	302...305
53	836	1.1	32.2	549	A052_32.2	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
53	836	1.6	32.2	1116	A102_32.2	S1 + M1LA4	P80 + BN80A4	N56C	302...305
55	813	2.7	31.3	1042	A202_31.3	S1 + M1LA4	P80 + BN80A4	N56C	312...315
59	758	2.9	29.2	1023	A202_29.2	S1 + M1LA4	P80 + BN80A4	N56C	312...315
60	742	1.2	28.6	518	A052_28.6	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
60	742	1.8	28.6	917	A102_28.6	S1 + M1LA4	P80 + BN80A4	N56C	302...305
67	661	1.3	25.5	510	A052_25.5	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
67	661	2.0	25.5	1063	A102_25.5	S1 + M1LA4	P80 + BN80A4	N56C	302...305
72	617	1.4	23.8	506	A052_23.8	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
72	617	2.2	23.8	880	A102_23.8	S1 + M1LA4	P80 + BN80A4	N56C	302...305
80	554	1.6	21.4	498	A052_21.4	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
80	554	2.4	21.4	1020	A102_21.4	S1 + M1LA4	P80 + BN80A4	N56C	302...305
92	482	1.7	18.6	488	A052_18.6	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
92	482	2.7	18.6	831	A102_18.6	S1 + M1LA4	P80 + BN80A4	N56C	302...305
104	427	1.9	16.4	476	A052_16.4	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
104	427	2.9	16.4	957	A102_16.4	S1 + M1LA4	P80 + BN80A4	N56C	302...305
123	362	2.3	13.9	461	A052_13.9	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
139	319	2.8	12.3	451	A052_12.3	S1 + M1LA4	P80 + BN80A4	N56C	296, 297
162	274	3.0	10.6	433	A052_10.6	S1 + M1LA4	P80 + BN80A4	N56C	296, 297

1 hp

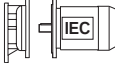
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs				NEMA	
1.1	52721	2.4	1632.3	15664	A904_1632	S2 + ME2SB4	P80 + BE80B4	N56C	398...401
1.1	50309	1.4	1557.7	13561	A804_1558	S2 + ME2SB4	P80 + BE80B4	N56C	390...393

1 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.2	48665	2.5	1506.8	15664	A904_1507	S2 + ME2SB4	P80 + BE80B4	N56C	398...401
1.2	46439	1.5	1437.8	13561	A804_1438	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
1.3	43468	1.0	1345.9	10420	A704_1346	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
1.3	43277	1.6	1339.9	13561	A804_1340	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
1.3	42763	2.9	1324.0	15664	A904_1324	S2 + ME2SB4	P80 + BE80B4	N56C	398...401
1.4	40125	1.1	1242.3	10420	A704_1242	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
1.4	39948	1.8	1236.9	13561	A804_1237	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
1.5	37513	1.2	1161.5	10420	A704_1161	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
1.6	35039	2.0	1084.9	13561	A804_1085	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
1.6	34628	1.3	1072.1	10420	A704_1072	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
1.7	32344	2.2	1001.4	13561	A804_1001	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
1.9	29925	1.5	926.5	10420	A704_926.5	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
1.9	29024	2.4	898.7	13561	A804_898.7	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
2.0	27623	1.6	855.3	10420	A704_855.3	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
2.1	26792	2.6	829.5	13561	A804_829.5	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
2.3	24672	1.8	763.9	10420	A704_763.9	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
2.3	24614	2.9	762.1	13561	A804_762.1	S2 + ME2SB4	P80 + BE80B4	N56C	390...393
2.3	24398	1.0	755.4	6252	A604_755.4	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
2.5	22774	1.9	705.1	10420	A704_705.1	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
2.5	22521	1.1	697.3	6252	A604_697.3	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
2.7	20820	2.1	644.6	10420	A704_644.6	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
2.7	20496	1.2	634.6	6252	A604_634.6	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
2.9	19218	2.3	595.0	10420	A704_595.0	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
3.0	18919	1.3	585.8	6252	A604_585.8	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
3.2	17506	1.4	542.0	6252	A604_542.0	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
3.2	17505	1.0	542.0	6245	A554_542.0	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
3.4	16647	2.7	515.4	10420	A704_515.4	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
3.4	16338	1.0	505.9	6245	A554_505.9	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
3.5	16159	1.5	500.3	6252	A604_500.3	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
3.7	15366	2.9	475.8	10420	A704_475.8	S2 + ME2SB4	P80 + BE80B4	N56C	382...385
3.9	14431	0.9	446.8	4119	A504_446.8	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
4.0	14159	1.8	438.4	6252	A604_438.4	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
4.2	13370	1.2	414.0	6245	A554_414.0	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
4.3	13127	1.0	406.4	4119	A504_406.4	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
4.3	13070	1.9	404.7	6252	A604_404.7	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
4.8	11809	1.1	365.6	4119	A504_365.6	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
5.0	11343	2.2	351.2	6252	A604_351.2	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
5.2	10742	1.2	332.6	4119	A504_332.6	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
5.4	10487	1.6	324.7	6245	A554_324.7	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
5.4	10471	2.4	324.2	6252	A604_324.2	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
6.1	9263	1.4	286.8	4119	A504_286.8	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
6.1	9247	2.7	286.3	6252	A604_286.3	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
6.6	8536	2.9	264.3	6252	A604_264.3	S2 + ME2SB4	P80 + BE80B4	N56C	372...375
6.6	8483	1.9	262.6	6245	A554_262.6	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
6.7	8426	1.6	260.9	4119	A504_260.9	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
7.3	7945	0.9	240.6	3092	A413_240.6	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
7.5	7493	1.8	232.0	4119	A504_232.0	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
8.0	7179	1.0	217.4	3092	A413_217.4	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
8.3	6815	1.9	211.0	4119	A504_211.0	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
8.4	6720	2.4	208.1	6245	A554_208.1	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
8.8	6523	1.2	197.5	3092	A413_197.5	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
9.0	6413	2.8	194.2	6245	A553_194.2	S2 + ME2SB4	P80 + BE80B4	N56C	362...365
9.2	6294	2.1	190.6	4119	A503_190.6	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
9.5	6088	1.2	184.4	3092	A413_184.4	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
10.1	5725	2.3	173.4	4119	A503_173.4	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
11.3	5105	2.6	154.6	4119	A503_154.6	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
11.6	4973	1.0	150.6	2498	A353_150.6	S2 + ME2SB4	P80 + BE80B4	N56C	332...335

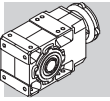


1 hp

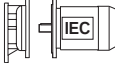
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
11.9	4851	1.6	146.9	3092	A413_146.9	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
12.4	4644	2.9	140.6	4119	A503_140.6	S2 + ME2SB4	P80 + BE80B4	N56C	352...355
12.8	4502	1.0	136.3	2498	A353_136.3	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
14.9	3861	1.2	116.9	2498	A353_116.9	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
15.1	3826	1.9	115.9	3092	A413_115.9	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
16.5	3485	1.2	105.5	2498	A353_105.5	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
18.2	3263	1.5	95.6	2498	A352_95.6	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
18.8	3064	2.1	92.8	3092	A413_92.8	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
20.1	2956	1.0	86.7	1792	A302_86.7	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
21.1	2816	1.9	82.5	2498	A352_82.5	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
22.0	2703	2.6	79.2	3092	A412_79.2	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
22.8	2610	1.2	76.5	1767	A302_76.5	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
23.5	2534	2.1	74.3	2498	A352_74.3	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
24.5	2433	2.9	71.3	3092	A412_71.3	S2 + ME2SB4	P80 + BE80B4	N56C	342...345
26.4	2252	1.5	66.0	1722	A302_66.0	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
26.5	2246	2.4	65.8	2498	A352_65.8	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
27.6	2154	0.9	63.1	1061	A202_63.1	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
28.9	2059	2.6	60.4	2498	A352_60.4	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
29.4	2027	1.7	59.4	1687	A302_59.4	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
32	1852	2.9	54.3	2498	A352_54.3	S2 + ME2SB4	P80 + BE80B4	N56C	332...335
33	1830	1.2	53.7	1073	A202_53.7	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
33	1797	2.0	52.7	1645	A302_52.7	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
36	1647	1.3	48.3	1058	A202_48.3	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
36	1647	2.2	48.3	1614	A302_48.3	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
40	1481	2.4	43.4	1577	A302_43.4	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
40	1474	1.5	43.2	1042	A202_43.2	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
43	1394	1.0	40.9	898	A102_40.9	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
44	1351	1.6	39.6	1028	A202_39.6	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
44	1339	2.7	39.3	1540	A302_39.3	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
48	1250	2.9	36.6	1516	A302_36.6	S2 + ME2SB4	P80 + BE80B4	N56C	322...325
49	1209	1.8	35.4	1007	A202_35.4	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
50	1198	1.1	35.1	878	A102_35.1	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
54	1098	1.2	32.2	1032	A102_32.2	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
56	1068	2.1	31.3	984	A202_31.3	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
60	997	2.2	29.2	970	A202_29.2	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
61	975	0.9	28.6	471	A052_28.6	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
61	975	1.4	28.6	854	A102_28.6	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
66	903	2.4	26.5	951	A202_26.5	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
69	869	1.0	25.5	478	A052_25.5	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
69	869	1.5	25.5	996	A102_25.5	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
73	811	1.1	23.8	447	A052_23.8	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
73	811	1.6	23.8	827	A102_23.8	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
76	788	2.6	23.1	923	A202_23.1	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
82	729	1.2	21.4	449	A052_21.4	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
82	729	1.8	21.4	963	A102_21.4	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
82	724	2.8	21.2	904	A202_21.2	S2 + ME2SB4	P80 + BE80B4	N56C	312...315
94	634	1.3	18.6	445	A052_18.6	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
94	634	2.1	18.6	789	A102_18.6	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
106	561	1.5	16.4	439	A052_16.4	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
106	561	2.2	16.4	912	A102_16.4	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
125	475	1.7	13.9	429	A052_13.9	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
125	475	2.6	13.9	740	A102_13.9	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
142	420	2.1	12.3	423	A052_12.3	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
142	420	2.7	12.3	717	A102_12.3	S2 + ME2SB4	P80 + BE80B4	N56C	302...305
165	360	2.3	10.6	408	A052_10.6	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
181	328	2.6	9.6	404	A052_9.6	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297
205	291	2.8	8.5	394	A052_8.5	S2 + ME2SB4	P80 + BE80B4	N56C	296, 297

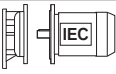
1.5 hp

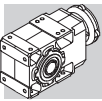
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.1	77152	1.6	1632.3	15664	A904_1632	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.1	73623	1.0	1557.7	13561	A804_1558	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.2	71217	1.7	1506.8	15664	A904_1507	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.2	67960	1.0	1437.8	13561	A804_1438	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.3	63332	1.1	1339.9	13561	A804_1340	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.3	62580	2.0	1324.0	15664	A904_1324	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.4	58460	1.2	1236.9	13561	A804_1237	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.4	57766	2.1	1222.2	15664	A904_1222	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.6	52492	2.4	1110.6	15664	A904_1111	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.6	51277	1.4	1084.9	13561	A804_1085	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.7	48454	2.6	1025.2	15664	A904_1025	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.7	47333	1.5	1001.4	13561	A804_1001	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
1.9	44296	2.8	937.2	15664	A904_937.2	S3 + ME3SA4	P90 + BE90S4	N140TC	398...401
1.9	43793	1.0	926.5	10420	A704_926.5	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
1.9	42475	1.7	898.7	13561	A804_898.7	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
2.0	40424	1.1	855.3	10420	A704_855.3	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
2.1	39208	1.8	829.5	13561	A804_829.5	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
2.3	36106	1.2	763.9	10420	A704_763.9	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
2.3	36020	2.0	762.1	13561	A804_762.1	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
2.5	33328	1.3	705.1	10420	A704_705.1	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
2.5	33249	2.1	703.5	13561	A804_703.5	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
2.7	30468	1.5	644.6	10420	A704_644.6	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
2.9	28697	2.5	607.2	13561	A804_607.2	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
2.9	28124	1.6	595.0	10420	A704_595.0	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
3.1	26490	2.7	560.5	13561	A804_560.5	S3 + ME3SA4	P90 + BE90S4	N140TC	390...393
3.2	25618	1.0	542.0	6252	A604_542.0	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
3.4	24361	1.8	515.4	10420	A704_515.4	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
3.5	23647	1.0	500.3	6252	A604_500.3	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
3.7	22487	2.0	475.8	10420	A704_475.8	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
4.0	20720	1.2	438.4	6252	A604_438.4	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
4.3	19126	1.3	404.7	6252	A604_404.7	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
4.3	18914	2.3	400.2	10420	A704_400.2	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
4.7	17459	2.5	369.4	10420	A704_369.4	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
5.0	16600	1.5	351.2	6252	A604_351.2	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
5.4	15347	1.1	324.7	6245	A554_324.7	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
5.4	15323	1.6	324.2	6252	A604_324.2	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
5.5	14952	3.0	316.4	10420	A704_316.4	S3 + ME3SA4	P90 + BE90S4	N140TC	382...385
6.1	13556	1.0	286.8	4119	A504_286.8	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
6.1	13533	1.8	286.3	6252	A604_286.3	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
6.6	12492	2.0	264.3	6252	A604_264.3	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
6.6	12414	1.3	262.6	6245	A554_262.6	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
6.7	12331	1.1	260.9	4119	A504_260.9	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
7.5	10965	1.2	232.0	4119	A504_232.0	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
7.7	10688	2.3	226.1	6252	A604_226.1	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
8.2	9974	1.3	211.0	4119	A504_211.0	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
8.3	9866	2.5	208.7	6252	A604_208.7	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
8.4	9834	1.6	208.1	6245	A554_208.1	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
9.0	9385	1.9	194.2	6245	A553_194.2	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
9.1	9211	1.4	190.6	4119	A503_190.6	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
9.4	8977	2.8	185.8	6252	A603_185.8	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
9.9	8458	2.1	175.0	6245	A553_175.0	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
10.0	8378	1.6	173.4	4119	A503_173.4	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
10.1	8286	3.0	171.5	6252	A603_171.5	S3 + ME3SA4	P90 + BE90S4	N140TC	372...375
10.8	7753	2.3	160.4	6245	A553_160.4	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
11.3	7471	1.8	154.6	4119	A503_154.6	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
11.8	7098	1.1	146.9	3092	A413_146.9	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
11.9	7095	2.5	146.8	6245	A553_146.8	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365

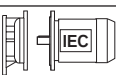


1.5 hp

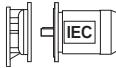
n2 rpm	T2 lb-in	S	i	Rn2 lbs					
12.4	6796	2.0	140.6	4119	A503_140.6	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
13.1	6415	2.8	132.7	6245	A553_132.7	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
13.4	6267	2.1	129.7	4119	A503_129.7	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
14.0	5987	3.0	123.9	6245	A553_123.9	S3 + ME3SA4	P90 + BE90S4	N140TC	362...365
14.8	5700	2.3	118.0	4119	A503_118.0	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
15.0	5599	1.3	115.9	3092	A413_115.9	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
15.9	5288	2.5	109.4	4119	A503_109.4	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
17.5	4810	2.8	99.5	4119	A503_99.5	S3 + ME3SA4	P90 + BE90S4	N140TC	352...355
18.2	4775	1.0	95.6	2498	A352_95.6	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
18.8	4483	1.5	92.8	3092	A413_92.8	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
21.1	4120	1.3	82.5	2498	A352_82.5	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
22.0	3956	1.8	79.2	3092	A412_79.2	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
23.4	3708	1.4	74.3	2498	A352_74.3	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
24.4	3560	2.0	71.3	3092	A412_71.3	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
26.4	3296	1.0	66.0	1520	A302_66.0	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
26.4	3287	1.6	65.8	2498	A352_65.8	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
27.1	3203	2.2	64.2	3092	A412_64.2	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
28.8	3013	1.8	60.4	2498	A352_60.4	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
29.3	2967	1.2	59.4	1528	A302_59.4	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
29.6	2936	2.4	58.8	3092	A412_58.8	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
32	2710	2.0	54.3	2498	A352_54.3	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
33	2653	2.6	53.1	3092	A412_53.1	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
33	2630	1.4	52.7	1505	A302_52.7	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
35	2450	2.2	49.1	2456	A352_49.1	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
36	2410	0.9	48.3	941	A202_48.3	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
36	2410	1.5	48.3	1487	A302_48.3	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
36	2410	2.9	48.3	3092	A412_48.3	S3 + ME3SA4	P90 + BE90S4	N140TC	342...345
38	2287	2.3	45.8	2436	A352_45.8	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
40	2168	1.7	43.4	1462	A302_43.4	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
40	2158	1.0	43.2	916	A202_43.2	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
42	2086	2.5	41.8	2373	A352_41.8	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
44	1978	1.1	39.6	927	A202_39.6	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
44	1960	1.9	39.3	1435	A302_39.3	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
47	1829	2.0	36.6	1417	A302_36.6	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
48	1828	2.9	36.6	2311	A352_36.6	S3 + ME3SA4	P90 + BE90S4	N140TC	332...335
49	1769	1.3	35.4	902	A202_35.4	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
52	1669	2.1	33.4	1392	A302_33.4	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
56	1563	1.4	31.3	890	A202_31.3	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
59	1463	2.3	29.3	1355	A302_29.3	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
60	1459	1.5	29.2	883	A202_29.2	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
61	1426	0.9	28.6	758	A102_28.6	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
66	1324	2.5	26.5	1326	A302_26.5	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
66	1321	1.6	26.5	871	A202_26.5	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
68	1271	1.0	25.5	736	A102_25.5	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
73	1187	1.1	23.8	740	A102_23.8	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
75	1154	1.8	23.1	853	A202_23.1	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
76	1136	3.0	22.8	1281	A302_22.8	S3 + ME3SA4	P90 + BE90S4	N140TC	322...325
81	1066	1.2	21.4	870	A102_21.4	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
82	1060	1.9	21.2	840	A202_21.2	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
94	927	1.4	18.6	719	A102_18.6	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
96	904	2.3	18.1	818	A202_18.1	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
106	821	1.5	16.4	839	A102_16.4	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
108	807	2.5	16.2	799	A202_16.2	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
124	703	2.9	14.1	776	A202_14.1	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315
125	695	1.8	13.9	687	A102_13.9	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
141	614	1.9	12.3	671	A102_12.3	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
145	597	2.9	12.0	745	A202_12.0	S3 + ME3SA4	P90 + BE90S4	N140TC	312...315

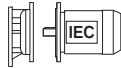
1.5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
165	527	2.3	10.6	652	A102_10.6	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
181	480	2.4	9.6	638	A102_9.6	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305
204	425	2.7	8.5	738	A102_8.5	S3 + ME3SA4	P90 + BE90S4	N140TC	302...305

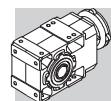


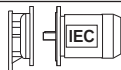
2 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.1	105441	1.2	1632.3	15664	A904_1632	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.2	97330	1.3	1506.8	15664	A904_1507	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.3	85526	1.4	1324.0	15664	A904_1324	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.4	78947	1.6	1222.2	15664	A904_1222	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.6	71739	1.7	1110.6	15664	A904_1111	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.6	70079	1.0	1084.9	13561	A804_1085	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
1.7	66221	1.9	1025.2	15664	A904_1025	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.7	64688	1.1	1001.4	13561	A804_1001	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
1.9	60538	2.0	937.2	15664	A904_937.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
1.9	58049	1.2	898.7	13561	A804_898.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
2.0	55881	2.2	865.1	15664	A904_865.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
2.1	53584	1.3	829.5	13561	A804_829.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
2.3	49539	2.5	766.9	15664	A904_766.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
2.3	49227	1.4	762.1	13561	A804_762.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
2.5	45728	2.7	707.9	15664	A904_707.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	398...401
2.5	45549	1.0	705.1	10420	A704_705.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
2.5	45440	1.6	703.5	13561	A804_703.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
2.7	41640	1.1	644.6	10420	A704_644.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
2.9	39219	1.8	607.2	13561	A804_607.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
2.9	38437	1.2	595.0	10420	A704_595.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
3.1	36203	2.0	560.5	13561	A804_560.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
3.4	33293	1.3	515.4	10420	A704_515.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
3.6	30936	2.3	478.9	13561	A804_478.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
3.7	30732	1.4	475.8	10420	A704_475.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
3.9	28556	2.5	442.1	13561	A804_442.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
4.3	26140	0.9	404.7	6252	A604_404.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
4.3	25849	1.7	400.2	10420	A704_400.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
4.5	24770	2.9	383.5	13561	A804_383.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	390...393
4.7	23861	1.9	369.4	10420	A704_369.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
5.0	22686	1.1	351.2	6252	A604_351.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
5.4	20941	1.2	324.2	6252	A604_324.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
5.5	20435	2.2	316.4	10420	A704_316.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
6.0	18863	2.3	292.0	10420	A704_292.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
6.1	18495	1.3	286.3	6252	A604_286.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
6.6	17072	1.5	264.3	6252	A604_264.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
6.6	16966	1.0	262.6	6245	A554_262.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
7.3	15413	2.9	238.6	10420	A704_238.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	382...385
7.7	14607	1.7	226.1	6252	A604_226.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
8.2	13631	1.0	211.0	4119	A504_211.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
8.3	13483	1.8	208.7	6252	A604_208.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
8.4	13439	1.2	208.1	6245	A554_208.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
9.0	12826	1.4	194.2	6245	A553_194.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
9.1	12588	1.1	190.6	4119	A503_190.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
9.4	12269	2.0	185.8	6252	A603_185.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
9.9	11560	1.5	175.0	6245	A553_175.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
10.0	11450	1.2	173.4	4119	A503_173.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355

2 hp

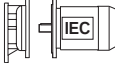
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
10.1	11325	2.2	171.5	6252	A603_171.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
10.8	10596	1.7	160.4	6245	A553_160.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
11.2	10306	2.4	156.0	6252	A603_156.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
11.3	10210	1.3	154.6	4119	A503_154.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
11.9	9696	1.8	146.8	6245	A553_146.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
12.1	9514	2.6	144.0	6252	A603_144.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
12.4	9288	1.4	140.6	4119	A503_140.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
13.1	8803	2.8	133.3	6252	A603_133.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	372...375
13.1	8767	2.0	132.7	6245	A553_132.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
13.4	8564	1.6	129.7	4119	A503_129.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
14.0	8182	2.2	123.9	6245	A553_123.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
14.8	7790	1.7	118.0	4119	A503_118.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
15.0	7652	0.9	115.9	3092	A413_115.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
15.9	7227	1.8	109.4	4119	A503_109.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
17.2	6696	2.6	101.4	6245	A553_101.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	362...365
17.5	6574	2.0	99.5	4119	A503_99.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
18.8	6127	1.1	92.8	3092	A413_92.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
19.4	5914	2.2	89.5	4119	A503_89.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
21.1	5631	0.9	82.5	2280	A352_82.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
21.4	5380	2.5	81.5	4119	A503_81.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
22.0	5406	1.3	79.2	3092	A412_79.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
23.4	5068	1.0	74.3	2321	A352_74.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
24.4	4865	1.4	71.3	3092	A412_71.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
24.8	4639	2.9	70.2	4119	A503_70.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	352...355
26.4	4492	1.2	65.8	2415	A352_65.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
27.1	4377	1.6	64.2	3092	A412_64.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
28.8	4118	1.3	60.4	2394	A352_60.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
29.6	4012	1.7	58.8	3092	A412_58.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
32	3704	1.4	54.3	2352	A352_54.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
33	3626	1.9	53.1	3092	A412_53.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
33	3594	1.0	52.7	1355	A302_52.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
35	3349	1.6	49.1	2311	A352_49.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
36	3294	1.1	48.3	1376	A302_48.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
36	3294	2.1	48.3	3072	A412_48.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
38	3125	1.7	45.8	2290	A352_45.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
39	3075	2.2	45.1	3010	A412_45.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
40	2963	1.2	43.4	1328	A302_43.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
42	2851	1.9	41.8	2248	A352_41.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
44	2679	1.4	39.3	1314	A302_39.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
47	2500	1.4	36.6	1304	A302_36.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
48	2499	2.1	36.6	2186	A352_36.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
48	2450	2.6	35.9	2845	A412_35.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	342...345
49	2417	0.9	35.4	820	A202_35.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
52	2281	1.5	33.4	1289	A302_33.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
52	2263	2.3	33.2	2144	A352_33.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
56	2136	1.0	31.3	791	A202_31.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
59	1999	1.7	29.3	1264	A302_29.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
60	1993	1.1	29.2	787	A202_29.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
61	1940	2.7	28.4	2069	A352_28.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
66	1810	1.9	26.5	1244	A302_26.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
66	1806	1.2	26.5	780	A202_26.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
68	1751	3.0	25.7	2021	A352_25.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	332...335
75	1577	1.3	23.1	774	A202_23.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
76	1552	2.2	22.8	1209	A302_22.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
81	1457	0.9	21.4	665	A102_21.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
82	1448	1.4	21.2	768	A202_21.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
85	1401	2.4	20.5	1186	A302_20.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325

2 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
94	1267	1.0	18.6	640	A102_18.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
96	1235	1.7	18.1	754	A202_18.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
97	1227	2.7	18.0	1153	A302_18.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
106	1122	1.1	16.4	756	A102_16.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
106	1115	2.8	16.3	1128	A302_16.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	322...325
108	1103	1.9	16.2	741	A202_16.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
124	960	2.1	14.1	727	A202_14.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
125	950	1.3	13.9	628	A102_13.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
141	840	1.4	12.3	618	A102_12.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
145	816	2.1	12.0	704	A202_12.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
165	720	1.7	10.6	608	A102_10.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
168	705	2.6	10.3	686	A202_10.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
181	656	1.7	9.6	597	A102_9.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
186	640	2.7	9.4	669	A202_9.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	312...315
204	581	2.0	8.5	695	A102_8.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
241	492	2.3	7.2	567	A102_7.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305
275	432	2.6	6.3	654	A102_6.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	302...305

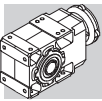


3 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.3	125160	1.0	1324.0	15664	A904_1324	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
1.4	115533	1.1	1222.2	15664	A904_1222	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
1.6	104984	1.2	1110.6	15664	A904_1111	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
1.7	96908	1.3	1025.2	15664	A904_1025	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
1.9	88592	1.4	937.2	15664	A904_937.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
2.0	81777	1.5	865.1	15664	A904_865.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
2.1	78415	0.9	829.5	13561	A804_829.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
2.3	72496	1.7	766.9	15664	A904_766.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
2.3	72040	1.0	762.1	13561	A804_762.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
2.5	66920	1.9	707.9	15664	A904_707.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
2.5	66498	1.1	703.5	13561	A804_703.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
2.9	57394	1.2	607.2	13561	A804_607.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
2.9	56866	2.2	601.6	15664	A904_601.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
3.1	52979	1.3	560.5	13561	A804_560.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
3.1	52492	2.4	555.3	15664	A904_555.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
3.4	48721	0.9	515.4	10420	A704_515.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
3.6	45997	2.7	486.6	15664	A904_486.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
3.6	45272	1.6	478.9	13561	A804_478.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
3.7	44974	1.0	475.8	10420	A704_475.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
3.9	42459	2.9	449.2	15664	A904_449.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	398...401
3.9	41790	1.7	442.1	13561	A804_442.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
4.4	37828	1.2	400.2	10420	A704_400.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
4.6	36249	2.0	383.5	13561	A804_383.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
4.7	34918	1.3	369.4	10420	A704_369.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
4.9	33461	2.1	354.0	13561	A804_354.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
5.5	29905	1.5	316.4	10420	A704_316.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
5.8	28396	2.5	300.4	13561	A804_300.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
6.0	27604	1.6	292.0	10420	A704_292.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
6.1	27065	0.9	286.3	6252	A604_286.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
6.3	26212	2.7	277.3	13561	A804_277.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	390...393
6.6	24983	1.0	264.3	6252	A604_264.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
7.3	22556	2.0	238.6	10420	A704_238.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385

3 hp

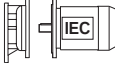
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
7.7	21376	1.2	226.1	6252	A604_226.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
7.9	20821	2.1	220.3	10420	A704_220.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
8.4	19731	1.3	208.7	6252	A604_208.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
9.0	18770	0.9	194.2	6245	A553_194.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
9.4	17954	1.4	185.8	6252	A603_185.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
9.5	17384	2.5	183.9	10420	A704_183.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
10.0	16917	1.0	175.0	6245	A553_175.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
10.2	16573	1.5	171.5	6252	A603_171.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
10.3	16047	2.8	169.8	10420	A704_169.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
10.9	15507	1.1	160.4	6245	A553_160.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
11.2	15083	1.6	156.0	6252	A603_156.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
11.4	14854	2.2	153.7	10420	A703_153.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	382...385
11.9	14190	1.2	146.8	6245	A553_146.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
12.1	13922	1.8	144.0	6252	A603_144.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
12.4	13591	1.0	140.6	3830	A503_140.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
13.1	12882	1.9	133.3	6252	A603_133.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
13.1	12829	1.4	132.7	6245	A553_132.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
13.5	12533	1.1	129.7	4057	A503_129.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
14.1	11974	1.5	123.9	6245	A553_123.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
14.2	11891	2.1	123.0	6252	A603_123.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
14.8	11400	1.2	118.0	4119	A503_118.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
15.9	10576	1.3	109.4	4119	A503_109.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
16.2	10419	2.4	107.8	6252	A603_107.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
17.2	9799	1.8	101.4	6245	A553_101.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
17.5	9620	1.4	99.5	4119	A503_99.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
17.5	9618	2.6	99.5	6252	A603_99.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
19.5	8655	1.5	89.5	4077	A503_89.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
20.2	8347	3.0	86.4	6252	A603_86.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	372...375
21.4	7873	1.7	81.5	4036	A503_81.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
21.9	7686	2.3	79.5	6245	A553_79.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
24.5	7120	1.0	71.3	2865	A412_71.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
24.8	6789	2.0	70.2	3974	A503_70.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
27.1	6217	2.8	64.3	6245	A553_64.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	362...365
27.2	6405	1.1	64.2	2989	A412_64.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
27.3	6175	2.1	63.9	3913	A503_63.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
29.7	5872	1.2	58.8	2969	A412_58.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
31	5491	2.4	56.8	3830	A503_56.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
32	5420	1.0	54.3	2134	A352_54.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
33	5306	1.3	53.1	2907	A412_53.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
34	4995	2.7	51.7	3768	A503_51.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
36	4900	1.1	49.1	2061	A352_49.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
36	4821	1.4	48.3	2865	A412_48.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
38	4574	1.2	45.8	2048	A352_45.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
39	4499	1.5	45.1	2824	A412_45.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
39	4350	3.0	45.0	3686	A503_45.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	352...355
42	4172	1.3	41.8	2030	A352_41.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
44	3920	0.9	39.3	1153	A302_39.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
48	3659	1.0	36.6	1153	A302_36.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
48	3657	1.5	36.6	1998	A352_36.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
49	3585	1.8	35.9	2701	A412_35.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
52	3338	1.0	33.4	1040	A302_33.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
53	3311	1.6	33.2	1969	A352_33.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
60	2925	1.1	29.3	1108	A302_29.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
61	2839	1.9	28.4	1921	A352_28.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
62	2828	2.1	28.3	2556	A412_28.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
66	2649	1.3	26.5	1102	A302_26.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
68	2563	2.0	25.7	1888	A352_25.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335

3 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
77	2271	1.5	22.8	1089	A302_22.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
77	2264	2.5	22.7	2412	A412_22.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
78	2245	2.2	22.5	1840	A352_22.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
82	2119	1.0	21.2	663	A202_21.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
85	2051	1.6	20.5	1077	A302_20.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
85	2040	2.4	20.4	1803	A352_20.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
96	1808	1.1	18.1	647	A202_18.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
97	1796	1.8	18.0	1058	A302_18.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
98	1774	2.9	17.8	2268	A412_17.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	342...345
103	1693	2.9	17.0	1732	A352_17.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
107	1632	1.9	16.3	1042	A302_16.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
108	1614	1.3	16.2	647	A202_16.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
124	1405	1.4	14.1	642	A202_14.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
129	1354	2.2	13.6	1009	A302_13.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
142	1229	0.9	12.3	528	A102_12.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
146	1195	1.4	12.0	632	A202_12.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
148	1176	2.1	11.8	978	A302_11.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
148	1176	2.8	11.8	1605	A352_11.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	332...335
165	1054	1.2	10.6	528	A102_10.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
167	1044	2.7	10.5	960	A302_10.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
169	1032	1.8	10.3	624	A202_10.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
181	960	1.2	9.6	524	A102_9.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
186	936	1.8	9.4	614	A202_9.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
187	930	2.6	9.3	933	A302_9.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
205	850	1.3	8.5	620	A102_8.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
206	845	2.9	8.5	912	A302_8.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	322...325
208	836	2.1	8.4	603	A202_8.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
239	728	2.4	7.3	589	A202_7.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
242	720	1.6	7.2	512	A102_7.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
267	653	2.6	6.5	579	A202_6.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	312...315
275	632	1.8	6.3	600	A102_6.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305
319	546	2.1	5.5	494	A102_5.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	302...305

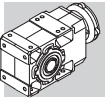


4 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
1.7	133249	0.9	1025.2	15664	A904_1025	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
1.9	121814	1.0	937.2	15664	A904_937.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
2.0	112443	1.1	865.1	15664	A904_865.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
2.3	99682	1.2	766.9	15664	A904_766.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
2.5	92014	1.3	707.9	15664	A904_707.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
2.9	78191	1.6	601.6	15664	A904_601.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
3.1	72847	1.0	560.5	13561	A804_560.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
3.1	72177	1.7	555.3	15664	A904_555.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
3.6	63246	2.0	486.6	15664	A904_486.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
3.6	62249	1.1	478.9	13561	A804_478.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
3.9	58381	2.1	449.2	15664	A904_449.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
3.9	57461	1.2	442.1	13561	A804_442.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
4.5	50100	2.5	385.4	15664	A904_385.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
4.5	49842	1.4	383.5	13561	A804_383.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
4.7	48012	0.9	369.4	10420	A704_369.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
4.9	46246	2.7	355.8	15664	A904_355.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	398...401
4.9	46008	1.5	354.0	13561	A804_354.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
5.5	41119	1.1	316.4	10420	A704_316.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385

4 hp

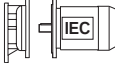
n2 rpm	T2 lb-in	S	i	Rn2 lbs					
5.8	39044	1.8	300.4	13561	A804_300.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
5.9	37956	1.2	292.0	10420	A704_292.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
6.3	36041	2.0	277.3	13561	A804_277.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
7.3	31014	1.4	238.6	10420	A704_238.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
7.5	30236	2.3	232.6	13561	A804_232.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
7.9	28628	1.5	220.3	10420	A704_220.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
8.1	27911	2.5	214.7	13561	A804_214.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	390...393
8.3	27130	0.9	208.7	6252	A604_208.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
9.3	24687	1.0	185.8	6252	A603_185.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
9.4	23903	1.9	183.9	10420	A704_183.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
10.1	22788	1.1	171.5	6252	A603_171.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
10.2	22065	2.0	169.8	10420	A704_169.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
11.1	20738	1.2	156.0	6252	A603_156.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
11.3	20424	1.6	153.7	10420	A703_153.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
11.8	19511	0.9	146.8	6245	A553_146.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
12.0	19143	1.3	144.0	6252	A603_144.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
12.2	18853	2.3	141.9	10420	A703_141.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
13.0	17713	1.4	133.3	6252	A603_133.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
13.1	17640	1.0	132.7	6245	A553_132.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
13.3	17366	2.5	130.7	10420	A703_130.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
14.0	16464	1.1	123.9	6245	A553_123.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
14.1	16350	1.5	123.0	6252	A603_123.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
14.4	16030	2.8	120.6	10420	A703_120.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	382...385
15.9	14542	0.9	109.4	3707	A503_109.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
16.1	14327	1.7	107.8	6252	A603_107.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
17.1	13473	1.3	101.4	6245	A553_101.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
17.4	13228	1.0	99.5	3542	A503_99.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
17.4	13225	1.9	99.5	6252	A603_99.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
19.4	11900	1.1	89.5	3521	A503_89.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
20.1	11478	2.2	86.4	6252	A603_86.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
21.3	10825	1.2	81.5	3542	A503_81.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
21.8	10595	2.3	79.7	6252	A603_79.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
21.8	10568	1.7	79.5	6245	A553_79.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
24.6	9357	2.6	70.4	6252	A603_70.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
24.7	9335	1.4	70.2	3542	A503_70.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
26.7	8637	2.9	65.0	6252	A603_65.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	372...375
27.0	8548	2.1	64.3	6245	A553_64.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
27.2	8491	1.6	63.9	3521	A503_63.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
31	7550	1.8	56.8	3501	A503_56.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
33	7296	1.0	53.1	2577	A412_53.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
34	6868	1.9	51.7	3460	A503_51.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
34	6771	2.6	51.0	6245	A553_51.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	362...365
36	6629	1.1	48.3	2618	A412_48.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
38	6187	1.1	45.1	2598	A412_45.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
39	5981	2.2	45.0	3398	A503_45.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
42	5736	0.9	41.8	1811	A352_41.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
42	5440	2.3	40.9	3357	A503_40.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
47	5028	1.1	36.6	1780	A352_36.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
48	4929	1.3	35.9	2515	A412_35.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
49	4731	2.6	35.6	3295	A503_35.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
52	4553	1.2	33.2	1774	A352_33.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
54	4303	2.9	32.4	3233	A503_32.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	352...355
61	3904	1.4	28.4	1753	A352_28.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
61	3888	1.5	28.3	2412	A412_28.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
65	3642	0.9	26.5	958	A302_26.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
68	3524	1.5	25.7	1734	A352_25.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
76	3123	1.1	22.8	949	A302_22.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325

4 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
77	3113	1.8	22.7	2309	A412_22.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
77	3086	1.6	22.5	1705	A352_22.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
84	2819	1.2	20.5	951	A302_20.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
85	2804	1.8	20.4	1682	A352_20.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
96	2469	1.3	18.0	947	A302_18.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
98	2439	2.1	17.8	2185	A412_17.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
102	2328	2.1	17.0	1630	A352_17.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
106	2244	1.4	16.3	943	A302_16.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
107	2220	0.9	16.2	558	A202_16.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
108	2210	2.3	16.1	2144	A412_16.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
112	2125	2.3	15.5	1603	A352_15.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
123	1932	1.0	14.1	546	A202_14.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
126	1889	2.5	13.8	2059	A412_13.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
128	1862	1.6	13.6	927	A302_13.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
133	1794	2.7	13.1	1551	A352_13.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
145	1643	1.1	12.0	550	A202_12.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
147	1617	1.5	11.8	906	A302_11.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
147	1617	2.0	11.8	1543	A352_11.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
148	1612	2.8	11.7	1975	A412_11.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	342...345
163	1460	2.2	10.6	1505	A352_10.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
166	1435	1.9	10.5	896	A302_10.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
168	1419	1.3	10.3	554	A202_10.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
185	1287	1.3	9.4	550	A202_9.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
186	1278	1.9	9.3	873	A302_9.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
186	1278	2.6	9.3	1457	A352_9.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
204	1169	1.0	8.5	508	A102_8.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	302...305
205	1162	2.1	8.5	859	A302_8.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
205	1162	2.7	8.5	1424	A352_8.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	332...335
207	1149	1.5	8.4	546	A202_8.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
238	1000	1.7	7.3	540	A202_7.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
241	990	1.2	7.2	451	A102_7.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	302...305
247	964	2.6	7.0	830	A302_7.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
265	898	1.9	6.5	533	A202_6.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315
271	880	2.8	6.4	813	A302_6.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	322...325
274	870	1.3	6.3	537	A102_6.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	302...305
317	750	1.5	5.5	447	A102_5.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	302...305
324	735	2.3	5.4	519	A202_5.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	312...315



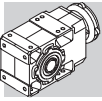
5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.0	136295	0.9	865.1	15664	A904_865.1	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
2.3	120827	1.0	766.9	15664	A904_766.9	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
2.5	111533	1.1	707.9	15664	A904_707.9	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
2.9	94777	1.3	601.6	15664	A904_601.6	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
3.1	87487	1.4	555.3	15664	A904_555.3	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
3.6	76662	1.6	486.6	15664	A904_486.6	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
3.6	75454	0.9	478.9	13561	A804_478.9	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
3.9	70765	1.8	449.2	15664	A904_449.2	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
3.9	69650	1.0	442.1	13561	A804_442.1	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
4.5	60727	2.0	385.4	15664	A904_385.4	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
4.5	60415	1.2	383.5	13561	A804_383.5	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
4.9	56056	2.2	355.8	15664	A904_355.8	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401

5 hp

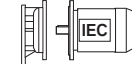
n2 rpm	T2 lb·in	S	i	Rn2 lbs					
4.9	55768	1.3	354.0	13561	A804_354.0	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
5.7	48035	2.6	304.9	15664	A904_304.9	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
5.8	47327	1.5	300.4	13561	A804_300.4	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
6.0	46007	1.0	292.0	10420	A704_292.0	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
6.2	44340	2.8	281.4	15664	A904_281.4	S4 + ME4SA4	P112 + BE112M4	N180TC	398...401
6.3	43686	1.6	277.3	13561	A804_277.3	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
7.3	37593	1.2	238.6	10420	A704_238.6	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
7.5	36650	1.9	232.6	13561	A804_232.6	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
7.9	34701	1.3	220.3	10420	A704_220.3	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
8.1	33831	2.1	214.7	13561	A804_214.7	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
9.5	28974	1.5	183.9	10420	A704_183.9	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
10.2	26988	2.6	171.3	13561	A804_171.3	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
10.3	26745	1.7	169.8	10420	A704_169.8	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
11.1	25259	2.8	156.8	13561	A803_156.8	S4 + ME4SA4	P112 + BE112M4	N180TC	390...393
11.2	25138	1.0	156.0	6252	A603_156.0		P112 + BE112M4	N180TC	372...375
11.3	24757	1.3	153.7	10420	A703_153.7	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
12.1	23204	1.1	144.0	6252	A603_144.0		P112 + BE112M4	N180TC	372...375
12.3	22852	1.9	141.9	10420	A703_141.9	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
13.1	21470	1.2	133.3	6252	A603_133.3	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
13.3	21049	2.1	130.7	10420	A703_130.7	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
14.1	19819	1.3	123.0	6252	A603_123.0	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
14.4	19430	2.3	120.6	10420	A703_120.6	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
16.1	17366	1.4	107.8	6252	A603_107.8	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
16.7	16791	2.6	104.2	10420	A703_104.2	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
17.2	16331	1.1	101.4	6245	A553_101.4	S4 + ME4SA4	P112 + BE112M4	N180TC	362...365
17.5	16030	1.5	99.5	6252	A603_99.5	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
18.1	15500	2.8	96.2	10420	A703_96.2	S4 + ME4SA4	P112 + BE112M4	N180TC	382...385
19.4	14425	0.9	89.5	3398	A503_89.5	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
20.1	13912	1.8	86.4	6252	A603_86.4	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
21.4	13121	1.0	81.5	3305	A503_81.5	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
21.8	12842	1.9	79.7	6252	A603_79.7	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
21.9	12810	1.4	79.5	6245	A553_79.5	S4 + ME4SA4	P112 + BE112M4	N180TC	362...365
24.7	11342	2.2	70.4	6252	A603_70.4	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
24.8	11315	1.2	70.2	3184	A503_70.2	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
26.8	10469	2.4	65.0	6252	A603_65.0	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
27.1	10362	1.7	64.3	6245	A553_64.3	S4 + ME4SA4	P112 + BE112M4	N180TC	362...365
27.2	10292	1.3	63.9	3027	A503_63.9	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
31	9152	1.5	56.8	3048	A503_56.8	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
31	8957	2.8	55.6	6252	A603_55.6	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
34	8325	1.6	51.7	3068	A503_51.7	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
34	8268	3.0	51.3	6252	A603_51.3	S4 + ME4SA4	P112 + BE112M4	N180TC	372...375
34	8208	2.2	51.0	6245	A553_51.0	S4 + ME4SA4	P112 + BE112M4	N180TC	362...365
39	7499	0.9	45.1	2391	A412_45.1	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
39	7250	1.8	45.0	3068	A503_45.0	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
43	6594	1.9	40.9	3048	A503_40.9	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
43	6492	2.5	40.3	6245	A553_40.3	S4 + ME4SA4	P112 + BE112M4	N180TC	362...365
48	5975	1.1	35.9	2309	A412_35.9	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
49	5735	2.1	35.6	3027	A503_35.6	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
52	5518	1.0	33.2	1674	A352_33.2		P112 + BE112M4	N180TC	332...335
54	5216	2.4	32.4	2986	A503_32.4	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
61	4732	1.1	28.4	1622	A352_28.4		P112 + BE112M4	N180TC	332...335
61	4713	1.3	28.3	2247	A412_28.3	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
66	4259	2.9	26.4	2904	A503_26.4	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355
68	4272	1.2	25.7	1545	A352_25.7		P112 + BE112M4	N180TC	332...335
77	3773	1.5	22.7	2165	A412_22.7	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
77	3741	1.3	22.5	1540	A352_22.5		P112 + BE112M4	N180TC	332...335
83	3481	2.8	20.9	3109	A502_20.9	S4 + ME4SA4	P112 + BE112M4	N180TC	352...355

5 hp

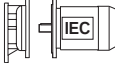
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
85	3418	1.0	20.5	867	A302_20.5		P112 + BE112M4	N180TC	322...325
85	3399	1.4	20.4	1532	A352_20.4		P112 + BE112M4	N180TC	332...335
97	2993	1.1	18.0	809	A302_18.0		P112 + BE112M4	N180TC	322...325
98	2956	1.7	17.8	2082	A412_17.8		P112 + BE112M4	N180TC	342...345
103	2822	1.7	17.0	1507	A352_17.0		P112 + BE112M4	N180TC	332...335
106	2719	1.2	16.3	818	A302_16.3		P112 + BE112M4	N180TC	322...325
108	2678	1.9	16.1	2049	A412_16.1	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
112	2575	1.9	15.5	1491	A352_15.5		P112 + BE112M4	N180TC	332...335
126	2289	2.1	13.8	1981	A412_13.8	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
128	2257	1.3	13.6	824	A302_13.6		P112 + BE112M4	N180TC	322...325
133	2175	2.3	13.1	1457	A352_13.1		P112 + BE112M4	N180TC	332...335
148	1960	1.3	11.8	815	A302_11.8		P112 + BE112M4	N180TC	322...325
148	1960	1.7	11.8	1468	A352_11.8	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
148	1954	2.3	11.7	1909	A412_11.7	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
164	1769	1.9	10.6	1438	A352_10.6	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
166	1740	1.6	10.5	818	A302_10.5		P112 + BE112M4	N180TC	322...325
168	1720	1.1	10.3	432	A202_10.3		P112 + BE112M4	N180TC	312...315
172	1686	2.6	10.1	1847	A412_10.1	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
186	1560	1.1	9.4	484	A202_9.4		P112 + BE112M4	N180TC	312...315
187	1549	1.6	9.3	803	A302_9.3		P112 + BE112M4	N180TC	322...325
187	1549	2.1	9.3	1401	A352_9.3	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
189	1530	2.9	9.2	1802	A412_9.2	S4 + ME4SA4	P112 + BE112M4	N180TC	342...345
206	1408	1.7	8.5	795	A302_8.5		P112 + BE112M4	N180TC	322...325
206	1408	2.2	8.5	1372	A352_8.5	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
208	1393	1.2	8.4	474	A202_8.4		P112 + BE112M4	N180TC	312...315
239	1213	1.4	7.3	476	A202_7.3		P112 + BE112M4	N180TC	312...315
241	1200	1.0	7.2	467	A102_7.2		P112 + BE112M4	N180TC	302...305
248	1169	2.1	7.0	776	A302_7.0		P112 + BE112M4	N180TC	322...325
248	1169	2.6	7.0	1314	A352_7.0	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
266	1088	1.6	6.5	476	A202_6.5		P112 + BE112M4	N180TC	312...315
271	1067	2.3	6.4	766	A302_6.4		P112 + BE112M4	N180TC	322...325
271	1067	2.7	6.4	1287	A352_6.4	S4 + ME4SA4	P112 + BE112M4	N180TC	332...335
275	1054	1.1	6.3	404	A102_6.3		P112 + BE112M4	N180TC	302...305
318	909	1.3	5.5	388	A102_5.5		P112 + BE112M4	N180TC	302...305
321	901	2.7	5.4	743	A302_5.4		P112 + BE112M4	N180TC	322...325
325	890	1.9	5.4	474	A202_5.4		P112 + BE112M4	N180TC	312...315



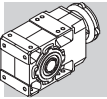
7.5 hp

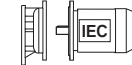
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
3.2	131230	0.9	555.3	15664	A904_555.3	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
3.6	114993	1.1	486.6	15664	A904_486.6	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
3.9	106147	1.2	449.2	15664	A904_449.2	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
4.6	91090	1.4	385.4	15664	A904_385.4	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
4.9	84083	1.5	355.8	15664	A904_355.8	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
5.8	72053	1.7	304.9	15664	A904_304.9	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
5.9	70990	1.0	300.4	13561	A804_300.4	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
6.3	66510	1.9	281.4	15664	A904_281.4	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
6.3	65529	1.1	277.3	13561	A804_277.3	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
7.6	54975	1.3	232.6	13561	A804_232.6	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
7.8	53511	2.3	226.4	15664	A904_226.4	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
8.2	50747	1.4	214.7	13561	A804_214.7	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
8.4	49394	2.5	209.0	15664	A904_209.0	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401

7.5 hp

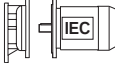
n2 rpm	T2 lb·in	S	i	Rn2 lbs					
9.6	43460	1.0	183.9	10420	A704_183.9	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
9.8	42532	2.9	180.0	15664	A904_180.0	S4 + ME4SB4	P132 + BE132S4	N210TC	398...401
10.3	40482	1.7	171.3	13561	A804_171.3	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
10.4	40117	1.1	169.8	10420	A704_169.8	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
11.2	37888	1.9	156.8	13561	A803_156.8	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
12.2	34974	2.0	144.7	13561	A803_144.7	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
12.4	34278	1.3	141.9	10420	A703_141.9	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
13.5	31574	1.4	130.7	10420	A703_130.7	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
14.0	30354	2.3	125.6	13561	A803_125.6	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
14.6	29145	1.5	120.6	10420	A703_120.6	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
15.2	28019	2.5	116.0	13561	A803_116.0	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
16.3	26048	1.0	107.8	6252	A603_107.8	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
16.9	25187	1.8	104.2	10420	A703_104.2	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
16.9	25138	2.8	104.0	13561	A803_104.0	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
17.7	24045	1.0	99.5	6252	A603_99.5	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
18.3	23250	1.8	96.2	10420	A703_96.2	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
18.3	23204	2.9	96.0	13561	A803_96.0	S4 + ME4SB4	P132 + BE132S4	N210TC	390...393
20.4	20868	1.2	86.4	6252	A603_86.4	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
20.5	20766	2.1	85.9	10420	A703_85.9	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
22.1	19263	1.3	79.7	6252	A603_79.7	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
22.1	19215	0.9	79.5	6245	A553_79.5	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
22.2	19168	2.1	79.3	10420	A703_79.3	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
24.3	17523	2.4	72.5	10420	A703_72.5	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
25.0	17012	1.5	70.4	6252	A603_70.4	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
26.3	16175	2.5	66.9	10420	A703_66.9	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
27.1	15704	1.6	65.0	6252	A603_65.0	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
27.4	15542	1.1	64.3	6245	A553_64.3	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
31	13935	2.9	57.7	10420	A703_57.7	S4 + ME4SB4	P132 + BE132S4	N210TC	382...385
31	13728	1.0	56.8	2698	A503_56.8	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
32	13436	1.8	55.6	6252	A603_55.6	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
34	12487	1.1	51.7	2677	A503_51.7	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
34	12402	2.0	51.3	6252	A603_51.3	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
35	12312	1.4	51.0	6245	A553_51.0	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
39	10919	2.3	45.2	6252	A603_45.2	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
39	10875	1.2	45.0	2553	A503_45.0	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
42	10079	2.5	41.7	6252	A603_41.7	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
43	9892	1.3	40.9	2595	A503_40.9	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
44	9739	1.7	40.3	6245	A553_40.3	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
49	8602	1.4	35.6	2615	A503_35.6	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
51	8288	3.0	34.3	6252	A603_34.3	S4 + ME4SB4	P132 + BE132S4	N210TC	372...375
54	7824	1.6	32.4	2615	A503_32.4	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
59	7232	2.3	29.9	6245	A553_29.9	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
67	6388	1.9	26.4	2595	A503_26.4	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
73	5811	2.1	24.0	2574	A503_24.0	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
74	5749	2.8	23.8	6204	A553_23.8	S4 + ME4SB4	P132 + BE132S4	N210TC	362...365
78	5660	1.0	22.7	1915	A412_22.7	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
84	5221	1.9	20.9	2965	A502_20.9	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
99	4434	1.2	17.8	1913	A412_17.8	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
106	4136	2.4	16.6	2801	A502_16.6	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
109	4017	1.2	16.1	1888	A412_16.1	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
128	3434	1.4	13.8	1843	A412_13.8	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
134	3272	2.8	13.1	2636	A502_13.1	S4 + ME4SB4	P132 + BE132S4	N210TC	352...355
149	2940	1.1	11.8	1343	A352_11.8	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335
150	2931	1.5	11.7	1787	A412_11.7	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
166	2654	1.2	10.6	1324	A352_10.6	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335
174	2528	1.7	10.1	1740	A412_10.1	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
189	2324	1.4	9.3	1299	A352_9.3	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335

7.5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
191	2296	2.0	9.2	1701	A412_9.2	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
208	2112	1.5	8.5	1278	A352_8.5	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335
211	2080	2.2	8.3	1666	A412_8.3	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
247	1778	2.5	7.1	1606	A412_7.1	S4 + ME4SB4	P132 + BE132S4	N210TC	342...345
251	1753	1.7	7.0	1234	A352_7.0	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335
275	1600	1.8	6.4	1212	A352_6.4	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335
325	1351	2.1	5.4	1168	A352_5.4	S4 + ME4SB4	P132 + BE132S4	N210TC	332...335

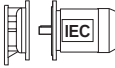


10 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
4.6	124490	1.0	385.4	15664	A904_385.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
4.9	114914	1.1	355.8	15664	A904_355.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
5.8	98472	1.3	304.9	15664	A904_304.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
6.3	90897	1.4	281.4	15664	A904_281.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
7.6	75133	0.9	232.6	13561	A804_232.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
7.8	73131	1.7	226.4	15664	A904_226.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
8.2	69354	1.0	214.7	13561	A804_214.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
8.4	67506	1.8	209.0	15664	A904_209.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
9.8	58127	2.1	180.0	15664	A904_180.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
10.3	55325	1.3	171.3	13561	A804_171.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
10.6	53655	2.3	166.1	15664	A904_166.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
11.2	51781	1.4	156.8	13561	A803_156.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
11.7	49869	2.3	151.0	15664	A903_151.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
12.2	47798	1.5	144.7	13561	A803_144.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
12.4	46847	0.9	141.9	10107	A703_141.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
12.6	46033	2.3	139.4	15664	A903_139.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
13.5	43151	1.0	130.7	10107	A703_130.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
13.9	41823	2.6	126.6	15664	A903_126.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	398...401
14.0	41484	1.7	125.6	13561	A803_125.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
14.6	39831	1.1	120.6	10420	A703_120.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
15.2	38293	1.8	116.0	13561	A803_116.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
16.9	34423	1.3	104.2	10420	A703_104.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
16.9	34355	2.1	104.0	13561	A803_104.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
18.3	31775	1.4	96.2	10420	A703_96.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
18.3	31712	2.1	96.0	13561	A803_96.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
19.7	29450	2.3	89.2	13561	A803_89.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
20.5	28380	1.5	85.9	10420	A703_85.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
21.4	27185	2.4	82.3	13561	A803_82.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
22.1	26326	0.9	79.7	6252	A603_79.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
22.2	26197	1.6	79.3	10420	A703_79.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
24.3	23949	1.8	72.5	10420	A703_72.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
24.3	23899	2.7	72.4	13561	A803_72.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
25.0	23250	1.1	70.4	6252	A603_70.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
26.3	22106	1.9	66.9	10420	A703_66.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
26.3	22061	3.0	66.8	13561	A803_66.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	390...393
27.1	21462	1.2	65.0	6252	A603_65.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
31	19044	2.2	57.7	10420	A703_57.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
32	18363	1.3	55.6	6252	A603_55.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
33	17579	2.3	53.2	10420	A703_53.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
34	16950	1.5	51.3	6252	A603_51.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
35	16826	1.1	51.0	5912	A553_51.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
36	16182	2.5	49.0	10420	A703_49.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385

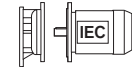
10 hp

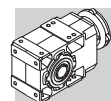
n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
39	14937	2.6	45.2	10420	A703_45.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	382...385
39	14923	1.7	45.2	6252	A603_45.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
42	13775	1.8	41.7	6252	A603_41.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
43	13519	0.9	40.9	2224	A503_40.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
44	13309	1.2	40.3	6245	A553_40.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
49	11756	1.0	35.6	2080	A503_35.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
51	11327	2.2	34.3	6252	A603_34.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
54	10693	1.2	32.4	2121	A503_32.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
56	10456	2.4	31.7	6252	A603_31.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
59	9884	1.7	29.9	6245	A553_29.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
63	9198	2.7	27.9	6252	A603_27.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
67	8731	1.4	26.4	2203	A503_26.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
68	8490	2.9	25.7	6252	A603_25.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
73	7941	1.5	24.0	2224	A503_24.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
74	7856	2.0	23.8	5995	A553_23.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
84	7136	1.4	20.9	2821	A502_20.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
85	7025	2.3	20.6	6252	A602_20.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
92	6560	2.3	19.2	5995	A552_19.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
105	5709	2.9	16.7	6252	A602_16.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	372...375
106	5652	1.7	16.6	2677	A502_16.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
109	5490	0.9	16.1	1688	A412_16.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
112	5349	2.8	15.7	5683	A552_15.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	362...365
128	4693	1.0	13.8	1676	A412_13.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
134	4471	2.0	13.1	2533	A502_13.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
150	4005	1.1	11.7	1643	A412_11.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
166	3627	0.9	10.6	1195	A352_10.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
174	3456	1.3	10.1	1618	A412_10.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
181	3320	2.5	9.7	2368	A502_9.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
189	3176	1.0	9.3	1176	A352_9.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
191	3137	1.4	9.2	1589	A412_9.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
208	2886	1.1	8.5	1166	A352_8.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
211	2843	1.6	8.3	1565	A412_8.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
227	2639	3.0	7.7	2224	A502_7.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	352...355
247	2430	1.9	7.1	1519	A412_7.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345
251	2396	1.3	7.0	1143	A352_7.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
275	2187	1.3	6.4	1124	A352_6.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
325	1847	1.5	5.4	1097	A352_5.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	332...335
336	1789	2.5	5.2	1427	A412_5.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	342...345

12.5 hp

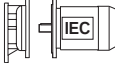
n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
5.8	120088	1.0	304.9	15664	A904_304.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
6.3	110851	1.1	281.4	15664	A904_281.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
7.8	89184	1.4	226.4	15664	A904_226.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
8.4	82324	1.5	209.0	15664	A904_209.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
9.8	70886	1.7	180.0	15664	A904_180.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
10.3	67470	1.0	171.3	13561	A804_171.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
10.6	65433	1.9	166.1	15664	A904_166.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
11.2	63147	1.1	156.8	13561	A803_156.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
11.7	60815	1.9	151.0	15664	A903_151.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
12.2	58290	1.2	144.7	13561	A803_144.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
12.6	56137	1.9	139.4	15664	A903_139.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
13.9	51004	2.1	126.6	15664	A903_126.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401

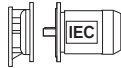
12.5 hp

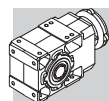
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
14.0	50590	1.4	125.6	13561	A803_125.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
14.6	48575	0.9	120.6	10420	A703_120.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
15.1	47080	2.6	116.9	15664	A903_116.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
15.2	46698	1.5	116.0	13561	A803_116.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
16.5	43019	2.9	106.8	15664	A903_106.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	398...401
16.9	41979	1.1	104.2	10420	A703_104.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
16.9	41896	1.7	104.0	13561	A803_104.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
18.3	38750	1.1	96.2	10420	A703_96.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
18.3	38673	1.7	96.0	13561	A803_96.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
19.7	35915	1.9	89.2	13561	A803_89.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
20.5	34610	1.3	85.9	10420	A703_85.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
21.4	33152	2.0	82.3	13561	A803_82.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
22.2	31947	1.3	79.3	10420	A703_79.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
24.3	29206	1.4	72.5	10420	A703_72.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
24.3	29145	2.2	72.4	13561	A803_72.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
26.3	26959	1.5	66.9	10420	A703_66.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
26.3	26903	2.4	66.8	13310	A803_66.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
27.1	26173	0.9	65.0	6252	A603_65.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
29.4	24075	2.7	59.8	13018	A803_59.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
31	23225	1.8	57.7	10420	A703_57.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
32	22393	1.1	55.6	6252	A603_55.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
32	22223	2.9	55.2	12789	A803_55.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	390...393
33	21438	1.9	53.2	10420	A703_53.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
34	20671	1.2	51.3	6252	A603_51.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
36	19734	2.1	49.0	10420	A703_49.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
39	18216	2.2	45.2	10420	A703_45.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
39	18199	1.4	45.2	6252	A603_45.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
42	16799	1.5	41.7	6252	A603_41.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
44	16231	1.0	40.3	5933	A553_40.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
46	15458	2.6	38.4	10420	A703_38.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
50	14269	2.6	35.4	10420	A703_35.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	382...385
51	13814	1.8	34.3	6252	A603_34.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
54	13041	0.9	32.4	1956	A503_32.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
56	12751	1.9	31.7	6252	A603_31.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
59	12054	1.4	29.9	6058	A553_29.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
63	11217	2.2	27.9	6252	A603_27.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
67	10647	1.2	26.4	1880	A503_26.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
68	10354	2.4	25.7	6252	A603_25.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
73	9685	1.3	24.0	1930	A503_24.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
74	9581	1.7	23.8	5808	A553_23.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
84	8702	1.1	20.9	2677	A502_20.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
85	8567	1.9	20.6	6252	A602_20.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
92	8000	1.8	19.2	5912	A552_19.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
105	6962	2.4	16.7	6252	A602_16.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	372...375
106	6893	1.4	16.6	2574	A502_16.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
112	6523	2.3	15.7	5621	A552_15.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
134	5453	1.7	13.1	2451	A502_13.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
135	5440	2.7	13.1	5371	A552_13.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	362...365
135	5437	0.9	13.1	1093	A352_13.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	332...335
150	4884	0.9	11.7	1513	A412_11.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345
174	4214	1.0	10.1	1513	A412_10.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345
181	4049	2.0	9.7	2306	A502_9.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
191	3826	1.2	9.2	1495	A412_9.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345
211	3467	1.3	8.3	1478	A412_8.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345
227	3219	2.4	7.7	2183	A502_7.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	352...355
247	2963	1.5	7.1	1447	A412_7.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345
251	2922	1.0	7.0	1064	A352_7.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	332...335
275	2667	1.1	6.4	1055	A352_6.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	332...335
325	2252	1.2	5.4	1037	A352_5.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	332...335
336	2182	2.1	5.2	1373	A412_5.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	342...345

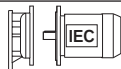


15 hp

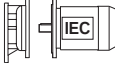
n2 rpm	T2 lb-in	S	i	Rn2 lbs					
6.3	133021	0.9	281.4	15664	A904_281.4		P160 + BE160M4	N250TC	398...401
7.8	107021	1.2	226.4	15664	A904_226.4		P160 + BE160M4	N250TC	398...401
8.4	98789	1.3	209.0	15664	A904_209.0		P160 + BE160M4	N250TC	398...401
9.8	85063	1.5	180.0	15664	A904_180.0		P160 + BE160M4	N250TC	398...401
10.6	78520	1.6	166.1	15664	A904_166.1		P160 + BE160M4	N250TC	398...401
11.3	75777	0.9	156.8	13143	A803_156.8	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
11.7	72978	1.5	151.0	15664	A903_151.0	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
12.2	69948	1.0	144.7	13143	A803_144.7	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
12.7	67365	1.6	139.4	15664	A903_139.4	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
13.9	61204	1.8	126.6	15664	A903_126.6	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
14.1	60708	1.2	125.6	13561	A803_125.6	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
15.1	56496	2.2	116.9	15664	A903_116.9	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
15.2	56038	1.3	116.0	13561	A803_116.0	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
16.5	51623	2.4	106.8	15664	A903_106.8	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
17.0	50275	1.4	104.0	13561	A803_104.0	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
17.9	47652	2.6	98.6	15664	A903_98.6	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
18.3	46499	0.9	96.2	10420	A703_96.2	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
18.4	46408	1.4	96.0	13561	A803_96.0	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
19.8	43098	1.6	89.2	13561	A803_89.2	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
20.3	42078	2.9	87.1	15664	A903_87.1	S5 + ME5SA4	P160 + BE160M4	N250TC	398...401
20.5	41532	1.1	85.9	10420	A703_85.9	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
21.4	39783	1.6	82.3	13456	A803_82.3	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
22.2	38337	1.1	79.3	10420	A703_79.3	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
24.3	35047	1.2	72.5	10420	A703_72.5	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
24.4	34974	1.9	72.4	13185	A803_72.4	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
26.4	32351	1.3	66.9	10420	A703_66.9	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
26.4	32284	2.0	66.8	12976	A803_66.8	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
29.5	28890	2.3	59.8	12705	A803_59.8	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
31	27870	1.5	57.7	10420	A703_57.7	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
32	26872	0.9	55.6	6252	A603_55.6	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
32	26668	2.4	55.2	12497	A803_55.2	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
33	25726	1.6	53.2	10420	A703_53.2	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
34	24805	1.0	51.3	6252	A603_51.3	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
36	23680	1.7	49.0	10420	A703_49.0	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
37	23286	2.8	48.2	12163	A803_48.2	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
39	21859	1.8	45.2	10420	A703_45.2	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
39	21838	1.1	45.2	6252	A603_45.2	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
40	21494	2.8	44.5	11954	A803_44.5	S5 + ME5SA4	P160 + BE160M4	N250TC	390...393
42	20159	1.2	41.7	6252	A603_41.7	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
46	18550	2.1	38.4	10420	A703_38.4	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
50	17123	2.2	35.4	10420	A703_35.4	S5 + ME5SA4	P160 + BE160M4	N250TC	382...385
51	16576	1.5	34.3	6252	A603_34.3	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
56	15301	1.6	31.7	6252	A603_31.7	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
59	14546	2.6	30.1	10295	A703_30.1		P160 + BE160M4	N250TC	382...385
59	14465	1.1	29.9	5871	A553_29.9	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365
63	13460	1.8	27.9	6252	A603_27.9	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
64	13428	2.6	27.8	10107	A703_27.8		P160 + BE160M4	N250TC	382...385
67	12776	1.0	26.4	1730	A503_26.4	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
69	12425	2.0	25.7	6252	A603_25.7	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
73	11622	1.1	24.0	1606	A503_24.0	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
74	11497	1.4	23.8	5413	A553_23.8	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365
84	10442	0.9	20.9	2698	A502_20.9	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
86	10281	1.6	20.6	6252	A602_20.6	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
92	9600	1.5	19.2	5808	A552_19.2	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365
105	8355	2.0	16.7	6252	A602_16.7	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
107	8272	1.2	16.6	2471	A502_16.6	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
113	7828	1.9	15.7	5537	A552_15.7	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365

15 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
135	6543	1.4	13.1	2368	A502_13.1	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
135	6528	2.3	13.1	5288	A552_13.1	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365
139	6342	2.6	12.7	6252	A602_12.7	S5 + ME5SA4	P160 + BE160M4	N250TC	372...375
170	5169	2.9	10.4	4996	A552_10.4	S5 + ME5SA4	P160 + BE160M4	N250TC	362...365
181	4859	1.7	9.7	2224	A502_9.7	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355
228	3862	2.0	7.7	2121	A502_7.7	S5 + ME5SA4	P160 + BE160M4	N250TC	352...355



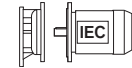
20 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
8.5	133365	0.9	209.0	15664	A904_209.0		P160 + BE160L4	N250TC	398...401
9.8	114835	1.1	180.0	15664	A904_180.0		P160 + BE160L4	N250TC	398...401
10.7	106002	1.2	166.1	15664	A904_166.1		P160 + BE160L4	N250TC	398...401
11.7	98521	1.1	151.0	15664	A903_151.0	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
12.7	90942	1.1	139.4	15664	A903_139.4	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
14.0	82626	1.3	126.6	15664	A903_126.6	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
15.1	76270	1.6	116.9	15664	A903_116.9	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
15.3	75651	0.9	116.0	12351	A803_116.0	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
16.6	69691	1.8	106.8	15664	A903_106.8	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
17.0	67871	1.0	104.0	12476	A803_104.0	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
18.0	64330	1.9	98.6	15664	A903_98.6	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
18.4	62651	1.1	96.0	12643	A803_96.0	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
19.8	58182	1.2	89.2	12601	A803_89.2	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
20.3	56805	2.2	87.1	15664	A903_87.1	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
21.5	53707	1.2	82.3	12476	A803_82.3	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
22.0	52436	2.4	80.4	15664	A903_80.4	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
23.8	48592	2.6	74.5	15664	A903_74.5	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
24.5	47215	1.4	72.4	12330	A803_72.4	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
25.7	44854	2.7	68.8	15664	A903_68.8	S5 + ME5LA4	P160 + BE160L4	N250TC	398...401
26.4	43674	0.9	66.9	10253	A703_66.9	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
26.5	43583	1.5	66.8	12163	A803_66.8	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
29.6	39001	1.7	59.8	11996	A803_59.8	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
31	37624	1.1	57.7	10420	A703_57.7	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
32	36001	1.8	55.2	11829	A803_55.2	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
33	34730	1.2	53.2	10420	A703_53.2	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
36	31968	1.3	49.0	10420	A703_49.0	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
37	31436	2.1	48.2	11579	A803_48.2	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
39	29509	1.3	45.2	10420	A703_45.2	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
40	29017	2.1	44.5	11412	A803_44.5	S5 + ME5LA4	P160 + BE160L4	N250TC	390...393
42	27214	0.9	41.7	6252	A603_41.7	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
46	25118	2.5	38.5	10682	A803_38.5		P160 + BE160L4	N250TC	390...393
46	25042	1.6	38.4	10399	A703_38.4	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
50	23186	2.5	35.5	10640	A803_35.5		P160 + BE160L4	N250TC	390...393
50	23116	1.6	35.4	10232	A703_35.4	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
52	22378	1.1	34.3	6252	A603_34.3	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
56	20657	1.2	31.7	6252	A603_31.7	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
58	19948	2.7	30.6	10327	A803_30.6		P160 + BE160L4	N250TC	390...393
59	19638	1.9	30.1	9920	A703_30.1		P160 + BE160L4	N250TC	382...385
63	18414	2.9	28.2	9910	A803_28.2		P160 + BE160L4	N250TC	390...393
64	18172	1.4	27.9	6252	A603_27.9	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
64	18127	1.9	27.8	9732	A703_27.8		P160 + BE160L4	N250TC	382...385
69	16774	1.5	25.7	6252	A603_25.7	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
74	15521	1.0	23.8	4705	A553_23.8	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365

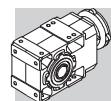
20 hp

n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
75	15345	2.3	23.5	9399	A703_23.5		P160 + BE160L4	N250TC	382...385
83	13899	2.4	21.3	9190	A703_21.3	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
86	13879	1.2	20.6	6252	A602_20.6	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
90	12830	2.4	19.7	9024	A703_19.7	S5 + ME5LA4	P160 + BE160L4	N250TC	382...385
92	12960	1.1	19.2	5579	A552_19.2	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365
106	11279	1.5	16.7	6252	A602_16.7	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
113	10567	1.4	15.7	5350	A552_15.7	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365
135	8833	1.0	13.1	2162	A502_13.1	S5 + ME5LA4	P160 + BE160L4	N250TC	352...355
135	8813	1.7	13.1	5142	A552_13.1	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365
139	8561	1.9	12.7	6252	A602_12.7	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
171	6979	2.1	10.4	4871	A552_10.4	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365
172	6952	2.4	10.3	6252	A602_10.3	S5 + ME5LA4	P160 + BE160L4	N250TC	372...375
182	6560	1.3	9.7	2080	A502_9.7	S5 + ME5LA4	P160 + BE160L4	N250TC	352...355
209	5702	2.6	8.5	4621	A552_8.5	S5 + ME5LA4	P160 + BE160L4	N250TC	362...365
229	5214	1.5	7.7	2008	A502_7.7	S5 + ME5LA4	P160 + BE160L4	N250TC	352...355

25 hp

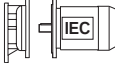
n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
10.6	130867	0.9	166.1	15664	A904_166.1		P180 + BE180M4	N280TC	398...401
11.7	121631	0.9	151.0	15664	A903_151.0		P180 + BE180M4	N280TC	398...401
12.7	112274	0.9	139.4	15664	A903_139.4		P180 + BE180M4	N280TC	398...401
13.9	102007	1.1	126.6	15664	A903_126.6		P180 + BE180M4	N280TC	398...401
15.1	94161	1.3	116.9	15664	A903_116.9		P180 + BE180M4	N280TC	398...401
16.5	86038	1.4	106.8	15664	A903_106.8		P180 + BE180M4	N280TC	398...401
17.9	79420	1.6	98.6	15664	A903_98.6		P180 + BE180M4	N280TC	398...401
19.8	71830	1.0	89.2	11912	A803_89.2		P180 + BE180M4	N280TC	390...393
20.3	70130	1.8	87.1	15664	A903_87.1		P180 + BE180M4	N280TC	398...401
21.4	66305	1.0	82.3	11516	A803_82.3		P180 + BE180M4	N280TC	390...393
22.0	64735	1.9	80.4	15664	A903_80.4		P180 + BE180M4	N280TC	398...401
23.7	59990	2.1	74.5	15664	A903_74.5		P180 + BE180M4	N280TC	398...401
24.4	58290	1.1	72.4	11599	A803_72.4		P180 + BE180M4	N280TC	390...393
25.7	55375	2.2	68.8	15664	A903_68.8		P180 + BE180M4	N280TC	398...401
26.4	53806	1.2	66.8	11495	A803_66.8		P180 + BE180M4	N280TC	390...393
29.5	48150	1.4	59.8	11412	A803_59.8		P180 + BE180M4	N280TC	390...393
29.6	48018	2.5	59.6	15664	A903_59.6		P180 + BE180M4	N280TC	398...401
32	44446	1.5	55.2	11287	A803_55.2		P180 + BE180M4	N280TC	390...393
32	44325	2.6	55.0	15643	A903_55.0		P180 + BE180M4	N280TC	398...401
33	42877	1.0	53.2	9795	A703_53.2		P180 + BE180M4	N280TC	382...385
36	39467	1.0	49.0	10337	A703_49.0		P180 + BE180M4	N280TC	382...385
37	38903	2.9	48.3	15267	A903_48.3		P180 + BE180M4	N280TC	398...401
37	38809	1.7	48.2	11099	A803_48.2		P180 + BE180M4	N280TC	390...393
39	36431	1.1	45.2	10212	A703_45.2		P180 + BE180M4	N280TC	382...385
40	35824	1.7	44.5	10953	A803_44.5		P180 + BE180M4	N280TC	390...393
46	31010	2.0	38.5	10723	A803_38.5		P180 + BE180M4	N280TC	390...393
46	30916	1.3	38.4	10003	A703_38.4		P180 + BE180M4	N280TC	382...385
50	28625	2.0	35.5	10556	A803_35.5		P180 + BE180M4	N280TC	390...393
50	28538	1.3	35.4	9857	A703_35.4		P180 + BE180M4	N280TC	382...385
56	25502	1.0	31.7	6252	A603_31.7		P180 + BE180M4	N280TC	372...375
58	24628	2.1	30.6	10285	A803_30.6		P180 + BE180M4	N280TC	390...393
59	24244	1.5	30.1	9607	A703_30.1		P180 + BE180M4	N280TC	382...385
63	22733	2.4	28.2	10118	A803_28.2		P180 + BE180M4	N280TC	390...393
63	22434	1.1	27.9	6252	A603_27.9		P180 + BE180M4	N280TC	372...375
64	22379	1.5	27.8	9440	A703_27.8		P180 + BE180M4	N280TC	382...385

25 hp									
n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
69	20708	1.2	25.7	6252	A603_25.7		P180 + BE180M4	N280TC	372...375
72	19734	2.8	24.5	9847	A803_24.5		P180 + BE180M4	N280TC	390...393
75	18944	1.9	23.5	9149	A703_23.5		P180 + BE180M4	N280TC	382...385
78	18216	2.8	22.6	9659	A803_22.6		P180 + BE180M4	N280TC	390...393
83	17160	1.9	21.3	8961	A703_21.3		P180 + BE180M4	N280TC	382...385
86	17134	1.0	20.6	6252	A602_20.6		P180 + BE180M4	N280TC	372...375
90	15840	1.9	19.7	8815	A703_19.7		P180 + BE180M4	N280TC	382...385
92	16000	0.9	19.2	5413	A552_19.2		P180 + BE180M4	N280TC	362...365
105	13925	1.2	16.7	6252	A602_16.7		P180 + BE180M4	N280TC	372...375
106	13442	2.4	16.7	8503	A703_16.7		P180 + BE180M4	N280TC	382...385
113	13046	1.1	15.7	5204	A552_15.7		P180 + BE180M4	N280TC	362...365
115	12408	2.4	15.4	8357	A703_15.4		P180 + BE180M4	N280TC	382...385
135	10541	3.0	13.1	8044	A703_13.1		P180 + BE180M4	N280TC	382...385
135	10880	1.4	13.1	5017	A552_13.1		P180 + BE180M4	N280TC	362...365
139	10570	1.6	12.7	6252	A602_12.7		P180 + BE180M4	N280TC	372...375
146	9730	3.0	12.1	7877	A703_12.1		P180 + BE180M4	N280TC	382...385
170	8615	1.7	10.4	4767	A552_10.4		P180 + BE180M4	N280TC	362...365
171	8583	1.9	10.3	6231	A602_10.3		P180 + BE180M4	N280TC	372...375
181	8099	1.0	9.7	1962	A502_9.7		P180 + BE180M4	N280TC	352...355
209	7040	2.1	8.5	4559	A552_8.5		P180 + BE180M4	N280TC	362...365
224	6543	2.5	7.9	5814	A602_7.9		P180 + BE180M4	N280TC	372...375
228	6437	1.2	7.7	1907	A502_7.7		P180 + BE180M4	N280TC	352...355
275	5333	2.6	6.4	4247	A552_6.4		P180 + BE180M4	N280TC	362...365

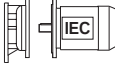


30 hp									
n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
15.1	112051	1.1	116.9	15664	A903_116.9		P180 + BE180L4	N280TC	398...401
16.6	102386	1.2	106.8	15664	A903_106.8		P180 + BE180L4	N280TC	398...401
18.0	94510	1.3	98.6	15664	A903_98.6		P180 + BE180L4	N280TC	398...401
20.3	83455	1.5	87.1	15664	A903_87.1		P180 + BE180L4	N280TC	398...401
22.0	77035	1.6	80.4	15664	A903_80.4		P180 + BE180L4	N280TC	398...401
23.8	71388	1.7	74.5	15664	A903_74.5		P180 + BE180L4	N280TC	398...401
24.5	69365	0.9	72.4	10744	A803_72.4		P180 + BE180L4	N280TC	390...393
25.7	65897	1.8	68.8	15664	A903_68.8		P180 + BE180L4	N280TC	398...401
26.5	64029	1.0	66.8	10828	A803_66.8		P180 + BE180L4	N280TC	390...393
29.6	57298	1.1	59.8	10807	A803_59.8		P180 + BE180L4	N280TC	390...393
29.7	57142	2.1	59.6	15413	A903_59.6		P180 + BE180L4	N280TC	398...401
32	52891	1.2	55.2	10723	A803_55.2		P180 + BE180L4	N280TC	390...393
32	52746	2.2	55.0	15183	A903_55.0		P180 + BE180L4	N280TC	398...401
37	46295	2.5	48.3	14849	A903_48.3		P180 + BE180L4	N280TC	398...401
37	46183	1.4	48.2	10619	A803_48.2		P180 + BE180L4	N280TC	390...393
39	43353	0.9	45.2	9482	A703_45.2		P180 + BE180L4	N280TC	382...385
40	42734	2.7	44.6	14619	A903_44.6		P180 + BE180L4	N280TC	398...401
40	42631	1.4	44.5	10494	A803_44.5		P180 + BE180L4	N280TC	390...393
46	36902	1.7	38.5	10327	A803_38.5		P180 + BE180L4	N280TC	390...393
46	36790	1.1	38.4	9586	A703_38.4		P180 + BE180L4	N280TC	382...385
50	34063	1.7	35.5	10202	A803_35.5		P180 + BE180L4	N280TC	390...393
50	33960	1.1	35.4	9482	A703_35.4		P180 + BE180L4	N280TC	382...385
58	29307	1.8	30.6	9972	A803_30.6		P180 + BE180L4	N280TC	390...393
59	28850	1.3	30.1	9274	A703_30.1		P180 + BE180L4	N280TC	382...385
63	27052	2.0	28.2	9826	A803_28.2		P180 + BE180L4	N280TC	390...393
64	26696	0.9	27.9	6252	A603_27.9		P180 + BE180L4	N280TC	372...375

30 hp

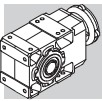
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
64	26631	1.3	27.8	9149	A703_27.8		P180 + BE180L4	N280TC	382...385
69	24643	1.0	25.7	6252	A603_25.7		P180 + BE180L4	N280TC	372...375
72	23483	2.4	24.5	9576	A803_24.5		P180 + BE180L4	N280TC	390...393
75	22544	1.6	23.5	8899	A703_23.5		P180 + BE180L4	N280TC	382...385
78	21677	2.4	22.6	9430	A803_22.6		P180 + BE180L4	N280TC	390...393
83	20420	1.6	21.3	8732	A703_21.3		P180 + BE180L4	N280TC	382...385
84	20080	2.7	20.9	9305	A803_20.9		P180 + BE180L4	N280TC	390...393
90	18849	1.6	19.7	8586	A703_19.7		P180 + BE180L4	N280TC	382...385
92	18535	2.7	19.3	9138	A803_19.3		P180 + BE180L4	N280TC	390...393
106	16571	1.0	16.7	6252	A602_16.7		P180 + BE180L4	N280TC	372...375
106	15996	2.1	16.7	8315	A703_16.7		P180 + BE180L4	N280TC	382...385
113	15525	1.0	15.7	5225	A552_15.7		P180 + BE180L4	N280TC	362...365
115	14765	2.1	15.4	8169	A703_15.4		P180 + BE180L4	N280TC	382...385
135	12544	2.5	13.1	7898	A703_13.1		P180 + BE180L4	N280TC	382...385
135	12947	1.1	13.1	4892	A552_13.1		P180 + BE180L4	N280TC	362...365
139	12578	1.3	12.7	6252	A602_12.7		P180 + BE180L4	N280TC	372...375
147	11579	2.5	12.1	7752	A703_12.1		P180 + BE180L4	N280TC	382...385
171	10252	1.4	10.4	4663	A552_10.4		P180 + BE180L4	N280TC	362...365
172	10214	1.6	10.3	6106	A602_10.3		P180 + BE180L4	N280TC	372...375
173	9802	2.7	10.2	7461	A703_10.2		P180 + BE180L4	N280TC	382...385
188	9048	2.7	9.4	7315	A703_9.4		P180 + BE180L4	N280TC	382...385
209	8378	1.8	8.5	4455	A552_8.5		P180 + BE180L4	N280TC	362...365
225	7786	2.1	7.9	5731	A602_7.9		P180 + BE180L4	N280TC	372...375
229	7660	1.0	7.7	1804	A502_7.7		P180 + BE180L4	N280TC	352...355
276	6347	2.2	6.4	4184	A552_6.4		P180 + BE180L4	N280TC	362...365
358	4896	2.7	4.9	3934	A552_4.9		P180 + BE180L4	N280TC	362...365

40 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
17.8	128661	1.0	98.6	14243	A903_98.6		P200 + IEC200L4	N320TC	398...401
20.2	113611	1.1	87.1	14640	A903_87.1		P200 + IEC200L4	N320TC	398...401
21.9	104871	1.2	80.4	14619	A903_80.4		P200 + IEC200L4	N320TC	398...401
23.6	97184	1.3	74.5	14557	A903_74.5		P200 + IEC200L4	N320TC	398...401
25.6	89708	1.3	68.8	14452	A903_68.8		P200 + IEC200L4	N320TC	398...401
29.5	77790	1.5	59.6	14306	A903_59.6		P200 + IEC200L4	N320TC	398...401
32	71806	1.6	55.0	14160	A903_55.0		P200 + IEC200L4	N320TC	398...401
36	63023	1.8	48.3	13972	A903_48.3		P200 + IEC200L4	N320TC	398...401
37	62871	1.0	48.2	9534	A803_48.2		P200 + IEC200L4	N320TC	390...393
39	58175	2.0	44.6	13784	A903_44.6		P200 + IEC200L4	N320TC	398...401
40	58035	1.1	44.5	9492	A803_44.5		P200 + IEC200L4	N320TC	390...393
45	50638	2.3	38.8	13512	A903_38.8		P200 + IEC200L4	N320TC	398...401
46	50236	1.2	38.5	9451	A803_38.5		P200 + IEC200L4	N320TC	390...393
49	46743	2.4	35.8	13325	A903_35.8		P200 + IEC200L4	N320TC	398...401
50	46372	1.2	35.5	9388	A803_35.5		P200 + IEC200L4	N320TC	390...393
56	41102	2.8	31.5	13032	A903_31.5		P200 + IEC200L4	N320TC	398...401
58	39897	1.3	30.6	9284	A803_30.6		P200 + IEC200L4	N320TC	390...393
58	39275	1.0	30.1	8503	A703_30.1		P200 + IEC200L4	N320TC	382...385
61	37941	2.8	29.1	12823	A903_29.1		P200 + IEC200L4	N320TC	398...401
62	36828	1.5	28.2	9179	A803_28.2		P200 + IEC200L4	N320TC	390...393
63	36254	1.0	27.8	8388	A703_27.8		P200 + IEC200L4	N320TC	382...385
72	31968	1.7	24.5	9033	A803_24.5		P200 + IEC200L4	N320TC	390...393
75	30690	1.1	23.5	8357	A703_23.5		P200 + IEC200L4	N320TC	382...385

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

40 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
78	29509	1.7	22.6	8908	A803_22.6		P200 + IEC200L4	N320TC	390...393
84	27335	2.0	20.9	8825	A803_20.9		P200 + IEC200L4	N320TC	390...393
91	25233	2.0	19.3	8700	A803_19.3		P200 + IEC200L4	N320TC	390...393
105	21842	2.5	16.7	8491	A803_16.7		P200 + IEC200L4	N320TC	390...393
105	21776	1.5	16.7	7940	A703_16.7		P200 + IEC200L4	N320TC	382...385
114	20162	2.5	15.5	8345	A803_15.5		P200 + IEC200L4	N320TC	390...393
114	20101	1.5	15.4	7815	A703_15.4		P200 + IEC200L4	N320TC	382...385
134	17076	1.8	13.1	7586	A703_13.1		P200 + IEC200L4	N320TC	382...385
146	15763	1.8	12.1	7461	A703_12.1		P200 + IEC200L4	N320TC	382...385
172	13343	2.0	10.2	7211	A703_10.2		P200 + IEC200L4	N320TC	382...385
186	12317	2.0	9.4	7086	A703_9.4		P200 + IEC200L4	N320TC	382...385

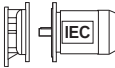


50 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
22.0	129147	1.0	80.4	13993	A903_80.4		P225 + IEC225S4	N320TC	398...401
23.7	119680	1.0	74.5	13241	A903_74.5		P225 + IEC225S4	N320TC	398...401
25.7	110474	1.1	68.8	13345	A903_68.8		P225 + IEC225S4	N320TC	398...401
29.6	95797	1.3	59.6	13345	A903_59.6		P225 + IEC225S4	N320TC	398...401
32	88428	1.3	55.0	13283	A903_55.0		P225 + IEC225S4	N320TC	398...401
37	77612	1.5	48.3	13178	A903_48.3		P225 + IEC225S4	N320TC	398...401
40	71642	1.6	44.6	13053	A903_44.6		P225 + IEC225S4	N320TC	398...401
45	62360	1.8	38.8	12886	A903_38.8		P225 + IEC225S4	N320TC	398...401
46	61865	1.0	38.5	8700	A803_38.5		P225 + IEC225S4	N320TC	390...393
49	57563	2.0	35.8	12740	A903_35.8		P225 + IEC225S4	N320TC	398...401
50	57106	1.0	35.5	8679	A803_35.5		P225 + IEC225S4	N320TC	390...393
56	50617	2.3	31.5	12510	A903_31.5		P225 + IEC225S4	N320TC	398...401
58	49132	1.1	30.6	8679	A803_30.6		P225 + IEC225S4	N320TC	390...393
61	46723	2.3	29.1	12343	A903_29.1		P225 + IEC225S4	N320TC	398...401
63	45353	1.2	28.2	8616	A803_28.2		P225 + IEC225S4	N320TC	390...393
72	39368	1.4	24.5	8533	A803_24.5		P225 + IEC225S4	N320TC	390...393
73	38739	2.8	24.1	11967	A903_24.1		P225 + IEC225S4	N320TC	398...401
78	36340	1.4	22.6	8449	A803_22.6		P225 + IEC225S4	N320TC	390...393
79	35759	2.8	22.3	11779	A903_22.3		P225 + IEC225S4	N320TC	398...401
84	33663	1.6	20.9	8408	A803_20.9		P225 + IEC225S4	N320TC	390...393
91	31073	1.6	19.3	8303	A803_19.3		P225 + IEC225S4	N320TC	390...393
105	26898	2.0	16.7	14416	A803_16.7		P225 + IEC225S4	N320TC	390...393
114	24829	2.0	15.5	8032	A803_15.5		P225 + IEC225S4	N320TC	390...393
133	21362	2.5	13.3	7844	A803_13.3		P225 + IEC225S4	N320TC	390...393
144	19718	2.5	12.3	7719	A803_12.3		P225 + IEC225S4	N320TC	390...393

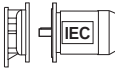
60 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
30	116204	1.0	59.6	12447	A903_59.6		P225 + IEC225M4		398...401
32	107266	1.1	55.0	12301	A903_55.0		P225 + IEC225M4		398...401
37	94146	1.2	48.3	11863	A903_48.3		P225 + IEC225M4		398...401
40	86904	1.3	44.6	11696	A903_44.6		P225 + IEC225M4		398...401
46	75644	1.5	38.8	12113	A903_38.8		P225 + IEC225M4		398...401

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

60 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs				NEMA	
49	69826	1.6	35.8	12218	A903_35.8		P225 + IEC225M4		398...401
56	61400	1.9	31.5	11487	A903_31.5		P225 + IEC225M4		398...401
61	56677	1.9	29.1	11487	A903_29.1		P225 + IEC225M4		398...401
63	55014	1.0	28.2	8074	A803_28.2		P225 + IEC225M4		390...393
72	47755	1.2	24.5	7552	A803_24.5		P225 + IEC225M4		390...393
73	46991	2.3	24.1	10965	A903_24.1		P225 + IEC225M4		398...401
78	44082	1.2	22.6	7510	A803_22.6		P225 + IEC225M4		390...393
80	43376	2.3	22.3	10985	A903_22.3		P225 + IEC225M4		398...401
84	40933	2.5	21.0	11069	A903_21.0		P225 + IEC225M4		398...401
84	40834	1.3	20.9	8115	A803_20.9		P225 + IEC225M4		390...393
91	37784	2.5	19.4	11027	A903_19.4		P225 + IEC225M4		398...401
92	37693	1.3	19.3	8032	A803_19.3		P225 + IEC225M4		390...393
105	32889	3.0	16.9	10860	A903_16.9		P225 + IEC225M4		398...401
106	32628	1.6	16.7	7782	A803_16.7		P225 + IEC225M4		390...393
114	30359	3.0	15.6	10672	A903_15.6		P225 + IEC225M4		398...401
115	30118	1.6	15.5	7698	A803_15.5		P225 + IEC225M4		390...393
133	25912	2.1	13.3	7552	A803_13.3		P225 + IEC225M4		390...393
144	23919	2.1	12.3	7448	A803_12.3		P225 + IEC225M4		390...393
166	20763	2.6	10.7	7281	A803_10.7		P225 + IEC225M4		390...393
180	19166	2.6	9.8	7177	A803_9.8		P225 + IEC225M4		390...393

75 hp

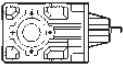
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs				NEMA	
37	114765	1.0	48.3	11027	A903_48.3		P250 + IEC250M4		398...401
40	105937	1.1	44.6	11257	A903_44.6		P250 + IEC250M4		398...401
46	92211	1.2	38.8	11299	A903_38.8		P250 + IEC250M4		398...401
49	85118	1.3	35.8	11278	A903_35.8		P250 + IEC250M4		398...401
56	74847	1.5	31.5	11236	A903_31.5		P250 + IEC250M4		398...401
61	69089	1.5	29.1	11153	A903_29.1		P250 + IEC250M4		398...401
73	57283	1.9	24.1	10985	A903_24.1		P250 + IEC250M4		398...401
80	52876	1.9	22.3	10860	A903_22.3		P250 + IEC250M4		398...401
84	49898	2.0	21.0	10797	A903_21.0		P250 + IEC250M4		398...401
91	46059	2.1	19.4	10672	A903_19.4		P250 + IEC250M4		398...401
105	40092	2.4	16.9	10463	A903_16.9		P250 + IEC250M4		398...401
114	37008	2.4	15.6	10317	A903_15.6		P250 + IEC250M4		398...401
129	32542	2.8	13.7	10108	A903_13.7		P250 + IEC250M4		398...401
140	30039	2.9	12.6	9941	A903_12.6		P250 + IEC250M4		398...401

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

39 GEARBOX RATING CHARTS

A 10

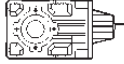
1330 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 10 2_5.5	5.5	327	646	3.6	—	500	218	646	2.4	227	587	308 309
A 10 2_6.3	6.3	286	708	3.4	—	520	190	708	2.3	197	611	
A 10 2_7.2	7.2	250	814	3.4	—	528	167	823	2.3	149	621	
A 10 2_8.5	8.5	212	814	2.9	—	567	141	841	2.0	171	666	
A 10 2_9.6	9.6	188	1047	3.3	—	539	125	1133	2.4	—	633	
A 10 2_10.6	10.6	170	1227	3.5	166	526	113	1330	2.5	192	618	
A 10 2_12.3	12.3	146	1129	2.8	—	585	98	1276	2.1	—	688	
A 10 2_13.9	13.9	129	1227	2.7	221	602	86	1330	1.9	256	707	
A 10 2_16.4	16.4	110	1239	2.3	233	650	73	1330	1.6	270	764	
A 10 2_18.6	18.6	97	1301	2.1	241	687	65	1330	1.4	280	807	
A 10 2_21.4	21.4	84	1330	1.9	245	732	56	1330	1.3	284	859	
A 10 2_23.8	23.8	76	1330	1.7	250	768	50	1330	1.1	289	902	
A 10 2_25.5	25.5	71	1330	1.6	250	793	47	1330	1.1	289	931	
A 10 2_28.6	28.6	63	1330	1.4	256	833	42	1330	0.94	292	979	
A 10 2_32.2	32.2	56	1330	1.3	260	876	37	1330	0.83	292	1029	
A 10 2_35.1	35.1	51	1330	1.1	260	908	34	1330	0.77	292	1067	
A 10 2_40.9	40.9	44	1330	0.99	266	969	29	1330	0.66	292	1139	
A 10 2_45.4	45.4	40	1330	0.89	266	1012	26.4	1330	0.59	292	1189	
A 10 2_51.3	51.3	35	1330	0.79	264	1065	23.4	1330	0.52	292	1236	
A 10 2_58.6	58.6	31	1330	0.69	266	1118	20.5	1330	0.46	292	1236	
A 10 2_65.9	65.9	27.3	1330	0.61	266	1118	18.2	1330	0.41	292	1236	
A 10 2_76.4	76.4	23.6	1330	0.53	266	1118	15.7	1330	0.35	292	1236	
A 10 2_91.6	91.6	19.7	1151	0.38	266	1160	13.1	1151	0.25	292	1236	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

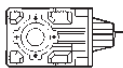
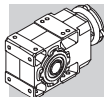
A 20

2210 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 20 2_5.4	5.4	333	994	5.6	157	494	222	1123	4.2	182	569	318 319
A 20 2_6.5	6.5	277	1109	5.2	125	521	185	1253	3.9	144	599	
A 20 2_7.3	7.3	247	1175	4.9	129	535	164	1328	3.7	149	616	
A 20 2_8.4	8.4	214	1199	4.3	133	566	143	1356	3.3	154	652	
A 20 2_9.4	9.4	191	1265	4.1	135	585	128	1430	3.1	156	673	
A 20 2_10.3	10.3	175	1848	5.4	182	519	117	2089	4.1	210	597	
A 20 2_12.0	12.0	150	1322	3.3	141	642	100	1495	2.5	163	672	
A 20 2_14.1	14.1	128	2012	4.3	196	581	85	2210	3.2	227	668	
A 20 2_16.2	16.2	111	2053	3.8	212	616	74	2210	2.8	246	708	
A 20 2_18.1	18.1	99	2053	3.4	247	653	66	2210	2.5	286	751	
A 20 2_21.2	21.2	85	2053	2.9	263	706	57	2210	2.1	305	813	
A 20 2_23.1	23.1	78	2053	2.7	278	737	52	2210	1.9	322	848	
A 20 2_26.5	26.5	68	2133	2.4	288	787	45	2210	1.7	333	905	
A 20 2_29.2	29.2	62	2204	2.3	308	824	41	2210	1.5	357	948	
A 20 2_31.3	31.3	58	2210	2.1	308	850	38	2210	1.4	357	979	
A 20 2_35.4	35.4	51	2210	1.9	337	902	34	2210	1.3	390	1038	
A 20 2_39.6	39.6	45	2210	1.7	349	947	30	2210	1.1	404	1090	
A 20 2_43.2	43.2	42	2210	1.6	349	986	27.8	2210	1.0	404	1135	
A 20 2_48.3	48.3	37	2210	1.4	351	1036	24.8	2210	0.93	407	1192	
A 20 2_53.7	53.7	34	2210	1.3	351	1085	22.3	2210	0.83	407	1249	
A 20 2_63.1	63.1	28.5	2012	0.97	355	1170	19.0	2169	0.70	412	1346	
A 20 2_71.0	71.0	25.4	1725	0.74	365	1277	16.9	1859	0.53	423	1394	
A 20 2_79.9	79.9	22.5	1725	0.66	365	1277	15.0	1859	0.47	423	1394	
A 20 2_92.3	92.3	19.5	1643	0.54	369	1277	13.0	1770	0.39	428	1394	
A 20 3_109.2	109.2	16.5	1684	0.48	265	1326	11.0	1903	0.36	292	1394	
A 20 3_120.5	120.5	14.9	1725	0.45	265	1374	10.0	1950	0.34	292	1394	
A 20 3_129.1	129.1	13.9	1766	0.43	272	1394	9.3	1996	0.32	292	1394	
A 20 3_146.1	146.1	12.3	1889	0.41	265	1394	8.2	2136	0.31	292	1394	
A 20 3_163.4	163.4	11.0	1930	0.37	279	1394	7.3	2182	0.28	292	1394	
A 20 3_178.3	178.3	10.1	2012	0.35	270	1394	6.7	2210	0.26	292	1394	
A 20 3_199.2	199.2	9.0	2053	0.32	286	1394	6.0	2210	0.23	292	1394	
A 20 3_221.3	221.3	8.1	2053	0.29	279	1394	5.4	2210	0.21	292	1394	
A 20 3_260.5	260.5	6.9	2053	0.25	286	1394	4.6	2210	0.18	292	1394	
A 20 3_292.8	292.8	6.1	2053	0.22	292	1394	4.1	2210	0.16	292	1394	
A 20 3_329.4	329.4	5.5	2053	0.20	292	1394	3.6	2210	0.14	292	1394	
A 20 3_380.9	380.9	4.7	2053	0.17	292	1394	3.2	2210	0.12	292	1394	

A 30

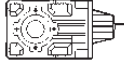
3630 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 30 2_5.4	5.4	333	1805	10.2	292	645	222	2041	7.7	338	742	
A 30 2_6.4	6.4	281	1887	9.0	300	686	188	2133	6.7	348	789	
A 30 2_7.0	7.0	257	2010	8.7	292	696	171	2273	6.6	338	801	
A 30 2_8.5	8.5	212	2051	7.3	320	754	141	2319	5.5	371	867	
A 30 2_9.3	9.3	194	2215	7.2	294	764	129	2505	5.5	341	879	
A 30 2_10.5	10.5	171	2790	8.1	449	731	114	3154	6.1	495	841	
A 30 2_11.8	11.8	153	2379	6.1	290	830	102	2690	4.6	336	955	
A 30 2_13.6	13.6	132	3036	6.8	449	797	88	3432	5.1	495	917	
A 30 2_16.3	16.3	110	3159	5.9	449	859	74	3571	4.4	495	988	
A 30 2_18.0	18.0	100	3282	5.5	449	883	67	3630	4.1	495	1017	
A 30 2_20.5	20.5	88	3364	5.0	449	933	59	3630	3.6	495	1073	
A 30 2_22.8	22.8	79	3364	4.5	449	982	53	3630	3.2	495	1130	
A 30 2_26.5	26.5	68	3364	3.9	449	1061	45	3630	2.8	495	1220	
A 30 2_29.3	29.3	61	3364	3.5	449	1112	41	3630	2.5	495	1280	
A 30 2_33.4	33.4	54	3478	3.2	449	1184	36	3630	2.2	495	1362	
A 30 2_36.6	36.6	49	3576	3.0	449	1238	33	3630	2.0	495	1424	
A 30 2_39.3	39.3	46	3630	2.8	449	1277	31	3630	1.9	495	1469	
A 30 2_43.4	43.4	41	3630	2.5	449	1336	27.6	3630	1.7	495	1538	
A 30 2_48.3	48.3	37	3630	2.3	449	1402	24.8	3630	1.5	495	1614	
A 30 2_52.7	52.7	34	3630	2.1	449	1458	22.8	3630	1.4	495	1678	
A 30 2_59.4	59.4	30	3540	1.8	449	1551	20.2	3540	1.2	495	1784	
A 30 2_66.0	66.0	27.3	3452	1.6	449	1635	18.2	3452	1.1	495	1881	
A 30 2_76.5	76.5	23.5	3098	1.2	449	1789	15.7	3098	0.82	495	2059	
A 30 2_86.7	86.7	20.8	2832	0.99	449	1917	13.8	2832	0.66	495	2158	
A 30 2_97.5	97.5	18.5	2655	0.83	449	1977	12.3	2655	0.55	495	2158	
A 30 3_109.1	109.1	16.5	2461	0.71	292	1977	11.0	2783	0.53	292	2158	
A 30 3_120.5	120.5	14.9	2461	0.64	265	1977	10.0	2783	0.48	292	2158	
A 30 3_137.4	137.4	13.1	2585	0.59	292	2012	8.7	2922	0.44	292	2158	
A 30 3_150.7	150.7	11.9	2708	0.56	265	2071	8.0	3061	0.42	292	2158	
A 30 3_161.4	161.4	11.2	2790	0.54	292	2115	7.4	3154	0.41	292	2158	
A 30 3_178.5	178.5	10.1	2831	0.50	272	2158	6.7	3200	0.37	292	2158	
A 30 3_198.5	198.5	9.1	2872	0.45	292	2158	6.0	3247	0.34	292	2158	
A 30 3_216.6	216.6	8.3	2954	0.43	279	2158	5.5	3339	0.32	292	2158	
A 30 3_244.3	244.3	7.4	3036	0.39	292	2158	4.9	3432	0.29	292	2158	
A 30 3_271.5	271.5	6.6	3118	0.36	288	2158	4.4	3525	0.27	292	2158	
A 30 3_314.5	314.5	5.7	3200	0.32	292	2158	3.8	3618	0.24	292	2158	
A 30 3_356.3	356.3	5.1	3036	0.27	292	2158	3.4	3363	0.20	292	2158	
A 30 3_400.8	400.8	4.5	2954	0.23	292	2158	3.0	3186	0.17	292	2158	

328
329

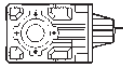
A 35

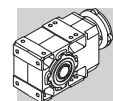
5310 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 35 2_5.4	5.4	333	2544	14.3	351	1051	222	2876	10.8	425	1189	338 339
A 35 2_6.4	6.4	281	2708	12.8	351	1110	188	3061	9.7	425	1255	
A 35 2_7.0	7.0	257	2872	12.5	351	1132	171	3247	9.4	425	1280	
A 35 2_8.5	8.5	212	2954	10.6	359	1218	141	3339	8.0	434	1377	
A 35 2_9.3	9.3	194	3118	10.2	359	1249	129	3525	7.7	434	1412	
A 35 2_10.6	10.6	170	3200	9.2	359	1314	113	3540	6.8	434	1485	
A 35 2_11.8	11.8	153	3282	8.4	365	1364	102	3540	6.1	441	1542	
A 35 2_13.1	13.1	137	4513	10.5	412	1203	92	5102	7.9	495	1360	
A 35 2_15.5	15.5	116	4677	9.2	416	1289	77	5287	6.9	470	1457	
A 35 2_17.0	17.0	106	4923	8.8	418	1314	71	5310	6.3	495	1485	
A 35 2_20.4	20.4	88	4923	7.3	425	1443	59	5310	5.3	495	1631	
A 35 2_22.5	22.5	80	4923	6.6	431	1511	53	5310	4.8	495	1709	
A 35 2_25.7	25.7	70	5178	6.1	431	1611	47	5310	4.2	495	1822	
A 35 2_28.4	28.4	63	5310	5.7	431	1692	42	5310	3.8	495	1914	
A 35 2_33.2	33.2	54	5310	4.9	431	1817	36	5310	3.2	495	2055	
A 35 2_36.6	36.6	49	5310	4.4	431	1903	33	5310	2.9	495	2151	
A 35 2_41.8	41.8	43	5310	3.9	431	2019	28.7	5310	2.6	495	2283	
A 35 2_45.8	45.8	39	5310	3.5	431	2103	26.2	5310	2.3	495	2377	
A 35 2_49.1	49.1	37	5310	3.3	431	2165	24.4	5310	2.2	495	2448	
A 35 2_54.3	54.3	33	5310	3.0	431	2269	22.1	5310	2.0	495	2566	
A 35 2_60.4	60.4	29.8	5310	2.7	431	2373	19.9	5310	1.8	495	2683	
A 35 2_65.8	65.8	27.4	5310	2.5	431	2456	18.2	5310	1.6	495	2698	
A 35 2_74.3	74.3	24.2	5310	2.2	431	2498	16.2	5310	1.4	495	2698	
A 35 2_82.5	82.5	21.8	5310	2.0	431	2498	14.5	5310	1.3	495	2698	
A 35 2_95.6	95.6	18.8	4780	1.5	431	2498	12.6	4780	1.0	495	2698	
A 35 3_105.5	105.5	17.1	4308	1.3	153	2698	11.4	4870	0.97	185	2698	
A 35 3_116.9	116.9	15.4	4595	1.2	171	2698	10.3	5195	0.93	206	2698	
A 35 3_136.3	136.3	13.2	4718	1.1	218	2698	8.8	5310	0.81	263	2698	
A 35 3_150.6	150.6	12.0	4923	1.0	227	2698	8.0	5310	0.74	275	2698	
A 35 3_171.8	171.8	10.5	4923	0.90	245	2698	7.0	5310	0.65	292	2698	
A 35 3_188.3	188.3	9.6	4923	0.82	255	2698	6.4	5310	0.59	292	2698	
A 35 3_201.8	201.8	8.9	4923	0.77	255	2698	5.9	5310	0.55	292	2698	
A 35 3_223.2	223.2	8.1	4923	0.69	255	2698	5.4	5310	0.50	292	2698	
A 35 3_248.1	248.1	7.3	5001	0.63	255	2698	4.8	5310	0.45	292	2698	
A 35 3_270.7	270.7	6.6	5045	0.58	255	2698	4.4	5310	0.41	292	2698	
A 35 3_305.4	305.4	5.9	5178	0.53	256	2698	3.9	5310	0.36	292	2698	
A 35 3_339.3	339.3	5.3	4267	0.39	272	2698	3.5	4603	0.28	292	2698	
A 35 3_393.2	393.2	4.6	3815	0.30	283	2698	3.1	4116	0.22	292	2698	

A 41

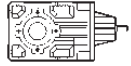
7520 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 41 2_5.2	5.2	346	4513	26	500	1146	231	4868	19.0	579	1317	348 349
A 41 2_7.1	7.1	254	4513	19.3	545	1326	169	4868	13.9	631	1524	
A 41 2_8.3	8.3	217	4513	16.5	561	1427	145	4868	11.9	650	1640	
A 41 2_9.2	9.2	196	4691	15.5	584	1493	130	4868	10.7	676	1716	
A 41 2_10.1	10.1	178	4390	13.2	692	1577	119	4958	9.9	787	1813	
A 41 2_11.7	11.7	154	4868	12.6	602	1664	103	4868	8.4	697	1912	
A 41 2_13.8	13.8	130	4800	10.6	700	1754	87	5421	8.0	787	2016	
A 41 2_16.1	16.1	112	5005	9.4	700	1855	75	5653	7.1	787	2133	
A 41 2_17.8	17.8	101	5169	8.8	708	1917	67	5838	6.6	787	2204	
A 41 2_22.7	22.7	79	5579	7.5	706	2082	53	6302	5.6	787	2393	
A 41 2_28.3	28.3	64	5990	6.4	704	2247	42	6765	4.8	787	2583	
A 41 2_35.9	35.9	50	6400	5.4	696	2433	33	7228	4.1	787	2796	
A 41 2_45.1	45.1	40	6810	4.6	680	2639	26.6	7520	3.4	787	3033	
A 41 2_48.3	48.3	37	6974	4.4	653	2701	24.8	7520	3.2	756	3104	
A 41 2_53.1	53.1	34	6974	4.0	680	2824	22.6	7520	2.9	787	3246	
A 41 2_58.8	58.8	31	6974	3.6	706	2948	20.4	7520	2.6	787	3372	
A 41 2_64.2	64.2	28.0	6974	3.3	706	3051	18.7	7520	2.4	787	3372	
A 41 2_71.3	71.3	25.2	6974	3.0	708	3092	16.8	7520	2.1	787	3372	
A 41 2_79.2	79.2	22.7	6564	2.5	714	3092	15.2	7081	1.8	787	3372	
A 41 3_92.8	92.8	19.4	6564	2.2	88	3147	12.9	7081	1.6	102	3372	
A 41 3_115.9	115.9	15.5	7081	1.9	200	3282	10.4	7520	1.4	232	3372	
A 41 3_146.9	146.9	12.3	7520	1.6	335	3372	8.2	7520	1.1	387	3372	
A 41 3_184.4	184.4	9.8	7520	1.3	361	3372	6.5	7520	0.85	418	3372	
A 41 3_197.5	197.5	9.1	7520	1.2	365	3372	6.1	7520	0.80	423	3372	
A 41 3_217.4	217.4	8.3	7520	1.1	372	3372	5.5	7520	0.72	430	3372	
A 41 3_240.6	240.6	7.5	7520	0.98	376	3372	5.0	7520	0.65	435	3372	
A 41 3_262.5	262.5	6.9	7520	0.90	380	3372	4.6	7520	0.60	439	3372	
A 41 3_291.7	291.7	6.2	7520	0.81	384	3372	4.1	7520	0.54	444	3372	
A 41 3_324.2	324.2	5.6	7520	0.73	388	3372	3.7	7520	0.49	449	3372	
A 41 3_376.8	376.8	4.8	7520	0.63	394	3372	3.2	7520	0.42	456	3372	



A 50

13300 lb·in



i

$n_1 = 1800 \text{ rpm}$

$n_1 = 1200 \text{ rpm}$

n_2

T_{n2}

P_{n1}

R_{n1}

R_{n2}

n_2

T_{n2}

P_{n1}

R_{n1}

R_{n2}

rpm

lb·in

hp

lbs

lbs

rpm

lb·in

hp

lbs

lbs

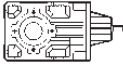


A 50 2_7.7	7.7	234	5743	23	590	2051	156	6487	17.1	683	2360
A 50 2_9.7	9.7	186	6154	19.3	602	2224	124	6950	14.5	698	2559
A 50 2_13.1	13.1	137	6154	14.3	635	2492	92	6950	10.7	736	2867
A 50 2_16.6	16.6	108	6564	12.0	643	2698	72	7414	9.0	745	3104
A 50 2_20.9	20.9	86	6564	9.5	655	2965	57	7414	7.2	759	3412
A 50 3_24.0	24.0	75	12307	16.1	429	1759	50	13300	11.6	497	2024
A 50 3_26.4	26.4	68	12307	14.6	549	1874	45	13300	10.5	636	2156
A 50 3_32.4	32.4	56	12307	11.9	563	2142	37	13300	8.6	653	2464
A 50 3_35.6	35.6	51	12307	10.8	672	2265	34	13300	7.8	778	2606
A 50 3_40.9	40.9	44	12524	9.6	657	2451	29.3	13300	6.8	762	2820
A 50 3_45.0	45.0	40	13011	9.1	702	2595	26.7	13300	6.2	787	2986
A 50 3_51.7	51.7	35	13300	8.1	694	2801	23.2	13300	5.4	776	3223
A 50 3_56.8	56.8	32	13300	7.3	710	2965	21.1	13300	4.9	787	3412
A 50 3_63.9	63.9	28.2	13300	6.5	704	3151	18.8	13300	4.3	787	3625
A 50 3_70.2	70.2	25.6	13300	5.9	714	3315	17.1	13300	4.0	787	3815
A 50 3_81.5	81.5	22.1	13300	5.1	714	3563	14.7	13300	3.4	787	4099
A 50 3_89.5	89.5	20.1	13300	4.7	714	3748	13.4	13300	3.1	787	4312
A 50 3_99.5	99.5	18.1	13300	4.2	714	3954	12.1	13300	2.8	787	4496
A 50 3_109.4	109.4	16.5	13300	3.8	714	4119	11.0	13300	2.5	787	4496
A 50 3_118.0	118.0	15.3	13300	3.5	714	4119	10.2	13300	2.4	787	4496
A 50 3_129.7	129.7	13.9	13300	3.2	714	4119	9.3	13300	2.1	787	4496
A 50 3_140.6	140.6	12.8	13300	3.0	714	4119	8.5	13300	2.0	787	4496
A 50 3_154.6	154.6	11.6	13300	2.7	714	4119	7.8	13300	1.8	787	4496
A 50 3_173.4	173.4	10.4	13300	2.4	714	4119	6.9	13300	1.6	787	4496
A 50 3_190.6	190.6	9.4	13300	2.2	714	4226	6.3	13300	1.5	787	4496
A 50 4_211.0	211.0	8.5	13300	2.0	449	4496	5.7	13300	1.3	495	4496
A 50 4_232.0	232.0	7.8	13300	1.8	449	4496	5.2	13300	1.2	495	4496
A 50 4_260.9	260.9	6.9	13300	1.6	452	4496	4.6	13300	1.1	495	4496
A 50 4_286.8	286.8	6.3	13300	1.5	459	4496	4.2	13300	0.99	495	4496
A 50 4_332.6	332.6	5.4	13300	1.3	468	4496	3.6	13300	0.85	495	4496
A 50 4_365.6	365.6	4.9	13300	1.2	472	4496	3.3	13300	0.78	495	4496
A 50 4_406.4	406.4	4.4	13300	1.0	479	4496	3.0	13300	0.70	495	4496
A 50 4_446.8	446.8	4.0	13300	0.95	481	4496	2.7	13300	0.64	495	4496
A 50 4_481.6	481.6	3.7	13300	0.88	486	4496	2.5	13300	0.59	495	4496
A 50 4_529.5	529.5	3.4	13300	0.80	488	4496	2.3	13300	0.54	495	4496
A 50 4_574.2	574.2	3.1	13300	0.74	492	4496	2.1	13300	0.49	495	4496
A 50 4_631.2	631.2	2.9	13300	0.67	495	4496	1.9	13300	0.45	495	4496
A 50 4_707.9	707.9	2.5	13300	0.60	495	4496	1.7	13300	0.40	495	4496
A 50 4_778.2	778.2	2.3	13300	0.55	495	4496	1.5	13300	0.36	495	4496

358
359

A 55

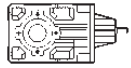
17700 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 55 2_4.9	4.9	367	7384	46	421	3893	245	8340	36	510	4402	368 369
A 55 2_6.4	6.4	281	7795	37	561	4226	188	8804	29	678	4778	
A 55 2_8.5	8.5	212	7795	28	686	4621	141	8804	22	787	5225	
A 55 2_10.4	10.4	173	8205	24	686	4913	115	9267	18.6	787	5555	
A 55 2_13.1	13.1	137	8205	19.0	726	5308	92	9267	14.8	787	6002	
A 55 2_15.7	15.7	115	8205	15.9	773	5621	76	9267	12.3	787	6355	
A 55 2_19.2	19.2	94	9025	14.3	710	5954	63	10194	11.1	787	6732	
A 55 3_23.8	23.8	76	16000	21	518	5413	50	17700	15.6	626	6120	
A 55 3_29.9	29.9	60	16410	17	543	5871	40	17700	12.4	657	6638	
A 55 3_40.3	40.3	45	16410	13	574	6245	29.8	17700	9.2	695	6744	
A 55 3_51.0	51.0	35	17700	11	598	6245	23.5	17700	7.3	723	6744	
A 55 3_64.3	64.3	28.0	17700	9	610	6519	18.7	17700	5.8	738	6744	
A 55 3_79.5	79.5	22.6	17700	7	553	6744	15.1	17700	4.7	669	6744	
A 55 3_101.4	101.4	17.8	17700	5	614	6744	11.8	17700	3.7	742	6744	
A 55 3_123.9	123.9	14.5	17700	4	633	6744	9.7	17700	3.0	766	6744	
A 55 3_132.7	132.7	13.6	17700	4	635	6744	9.0	17700	2.8	768	6744	
A 55 3_146.8	146.8	12.3	17700	4	645	6744	8.2	17700	2.5	780	6744	
A 55 3_160.4	160.4	11.2	17700	3	647	6744	7.5	17700	2.3	783	6744	
A 55 3_175.0	175.0	10.3	17700	3	647	6744	6.9	17700	2.1	783	6744	
A 55 3_194.2	194.2	9.3	17700	3	649	6744	6.2	17700	1.9	785	6744	
A 55 4_208.1	208.1	8.6	16000	2.5	431	6744	5.8	17700	1.8	495	6744	
A 55 4_262.6	262.6	6.9	16410	2.0	445	6744	4.6	17700	1.4	495	6744	
A 55 4_324.7	324.7	5.5	16410	1.6	456	6744	3.7	17700	1.2	495	6744	
A 55 4_414.0	414.0	4.3	16410	1.3	468	6744	2.9	17700	0.91	495	6744	
A 55 4_505.9	505.9	3.6	16817	1.1	477	6744	2.4	17700	0.75	495	6744	
A 55 4_542.0	542.0	3.3	16817	1.0	481	6744	2.2	17700	0.70	495	6744	
A 55 4_599.5	599.5	3.0	17260	0.92	483	6744	2.0	17700	0.63	495	6744	
A 55 4_655.1	655.1	2.7	17260	0.85	490	6744	1.8	17700	0.58	495	6744	
A 55 4_714.7	714.7	2.5	17260	0.77	495	6744	1.7	17700	0.53	495	6744	
A 55 4_793.0	793.0	2.3	17700	0.72	495	6744	1.5	17700	0.48	495	6744	

368
369

A 60

24800 lb·in



i

$n_1 = 1800 \text{ rpm}$

$n_1 = 1200 \text{ rpm}$

n_2

T_{n2}

P_{n1}

R_{n1}

R_{n2}

n_2

T_{n2}

P_{n1}

R_{n1}

R_{n2}

rpm

lb·in

hp

lbs

lbs

rpm

lb·in

hp

lbs

lbs

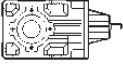
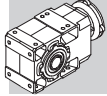


A 60 2_7.9	7.9	228	9846	39	694	5773	152	11121	29	803	6520
A 60 2_10.3	10.3	175	9846	30	763	6252	117	11121	22	884	6744
A 60 2_12.7	12.7	142	10256	25	778	6252	94	11584	18.5	900	6744
A 60 2_16.7	16.7	108	10666	20	798	6430	72	12047	14.6	924	6744
A 60 2_20.6	20.6	87	11487	17.5	794	6744	58	12974	12.8	919	6744
A 60 3_25.7	25.7	70	24429	29.8	776	6252	47	24800	20.2	898	6744
A 60 3_27.9	27.9	65	24800	27.9	802	6252	43	24800	18.6	929	6744
A 60 3_31.7	31.7	57	24800	24.5	804	6519	38	24800	16.4	931	6744
A 60 3_34.3	34.3	52	24800	22.7	829	6744	35	24800	15.1	959	6744
A 60 3_41.7	41.7	43	24800	18.6	835	6744	28.8	24800	12.4	966	6744
A 60 3_45.2	45.2	40	24800	17.2	857	6744	26.5	24800	11.5	992	6744
A 60 3_51.3	51.3	35	24800	15.2	853	6744	23.4	24800	10.1	988	6744
A 60 3_55.6	55.6	32	24800	14.0	874	6744	21.6	24800	9.3	1011	6744
A 60 3_65.0	65.0	27.7	24800	12.0	870	6744	18.5	24800	8.0	1007	6744
A 60 3_70.4	70.4	25.6	24800	11.0	890	6744	17.0	24800	7.4	1030	6744
A 60 3_79.7	79.7	22.6	24800	9.8	880	6744	15.1	24800	6.5	1018	6744
A 60 3_86.4	86.4	20.8	24800	9.0	900	6744	13.9	24800	6.0	1042	6744
A 60 3_99.5	99.5	18.1	24800	7.8	890	6744	12.1	24800	5.2	1030	6744
A 60 3_107.8	107.8	16.7	24800	7.2	908	6744	11.1	24800	4.8	1051	6744
A 60 3_123.0	123.0	14.6	24800	6.3	898	6744	9.8	24800	4.2	1040	6744
A 60 3_133.3	133.3	13.5	24800	5.8	917	6744	9.0	24800	3.9	1057	6744
A 60 3_144.0	144.0	12.5	24800	5.4	902	6744	8.3	24800	3.6	1044	6744
A 60 3_156.0	156.0	11.5	24800	5.0	921	6744	7.7	24800	3.3	1057	6744
A 60 3_171.5	171.5	10.5	24800	4.5	904	6744	7.0	24800	3.0	1047	6744
A 60 3_185.8	185.8	9.7	24800	4.2	923	6744	6.5	24800	2.8	1057	6744
A 60 4_208.7	208.7	8.6	24800	3.8	714	6744	5.7	24800	2.5	787	6744
A 60 4_226.1	226.1	8.0	24800	3.5	714	6744	5.3	24800	2.3	787	6744
A 60 4_264.3	264.3	6.8	24800	3.0	714	6744	4.5	24800	2.0	787	6744
A 60 4_286.3	286.3	6.3	24800	2.8	714	6744	4.2	24800	1.9	787	6744
A 60 4_324.2	324.2	5.6	24800	2.5	714	6744	3.7	24800	1.6	787	6744
A 60 4_351.2	351.2	5.1	24800	2.3	714	6744	3.4	24800	1.5	787	6744
A 60 4_404.7	404.7	4.4	24800	2.0	714	6744	3.0	24800	1.3	787	6744
A 60 4_438.4	438.4	4.1	24800	1.8	714	6744	2.7	24800	1.2	787	6744
A 60 4_500.3	500.3	3.6	24800	1.6	714	6744	2.4	24800	1.1	787	6744
A 60 4_542.0	542.0	3.3	24800	1.5	714	6744	2.2	24800	0.98	787	6744
A 60 4_585.8	585.8	3.1	24800	1.4	714	6744	2.0	24800	0.90	787	6744
A 60 4_634.6	634.6	2.8	24800	1.3	714	6744	1.9	24800	0.84	787	6744
A 60 4_697.3	697.3	2.6	24800	1.1	717	6744	1.7	24800	0.76	787	6744
A 60 4_755.4	755.4	2.4	24800	1.1	722	6744	1.6	24800	0.70	787	6744

378
379

A 70

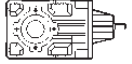
44300 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 70 3_9.4	9.4	191	22974	77	521	6648	128	25948	58	606	7516	
A 70 3_10.2	10.2	176	26256	81	558	6648	118	28766	59	352	7516	
A 70 3_12.1	12.1	149	26256	68	544	7065	99	29655	51	333	7987	
A 70 3_13.1	13.1	137	27487	66	544	7211	92	31045	50	499	8152	
A 70 3_15.4	15.4	117	27487	56	496	7648	78	31045	42	577	8647	
A 70 3_16.7	16.7	108	29538	55	562	7752	72	33362	42	615	8764	
A 70 3_19.7	19.7	91	30358	48	456	8190	61	32749	35	425	9259	
A 70 3_21.3	21.3	85	32820	48	618	8294	56	35404	35	435	9377	
A 70 3_23.5	23.5	77	35281	47	1276	8440	51	39849	35	1485	9542	
A 70 3_27.8	27.8	65	34461	39	1286	9024	43	38922	29.3	1497	10202	
A 70 3_30.1	30.1	60	37333	39	1286	9149	40	42165	29.3	1497	10343	
A 70 3_35.4	35.4	51	36922	33	1300	9711	34	41702	24.6	1514	10979	
A 70 3_38.4	38.4	47	39794	33	1302	9857	31	44300	24.1	1516	11144	
A 70 3_45.2	45.2	40	39384	27.3	1306	10420	26.5	44300	20.5	1521	11240	
A 70 3_49.0	49.0	37	41025	26.3	1317	10420	24.5	44300	18.9	1533	11240	
A 70 3_53.2	53.2	34	41025	24.2	1302	10420	22.6	44300	17.4	1516	11240	
A 70 3_57.7	57.7	31	41025	22.3	1325	10420	20.8	44300	16.0	1542	11240	
A 70 3_66.9	66.9	26.9	41025	19.2	1323	10420	17.9	44300	13.8	1540	11240	
A 70 3_72.5	72.5	24.8	42043	18.2	1343	10454	16.6	44300	12.8	1564	11240	
A 70 3_79.3	79.3	22.7	41025	16.2	1331	10881	15.1	44300	11.7	1549	11240	
A 70 3_85.9	85.9	21.0	43813	16.0	1351	11038	14.0	44300	10.8	1573	11240	
A 70 3_96.2	96.2	18.7	42928	14.0	1341	11240	12.5	44300	9.6	1561	11240	
A 70 3_104.2	104.2	17.3	44300	13.3	1359	11240	11.5	44300	8.9	1574	11240	
A 70 3_120.6	120.6	14.9	44300	11.5	1349	11240	10.0	44300	7.7	1574	11240	
A 70 3_130.7	130.7	13.8	44300	10.6	1366	11240	9.2	44300	7.1	1574	11240	
A 70 3_141.9	141.9	12.7	44300	9.8	1355	11240	8.5	44300	6.5	1574	11240	
A 70 3_153.7	153.7	11.7	33230	6.8	1413	11240	7.8	37532	5.1	1574	11240	
A 70 4_169.8	169.8	10.6	44300	8.4	514	11240	7.1	44300	5.6	599	11240	
A 70 4_183.9	183.9	9.8	44300	7.7	545	11240	6.5	44300	5.1	634	11240	
A 70 4_220.3	220.3	8.2	44300	6.4	553	11240	5.4	44300	4.3	644	11240	
A 70 4_238.6	238.6	7.5	44300	5.9	565	11240	5.0	44300	4.0	658	11240	
A 70 4_292.0	292.0	6.2	44300	4.9	570	11240	4.1	44300	3.2	663	11240	
A 70 4_316.4	316.4	5.7	44300	4.5	582	11240	3.8	44300	3.0	677	11240	
A 70 4_369.4	369.4	4.9	44300	3.8	580	11240	3.2	44300	2.6	675	11240	
A 70 4_400.2	400.2	4.5	44300	3.5	592	11240	3.0	44300	2.4	689	11240	
A 70 4_475.8	475.8	3.8	44300	3.0	590	11240	2.5	44300	2.0	687	11240	
A 70 4_515.4	515.4	3.5	44300	2.8	600	11240	2.3	44300	1.8	699	11240	
A 70 4_595.0	595.0	3.0	44300	2.4	596	11240	2.0	44300	1.6	694	11240	
A 70 4_644.6	644.6	2.8	44300	2.2	606	11240	1.9	44300	1.5	706	11240	
A 70 4_705.1	705.1	2.6	44300	2.0	600	11240	1.7	44300	1.3	699	11240	
A 70 4_763.9	763.9	2.4	44300	1.9	610	11240	1.6	44300	1.2	710	11240	
A 70 4_855.3	855.3	2.1	44300	1.7	604	11240	1.4	44300	1.1	703	11240	
A 70 4_926.5	926.5	1.9	44300	1.5	612	11240	1.3	44300	1.0	713	11240	
A 70 4_1072	1072	1.7	44300	1.3	606	11240	1.1	44300	0.88	706	11240	
A 70 4_1161	1161	1.6	44300	1.2	616	11240	1.0	44300	0.82	718	11240	
A 70 4_1242	1242	1.4	44300	1.1	608	11240	0.97	44300	0.76	708	11240	
A 70 4_1346	1346	1.3	44300	1.1	619	11240	0.89	44300	0.70	720	11240	
A 70 4_1583	1583	1.1	44300	0.90	610	11240	0.76	44300	0.60	710	11240	
A 70 4_1715	1715	1.0	44300	0.83	621	11240	0.70	44300	0.55	722	11240	

386
387

A 80

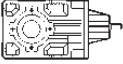
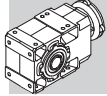
70800 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 80 3_9.8	9.8	184	31965	102	—	6697	122	36176	77	—	7556	394 395
A 80 3_10.7	10.7	168	35243	103	—	6739	112	39887	78	—	7603	
A 80 3_12.3	12.3	146	35243	90	—	7093	98	39887	68	—	8003	
A 80 3_13.3	13.3	135	35243	83	259	7344	90	39887	63	273	8285	
A 80 3_15.5	15.5	116	33604	68	351	7844	77	38032	51	411	8850	
A 80 3_16.7	16.7	108	36883	69	324	7907	72	41742	52	347	8921	
A 80 3_19.3	19.3	93	36063	59	420	8387	62	40814	44	446	9462	
A 80 3_20.9	20.9	86	39341	59	375	8470	57	44525	45	413	9556	
A 80 3_22.6	22.6	80	51226	71	1173	8011	53	57975	54	1384	9038	
A 80 3_24.5	24.5	73	55324	71	1175	8053	49	62613	53	1386	9086	
A 80 3_28.2	28.2	64	54095	60	1199	8595	43	61221	45	1415	9697	
A 80 3_30.6	30.6	59	52865	54	1235	8971	39	59830	41	1458	10121	
A 80 3_35.5	35.5	51	57373	51	1207	9242	34	64932	38	1424	10427	
A 80 3_38.5	38.5	47	62291	51	1207	9284	31	70497	38	1424	10474	
A 80 3_44.5	44.5	40	61061	43	1221	9910	27.0	69106	32	1441	11180	
A 80 3_48.2	48.2	37	65569	43	1225	9993	24.9	70800	31	1446	11275	
A 80 3_55.2	55.2	33	64750	37	1217	10598	21.7	70800	27	1436	11957	
A 80 3_59.8	59.8	30	65569	34	1241	10911	20.1	70800	25	1465	12310	
A 80 3_66.8	66.8	26.9	65569	31	1237	11391	18.0	70800	22	1460	12852	
A 80 3_72.4	72.4	24.9	65569	28	1264	11787	16.6	70800	20	1491	13299	
A 80 3_82.3	82.3	21.9	65569	25	1254	12371	14.6	70800	18.0	1479	13958	
A 80 3_89.2	89.2	20.2	69039	24	1278	12809	13.5	70800	16.6	1507	14452	
A 80 3_96.0	96.0	18.8	66383	22	1260	13143	12.5	70800	15.4	1486	14612	
A 80 3_104.0	104.0	17.3	70800	21	1284	13561	11.5	70800	14.2	1515	14612	
A 80 3_116.0	116.0	15.5	70800	19.1	1268	13561	10.3	70800	12.8	1496	14612	
A 80 3_125.6	125.6	14.3	70800	17.7	1292	13561	9.6	70800	11.8	1524	14612	
A 80 3_144.7	144.7	12.4	70800	15.4	1278	13561	8.3	70800	10.2	1507	14612	
A 80 3_156.8	156.8	11.5	70800	14.2	1300	13561	7.7	70800	9.4	1534	14612	
A 80 4_171.3	171.3	10.5	70800	13.3	—	14612	7.0	70800	8.8	292	14612	
A 80 4_214.7	214.7	8.4	70800	10.6	—	14612	5.6	70800	7.1	332	14612	
A 80 4_232.6	232.6	7.7	70800	9.8	—	14612	5.2	70800	6.5	430	14612	
A 80 4_277.3	277.3	6.5	70800	8.2	388	14612	4.3	70800	5.5	458	14612	
A 80 4_300.4	300.4	6.0	70800	7.6	461	14612	4.0	70800	5.0	544	14612	
A 80 4_354.0	354.0	5.1	70800	6.4	441	14612	3.4	70800	4.3	520	14612	
A 80 4_383.5	383.5	4.7	70800	5.9	509	14612	3.1	70800	3.9	601	14612	
A 80 4_442.1	442.1	4.1	70800	5.1	489	14612	2.7	70800	3.4	577	14612	
A 80 4_478.9	478.9	3.8	70800	4.7	537	14612	2.5	70800	3.2	634	14612	
A 80 4_560.5	560.5	3.2	70800	4.1	529	14612	2.1	70800	2.7	624	14612	
A 80 4_607.2	607.2	3.0	70800	3.7	547	14612	2.0	70800	2.5	646	14612	
A 80 4_703.5	703.5	2.6	70800	3.2	541	14612	1.7	70800	2.2	639	14612	
A 80 4_762.1	762.1	2.4	70800	3.0	555	14612	1.6	70800	2.0	655	14612	
A 80 4_829.5	829.5	2.2	70800	2.7	547	14612	1.4	70800	1.8	646	14612	
A 80 4_898.7	898.7	2.0	70800	2.5	559	14612	1.3	70800	1.7	660	14612	
A 80 4_1001	1001	1.8	70800	2.3	551	14612	1.2	70800	1.5	650	14612	
A 80 4_1085	1085	1.7	70800	2.1	563	14612	1.1	70800	1.4	665	14612	
A 80 4_1237	1237	1.5	70800	1.8	553	14612	0.97	70800	1.2	653	14612	
A 80 4_1340	1340	1.3	70800	1.7	565	14612	0.90	70800	1.1	667	14612	
A 80 4_1438	1438	1.3	70800	1.6	557	14612	0.83	70800	1.1	658	14612	
A 80 4_1558	1558	1.2	70800	1.5	569	14612	0.77	70800	0.97	672	14612	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

A 90

123900 lb·in

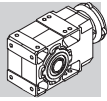
	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
A 90 3_9.7	9.7	186	74175	240	1095	7310	124	80103	173	1308	8230	
A 90 3_10.5	10.5	171	80322	240	1097	7289	114	86741	173	1310	8207	
A 90 3_12.6	12.6	143	85650	213	950	7665	95	96934	161	1135	8630	
A 90 3_13.7	13.7	131	91387	209	1050	7707	88	103427	158	1199	8677	
A 90 3_15.6	15.6	115	89748	180	1073	8229	77	101572	136	1282	9265	
A 90 3_16.9	16.9	107	97124	180	1079	8208	71	109920	136	1289	9241	
A 90 3_19.4	19.4	93	94665	153	1061	8834	62	101788	110	1268	9947	
A 90 3_21.0	21.0	86	101632	152	1093	8855	57	109754	109	1306	9970	
A 90 3_22.3	22.3	81	99583	140	2419	9168	54	112703	106	2891	10323	
A 90 3_24.1	24.1	75	107779	140	2419	9148	50	121979	106	2891	10300	
A 90 3_29.1	29.1	62	106550	115	2459	10004	41	120588	87	2938	11264	
A 90 3_31.5	31.5	57	114746	114	2459	10004	38	123900	82	2938	11264	
A 90 3_35.8	35.8	50	112697	99	2479	10672	34	123900	72	2962	12016	
A 90 3_38.8	38.8	46	114746	93	2518	11006	31	123900	67	3009	12392	
A 90 3_44.6	44.6	40	114746	81	2518	11696	26.9	123900	58	3009	13168	
A 90 3_48.3	48.3	37	114746	75	2538	12113	24.8	123900	54	3033	13639	
A 90 3_55.0	55.0	33	114746	65	2538	12823	21.8	123900	47	3033	14438	
A 90 3_59.6	59.6	30	119933	63	2578	13262	20.1	123900	43	3080	14932	
A 90 3_68.8	68.8	26.2	119933	55	2578	14076	17.4	123900	38	3080	15849	
A 90 3_74.5	74.5	24.2	123900	52	2598	14557	16.1	123900	35	3104	16390	
A 90 3_80.4	80.4	22.4	123900	48	2578	15016	14.9	123900	32	3080	16860	
A 90 3_87.1	87.1	20.7	123900	45	2617	15517	13.8	123900	30	3128	16860	
A 90 3_98.6	98.6	18.3	123900	39	2598	15664	12.2	123900	26	3104	16860	
A 90 3_106.8	106.8	16.9	123900	36	2637	15664	11.2	123900	24	3151	16860	
A 90 3_116.9	116.9	15.4	123900	33	2617	15664	10.3	123900	22	3128	16860	
A 90 3_126.6	126.6	14.2	107779	27	2657	16051	9.5	121979	20	3175	16860	
A 90 3_139.4	139.4	12.9	104501	24	2657	16748	8.6	118269	17.7	3175	16860	
A 90 3_151.0	151.0	11.9	113107	23	2657	16860	7.9	123900	17.2	3175	16860	
A 90 4_166.1	166.1	10.8	123900	24	—	16860	7.2	123900	16.0	—	16860	402 403
A 90 4_180.0	180.0	10.0	123900	22	—	16860	6.7	123900	14.7	—	16860	
A 90 4_209.0	209.0	8.6	123900	19.0	—	16860	5.7	123900	12.7	—	16860	
A 90 4_226.4	226.4	8.0	123900	17.6	—	16860	5.3	123900	11.7	—	16860	
A 90 4_281.4	281.4	6.4	123900	14.1	—	16860	4.3	123900	9.4	—	16860	
A 90 4_304.9	304.9	5.9	123900	13.0	—	16860	3.9	123900	8.7	—	16860	
A 90 4_355.8	355.8	5.1	123900	11.2	—	16860	3.4	123900	7.4	—	16860	
A 90 4_385.4	385.4	4.7	123900	10.3	—	16860	3.1	123900	6.9	161	16860	
A 90 4_449.2	449.2	4.0	123900	8.8	—	16860	2.7	123900	5.9	—	16860	
A 90 4_486.6	486.6	3.7	123900	8.2	—	16860	2.5	123900	5.4	225	16860	
A 90 4_555.3	555.3	3.2	123900	7.2	—	16860	2.2	123900	4.8	175	16860	
A 90 4_601.6	601.6	3.0	123900	6.6	—	16860	2.0	123900	4.4	284	16860	
A 90 4_707.9	707.9	2.5	123900	5.6	—	16860	1.7	123900	3.7	249	16860	
A 90 4_766.9	766.9	2.3	123900	5.2	—	16860	1.6	123900	3.5	353	16860	
A 90 4_865.1	865.1	2.1	123900	4.6	—	16860	1.4	123900	3.1	277	16860	
A 90 4_937.2	937.2	1.9	123900	4.2	—	16860	1.3	123900	2.8	377	16860	
A 90 4_1025	1025	1.8	123900	3.9	—	16860	1.2	123900	2.6	315	16860	
A 90 4_1111	1111	1.6	123900	3.6	—	16860	1.1	123900	2.4	412	16860	
A 90 4_1222	1222	1.5	123900	3.3	—	16860	0.98	123900	2.2	327	16860	
A 90 4_1324	1324	1.4	123900	3.0	—	16860	0.91	123900	2.0	424	16860	
A 90 4_1507	1507	1.2	123900	2.6	—	16860	0.80	123900	1.8	341	16860	
A 90 4_1632	1632	1.1	123900	2.4	—	16860	0.74	123900	1.6	436	16860	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

40 MOTOR AVAILABILITY

Please be aware that motor-gearbox combinations resulting from following charts are purely based on geometrical compatibility.

When selecting a gearmotor, refer to procedure specified at paragraph 12 and observe particularly the condition $S \leq f_s$.



(C 40)

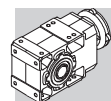
		IEC_   (IM B5)											
		P63	P71	P80	P90	P100	P112	P132	P160	P180	P200	P225	P250
A 05 2	i =	5.5_91.6	5.5_51.3	5.5_51.3									
A 10 2		5.5_91.6	5.5_91.6	5.5_65.9	5.5_65.9	5.5_65.9	5.5_65.9						
A 20 2		7.3_92.3 ⚙(10.3)	7.3_92.3 ⚙(10.3)	5.4_79.9	5.4_79.9	5.4_79.9	5.4_79.9						
A 20 3		109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9						
A 30 2		9.3_97.5 ⚙(10.5 ; 13.6_16.3)	9.3_97.5 ⚙(10.5 ; 13.6_16.3)	5.4_97.5	5.4_97.5	5.4_97.5	5.4_97.5						
A 30 3		109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8						
A 35 2		9.3_95.6 ⚙(13.1_20.4)	9.3_95.6 ⚙(13.1_20.4)	5.4_95.6	5.4_95.6	5.4_95.6	5.4_95.6	5.4_11.8					
A 35 3		105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2						
A 41 2		11.7_79.2 ⚙(13.8_17.8)	11.7_79.2 ⚙(13.8_17.8)	5.2_79.2	5.2_79.2	5.2_79.2	5.2_79.2	5.2_45.1					
A 41 3		92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8						
A 50 2		20.9	20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9			
A 50 3		51.7_190.6	51.7_190.6	24.0_190.6	24.0_190.6	24.0_190.6	24.0_190.6	24.0_109.4	24.0_109.4	24.0_109.4			
A 50 4		211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2						
A 55 2				13.1_19.2	13.1_19.2	13.1_19.2	13.1_19.2	4.9_19.2	4.9_19.2	4.9_19.2			
A 55 3		64.3_194.2	64.3_194.2	23.8_194.2	23.8_194.2	23.8_194.2	23.8_194.2	23.8_123.9	23.8_123.9	23.8_123.9			
A 55 4		208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0						
A 60 2				10.3_20.6	10.3_20.6	10.3_20.6	10.3_20.6	7.9_20.6	7.9_20.6	7.9_20.6			
A 60 3		65.0_185.8	65.0_185.8	25.7_185.8	25.7_185.8	25.7_185.8	25.7_185.8	25.7_133.3	25.7_133.3	25.7_133.3			
A 60 4		208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4						
A 70 3				66.9_153.7	66.9_153.7	66.9_153.7	66.9_153.7	15.4_153.7 ⚙(23.5_30.1)	9.4_153.7	9.4_153.7	9.4_38.4 ⚙(19.7_21.3)		
A 70 4	292.0_1715	292.0_1715	169.8_1715	169.8_1715	169.8_1715	169.8_1715	169.8_644.6						
A 80 3			82.3_156.8	82.3_156.8	82.3_156.8	82.3_156.8	19.3_156.8 ⚙(22.6_38.5)	12.3_156.8 ⚙(22.6_24.5)	9.8_156.8	9.8_104.0	9.8_104.0		
A 80 4	354.0_1558	354.0_1558	171.3_1558	171.3_1558	171.3_1558	171.3_1558	171.3_762.1						
A 90 3			98.6_151.0	98.6_151.0	98.6_151.0	98.6_151.0	55.0_151.0	19.4_151.0 ⚙(22.3_38.8)	9.7_151.0	9.7_126.6	9.7_126.6		
A 90 4	449.2_1632	449.2_1632	166.1_1632	166.1_1632	166.1_1632	166.1_1632	166.1_937.2	166.1_937.2	166.1_937.2				

(C 41)

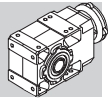


NEMA Motor frame

		N56C	N140TC	N180TC	N210TC	N250TC	N280TC	N320TC
	HP	0.16 ... 1	1.5 ... 2	3 ... 5	7.5 ... 10	15 ... 20	25 ... 30	40 ... 50
A 05 2	i =	5.5_91.6	5.5_65.9					
A 10 2		5.5_91.6	5.5_65.9	5.5_65.9				
A 20 2		7.3_92.3 ☯ (10.3)	5.4_79.9	5.4_79.9				
A 20 3		109.2_380.9	109.2_380.9	109.2_380.9				
A 30 2		9.3_97.5 ☯ (10.5; 13.6_16.3)	5.4_97.5	5.4_97.5				
A 30 3		109.1_400.8	109.1_400.8	109.1_400.8				
A 35 2		9.3_95.6 ☯ (13.1_20.4)	5.4_95.6	5.4_95.6	5.4_11.8			
A 35 3		105.5_393.2	105.5_393.2	105.5_393.2				
A 41 2		11.7_79.2 ☯ (13.8_17.8)	5.2_79.2	5.2_79.2	5.2_45.1			
A 41 3		92.8_376.8	92.8_376.8	92.8_376.8				
A 50 2		20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	
A 50 3		51.7_190.6	24.0_190.6	24.0_190.6	24.0_109.4	24.0_109.4	24.0_109.4	
A 50 4		211.0_778.2	211.0_778.2	211.0_778.2				
A 55 2			13.1_19.2	13.1_19.2	4.9_19.2	4.9_19.2	4.9_19.2	
A 55 3		64.3_194.2	23.8_194.2	23.8_194.2	23.8_123.9	23.8_123.9	23.8_123.9	
A 55 4		208.1_793.0	208.1_793.0	208.1_793.0				
A 60 2			10.3_20.6	10.3_20.6	7.9_20.6	7.9_20.6	7.9_20.6	
A 60 3		65.0_185.8	25.7_185.8	25.7_185.8	25.7_133.3	25.7_133.3	25.7_133.3	
A 60 4		208.7_755.4	208.7_755.4	208.7_755.4				
A 70 3			66.9_153.7	66.9_153.7	15.4_153.7 ☯ (23.5_30.1)	9.4_153.7	9.4_153.7	
A 70 4		292.0_1715	169.8_1715	169.8_1715	169.8_644.6			
A 80 3				82.3_156.8	19.3_156.8 ☯ (22.6_38.5)	12.3_156.8 ☯ (22.6_24.5)	9.8_156.8	9.8_104.0
A 80 4		354.0_1558	171.3_1558	171.3_1558	171.3_762.1			
A 90 3				98.6_151.0	55.0_151.0	19.4_151.0 ☯ (22.3_38.8)	9.7_151.0	9.7_126.6
A 90 4		449.2_1632	166.1_1632	166.1_1632	166.1_937.2	166.1_937.2	166.1_937.2	



(C 42)

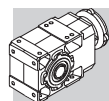


		 					
		M05	M1	M2 - ME2	ME3	ME4	ME5
A 05 2	i =	5.5_91.6	5.5_51.3	5.5_65.9			
A 10 2		5.5_91.6	5.5_51.3	5.5_65.9	5.5_65.9		
A 20 2		7.3_92.3 ⊖ (10.3)	7.3_63.1 ⊖ (10.3)	5.4_79.9	5.4_79.9		
A 20 3		109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9		
A 30 2			9.3_76.5 ⊖ (10.5 ; 13.6_16.3)	5.4_97.5	5.4_97.5		
A 30 3		109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8		
A 35 2			9.3_95.6 ⊖ (13.1_20.4)	5.4_95.6	5.4_95.6	5.4_11.8	
A 35 3		105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2		
A 41 2			11.7_79.2 ⊖ (13.8_17.8)	5.2_79.2	5.2_79.2	5.2_45.1	
A 41 3		92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8		
A 50 2			20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9
A 50 3			51.7_190.6	24.0_190.6	24.0_190.6	24.0_109.4	24.0_109.4
A 50 4			211.0_778.2	211.0_778.2	211.0_778.2		
A 55 2				13.1_19.2	13.1_19.2	4.9_19.2	4.9_19.2
A 55 3			64.3_194.2	23.8_194.2	23.8_194.2	23.8_123.9	23.8_123.9
A 55 4			208.1_793.0	208.1_793.0	208.1_793.0		
A 60 2				10.3_20.6	10.3_20.6	7.9_20.6	7.9_20.6
A 60 3				25.7_185.8	25.7_185.8	25.7_133.3	25.7_133.3
A 60 4			208.7_755.4	208.7_755.4	208.7_755.4		
A 70 3				66.9_153.7	66.9_153.7	15.4_153.7 ⊖ (23.5_30.1)	15.4_153.7 ⊖ (23.5_30.1)
A 70 4			292.0_1715	169.8_1715	169.8_1715	169.8_644.6	
A 80 3					82.3_156.8	19.3_156.8 ⊖ (22.6_38.5)	19.3_156.8 ⊖ (22.6_38.5)
A 80 4			354.0_1558	171.3_1558	171.3_1558	171.3_762.1	
A 90 3					98.6_151.0	55.0_151.0	55.0_151.0
A 90 4			449.2_1632	166.1_1632	166.1_1632	166.1_937.2	

Motor adapters matching the most popular brands of servomotors are available for units size A05... A60. Dimensions of servomotor inputs are provided within the drawing section for each frame size. The code **SK** applies for inputs featuring a conventional keyway, while through the specification of the **SC** code the input shaft will feature a clamping device instead.

(C 43)

		SERVO INPUT					
		SK40A	SK60A	SK60B	SK80A	SK80B	SK80C
		SC40A	SC60A	SC60B	SC80A	SC80B	SC80C
A 05 2	i =	5.5_91.6	5.5_91.6	5.5_51.3	5.5_51.3		
A 10 2			5.5_91.6	5.5_51.3	5.5_51.3		5.5_65.9
A 20 2			7.3_92.3 ⌀ (10.3)	7.3_63.1 ⌀ (10.3)	7.3_63.1 ⌀ (10.3)		5.4_79.9
A 20 3			109.2_380.9	109.2_380.9	109.2_380.9		109.2_380.9
A 30 2			9.3_97.5 ⌀ (10.5 ; 13.6_16.3)	9.3_76.5 ⌀ (10.5 ; 13.6_16.3)	9.3_76.5 ⌀ (10.5 ; 13.6_16.3)		5.4_97.5
A 30 3			109.1_400.8	109.1_400.8	109.1_400.8		109.1_400.8
A 35 2			9.3_95.6 ⌀ (13.1_20.4)	9.3_95.6 ⌀ (13.1_20.4)	9.3_95.6 ⌀ (13.1_20.4)		5.4_95.6
A 35 3			105.5_393.2	105.5_393.2	105.5_393.2		105.5_393.2
A 41 2						11.7_79.2 ⌀ (13.8_17.8)	5.2_79.2
A 41 3			92.8_376.8	92.8_376.8	92.8_376.8		92.8_376.8
A 50 2						20.9	7.7_20.9
A 50 3						51.7_190.6	24.0_190.6
A 50 4							211.0_778.2
A 55 2							13.1_19.2
A 55 3						64.3_194.2	23.8_194.2
A 55 4							208.1_793.0
A 60 2							10.3_20.6
A 60 3							25.7_185.8
A 60 4						208.7_755.4	208.7_755.4

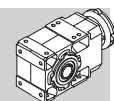


(C 44)

		SERVO INPUT							
		SK95A	SK95B	SK95C	SK110A	SK110B	SK130A	SK130B	SK180A
		SC95A	SC95B	SC95C	SC110A	SC110B	SC130A	SC130B	SC180A
A 10 2	i =	5.5_51.3	5.5_65.9	5.5_65.9	5.5_65.9	5.5_65.9			
A 20 2		7.3_63.1 ⌀ (10.3)	5.4_79.9	5.4_79.9	5.4_79.9	5.4_79.9			
A 20 3		109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9	109.2_380.9			
A 30 2		9.3_76.5 ⌀ (10.5 ; 13.6_16.3)	5.4_97.5	5.4_97.5	5.4_97.5	5.4_97.5	5.4_97.5		
A 30 3		109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8	109.1_400.8			
A 35 2		9.3_95.6 ⌀ (13.1_20.4)	5.4_95.6	5.4_95.6	5.4_95.6	5.4_95.6	5.4_95.6		
A 35 3		105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2	105.5_393.2			
A 41 2		11.7_79.2 ⌀ (13.8_17.8)	5.2_79.2	5.2_79.2	5.2_79.2	5.2_79.2	5.2_79.2	5.2_45.1	5.2_45.1
A 41 3		92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8	92.8_376.8			
A 50 2		20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9	7.7_20.9
A 50 3		51.7_190.6	24.0_190.6	24.0_190.6	24.0_190.6	24.0_190.6	24.0_190.6	24.0_109.4	24.0_109.4
A 50 4		211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2	211.0_778.2		
A 55 2			13.1_19.2	13.1_19.2	13.1_19.2	13.1_19.2	13.1_19.2	4.9_19.2	4.9_19.2
A 55 3		64.3_194.2	23.8_194.2	23.8_194.2	23.8_194.2	23.8_194.2	23.8_194.2	23.8_123.9	23.8_123.9
A 55 4		208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0	208.1_793.0		
A 60 2			10.3_20.6	10.3_20.6	10.3_20.6	10.3_20.6	10.3_20.6	7.9_20.6	7.9_20.6
A 60 3		65.0_185.8	25.7_185.8	25.7_185.8	25.7_185.8	25.7_185.8	25.7_185.8	25.7_133.3	25.7_133.3
A 60 4		208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4	208.7_755.4		

41 MOMENT OF INERTIA

The following charts indicate moment of inertia values J_r [lb•ft²] referred to the gear unit high speed shaft. A key to the symbols used follows:

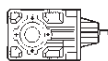


Values under this icon refer to compact gear units, without motor. To obtain the overall moment of inertia for the gearmotor just add the value of the inertia for the specific compact motor, given in the relevant rating chart.



NEMA

Values under this symbol refer to gearboxes with NEMA motor adaptor (NEMA size...).



This symbol refers to gearbox values.



IEC

Values under this symbol refer to gearboxes with IEC motor adaptor (IEC size...).



SERVO

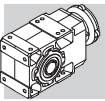
Values under this symbol refer to gear unit with servomotor input adaptor.

A 05

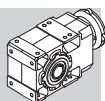
	i	J (•10 ⁻⁴) [lb•ft ²]			
			63	71	80
A 05 2_5.5	5.5	17	23	24	33
A 05 2_6.3	6.3	13	20	20	28
A 05 2_7.2	7.2	11	18	18	26
A 05 2_8.5	8.5	8.5	15	15	24
A 05 2_9.6	9.6	6.9	13	14	22
A 05 2_10.6	10.6	12	18	19	26
A 05 2_12.3	12.3	4.3	11	11	19
A 05 2_13.9	13.9	8.3	15	15	23
A 05 2_16.4	16.4	6.4	13	14	22
A 05 2_18.6	18.6	5.2	12	12	20
A 05 2_21.4	21.4	3.8	10	11	19
A 05 2_23.8	23.8	3.3	9.7	10	19
A 05 2_25.5	25.5	3.1	9.3	10	18
A 05 2_28.6	28.6	2.6	9.0	9.5	18
A 05 2_32.2	32.2	2.1	8.5	9.3	17
A 05 2_35.1	35.1	1.9	8.3	8.8	17
A 05 2_40.9	40.9	1.7	7.8	8.5	17
A 05 2_45.4	45.4	1.2	7.6	8.3	16
A 05 2_51.3	51.3	0.95	7.4	8.1	16
A 05 2_58.6	58.6	0.95	7.4	—	—
A 05 2_65.9	65.9	0.71	7.1	—	—
A 05 2_76.4	76.4	0.47	6.9	—	—
A 05 2_91.6	91.6	0.47	6.6	—	—

A 05

	i	J (•10 ⁻⁴) [lb•ft ²]				
			NEMA			
			N56C	N140TC	N180TC	
A 05 2_5.5	5.5	17	23	23	33	—
A 05 2_6.3	6.3	13	20	20	28	—
A 05 2_7.2	7.2	11	18	18	26	—
A 05 2_8.5	8.5	8,5	15	15	24	—
A 05 2_9.6	9.6	6,9	13	13	22	—
A 05 2_10.6	10.6	12	18	18	26	—
A 05 2_12.3	12.3	4,3	11	11	19	—
A 05 2_13.9	13.9	8,3	15	15	23	—
A 05 2_16.4	16.4	6,4	13	13	22	—
A 05 2_18.6	18.6	5,2	12	12	20	—
A 05 2_21.4	21.4	3,8	10	10	19	—
A 05 2_23.8	23.8	3,3	9,7	9,7	19	—
A 05 2_25.5	25.5	3,1	9,3	9,3	18	—
A 05 2_28.6	28.6	2,6	9,0	9,0	18	—
A 05 2_32.2	32.2	2,1	8,5	8,5	17	—
A 05 2_35.1	35.1	1,9	8,3	8,3	17	—
A 05 2_40.9	40.9	1,7	7,8	7,8	17	—
A 05 2_45.4	45.4	1,2	7,6	7,6	16	—
A 05 2_51.3	51.3	0,95	7,4	7,4	16	—
A 05 2_58.6	58.6	0,95	7,4	7,4	—	—
A 05 2_65.9	65.9	0,71	7,1	7,1	—	—
A 05 2_76.4	76.4	0,47	6,9	6,9	—	—
A 05 2_91.6	91.6	0,47	6,6	6,6	—	—



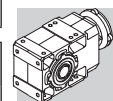
A 05



	i	J (•10 ⁻⁴) [lb•ft ²]					
		 SERVO					
		40A		60A		60B 80A	
		SK	SC	SK	SC	SK	SC
A 05 2_5.5	5.5	21	26	23	31	24	33
A 05 2_6.3	6.3	17	21	20	26	20	31
A 05 2_7.2	7.2	15	19	18	24	18	28
A 05 2_8.5	8.5	13	16	15	21	15	26
A 05 2_9.6	9.6	11	15	13	19	14	24
A 05 2_10.6	10.6	16	20	18	24	19	28
A 05 2_12.3	12.3	8,3	12	11	17	11	22
A 05 2_13.9	13.9	12	16	15	21	15	26
A 05 2_16.4	16.4	10	14	13	19	14	24
A 05 2_18.6	18.6	9,3	13	12	18	12	23
A 05 2_21.4	21.4	7,8	12	10	16	11	21
A 05 2_23.8	23.8	7,4	11	9,7	16	10	21
A 05 2_25.5	25.5	7,1	11	9,3	15	10	20
A 05 2_28.6	28.6	6,6	10	9,0	15	9,5	20
A 05 2_32.2	32.2	6,2	10	8,5	15	9,3	20
A 05 2_35.1	35.1	5,9	9,7	8,3	14	8,8	19
A 05 2_40.9	40.9	5,7	9,5	7,8	14	8,5	19
A 05 2_45.4	45.4	5,2	9,0	7,6	14	8,3	19
A 05 2_51.3	51.3	5,0	8,8	7,4	14	8,1	19
A 05 2_58.6	58.6	5,0	8,8	7,4	14	—	—
A 05 2_65.9	65.9	4,7	8,5	7,1	13	—	—
A 05 2_76.4	76.4	4,5	8,3	6,9	13	—	—
A 05 2_91.6	91.6	4,5	8,3	6,6	13	—	—

A 10

	i	J (•10 ⁻⁴) [lb•ft ²]							
			 IEC						
			63	71	80	90	100	112	
A 10 2_5.5	5.5	24	59	59	93	90	121	121	43
A 10 2_6.3	6.3	19	55	55	88	85	116	116	38
A 10 2_7.2	7.2	14	50	50	83	81	112	112	36
A 10 2_8.5	8.5	11	45	45	78	74	107	107	33
A 10 2_9.6	9.6	7.1	43	43	76	74	104	104	31
A 10 2_10.6	10.6	12	47	47	81	78	109	109	33
A 10 2_12.3	12.3	4.7	40	40	74	71	102	102	26
A 10 2_13.9	13.9	7.1	43	43	76	74	109	109	28
A 10 2_16.4	16.4	5.9	40	40	74	71	102	102	26
A 10 2_18.6	18.6	4.7	40	40	74	71	102	102	24
A 10 2_21.4	21.4	3.6	38	38	71	69	100	100	24
A 10 2_23.8	23.8	2.4	38	38	71	69	100	100	24
A 10 2_25.5	25.5	2.4	38	38	71	69	100	100	24
A 10 2_28.6	28.6	2.4	38	38	71	69	100	100	21
A 10 2_32.2	32.2	1.9	38	38	71	69	100	100	21
A 10 2_35.1	35.1	1.7	38	38	71	69	100	100	21
A 10 2_40.9	40.9	1.4	38	38	71	69	100	100	21
A 10 2_45.4	45.4	1.2	38	38	71	69	100	100	21
A 10 2_51.3	51.3	0.71	36	36	69	66	97	97	21
A 10 2_58.6	58.6	0.71	36	36	69	66	97	97	21
A 10 2_65.9	65.9	0.47	36	36	69	66	97	97	21
A 10 2_76.4	76.4	0.47	36	36	—	—	—	—	21
A 10 2_91.6	91.6	0.24	36	36	—	—	—	—	21

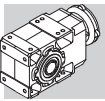


A 10

	i	J (•10 ⁻⁴) [lb•ft ²]				
			 NEMA			
			N56C	N140TC	N180TC	
A 10 2_5.5	5.5	24	59	59	93	43
A 10 2_6.3	6.3	19	55	55	88	38
A 10 2_7.2	7.2	14	50	50	83	36
A 10 2_8.5	8.5	11	45	45	78	33
A 10 2_9.6	9.6	7,1	43	43	76	31
A 10 2_10.6	10.6	12	47	47	81	33
A 10 2_12.3	12.3	4,7	40	40	74	26
A 10 2_13.9	13.9	7,1	43	43	76	28
A 10 2_16.4	16.4	5,9	40	40	74	26
A 10 2_18.6	18.6	4,7	40	40	74	24
A 10 2_21.4	21.4	3,6	38	38	71	24
A 10 2_23.8	23.8	2,4	38	38	71	24
A 10 2_25.5	25.5	2,4	38	38	71	24
A 10 2_28.6	28.6	2,4	38	38	71	21
A 10 2_32.2	32.2	1,9	38	38	71	21
A 10 2_35.1	35.1	1,7	38	38	71	21
A 10 2_40.9	40.9	1,4	38	38	71	21
A 10 2_45.4	45.4	1,2	38	38	71	21
A 10 2_51.3	51.3	0,7	36	36	69	21
A 10 2_58.6	58.6	0,71	36	36	69	21
A 10 2_65.9	65.9	0,47	36	36	69	21
A 10 2_76.4	76.4	0,47	36	36	—	21
A 10 2_91.6	91.6	0,24	36	36	—	21

A 10

	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 10 2_5.5	5.5	31	36	31	40	90	102	93	104	90	114
A 10 2_6.3	6.3	26	31	26	36	85	97	88	100	85	109
A 10 2_7.2	7.2	21	26	21	31	81	93	83	95	81	104
A 10 2_8.5	8.5	17	23	18	28	78	88	78	90	74	97
A 10 2_9.6	9.6	14	20	14	24	74	85	76	88	74	97
A 10 2_10.6	10.6	18	24	19	28	78	90	81	93	78	102
A 10 2_12.3	12.3	11	17	12	22	71	83	74	85	71	95
A 10 2_13.9	13.9	14	20	14	24	74	85	76	88	74	97
A 10 2_16.4	16.4	12	19	13	23	74	83	74	85	71	95
A 10 2_18.6	18.6	11	17	12	22	71	83	74	85	71	95
A 10 2_21.4	21.4	10	16	10	21	71	81	71	83	69	93
A 10 2_23.8	23.8	8,8	15	9,3	20	69	81	71	83	69	93
A 10 2_25.5	25.5	8,8	15	9,3	20	69	81	71	83	69	93
A 10 2_28.6	28.6	8,8	15	9,3	20	69	81	71	83	69	93
A 10 2_32.2	32.2	8,3	14	8,8	19	69	78	71	83	69	93
A 10 2_35.1	35.1	8,1	14	8,5	19	69	78	71	83	69	93
A 10 2_40.9	40.9	7,8	14	8,3	19	69	78	71	83	69	93
A 10 2_45.4	45.4	7,6	14	8,1	19	69	78	71	83	69	93
A 10 2_51.3	51.3	7,1	13	7,6	18	69	78	69	81	66	90
A 10 2_58.6	58.6	7,1	13	—	—	—	—	69	81	66	90
A 10 2_65.9	65.9	6,9	13	—	—	—	—	69	81	66	90
A 10 2_76.4	76.4	6,9	13	—	—	—	—	—	—	—	—
A 10 2_91.6	91.6	6,6	13	—	—	—	—	—	—	—	—

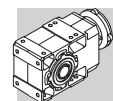


A 20

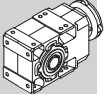
	i	J (•10 ⁻⁴) [lb•ft ²]							
			 IEC						
			63	71	80	90	100	112	
A 20 2_5.4	5.4	57	—	—	126	123	154	154	102
A 20 2_6.5	6.5	45	—	—	114	112	142	142	90
A 20 2_7.3	7.3	33	69	69	102	100	131	131	78
A 20 2_8.4	8.4	26	62	62	95	93	123	123	71
A 20 2_9.4	9.4	21	57	57	90	88	119	119	66
A 20 2_10.3	10.3	28	—	—	97	95	126	126	71
A 20 2_12.0	12.0	12	47	47	81	78	109	109	57
A 20 2_14.1	14.1	17	52	52	85	83	114	114	62
A 20 2_16.2	16.2	13	47	47	81	78	109	109	59
A 20 2_18.1	18.1	9.5	45	45	78	76	107	107	57
A 20 2_21.2	21.2	8.3	43	43	76	74	104	104	55
A 20 2_23.1	23.1	7.1	43	43	76	74	104	104	52
A 20 2_26.5	26.5	5.9	40	40	74	71	102	102	50
A 20 2_29.2	29.2	4.7	40	40	74	71	102	102	50
A 20 2_31.3	31.3	4.7	40	40	74	71	102	102	50
A 20 2_35.4	35.4	4.7	40	40	74	71	102	102	50
A 20 2_39.6	39.6	2.4	38	38	71	69	100	100	47
A 20 2_43.2	43.2	2.4	38	38	71	69	100	100	47
A 20 2_48.3	48.3	2.4	38	38	71	69	100	100	47
A 20 2_53.7	53.7	2.4	38	38	71	69	100	100	47
A 20 2_63.1	63.1	2.4	38	38	71	69	100	100	47
A 20 2_71.0	71.0	1.2	36	36	69	66	97	97	47
A 20 2_79.9	79.9	0.71	36	36	69	66	97	97	47
A 20 2_92.3	92.3	0.47	36	36	—	—	—	—	47
A 20 3_109.2	109.2	0.47	36	36	69	66	97	97	21
A 20 3_120.5	120.5	0.47	36	36	69	66	97	97	21
A 20 3_129.1	129.1	0.47	36	36	69	66	97	97	21
A 20 3_146.1	146.1	0.47	36	36	69	66	97	97	21
A 20 3_163.4	163.4	0.24	36	36	69	66	97	97	21
A 20 3_178.3	178.3	0.24	36	36	69	66	97	97	21
A 20 3_199.2	199.2	0.24	36	36	69	66	97	97	21
A 20 3_221.3	221.3	0.24	36	36	69	66	97	97	21
A 20 3_260.5	260.5	0.24	36	36	69	66	97	97	21
A 20 3_292.8	292.8	0.24	36	36	69	66	97	97	21
A 20 3_329.4	329.4	0.24	36	36	69	66	97	97	21
A 20 3_380.9	380.9	0.24	36	36	69	66	97	97	21

A 20

	i	J (•10 ⁻⁴) [lb•ft ²]				
			NEMA			
			N56C	N140TC	N180TC	
A 20 2_5.4	5.4	57	—	—	126	102
A 20 2_6.5	6.5	45	—	—	114	90
A 20 2_7.3	7.3	33	69	69	102	78
A 20 2_8.4	8.4	26	62	62	95	71
A 20 2_9.4	9.4	21	57	57	90	66
A 20 2_10.3	10.3	28	—	—	97	71
A 20 2_12.0	12.0	12	47	47	81	57
A 20 2_14.1	14.1	17	52	52	85	62
A 20 2_16.2	16.2	13	47	47	81	59
A 20 2_18.1	18.1	9,5	45	45	78	57
A 20 2_21.2	21.2	8,3	43	43	76	55
A 20 2_23.1	23.1	7,1	43	43	76	52
A 20 2_26.5	26.5	5,9	40	40	74	50
A 20 2_29.2	29.2	4,7	40	40	74	50
A 20 2_31.3	31.3	4,7	40	40	74	50
A 20 2_35.4	35.4	4,7	40	40	74	50
A 20 2_39.6	39.6	2,4	38	38	71	47
A 20 2_43.2	43.2	2,4	38	38	71	47
A 20 2_48.3	48.3	2,4	38	38	71	47
A 20 2_53.7	53.7	2,4	38	38	71	47
A 20 2_63.1	63.1	2,4	38	38	71	47
A 20 2_71.0	71.0	1,2	36	36	69	47
A 20 2_79.9	79.9	0,71	36	36	69	47
A 20 2_92.3	92.3	0,47	36	36	—	47
A 20 3_109.2	109.2	0,47	36	36	69	21
A 20 3_120.5	120.5	0,47	36	36	69	21
A 20 3_129.1	129.1	0,47	36	36	69	21
A 20 3_146.1	146.1	0,47	36	36	69	21
A 20 3_163.4	163.4	0,24	36	36	69	21
A 20 3_178.3	178.3	0,24	36	36	69	21
A 20 3_199.2	199.2	0,24	36	36	69	21
A 20 3_221.3	221.3	0,24	36	36	69	21
A 20 3_260.5	260.5	0,24	36	36	69	21
A 20 3_292.8	292.8	0,24	36	36	69	21
A 20 3_329.4	329.4	0,24	36	36	69	21
A 20 3_380.9	380.9	0,24	36	36	69	21

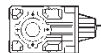


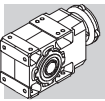
A 20



	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 20 2_5.4	5.4	—	—	—	—	—	—	126	138	123	147
A 20 2_6.5	6.5	—	—	—	—	—	—	114	126	112	135
A 20 2_7.3	7.3	40	45	40	50	100	112	102	114	100	123
A 20 2_8.4	8.4	33	38	33	43	93	109	95	107	93	116
A 20 2_9.4	9.4	28	33	28	38	88	100	90	102	88	112
A 20 2_10.3	10.3	—	—	—	—	—	—	97	109	95	119
A 20 2_12.0	12.0	18	24	19	28	78	90	81	93	78	102
A 20 2_14.1	14.1	23	28	23	33	83	95	85	97	83	107
A 20 2_16.2	16.2	19	26	20	31	81	90	81	93	78	102
A 20 2_18.1	18.1	16	22	16	26	76	88	78	90	76	100
A 20 2_21.2	21.2	15	21	15	26	76	85	76	88	74	97
A 20 2_23.1	23.1	14	20	14	24	74	85	76	88	74	97
A 20 2_26.5	26.5	12	19	13	23	74	83	74	85	71	95
A 20 2_29.2	29.2	11	17	12	22	71	83	74	85	71	95
A 20 2_31.3	31.3	11	17	12	22	71	83	74	85	71	95
A 20 2_35.4	35.4	11	17	12	22	71	83	74	85	71	95
A 20 2_39.6	39.6	8,8	15	9,3	20	69	81	71	83	69	93
A 20 2_43.2	43.2	8,8	15	9,3	20	69	81	71	83	69	93
A 20 2_48.3	48.3	8,8	15	9,3	20	69	81	71	83	69	93
A 20 2_53.7	53.7	8,8	15	9,3	20	69	81	71	83	69	93
A 20 2_63.1	63.1	8,8	15	9,3	20	69	81	71	83	69	93
A 20 2_71.0	71.0	7,6	14	—	—	—	—	69	81	66	90
A 20 2_79.9	79.9	7,1	13	—	—	—	—	69	81	66	90
A 20 2_92.3	92.3	6,9	13	—	—	—	—	—	—	—	—
A 20 3_109.2	109.2	6,9	13	7,4	18	66	78	69	81	66	90
A 20 3_120.5	120.5	6,9	13	7,4	18	66	78	69	81	66	90
A 20 3_129.1	129.1	6,9	13	7,4	18	66	78	69	81	66	90
A 20 3_146.1	146.1	6,9	13	7,4	18	66	78	69	81	66	90
A 20 3_163.4	163.4	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_178.3	178.3	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_199.2	199.2	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_221.3	221.3	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_260.5	260.5	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_292.8	292.8	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_329.4	329.4	6,6	13	7,1	18	66	78	69	81	66	90
A 20 3_380.9	380.9	6,6	13	7,1	18	66	78	69	81	66	90

A 30

	i	J (•10 ⁻⁴) [lb•ft²]							
			 IEC						
			63	71	80	90	100	112	
A 30 2_5.4	5.4	107	—	—	176	173	204	204	164
A 30 2_6.4	6.4	81	—	—	157	157	185	185	142
A 30 2_7.0	7.0	69	—	—	138	138	166	166	123
A 30 2_8.5	8.5	52	—	—	121	121	150	150	109
A 30 2_9.3	9.3	38	74	74	107	104	135	135	95
A 30 2_10.5	10.5	55	—	—	123	121	152	152	109
A 30 2_11.8	11.8	26	62	62	95	93	123	123	81
A 30 2_13.6	13.6	36	—	—	104	102	133	133	93
A 30 2_16.3	16.3	28	—	—	97	95	126	126	83
A 30 2_18.0	18.0	21	57	57	90	88	119	119	76
A 30 2_20.5	20.5	17	52	52	85	83	114	114	74
A 30 2_22.8	22.8	14	50	50	83	81	112	112	71
A 30 2_26.5	26.5	12	47	47	81	78	109	109	69
A 30 2_29.3	29.3	9.5	45	45	78	76	107	107	66
A 30 2_33.4	33.4	8.3	43	43	76	74	104	104	64
A 30 2_36.6	36.6	7.1	43	43	76	74	104	104	64
A 30 2_39.3	39.3	5.9	40	40	74	71	102	102	62
A 30 2_43.4	43.4	4.7	40	40	74	71	102	102	62
A 30 2_48.3	48.3	4.7	40	40	74	71	102	102	62
A 30 2_52.7	52.7	4.7	40	40	74	71	102	102	59
A 30 2_59.4	59.4	2.4	38	38	71	69	100	100	59
A 30 2_66.0	66.0	2.4	38	38	71	69	100	100	59
A 30 2_76.5	76.5	2.4	38	38	71	69	100	100	59
A 30 2_86.7	86.7	2.4	38	38	71	69	100	100	59
A 30 2_97.5	97.5	2.4	38	38	71	69	100	100	57
A 30 3_109.1	109.1	2.4	38	38	71	69	100	100	21
A 30 3_120.5	120.5	2.4	38	38	71	69	100	100	21
A 30 3_137.4	137.4	2.4	38	38	71	69	100	100	21
A 30 3_150.7	150.7	2.4	38	38	71	69	100	100	21
A 30 3_161.4	161.4	2.4	38	38	71	69	100	100	21
A 30 3_178.5	178.5	2.4	38	38	71	69	100	100	21
A 30 3_198.5	198.5	2.4	38	38	71	69	100	100	21
A 30 3_216.6	216.6	2.4	38	38	71	69	100	100	21
A 30 3_244.3	244.3	2.4	38	38	71	69	100	100	21
A 30 3_271.5	271.5	2.4	38	38	71	69	100	100	21
A 30 3_314.5	314.5	2.4	38	38	71	69	100	100	21
A 30 3_356.3	356.3	1.4	38	38	71	69	100	100	21
A 30 3_400.8	400.8	0.95	36	38	69	66	97	97	21

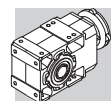


A 30

	i	J (•10 ⁻⁴) [lb•ft ²]			
			NEMA		
			N56C	N140TC	N180TC
A 30 2_5.4	5.4	107	—	—	176
A 30 2_6.4	6.4	81	—	—	157
A 30 2_7.0	7.0	69	—	—	138
A 30 2_8.5	8.5	52	—	—	121
A 30 2_9.3	9.3	38	74	74	107
A 30 2_10.5	10.5	55	—	—	123
A 30 2_11.8	11.8	26	62	62	95
A 30 2_13.6	13.6	36	—	—	104
A 30 2_16.3	16.3	28	—	—	97
A 30 2_18.0	18.0	21	57	57	90
A 30 2_20.5	20.5	17	52	52	85
A 30 2_22.8	22.8	14	50	50	83
A 30 2_26.5	26.5	12	47	47	81
A 30 2_29.3	29.3	9,5	45	45	78
A 30 2_33.4	33.4	8,3	43	43	76
A 30 2_36.6	36.6	7,1	43	43	76
A 30 2_39.3	39.3	5,9	40	40	74
A 30 2_43.4	43.4	4,7	40	40	74
A 30 2_48.3	48.3	4,7	40	40	74
A 30 2_52.7	52.7	4,7	40	40	74
A 30 2_59.4	59.4	2,4	38	38	71
A 30 2_66.0	66.0	2,4	38	38	71
A 30 2_76.5	76.5	2,4	38	38	71
A 30 2_86.7	86.7	2,4	38	38	71
A 30 2_97.5	97.5	2,4	38	38	71
A 30 3_109.1	109.1	2,4	38	38	71
A 30 3_120.5	120.5	2,4	38	38	71
A 30 3_137.4	137.4	2,4	38	38	71
A 30 3_150.7	150.7	2,4	38	38	71
A 30 3_161.4	161.4	2,4	38	38	71
A 30 3_178.5	178.5	2,4	38	38	71
A 30 3_198.5	198.5	2,4	38	38	71
A 30 3_216.6	216.6	2,4	38	38	71
A 30 3_244.3	244.3	2,4	38	38	71
A 30 3_271.5	271.5	2,4	38	38	71
A 30 3_314.5	314.5	2,4	38	38	71
A 30 3_356.3	356.3	1,4	38	38	71
A 30 3_400.8	400.8	0,95	36	36	69

A 30

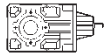
	i	J (•10 ⁻⁴) [lb•ft ²]											
		 SERVO											
		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 30 2_5.4	5.4	—	—	—	—	—	—	176	187	173	197	173	197
A 30 2_6.4	6.4	—	—	—	—	—	—	157	168	157	180	157	180
A 30 2_7.0	7.0	—	—	—	—	—	—	138	150	138	161	138	161
A 30 2_8.5	8.5	—	—	—	—	—	—	121	133	121	145	121	145
A 30 2_9.3	9.3	45	50	45	55	104	116	107	119	104	128	104	128
A 30 2_10.5	10.5	—	—	—	—	—	—	123	135	121	145	121	145
A 30 2_11.8	11.8	33	38	33	43	93	104	95	107	93	116	93	116
A 30 2_13.6	13.6	—	—	—	—	—	—	104	116	102	126	102	126
A 30 2_16.3	16.3	—	—	—	—	—	—	97	109	95	119	95	119
A 30 2_18.0	18.0	28	33	28	38	88	100	90	102	88	112	88	112
A 30 2_20.5	20.5	23	28	23	33	83	95	85	97	83	107	83	107
A 30 2_22.8	22.8	21	26	21	31	81	93	83	95	81	104	81	104
A 30 2_26.5	26.5	18	24	19	28	78	90	81	93	78	102	78	102
A 30 2_29.3	29.3	16	22	16	26	76	88	78	90	76	100	76	100
A 30 2_33.4	33.4	15	21	15	26	76	85	76	88	74	97	74	97
A 30 2_36.6	36.6	14	20	14	24	74	85	76	88	74	97	74	97
A 30 2_39.3	39.3	12	19	13	23	74	83	74	85	71	95	71	95
A 30 2_43.4	43.4	11	17	12	22	71	83	74	85	71	95	71	95
A 30 2_48.3	48.3	11	17	12	22	71	83	74	85	71	95	71	95
A 30 2_52.7	52.7	11	17	12	22	71	83	74	85	71	95	71	95
A 30 2_59.4	59.4	8,8	15	9,3	20	69	81	71	83	69	93	69	93
A 30 2_66.0	66.0	8,8	15	9,3	20	69	81	71	83	69	93	69	93
A 30 2_76.5	76.5	8,8	15	9,3	20	69	81	71	83	69	93	69	93
A 30 2_86.7	86.7	8,8	15	—	—	—	—	71	83	69	93	69	93
A 30 2_97.5	97.5	8,8	15	—	—	—	—	71	83	69	93	69	93
A 30 3_109.1	109.1	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_120.5	120.5	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_137.4	137.4	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_150.7	150.7	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_161.4	161.4	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_178.5	178.5	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_198.5	198.5	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_216.6	216.6	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_244.3	244.3	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_271.5	271.5	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_314.5	314.5	8,8	15	9,3	20	69	81	71	83	69	93	—	—
A 30 3_356.3	356.3	7,8	14	8,3	19	69	78	71	83	69	93	—	—
A 30 3_400.8	400.8	7,4	14	7,8	18	69	78	69	81	66	90	—	—

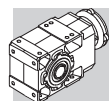


A 35

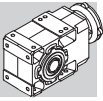
	i	J (•10 ⁻⁴) [lb•ft ²]								
			 IEC							
			63	71	80	90	100	112	132	
A 35 2_5.4	5.4	173	—	—	237	235	261	261	570	223
A 35 2_6.4	6.4	128	—	—	192	190	218	218	522	176
A 35 2_7.0	7.0	109	—	—	173	171	199	199	498	157
A 35 2_8.5	8.5	78	—	—	145	140	168	168	475	128
A 35 2_9.3	9.3	66	83	83	133	128	157	157	451	116
A 35 2_10.6	10.6	50	69	69	116	114	142	142	451	100
A 35 2_11.8	11.8	43	59	59	109	104	135	135	427	93
A 35 2_13.1	13.1	71	—	—	135	133	161	161	—	119
A 35 2_15.5	15.5	52	—	—	119	116	145	145	—	102
A 35 2_17.0	17.0	47	—	—	112	109	138	138	—	95
A 35 2_20.4	20.4	38	—	—	102	100	128	128	—	85
A 35 2_22.5	22.5	31	47	47	97	93	121	121	—	81
A 35 2_25.7	25.7	23	40	40	88	85	114	114	—	71
A 35 2_28.4	28.4	20	38	38	85	83	112	112	—	69
A 35 2_33.2	33.2	16	33	33	83	78	107	107	—	66
A 35 2_36.6	36.6	14	31	31	78	76	104	104	—	62
A 35 2_41.8	41.8	11	28	28	76	74	102	102	—	59
A 35 2_45.8	45.8	10	26	26	76	74	102	102	—	59
A 35 2_49.1	49.1	9.0	26	26	74	71	100	100	—	57
A 35 2_54.3	54.3	7.8	26	24	74	71	100	100	—	57
A 35 2_60.4	60.4	6.9	24	24	71	69	97	97	—	55
A 35 2_65.8	65.8	5.9	24	24	71	69	97	97	—	55
A 35 2_74.3	74.3	5.0	23	22	71	66	97	97	—	55
A 35 2_82.5	82.5	4.3	22	21	69	66	95	95	—	52
A 35 2_95.6	95.6	3.6	21	21	69	66	95	95	—	52
A 35 3_105.5	105.5	2.6	21	21	69	66	95	95	—	19
A 35 3_116.9	116.9	2.6	21	21	69	66	95	95	—	19
A 35 3_136.3	136.3	2.4	21	20	69	66	95	95	—	19
A 35 3_150.6	150.6	2.1	20	20	69	66	95	95	—	18
A 35 3_171.8	171.8	1.9	20	20	69	66	95	95	—	18
A 35 3_188.3	188.3	1.9	20	20	69	64	95	95	—	18
A 35 3_201.8	201.8	1.9	20	20	69	64	95	95	—	18
A 35 3_223.2	223.2	1.9	20	20	69	64	95	95	—	18
A 35 3_248.1	248.1	1.7	20	20	69	64	95	95	—	18
A 35 3_270.7	270.7	1.7	20	20	69	64	95	95	—	18
A 35 3_305.4	305.4	1.7	20	20	69	64	95	95	—	18
A 35 3_339.3	339.3	1.7	20	20	69	64	95	95	—	18
A 35 3_393.2	393.2	1.7	20	20	69	64	93	93	—	18

A 35

	i	J (•10 ⁻⁴) [lb•ft ²]					
			NEMA				
			N56C	N140TC	N180TC	N210TC	
A 35 2_5.4	5.4	173	—	—	237	570	223
A 35 2_6.4	6.4	128	—	—	192	522	176
A 35 2_7.0	7.0	109	—	—	173	498	157
A 35 2_8.5	8.5	78	—	—	145	475	128
A 35 2_9.3	9.3	66	83	83	133	451	116
A 35 2_10.6	10.6	50	69	69	116	451	100
A 35 2_11.8	11.8	43	59	59	109	427	93
A 35 2_13.1	13.1	71	—	—	135	—	119
A 35 2_15.5	15.5	52	—	—	119	—	102
A 35 2_17.0	17.0	47	—	—	112	—	95
A 35 2_20.4	20.4	38	—	—	102	—	85
A 35 2_22.5	22.5	31	47	47	97	—	81
A 35 2_25.7	25.7	23	40	40	88	—	71
A 35 2_28.4	28.4	20	38	38	85	—	69
A 35 2_33.2	33.2	16	33	33	83	—	66
A 35 2_36.6	36.6	14	31	31	78	—	62
A 35 2_41.8	41.8	11	28	28	76	—	59
A 35 2_45.8	45.8	10	26	26	76	—	59
A 35 2_49.1	49.1	9,0	26	26	74	—	57
A 35 2_54.3	54.3	7,8	26	26	74	—	57
A 35 2_60.4	60.4	6,9	24	24	71	—	55
A 35 2_65.8	65.8	5,9	24	24	71	—	55
A 35 2_74.3	74.3	5,0	23	23	71	—	55
A 35 2_82.5	82.5	4,3	22	22	69	—	52
A 35 2_95.6	95.6	3,6	21	21	69	—	52
A 35 3_105.5	105.5	2,6	21	21	69	—	19
A 35 3_116.9	116.9	2,6	21	21	69	—	19
A 35 3_136.3	136.3	2,4	21	21	69	—	19
A 35 3_150.6	150.6	2,1	20	20	69	—	18
A 35 3_171.8	171.8	1,9	20	20	69	—	18
A 35 3_188.3	188.3	1,9	20	20	69	—	18
A 35 3_201.8	201.8	1,9	20	20	69	—	18
A 35 3_223.2	223.2	1,9	20	20	69	—	18
A 35 3_248.1	248.1	1,7	20	20	69	—	18
A 35 3_270.7	270.7	1,7	20	20	69	—	18
A 35 3_305.4	305.4	1,7	20	20	69	—	18
A 35 3_339.3	339.3	1,7	20	20	69	—	18
A 35 3_393.2	393.2	1,7	20	20	69	—	18

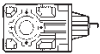


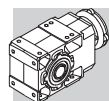
A 35



		J (•10-4) [lb•ft ²]													
		 SERVO													
		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A			
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 35 2_5.4	5.4	—	—	—	—	—	—	237	261	235	259	235	261		
A 35 2_6.4	6.4	—	—	—	—	—	—	192	204	190	214	190	214		
A 35 2_7.0	7.0	—	—	—	—	—	—	173	185	171	195	171	195		
A 35 2_8.5	8.5	—	—	—	—	—	—	145	157	140	164	140	164		
A 35 2_9.3	9.3	74	78	74	83	133	145	133	145	128	152	128	152		
A 35 2_10.6	10.6	57	62	57	66	116	128	116	128	114	138	114	138		
A 35 2_11.8	11.8	50	55	50	59	109	121	109	121	104	128	104	128		
A 35 2_13.1	13.1	—	—	—	—	—	—	135	147	133	157	133	157		
A 35 2_15.5	15.5	—	—	—	—	—	—	119	131	116	140	116	140		
A 35 2_17.0	17.0	—	—	—	—	—	—	112	123	109	133	109	133		
A 35 2_20.4	20.4	—	—	—	—	—	—	102	114	100	123	100	123		
A 35 2_22.5	22.5	38	43	38	47	97	109	97	109	93	116	93	116		
A 35 2_25.7	25.7	28	36	31	40	90	100	88	100	85	109	85	109		
A 35 2_28.4	28.4	26	33	28	38	88	97	85	97	83	107	83	107		
A 35 2_33.2	33.2	23	28	23	33	83	93	83	95	78	102	78	102		
A 35 2_36.6	36.6	20	26	21	31	81	90	78	90	76	100	76	100		
A 35 2_41.8	41.8	18	24	18	28	78	88	76	88	74	97	74	97		
A 35 2_45.8	45.8	16	23	17	26	76	88	76	88	74	97	74	97		
A 35 2_49.1	49.1	15	22	16	26	76	85	74	85	71	95	71	95		
A 35 2_54.3	54.3	14	20	15	26	76	85	74	85	71	95	71	95		
A 35 2_60.4	60.4	13	19	14	24	74	83	71	83	69	93	69	93		
A 35 2_65.8	65.8	12	19	13	23	74	83	71	83	69	93	69	93		
A 35 2_74.3	74.3	11	18	12	22	71	83	71	83	66	90	66	90		
A 35 2_82.5	82.5	11	17	11	22	71	81	69	81	66	90	66	90		
A 35 2_95.6	95.6	10	16	10	21	71	81	69	81	66	90	66	90		
A 35 3_105.5	105.5	9,0	15	9,5	20	69	81	69	81	66	90	—	—		
A 35 3_116.9	116.9	9,0	15	9,5	20	69	81	69	81	66	90	—	—		
A 35 3_136.3	136.3	8,8	15	9,3	20	69	81	69	81	66	90	—	—		
A 35 3_150.6	150.6	8,5	15	9,0	19	69	78	69	81	66	90	—	—		
A 35 3_171.8	171.8	8,3	14	8,8	19	69	78	69	81	66	90	—	—		
A 35 3_188.3	188.3	8,3	14	8,8	19	69	78	69	81	64	88	—	—		
A 35 3_201.8	201.8	8,3	14	8,8	19	69	78	69	81	64	88	—	—		
A 35 3_223.2	223.2	8,3	14	8,8	19	69	78	69	81	64	88	—	—		
A 35 3_248.1	248.1	8,1	14	8,5	19	69	78	69	81	64	88	—	—		
A 35 3_270.7	270.7	8,1	14	8,5	19	69	78	69	81	64	88	—	—		
A 35 3_305.4	305.4	8,1	14	8,5	19	69	78	69	81	64	88	—	—		
A 35 3_339.3	339.3	8,1	14	8,5	19	69	78	69	81	64	88	—	—		
A 35 3_393.2	393.2	8,1	14	8,5	19	69	78	69	81	64	88	—	—		

A 41

	i	J (•10 ⁻⁴) [lb•ft ²]								
			63	71	80	90	100	112	132	
A 41 2_5.2	5.2	308	—	—	380	380	403	403	759	546
A 41 2_7.1	7.1	173	—	—	237	237	261	261	617	427
A 41 2_8.3	8.3	140	—	—	209	206	237	237	593	380
A 41 2_9.2	9.2	107	—	—	176	173	204	204	546	356
A 41 2_10.1	10.1	140	—	—	209	206	237	237	593	380
A 41 2_11.7	11.7	69	104	104	138	135	166	166	522	308
A 41 2_13.8	13.8	85	—	—	154	152	183	183	546	332
A 41 2_16.1	16.1	69	—	—	138	135	166	166	522	308
A 41 2_17.8	17.8	52	—	—	121	119	150	150	498	261
A 41 2_22.7	22.7	36	71	71	104	102	133	133	475	261
A 41 2_28.3	28.3	26	62	62	95	93	123	123	475	237
A 41 2_35.9	35.9	40	76	76	109	107	138	138	475	233
A 41 2_45.1	45.1	36	71	71	104	102	133	133	475	228
A 41 2_48.3	48.3	33	69	69	102	100	131	131	—	225
A 41 2_53.1	53.1	33	69	69	102	100	131	131	—	225
A 41 2_58.8	58.8	31	66	66	100	97	128	128	—	223
A 41 2_64.2	64.2	31	66	66	100	97	128	128	—	223
A 41 2_71.3	71.3	28	64	64	97	95	126	126	—	221
A 41 2_79.2	79.2	28	64	64	97	95	126	126	—	221
A 41 3_92.8	92.8	26	62	62	95	93	123	123	—	218
A 41 3_115.9	115.9	4.7	40	40	69	71	102	102	—	50
A 41 3_146.9	146.9	2.4	38	38	66	69	100	100	—	50
A 41 3_184.4	184.4	2.4	38	38	66	69	100	100	—	50
A 41 3_197.5	197.5	2.4	38	38	66	69	100	100	—	47
A 41 3_217.4	217.4	2.4	38	38	66	69	100	100	—	47
A 41 3_240.6	240.6	2.4	38	38	66	69	100	100	—	47
A 41 3_262.5	262.5	2.4	38	38	66	69	100	100	—	47
A 41 3_291.7	291.7	2.4	38	38	66	69	100	100	—	47
A 41 3_324.2	324.2	2.4	38	38	66	69	100	100	—	47
A 41 3_376.8	376.8	2.4	38	38	66	69	100	100	—	47

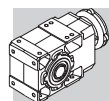


A 41

	i	J (•10 ⁻⁴) [lb•ft ²]					
			NEMA				
			N56C	N140TC	N180TC	N210TC	
A 41 2_5.2	5.2	308	—	—	380	759	546
A 41 2_7.1	7.1	173	—	—	237	617	427
A 41 2_8.3	8.3	140	—	—	209	593	380
A 41 2_9.2	9.2	107	—	—	176	546	356
A 41 2_10.1	10.1	140	—	—	209	593	380
A 41 2_11.7	11.7	69	104	104	138	522	308
A 41 2_13.8	13.8	85	—	—	154	546	332
A 41 2_16.1	16.1	69	—	—	138	522	308
A 41 2_17.8	17.8	52	—	—	121	498	261
A 41 2_22.7	22.7	36	71	71	104	475	261
A 41 2_28.3	28.3	26	62	62	95	475	237
A 41 2_35.9	35.9	40	76	76	109	475	233
A 41 2_45.1	45.1	36	71	71	104	475	228
A 41 2_48.3	48.3	33	69	69	102	—	225
A 41 2_53.1	53.1	33	69	69	102	—	225
A 41 2_58.8	58.8	31	66	66	100	—	223
A 41 2_64.2	64.2	31	66	66	100	—	223
A 41 2_71.3	71.3	28	64	64	97	—	221
A 41 2_79.2	79.2	28	64	64	97	—	221
A 41 3_92.8	92.8	26	62	62	95	—	218
A 41 3_115.9	115.9	4,7	40	40	69	—	50
A 41 3_146.9	146.9	2,4	38	38	66	—	50
A 41 3_184.4	184.4	2,4	38	38	66	—	50
A 41 3_197.5	197.5	2,4	38	38	66	—	47
A 41 3_217.4	217.4	2,4	38	38	66	—	47
A 41 3_240.6	240.6	2,4	38	38	66	—	47
A 41 3_262.5	262.5	2,4	38	38	66	—	47
A 41 3_291.7	291.7	2,4	38	38	66	—	47
A 41 3_324.2	324.2	2,4	38	38	66	—	47
A 41 3_376.8	376.8	2,4	38	38	66	—	47

A 41

	i	J ($\cdot 10^{-4}$) [lb•ft ²]																	
		 SERVO																	
		60A		60B 80A		80B		95A		80C 95B 110A		95C 110B		130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 41 2_5.2	5.2	—	—	—	—	—	—	—	—	380	392	380	403	380	403	712	759	759	878
A 41 2_7.1	7.1	—	—	—	—	—	—	—	—	237	249	237	261	237	261	570	641	617	736
A 41 2_8.3	8.3	—	—	—	—	—	—	—	—	209	221	206	230	206	230	546	593	593	712
A 41 2_9.2	9.2	—	—	—	—	—	—	—	—	176	187	173	197	173	197	498	570	546	664
A 41 2_10.1	10.1	—	—	—	—	—	—	—	—	209	221	206	230	206	230	546	593	593	712
A 41 2_11.7	11.7	—	—	—	—	135	147	135	147	138	150	135	159	135	159	475	522	522	641
A 41 2_13.8	13.8	—	—	—	—	—	—	—	—	154	166	152	176	152	176	498	546	546	664
A 41 2_16.1	16.1	—	—	—	—	—	—	—	—	138	150	135	159	135	159	475	522	522	641
A 41 2_17.8	17.8	—	—	—	—	—	—	—	—	121	133	119	142	119	142	451	522	498	617
A 41 2_22.7	22.7	—	—	—	—	102	114	102	114	104	116	102	126	102	126	427	498	475	593
A 41 2_28.3	28.3	—	—	—	—	93	104	93	104	95	107	93	116	93	116	427	498	475	593
A 41 2_35.9	35.9	—	—	—	—	107	119	107	119	109	121	107	131	107	131	451	498	475	593
A 41 2_45.1	45.1	—	—	—	—	102	114	102	114	104	116	102	126	102	126	427	498	475	593
A 41 2_48.3	48.3	—	—	—	—	100	112	100	112	102	114	100	123	100	123	—	—	—	—
A 41 2_53.1	53.1	—	—	—	—	100	112	100	112	102	114	100	123	100	123	—	—	—	—
A 41 2_58.8	58.8	—	—	—	—	97	109	97	109	100	112	97	121	97	121	—	—	—	—
A 41 2_64.2	64.2	—	—	—	—	97	109	97	109	100	112	97	121	97	121	—	—	—	—
A 41 2_71.3	71.3	—	—	—	—	95	107	95	107	97	109	95	119	95	119	—	—	—	—
A 41 2_79.2	79.2	—	—	—	—	95	107	95	107	97	109	95	119	95	119	—	—	—	—
A 41 3_92.8	92.8	33	38	33	43	—	—	93	104	95	107	93	116	—	—	—	—	—	—
A 41 3_115.9	115.9	11	17	12	22	—	—	71	83	69	81	71	95	—	—	—	—	—	—
A 41 3_146.9	146.9	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_184.4	184.4	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_197.5	197.5	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_217.4	217.4	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_240.6	240.6	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_262.5	262.5	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_291.7	291.7	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_324.2	324.2	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—
A 41 3_376.8	376.8	9	15	9,3	20	—	—	69	81	66	78	69	93	—	—	—	—	—	—



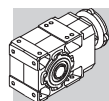
A 50

	i	J (•10 ⁻⁴) [lb•ft ²]										
			IEC 									
			63	71	80	90	100	112	132	160	180	
A 50 2_7.7	7.7	356	—	—	427	427	451	451	807	2207	2159	570
A 50 2_9.7	9.7	237	—	—	308	308	332	332	688	2112	2041	451
A 50 2_13.1	13.1	150	—	—	218	216	237	237	593	2017	1946	356
A 50 2_16.6	16.6	100	—	—	166	166	195	195	546	1946	1898	308
A 50 2_20.9	20.9	66	100	100	135	133	164	164	522	1922	1875	285
A 50 3_24.0	24.0	142	—	—	211	209	237	237	593	1993	1946	356
A 50 3_26.4	26.4	138	—	—	206	204	235	235	593	1993	1946	356
A 50 3_32.4	32.4	95	—	—	161	161	192	192	546	1946	1898	308
A 50 3_35.6	35.6	93	—	—	159	159	190	190	546	1946	1898	308
A 50 3_40.9	40.9	64	—	—	133	131	161	161	522	1922	1875	285
A 50 3_45.0	45.0	62	—	—	131	128	159	159	522	1922	1875	285
A 50 3_51.7	51.7	45	81	81	112	112	142	142	498	1898	1851	261
A 50 3_56.8	56.8	45	78	78	112	109	140	140	498	1898	1851	261
A 50 3_63.9	63.9	33	69	66	100	100	131	131	475	1898	1827	261
A 50 3_70.2	70.2	33	66	66	100	97	128	128	475	1898	1827	237
A 50 3_81.5	81.5	21	57	57	90	88	119	119	475	1875	1827	237
A 50 3_89.5	89.5	21	57	57	88	88	119	119	475	1875	1827	237
A 50 3_99.5	99.5	14	50	50	83	81	112	112	475	1875	1827	230
A 50 3_109.4	109.4	14	50	50	83	81	112	112	475	1875	1827	230
A 50 3_118.0	118.0	12	47	47	81	78	109	109	—	—	—	228
A 50 3_129.7	129.7	12	47	47	81	78	109	109	—	—	—	228
A 50 3_140.6	140.6	9.5	43	43	76	76	104	104	—	—	—	223
A 50 3_154.6	154.6	9.5	43	43	76	76	104	104	—	—	—	223
A 50 3_173.4	173.4	7.1	40	40	74	71	102	102	—	—	—	221
A 50 3_190.6	190.6	4.7	40	40	74	71	102	102	—	—	—	221

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

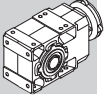
A 50

	i	J (•10 ⁻⁴) [lb•ft ²]							
			NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
A 50 2_7.7	7.7	356	—	—	427	807	2207	2159	570
A 50 2_9.7	9.7	237	—	—	308	688	2112	2041	451
A 50 2_13.1	13.1	150	—	—	218	593	2017	1946	356
A 50 2_16.6	16.6	100	—	—	166	546	1946	1898	308
A 50 2_20.9	20.9	66	100	100	135	522	1922	1875	285
A 50 3_24.0	24.0	142	—	—	211	593	1993	1946	356
A 50 3_26.4	26.4	138	—	—	206	593	1993	1946	356
A 50 3_32.4	32.4	95	—	—	161	546	1946	1898	308
A 50 3_35.6	35.6	93	—	—	159	546	1946	1898	308
A 50 3_40.9	40.9	64	—	—	133	522	1922	1875	285
A 50 3_45.0	45.0	62	—	—	131	522	1922	1875	285
A 50 3_51.7	51.7	45	81	81	112	498	1898	1851	261
A 50 3_56.8	56.8	45	78	78	112	498	1898	1851	261
A 50 3_63.9	63.9	33	69	69	100	475	1898	1827	261
A 50 3_70.2	70.2	33	66	66	100	475	1898	1827	237
A 50 3_81.5	81.5	21	57	57	90	475	1875	1827	237
A 50 3_89.5	89.5	21	57	57	88	475	1875	1827	237
A 50 3_99.5	99.5	14	50	50	83	475	1875	1827	230
A 50 3_109.4	109.4	14	50	50	83	475	1875	1827	230
A 50 3_118.0	118.0	12	47	47	81	—	—	—	228
A 50 3_129.7	129.7	12	47	47	81	—	—	—	228
A 50 3_140.6	140.6	9,5	43	43	76	—	—	—	223
A 50 3_154.6	154.6	9,5	43	43	76	—	—	—	223
A 50 3_173.4	173.4	7,1	40	40	74	—	—	—	221
A 50 3_190.6	190.6	4,7	40	40	74	—	—	—	221



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

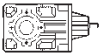
A 50

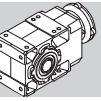


	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		80B 95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 50 2_7.7	7.7	—	—	427	451	427	451	759	807	807	925
A 50 2_9.7	9.7	—	—	308	332	308	332	641	688	688	807
A 50 2_13.1	13.1	—	—	218	230	216	237	546	617	593	712
A 50 2_16.6	16.6	—	—	166	178	166	190	498	570	546	664
A 50 2_20.9	20.9	133	145	135	147	133	157	475	522	522	641
A 50 3_24.0	24.0	—	—	211	223	209	233	546	593	593	712
A 50 3_26.4	26.4	—	—	206	218	204	228	546	593	593	712
A 50 3_32.4	32.4	—	—	161	173	161	185	498	546	546	664
A 50 3_35.6	35.6	—	—	159	171	159	183	498	546	546	664
A 50 3_40.9	40.9	—	—	133	145	131	154	475	522	522	641
A 50 3_45.0	45.0	—	—	131	142	128	152	475	522	522	641
A 50 3_51.7	51.7	112	121	112	123	112	135	451	498	498	617
A 50 3_56.8	56.8	112	121	112	123	109	133	451	498	498	617
A 50 3_63.9	63.9	100	112	100	123	100	123	427	498	475	593
A 50 3_70.2	70.2	100	112	100	123	97	121	427	498	475	593
A 50 3_81.5	81.5	88	97	90	102	88	112	427	475	475	593
A 50 3_89.5	89.5	88	97	88	100	88	112	427	475	475	593
A 50 3_99.5	99.5	81	93	83	95	81	104	427	475	475	593
A 50 3_109.4	109.4	81	93	83	95	81	104	427	475	475	593
A 50 3_118.0	118.0	78	90	81	95	78	102	—	—	—	—
A 50 3_129.7	129.7	78	90	81	95	78	102	—	—	—	—
A 50 3_140.6	140.6	76	88	76	88	76	100	—	—	—	—
A 50 3_154.6	154.6	76	88	76	88	76	100	—	—	—	—
A 50 3_173.4	173.4	74	85	74	85	71	95	—	—	—	—
A 50 3_190.6	190.6	71	83	74	85	71	95	—	—	—	—

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

A 55

	i	J ($\cdot 10^{-4}$) [lb·ft ²]										
			 IEC									
			63	71	80	90	100	112	132	160	180	
A 55 2_4.9	4.9	1448	—	—	—	—	—	—	1827	2919	2848	1661
A 55 2_6.4	6.4	973	—	—	—	—	—	—	1353	2444	2373	1187
A 55 2_8.5	8.5	617	—	—	—	—	—	—	997	2088	2017	831
A 55 2_10.4	10.4	451	—	—	—	—	—	—	831	1922	1851	664
A 55 2_13.1	13.1	285	—	—	332	332	403	403	664	1756	1709	498
A 55 2_15.7	15.7	211	—	—	261	261	332	332	593	1685	1614	427
A 55 2_19.2	19.2	147	—	—	204	202	261	261	546	1614	1566	356
A 55 3_23.8	23.8	261	—	—	308	308	380	380	641	1732	1661	475
A 55 3_29.9	29.9	187	—	—	237	237	308	308	570	1661	1590	403
A 55 3_40.3	40.3	126	—	—	185	180	237	237	522	1614	1542	332
A 55 3_51.0	51.0	85	—	—	142	140	204	204	475	1566	1495	308
A 55 3_64.3	64.3	62	74	71	121	119	183	183	451	1542	1471	285
A 55 3_79.5	79.5	47	57	57	107	104	168	168	427	1519	1471	261
A 55 3_101.4	101.4	31	43	43	90	88	154	154	427	1519	1448	237
A 55 3_123.9	123.9	24	36	36	85	81	147	147	403	1495	1448	237
A 55 3_132.7	132.7	17	33	33	83	78	145	145	—	—	—	225
A 55 3_146.8	146.8	16	33	33	81	78	142	142	—	—	—	223
A 55 3_160.4	160.4	14	31	31	78	76	142	142	—	—	—	223
A 55 3_175.0	175.0	12	28	28	78	74	140	140	—	—	—	221
A 55 3_194.2	194.2	10	28	28	76	74	138	138	—	—	—	218



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

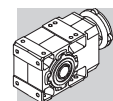
A 55

	i	J ($\cdot 10^{-4}$) [lb·ft ²]							
			NEMA 						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
A 55 2_4.9	4.9	1448	—	—	—	1827	2919	2848	1661
A 55 2_6.4	6.4	973	—	—	—	1353	2444	2373	1187
A 55 2_8.5	8.5	617	—	—	—	997	2088	2017	831
A 55 2_10.4	10.4	451	—	—	—	831	1922	1851	664
A 55 2_13.1	13.1	285	—	—	332	664	1756	1709	498
A 55 2_15.7	15.7	211	—	—	261	593	1685	1614	427
A 55 2_19.2	19.2	147	—	—	204	546	1614	1566	356
A 55 3_23.8	23.8	261	—	—	308	641	1732	1661	475
A 55 3_29.9	29.9	187	—	—	237	570	1661	1590	403
A 55 3_40.3	40.3	126	—	—	185	522	1614	1542	332
A 55 3_51.0	51.0	85	—	—	142	475	1566	1495	308
A 55 3_64.3	64.3	62	74	74	121	451	1542	1471	285
A 55 3_79.5	79.5	47	57	57	107	427	1519	1471	261
A 55 3_101.4	101.4	31	43	43	90	427	1519	1448	237
A 55 3_123.9	123.9	24	36	36	85	403	1495	1448	237
A 55 3_132.7	132.7	17	33	33	83	—	—	—	225
A 55 3_146.8	146.8	16	33	33	81	—	—	—	223
A 55 3_160.4	160.4	14	31	31	78	—	—	—	223
A 55 3_175.0	175.0	12	28	28	78	—	—	—	221
A 55 3_194.2	194.2	10	28	28	76	—	—	—	218

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

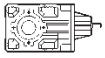
A 55

	i	J ($\cdot 10^{-4}$) [lb•ft ²]									
		 SERVO									
		80B 95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 55 2_4.9	4.9	—	—	—	—	—	—	1851	1898	1827	1946
A 55 2_6.4	6.4	—	—	—	—	—	—	1376	1424	1353	1471
A 55 2_8.5	8.5	—	—	—	—	—	—	1020	1068	997	1115
A 55 2_10.4	10.4	—	—	—	—	—	—	854	902	831	949
A 55 2_13.1	13.1	—	—	332	356	332	356	688	736	664	783
A 55 2_15.7	15.7	—	—	261	285	261	285	617	664	593	712
A 55 2_19.2	19.2	—	—	204	216	202	225	546	617	546	664
A 55 3_23.8	23.8	—	—	308	332	308	332	664	712	641	759
A 55 3_29.9	29.9	—	—	237	261	237	261	593	641	570	688
A 55 3_40.3	40.3	—	—	185	197	180	204	522	593	522	641
A 55 3_51.0	51.0	—	—	142	154	140	164	498	546	475	593
A 55 3_64.3	64.3	128	140	121	133	119	142	475	522	451	570
A 55 3_79.5	79.5	114	126	107	119	104	128	451	498	427	546
A 55 3_101.4	101.4	97	109	90	102	88	112	427	498	427	546
A 55 3_123.9	123.9	90	102	85	97	81	104	427	475	403	522
A 55 3_132.7	132.7	83	95	83	95	78	102	—	—	—	—
A 55 3_146.8	146.8	83	93	81	93	78	102	—	—	—	—
A 55 3_160.4	160.4	81	90	78	90	76	100	—	—	—	—
A 55 3_175.0	175.0	78	90	78	90	74	97	—	—	—	—
A 55 3_194.2	194.2	78	88	76	88	74	97	—	—	—	—



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

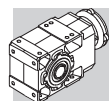
A 60

	i	J (•10 ⁻⁴) [lb•ft ²]										
			 IEC									
			63	71	80	90	100	112	132	160	180	
A 60 2_7.9	7.9	854	—	—	—	—	—	—	1281	2705	2658	1353
A 60 2_10.3	10.3	546	—	—	593	593	641	641	973	2397	2349	1044
A 60 2_12.7	12.7	380	—	—	451	451	475	475	831	2231	2183	878
A 60 2_16.7	16.7	223	—	—	285	285	332	332	664	2088	2017	712
A 60 2_20.6	20.6	159	—	—	228	225	261	261	617	2017	1970	664
A 60 3_25.7	25.7	332	—	—	403	403	427	427	783	2183	2136	831
A 60 3_27.9	27.9	332	—	—	403	403	427	427	783	2183	2136	831
A 60 3_31.7	31.7	237	—	—	308	308	356	356	688	2112	2041	736
A 60 3_34.3	34.3	237	—	—	308	308	332	332	688	2112	2041	736
A 60 3_41.7	41.7	145	—	—	214	211	237	237	593	1993	1946	641
A 60 3_45.2	45.2	145	—	—	211	211	237	237	593	1993	1946	641
A 60 3_51.3	51.3	119	—	—	176	176	206	206	570	1970	1922	617
A 60 3_55.6	55.6	107	—	—	176	173	204	204	546	1970	1922	617
A 60 3_65.0	65.0	76	112	109	145	142	173	173	522	1946	1875	570
A 60 3_70.4	70.4	76	112	109	145	142	173	173	522	1922	1875	570
A 60 3_79.7	79.7	50	85	83	119	116	147	147	498	1898	1851	546
A 60 3_86.4	86.4	50	85	83	119	116	147	147	498	1898	1851	546
A 60 3_99.5	99.5	47	83	81	102	102	133	133	475	1898	1851	546
A 60 3_107.8	107.8	36	71	69	102	102	133	133	475	1898	1851	522
A 60 3_123.0	123.0	26	62	59	95	93	123	123	475	1875	1827	522
A 60 3_133.3	133.3	26	62	59	93	93	123	123	475	1875	1827	522
A 60 3_144.0	144.0	19	55	52	88	85	119	119	—	—	—	522
A 60 3_156.0	156.0	19	55	52	88	85	119	119	—	—	—	522
A 60 3_171.5	171.5	14	50	47	83	81	112	112	—	—	—	522
A 60 3_185.8	185.8	14	50	47	83	81	112	112	—	—	—	522

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

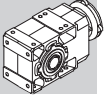
A 60

	i	J ($\cdot 10^{-4}$) [lb·ft ²]							
			NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
A 60 2_7.9	7.9	854	—	—	—	1281	2705	2658	1353
A 60 2_10.3	10.3	546	—	—	593	973	2397	2349	1044
A 60 2_12.7	12.7	380	—	—	451	831	2231	2183	878
A 60 2_16.7	16.7	223	—	—	285	664	2088	2017	712
A 60 2_20.6	20.6	159	—	—	228	617	2017	1970	664
A 60 3_25.7	25.7	332	—	—	403	783	2183	2136	831
A 60 3_27.9	27.9	332	—	—	403	783	2183	2136	831
A 60 3_31.7	31.7	237	—	—	308	688	2112	2041	736
A 60 3_34.3	34.3	237	—	—	308	688	2112	2041	736
A 60 3_41.7	41.7	145	—	—	214	593	1993	1946	641
A 60 3_45.2	45.2	145	—	—	211	593	1993	1946	641
A 60 3_51.3	51.3	119	—	—	176	570	1970	1922	617
A 60 3_55.6	55.6	107	—	—	176	546	1970	1922	617
A 60 3_65.0	65.0	76	112	112	145	522	1946	1875	570
A 60 3_70.4	70.4	76	112	112	145	522	1922	1875	570
A 60 3_79.7	79.7	50	85	85	119	498	1898	1851	546
A 60 3_86.4	86.4	50	85	85	119	498	1898	1851	546
A 60 3_99.5	99.5	47	83	83	102	475	1898	1851	546
A 60 3_107.8	107.8	36	71	71	102	475	1898	1851	522
A 60 3_123.0	123.0	26	62	62	95	475	1875	1827	522
A 60 3_133.3	133.3	26	62	62	93	475	1875	1827	522
A 60 3_144.0	144.0	19	55	55	88	—	—	—	522
A 60 3_156.0	156.0	19	55	55	88	—	—	—	522
A 60 3_171.5	171.5	14	50	50	83	—	—	—	522
A 60 3_185.8	185.8	14	50	50	83	—	—	—	522



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

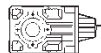
A 60

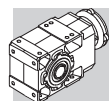


	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
A 60 2_7.9	7.9	—	—	—	—	—	—	53	55	54	59
A 60 2_10.3	10.3	—	—	593	617	593	617	949	997	973	1092
A 60 2_12.7	12.7	—	—	451	475	451	475	783	831	831	949
A 60 2_16.7	16.7	—	—	285	308	285	308	617	688	664	783
A 60 2_20.6	20.6	—	—	228	237	225	237	570	617	617	736
A 60 3_25.7	25.7	—	—	403	427	403	427	736	783	783	902
A 60 3_27.9	27.9	—	—	403	427	403	427	736	783	783	902
A 60 3_31.7	31.7	—	—	308	332	308	332	641	688	688	807
A 60 3_34.3	34.3	—	—	308	332	308	332	641	688	688	807
A 60 3_41.7	41.7	—	—	214	225	211	235	546	617	593	712
A 60 3_45.2	45.2	—	—	211	223	211	235	546	617	593	712
A 60 3_51.3	51.3	—	—	176	187	176	199	522	570	570	688
A 60 3_55.6	55.6	—	—	176	187	173	197	498	570	546	664
A 60 3_65.0	65.0	142	154	145	157	142	166	475	546	522	641
A 60 3_70.4	70.4	142	154	145	157	142	166	475	546	522	641
A 60 3_79.7	79.7	116	128	119	131	116	140	451	522	498	617
A 60 3_86.4	86.4	116	128	119	131	116	140	451	522	498	617
A 60 3_99.5	99.5	114	126	102	114	102	126	451	498	475	593
A 60 3_107.8	107.8	102	114	102	114	102	126	427	498	475	593
A 60 3_123.0	123.0	93	104	95	107	93	116	427	498	475	593
A 60 3_133.3	133.3	93	104	93	104	93	116	427	498	475	593
A 60 3_144.0	144.0	85	97	88	100	85	109	—	—	—	—
A 60 3_156.0	156.0	85	97	88	100	85	109	—	—	—	—
A 60 3_171.5	171.5	81	93	83	95	81	104	—	—	—	—
A 60 3_185.8	185.8	81	93	83	95	81	104	—	—	—	—

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

A 70

	i	J (•10 ⁻⁴) [lb•ft ²]											
			 IEC										
			80	90	100	112	132	160	180	200	225	250	
A 70 3_9.4	9.4	—	—	—	—	—	—	4438	4390	4604	—	—	3560
A 70 3_10.2	10.2	—	—	—	—	—	—	4343	4271	4509	—	—	3465
A 70 3_12.1	12.1	—	—	—	—	—	—	3560	3512	3726	—	—	2682
A 70 3_13.1	13.1	—	—	—	—	—	—	3488	3441	3654	—	—	2634
A 70 3_15.4	15.4	1068	—	—	—	—	1519	2943	2871	3821	—	—	2065
A 70 3_16.7	16.7	1044	—	—	—	—	1495	2895	2848	3061	—	—	2017
A 70 3_19.7	19.7	712	—	—	—	—	1163	2587	2539	—	—	—	1709
A 70 3_21.3	21.3	688	—	—	—	—	1139	2563	2515	—	—	—	1685
A 70 3_23.5	23.5	—	—	—	—	—	—	2753	2705	2919	—	—	1875
A 70 3_27.8	27.8	—	—	—	—	—	—	2800	2753	2966	—	—	1922
A 70 3_30.1	30.1	—	—	—	—	—	—	2776	2729	2943	—	—	1922
A 70 3_35.4	35.4	617	—	—	—	—	1068	2468	2420	2634	—	—	1590
A 70 3_38.4	38.4	593	—	—	—	—	1044	2468	2397	2634	—	—	1590
A 70 3_45.2	45.2	427	—	—	—	—	878	2302	2231	—	—	—	1400
A 70 3_49.0	49.0	427	—	—	—	—	878	2278	2231	—	—	—	1400
A 70 3_53.2	53.2	356	—	—	—	—	807	2207	2159	—	—	—	1329
A 70 3_57.7	57.7	356	—	—	—	—	807	2207	2159	—	—	—	1329
A 70 3_66.9	66.9	230	285	285	308	308	688	2088	2041	—	—	—	1210
A 70 3_72.5	72.5	228	285	285	308	308	664	2088	2041	—	—	—	1210
A 70 3_79.3	79.3	161	223	221	261	261	617	2017	1970	—	—	—	1139
A 70 3_85.9	85.9	159	221	221	261	261	617	2017	1970	—	—	—	1139
A 70 3_96.2	96.2	128	195	195	223	223	570	1993	1946	—	—	—	1115
A 70 3_104.2	104.2	128	195	192	223	223	570	1993	1922	—	—	—	1115
A 70 3_120.6	120.6	81	147	147	178	178	522	1946	1875	—	—	—	1068
A 70 3_130.7	130.7	81	147	147	176	176	522	1946	1875	—	—	—	1068
A 70 3_141.9	141.9	57	126	123	154	154	498	1922	1851	—	—	—	1044
A 70 3_153.7	153.7	57	123	123	154	154	498	1922	1851	—	—	—	1044



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

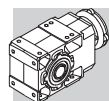
A 70

	i	J (•10 ⁻⁴) [lb•ft ²]					
			NEMA 				
			N180TC	N210TC	N250TC	N280TC	
A 70 3_9.4	9.4	—	—	—	4438	4390	3560
A 70 3_10.2	10.2	—	—	—	4343	4271	3465
A 70 3_12.1	12.1	—	—	—	3560	3512	2682
A 70 3_13.1	13.1	—	—	—	3488	3441	2634
A 70 3_15.4	15.4	1068	—	1519	2943	2871	2065
A 70 3_16.7	16.7	1044	—	1495	2895	2848	2017
A 70 3_19.7	19.7	712	—	1163	2587	2539	1709
A 70 3_21.3	21.3	688	—	1139	2563	2515	1685
A 70 3_23.5	23.5	—	—	—	2753	2705	1875
A 70 3_27.8	27.8	—	—	—	2800	2753	1922
A 70 3_30.1	30.1	—	—	—	2776	2729	1922
A 70 3_35.4	35.4	617	—	1068	2468	2420	1590
A 70 3_38.4	38.4	593	—	1044	2468	2397	1590
A 70 3_45.2	45.2	427	—	878	2302	2231	1400
A 70 3_49.0	49.0	427	—	878	2278	2231	1400
A 70 3_53.2	53.2	356	—	807	2207	2159	1329
A 70 3_57.7	57.7	356	—	807	2207	2159	1329
A 70 3_66.9	66.9	230	285	688	2088	2041	1210
A 70 3_72.5	72.5	228	285	664	2088	2041	1210
A 70 3_79.3	79.3	161	223	617	2017	1970	1139
A 70 3_85.9	85.9	159	221	617	2017	1970	1139
A 70 3_96.2	96.2	128	195	570	1993	1946	1115
A 70 3_104.2	104.2	128	195	570	1993	1922	1115
A 70 3_120.6	120.6	81	147	522	1946	1875	1068
A 70 3_130.7	130.7	81	147	522	1946	1875	1068
A 70 3_141.9	141.9	57	126	498	1922	1851	1044
A 70 3_153.7	153.7	57	123	498	1922	1851	1044

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

A 80

	i	J (•10 ⁻⁴) [lb•ft ²]												
			 IEC											
			80	90	100	112	132	160	180	200	225	250		
A 80 3_9.8	9.8	—	—	—	—	—	—	—	7594	7902	14499	—	6787	
A 80 3_10.7	10.7	—	—	—	—	—	—	—	7333	7665	14262	—	6550	
A 80 3_12.3	12.3	—	—	—	—	—	—	5672	5672	6004	12601	—	4865	
A 80 3_13.3	13.3	—	—	—	—	—	—	5505	5529	5838	12435	—	4722	
A 80 3_15.5	15.5	—	—	—	—	—	—	4438	4390	4604	11343	—	3560	
A 80 3_16.7	16.7	—	—	—	—	—	—	4343	4271	4509	11248	—	3560	
A 80 3_19.3	19.3	1637	—	—	—	—	2088	3488	3441	3654	10441	—	2634	
A 80 3_20.9	20.9	1566	—	—	—	—	2017	3441	3370	3607	10370	—	2563	
A 80 3_22.6	22.6	—	—	—	—	—	—	—	4865	5197	11770	—	4058	
A 80 3_24.5	24.5	—	—	—	—	—	—	—	4817	5149	11723	—	4010	
A 80 3_28.2	28.2	—	—	—	—	—	—	3916	3939	4248	10845	—	3132	
A 80 3_30.6	30.6	—	—	—	—	—	—	3892	3892	4224	10821	—	3085	
A 80 3_35.5	35.5	—	—	—	—	—	—	3322	3275	3488	10252	—	2468	
A 80 3_38.5	38.5	—	—	—	—	—	—	3322	3251	3488	10228	—	2444	
A 80 3_44.5	44.5	925	—	—	—	—	1376	2800	2729	2966	9729	—	1922	
A 80 3_48.2	48.2	925	—	—	—	—	1376	2776	2729	2943	9729	—	2136	
A 80 3_55.2	55.2	688	—	—	—	—	1139	2563	2492	3227	9468	—	1661	
A 80 3_59.8	59.8	688	—	—	—	—	1139	2539	2492	3227	9468	—	1661	
A 80 3_66.8	66.8	522	—	—	—	—	973	2397	2326	3037	9279	—	1495	
A 80 3_72.4	72.4	522	—	—	—	—	973	2373	2326	3037	9279	—	1495	
A 80 3_82.3	82.3	356	403	403	427	427	807	2231	2159	2848	9112	—	1329	
A 80 3_89.2	89.2	356	403	403	427	427	807	2207	2159	2848	9160	—	1329	
A 80 3_96.0	96.0	332	380	380	403	403	759	2183	2136	2824	9065	—	1305	
A 80 3_104.0	104.0	308	380	380	403	403	759	2183	2112	2824	9065	—	1305	
A 80 3_116.0	116.0	216	285	285	308	308	664	2065	2017	—	—	—	1187	
A 80 3_125.6	125.6	216	285	285	308	308	664	2065	2017	—	—	—	1187	
A 80 3_144.7	144.7	128	197	195	237	237	570	1993	1946	—	—	—	1115	
A 80 3_156.8	156.8	128	71	69	100	100	451	1851	1804	—	—	—	973	



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

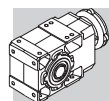
A 80

	i	J (•10 ⁻⁴) [lb•ft ²]						
			NEMA 					
			N180TC	N210TC	N250TC	N280TC	N320TC	
A 80 3_9.8	9.8	—	—	—	—	7594	14499	6787
A 80 3_10.7	10.7	—	—	—	—	7333	14262	6550
A 80 3_12.3	12.3	—	—	—	5672	5672	12601	4865
A 80 3_13.3	13.3	—	—	—	5505	5529	12435	4722
A 80 3_15.5	15.5	—	—	—	4438	4390	11343	3560
A 80 3_16.7	16.7	—	—	—	4343	4271	11248	3560
A 80 3_19.3	19.3	1637	—	2088	3488	3441	10441	2634
A 80 3_20.9	20.9	1566	—	2017	3441	3370	10370	2563
A 80 3_22.6	22.6	—	—	—	—	4865	11770	4058
A 80 3_24.5	24.5	—	—	—	—	4817	11723	4010
A 80 3_28.2	28.2	—	—	—	3916	3939	10845	3132
A 80 3_30.6	30.6	—	—	—	3892	3892	10821	3085
A 80 3_35.5	35.5	—	—	—	3322	3275	10252	2468
A 80 3_38.5	38.5	—	—	—	3322	3251	10228	2444
A 80 3_44.5	44.5	925	—	1376	2800	2729	9729	1922
A 80 3_48.2	48.2	925	—	1376	2776	2729	9729	2136
A 80 3_55.2	55.2	688	—	1139	2563	2492	9468	1661
A 80 3_59.8	59.8	688	—	1139	2539	2492	9468	1661
A 80 3_66.8	66.8	522	—	973	2397	2326	9279	1495
A 80 3_72.4	72.4	522	—	973	2373	2326	9279	1495
A 80 3_82.3	82.3	356	403	807	2231	2159	9112	1329
A 80 3_89.2	89.2	356	403	807	2207	2159	9160	1329
A 80 3_96.0	96.0	332	380	759	2183	2136	9065	1305
A 80 3_104.0	104.0	308	380	759	2183	2112	9065	1305
A 80 3_116.0	116.0	216	285	664	2065	2017	—	1187
A 80 3_125.6	125.6	216	285	664	2065	2017	—	1187
A 80 3_144.7	144.7	128	197	570	1993	1946	—	1115
A 80 3_156.8	156.8	128	71	451	1851	1804	—	973

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

A 90

	i	J (•10 ⁻⁴) [lb•ft ²]											
			 IEC										
			80	90	100	112	132	160	180	200	225	250	
A 90 3_9.7	9.7	—	—	—	—	—	—	—	14167	14499	21096	21784	21310
A 90 3_10.5	10.5	—	—	—	—	—	—	—	13645	13977	20574	21262	20788
A 90 3_12.6	12.6	—	—	—	—	—	—	—	9540	9872	16445	17157	16682
A 90 3_13.7	13.7	—	—	—	—	—	—	—	9231	9563	16160	16849	16374
A 90 3_15.6	15.6	—	—	—	—	—	—	—	7261	7570	14167	14879	14404
A 90 3_16.9	16.9	—	—	—	—	—	—	—	7048	7380	13977	14665	14191
A 90 3_19.4	19.4	—	—	—	—	—	—	5600	5553	5766	12506	13265	12577
A 90 3_21.0	21.0	—	—	—	—	—	—	5482	5411	5648	12387	13123	12435
A 90 3_22.3	22.3	—	—	—	—	—	—	—	7736	8068	14665	15354	14879
A 90 3_24.1	24.1	—	—	—	—	—	—	—	7641	7973	14570	15259	14784
A 90 3_29.1	29.1	—	—	—	—	—	—	—	5766	6099	12696	13384	12909
A 90 3_31.5	31.5	—	—	—	—	—	—	—	5719	6028	12625	13336	12862
A 90 3_35.8	35.8	—	—	—	—	—	—	—	4770	5102	11699	12387	11913
A 90 3_38.8	38.8	—	—	—	—	—	—	—	4746	5055	11652	12364	11865
A 90 3_44.6	44.6	—	—	—	—	—	—	4010	3939	4177	10916	11652	10963
A 90 3_48.3	48.3	—	—	—	—	—	—	3987	3916	4153	10892	11628	10940
A 90 3_55.0	55.0	1566	—	—	—	—	2017	3417	3370	3583	10370	11106	10394
A 90 3_59.6	59.6	1566	—	—	—	—	1993	3417	3346	3583	10346	11106	10370
A 90 3_68.8	68.8	1139	—	—	—	—	1590	2990	2943	3654	9919	10655	9872
A 90 3_74.5	74.5	1115	—	—	—	—	1566	2990	2919	3654	9896	10655	9872
A 90 3_80.4	80.4	1020	—	—	—	—	1471	2871	2824	3536	9777	10513	9777
A 90 3_87.1	87.1	1020	—	—	—	—	1471	2871	2824	3512	9777	10513	9777
A 90 3_98.6	98.6	664	712	712	759	759	1115	2515	2468	3180	9421	10157	9468
A 90 3_106.8	106.8	664	712	712	736	736	1115	2515	2468	3156	9421	10157	9468
A 90 3_116.9	116.9	546	593	593	617	617	973	2397	2349	3037	9279	10038	9350
A 90 3_126.6	126.6	522	593	593	617	617	973	2397	2326	3037	9279	10014	9350
A 90 3_139.4	139.4	356	403	403	451	451	783	2207	2159	—	—	—	9160
A 90 3_151.0	151.0	332	71	71	102	102	451	1875	1804	—	—	—	8828



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

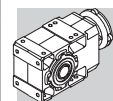
A 90

	i	J ($\cdot 10^{-4}$) [lb·ft ²]						
			NEMA 					
			N180TC	N210TC	N250TC	N280TC	N320TC	
A 90 3_9.7	9.7	—	—	—	—	14167	21096	21310
A 90 3_10.5	10.5	—	—	—	—	13645	20574	20788
A 90 3_12.6	12.6	—	—	—	—	9540	16445	16682
A 90 3_13.7	13.7	—	—	—	—	9231	16160	16374
A 90 3_15.6	15.6	—	—	—	—	7261	14167	14404
A 90 3_16.9	16.9	—	—	—	—	7048	13977	14191
A 90 3_19.4	19.4	—	—	—	5600	5553	12506	12577
A 90 3_21.0	21.0	—	—	—	5482	5411	12387	12435
A 90 3_22.3	22.3	—	—	—	—	7736	14665	14879
A 90 3_24.1	24.1	—	—	—	—	7641	14570	14784
A 90 3_29.1	29.1	—	—	—	—	5766	12696	12909
A 90 3_31.5	31.5	—	—	—	—	5719	12625	12862
A 90 3_35.8	35.8	—	—	—	—	4770	11699	11913
A 90 3_38.8	38.8	—	—	—	—	4746	11652	11865
A 90 3_44.6	44.6	—	—	—	4010	3939	10916	10963
A 90 3_48.3	48.3	—	—	—	3987	3916	10892	10940
A 90 3_55.0	55.0	1566	—	2017	3417	3370	10370	10394
A 90 3_59.6	59.6	1566	—	1993	3417	3346	10346	10370
A 90 3_68.8	68.8	1139	—	1590	2990	2943	9919	9872
A 90 3_74.5	74.5	1115	—	1566	2990	2919	9896	9872
A 90 3_80.4	80.4	1020	—	1471	2871	2824	9777	9777
A 90 3_87.1	87.1	1020	—	1471	2871	2824	9777	9777
A 90 3_98.6	98.6	664	712	1115	2515	2468	9421	9468
A 90 3_106.8	106.8	664	712	1115	2515	2468	9421	9468
A 90 3_116.9	116.9	546	593	973	2397	2349	9279	9350
A 90 3_126.6	126.6	522	593	973	2397	2326	9279	9350
A 90 3_139.4	139.4	356	403	783	2207	2159	—	9160
A 90 3_151.0	151.0	332	71	451	1875	1804	—	8828

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

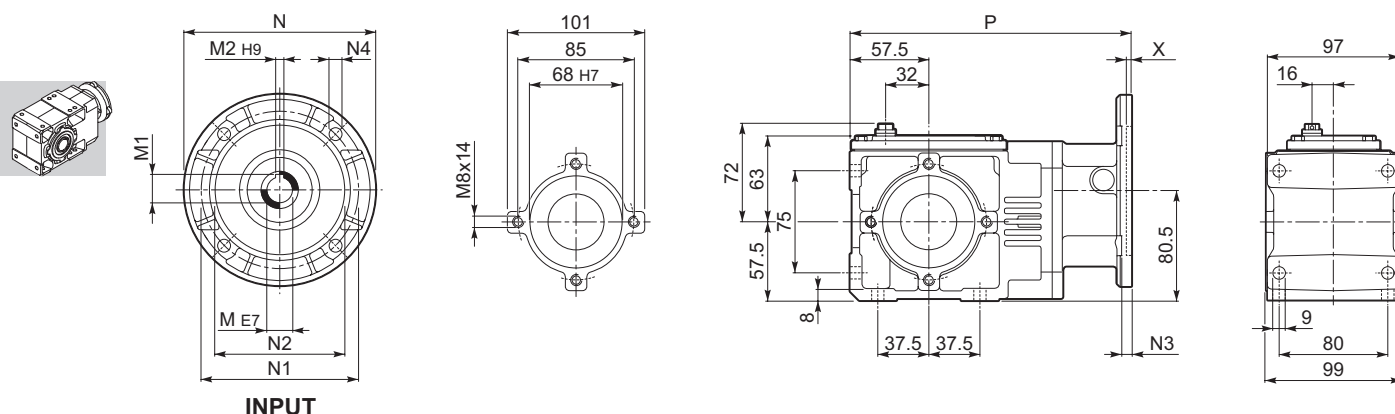
42 EXACT RATIOS

i _N	A 05	A 10	A 20	A 30	A 35	A 41	A 50	A 55	A 60	A 70	A 80	A 90
5.0								4.94505				
5.6	5.46559	5.46559	5.35117	5.41311	5.41311	5.24476						
6.3	6.33484	6.33484	6.53846	6.41026	6.41026			6.41026				
7.1	7.21154	7.21154	7.28745	7.02341	7.02341	7.12251						
8.0	8.51648	8.51648	8.37104	8.46154	8.46154	8.33333	7.73684	8.46154	7.86420			
9.0	9.61538	9.61538	9.37500	9.31174	9.31174	9.19732				9.43946		9.67545
10.0	10.55639	10.55639	10.33540	10.45503	10.63348	10.12987	9.73401	10.35503	10.31579	10.22609	9.83278	10.48174
11.2				11.77885	11.77885	11.74089				12.08027	10.65217	12.64214
12.5	12.30769	12.30769	11.96581		13.06878		13.10700	13.07692	12.70370	13.08696	12.27130	13.69565
14.0	13.92857	13.92857	14.07519	13.56522	15.47619	13.75661				15.40468	13.29391	15.57512
16.0	16.44898	16.44898	16.16807	16.34286	16.95652	16.09524	16.57005	15.68047	16.73663	16.68841	15.45151	16.87304
18.0	18.57143	18.57143	18.10714	17.98496		17.76398					19.33779	19.38462
20.0	21.35714	21.35714	21.22449	20.53782	20.42857		20.91813	19.23077	20.5942	19.66555	20.94928	21.00000
22.4	23.77143	23.77143	23.11111	22.75000	22.48120	22.67669				21.30435	22.61538	22.25354
25.0	25.46939	25.46939	26.46429	26.53061	25.67227		24.04795	23.79021	25.71012	23.52000	24.50000	24.10800
28.0	28.57143	28.57143	29.21905	29.30159	28.43750	28.32143	26.43733		27.85263	27.78462	28.22400	29.07692
31.5	32.19048	32.19048	31.30612	33.42857	33.16327		32.38095	29.93134	31.66154	30.10000	30.57600	31.50000
35.5	35.11688	35.11688	35.42857	36.64762	36.62698	35.90476	35.59829		34.30000	35.43077	35.53846	35.82277
40.0	40.85714	40.85714	39.61905	39.26531	41.78571	45.06667	40.93645	40.30303	41.71282	38.38333	38.50000	38.80800
45.0	45.39683	45.39683	43.22078	43.42857	45.80952	48.28571	45.00386		45.18889	45.23077	44.47692	44.58462
50.0	51.25714	51.25714	48.28571	48.28571	49.08163	53.14286	51.67843	50.95166	51.32709	49.00000	48.18333	48.30000
56.0	58.60317	58.60317	53.65079	52.67532	54.28571	58.80952	56.81314		55.60435	53.23314	55.18154	55.03077
63.0	65.92857	65.92857	63.14286	59.42857	60.35714	64.15584	63.89011	64.32168	64.98947	66.94154	66.80237	59.61667
71.0			70.98413	66.03175	65.84416	71.31429	70.23817		70.40526	72.52000	72.36923	68.75077
80.0	76.40816	76.40816	79.85714	76.51429	74.28571	79.23810	81.45055	79.52098	79.71923	79.32781	82.32000	80.37160
90.0	91.61905	91.61905	92.32653	86.66667	82.53968	92.76828	89.54339		86.36250	85.93846	89.18000	87.06923
100.0				97.50000	95.64286		99.53407	101.37762	99.50769	96.21818	104.03077	98.60308
112.2			109.16518	109.07029	105.54155	115.86039	109.42367	123.88531	107.80000	104.23636	115.95524	116.90414
125.0			120.52857	120.46208	116.90972		129.67046	132.73427	123.02769	120.61538	125.61818	126.64615
140.0			146.14286	137.42857	136.33787	146.88312	140.61938	146.80796	144.04260	141.86014	144.73846	139.39301
160.0			163.42857	161.42404	150.57760		154.59118	160.43706	171.46573	169.75499	156.80000	166.12694
180.0			178.28571	178.53968	171.78571	184.36364	173.36264	175.02225	185.75455	183.90123	171.29752	179.97085
200.0			199.17857	198.50794	201.78005	197.53247	190.58777	194.19860	208.73017		214.73193	209.01044
225.0			221.30952	216.55411	223.17460	217.40260	231.98700	208.05260	226.12435	220.25418	232.62626	226.42797
250.0			260.46429	244.31746	248.13492	240.58442	260.88462		264.29053	238.60870		
280.0			292.80952	271.46384	270.69264	291.74026	286.80584	262.64685	286.31474	292.01619	277.28428	281.43590
315.0			329.41071	314.55873	305.39683	324.15584	332.58974		324.19154	316.35088	300.39130	304.88889
355.0				356.29630	339.32981	376.83117	365.63552	324.71066	351.20750	369.38462	353.96864	355.79521
400.0			380.84694	400.83333	393.19841		406.43077		404.66462	400.16667	383.46603	385.44482
450.0							446.81331	413.95862	438.38667	475.76068	442.07937	449.15802
500.0							481.63314	505.86503	500.31262	515.40741	478.91932	486.58785
560.0							574.19580	541.99825	585.77325	595.03590	560.45035	555.29467
630.0							631.24731	655.11801	634.58769	644.62222	607.15455	601.56923
710.0							707.89744	714.67419	697.29399	705.13609	703.46182	707.91953
800.0							778.23340	792.97762	755.40182	855.27273	829.52598	766.91282
900.0										926.54545	898.65315	865.09065
1000.0										1072.13675	1001.43166	1025.1594
1125.0										1161.48148	1084.88430	1110.58935
1250.0										1242.33846	1236.85594	1222.17967
1400.0										1345.86667	1339.92727	1324.02797
1600.0										1583.07692	1557.66545	1506.76450
1800.0										1715.00000		1632.32821



43 DIMENSIONS

A 05...P(IEC)

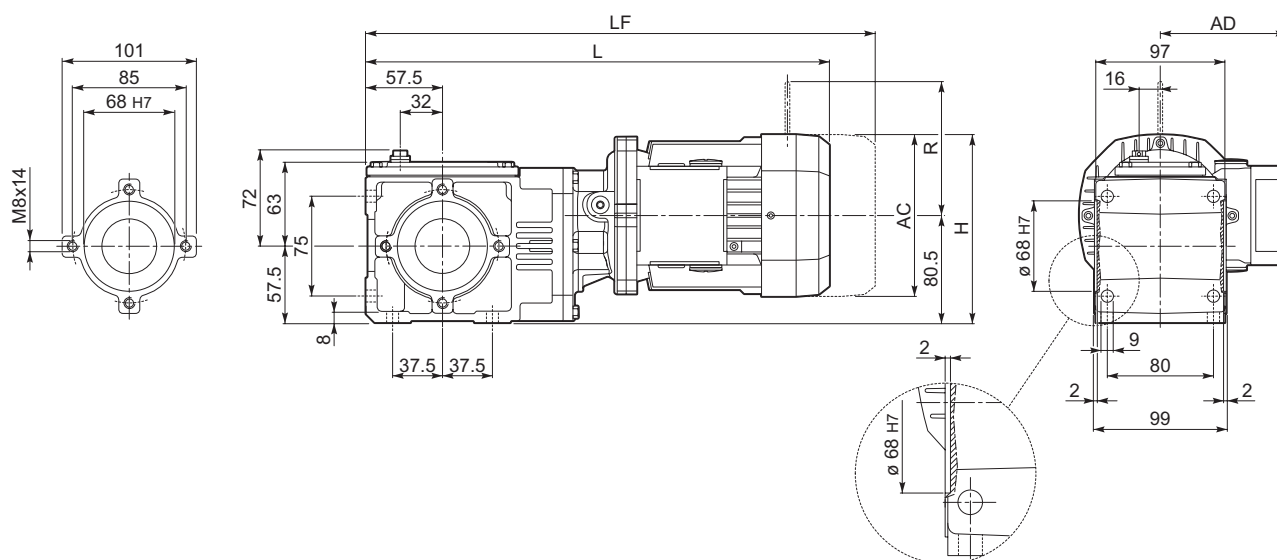


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 05 2	P63	11	12.8	4	140	115	95	7	9.5	3.5	206	5
A 05 2	P71	14	16.3	5	160	130	110	7	9.5	4	213	5
A 05 2	P80	19	20.8	6	200	165	130	7	11.5	4	223	5.5

Metric output versions available also in combination with NEMA motor adaptor

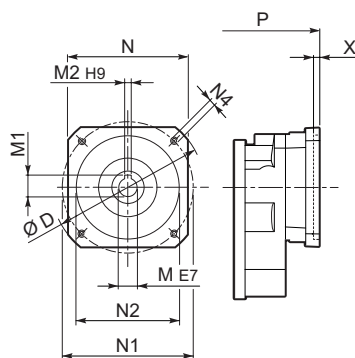
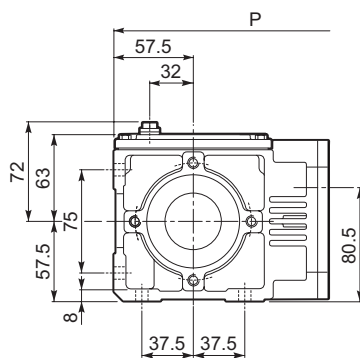
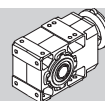
A 05...M/ME



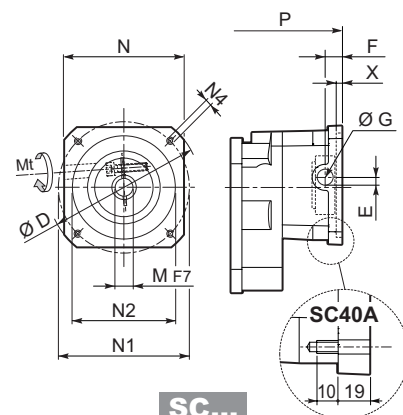
Dimensions are in mm

			AC	H	L	AD	Kg	M...FD M...FA		M...FD		M...FA	
								LF	Kg	R	AD	R	AD
A 05 2	S05	M05	121	141	360.5	95	7.5	426.5	9	96	122	116	95
A 05 2	S1	M1	138	149.5	389.5	108	11.5	450.5	14	103	135	124	108
A 05 2	S2	ME2S	156	158.5	418.5	119	15.5	—	—	—	—	—	—

A 05...SK / SC



SK...



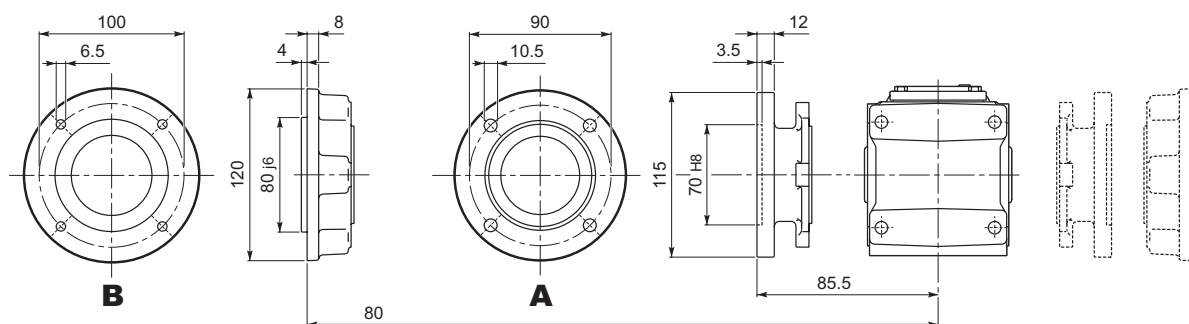
SC...

Dimensions are in mm

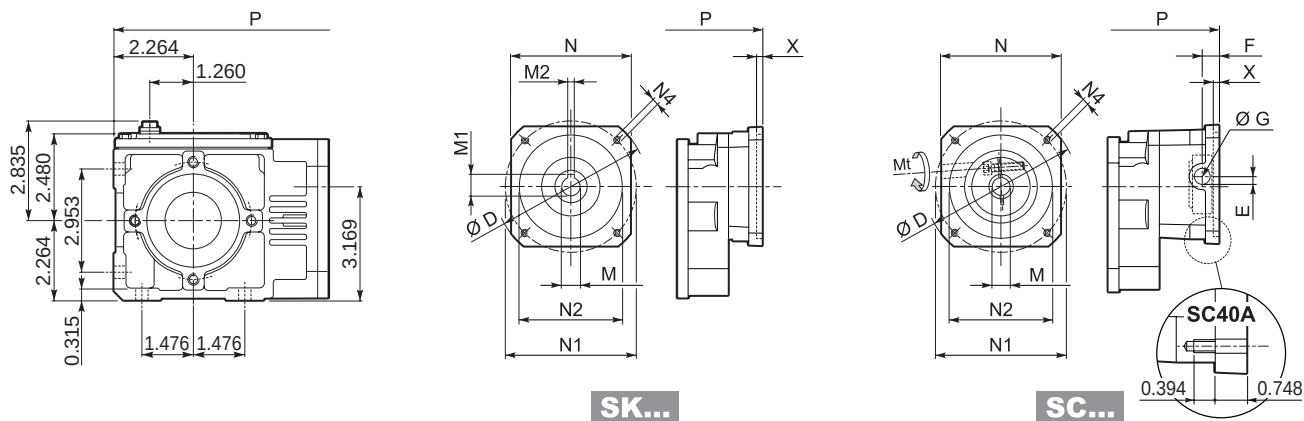
		D	M	M1	M2	N	N1	N2	N4	X	P	Kg
A 05 2	SK40A	74	9	10.4	3	55	63	40	M5x10	3	207.5	5
A 05 2	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	206	5
A 05 2	SK60B	102	14	16.3	5	82	75	60	M5x10	4	213	5
A 05 2	SK80A	115	14	16.3	5	90	100	80	M6x12	4	213	5

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	 Kg
A 05 2	SC40A	M5	15	74	10.5	9.5	12.5	9	55	63	40	M5x10	3	226.5	6
A 05 2	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	233	6
A 05 2	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	233	6
A 05 2	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	233	6

A 05...F...



A 05...SK / SC

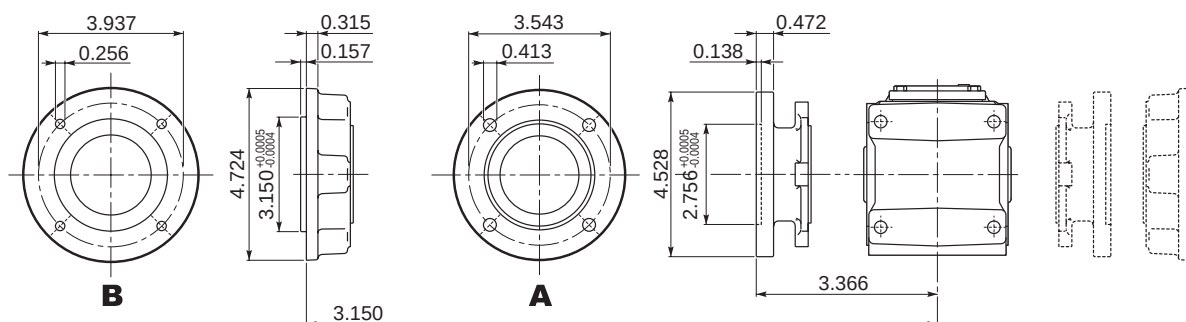


Dimensions are in Inch except when shown in *italic* [mm]

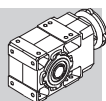
		D	M	M1	M2	N	N1	N2	N4	X	P	lbs
												
A 05 2	SK40A	2.913	0.354	0.409	0.118	2.165	2.480	1.575	<i>M5x10</i>	0.118	8.169	11
A 05 2	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	<i>M5x10</i>	0.138	8.110	11
A 05 2	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	<i>M5x10</i>	0.157	8.386	11
A 05 2	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	<i>M6x12</i>	0.157	8.386	11

			Mt [lb·in]	D	E	F	G	M	N	N1	N2	N4	X	P	lbs
A 05 2	SC40A	<i>M5</i>	133	2.913	0.413	0.374	0.492	0.354	2.165	2.480	1.575	<i>M5x10</i>	0.118	8.917	13
A 05 2	SC60A	<i>M6</i>	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	<i>M5x10</i>	0.157	9.173	13
A 05 2	SC60B	<i>M6</i>	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	<i>M5x10</i>	0.157	9.173	13
A 05 2	SC80A	<i>M6</i>	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	<i>M6x12</i>	0.157	9.173	13

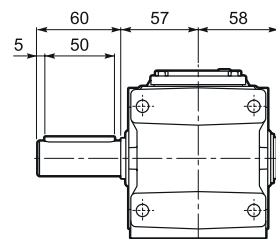
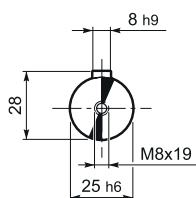
A 05...F...



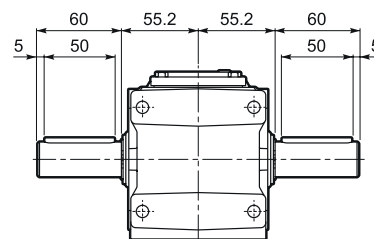
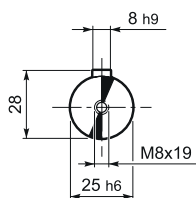
A 05



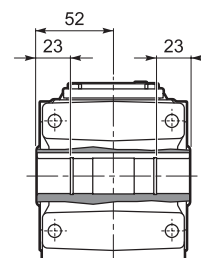
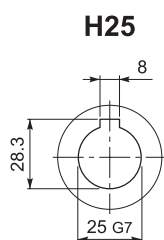
A 05...UR



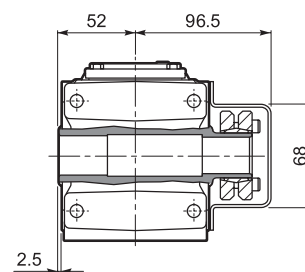
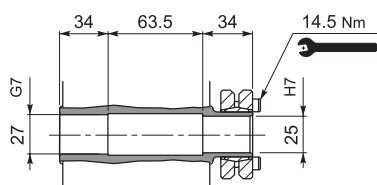
A 05...UD



A 05...UH



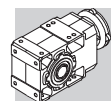
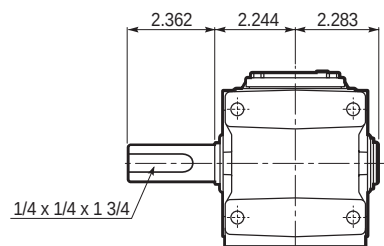
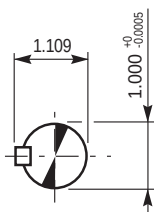
A 05...US



A 05

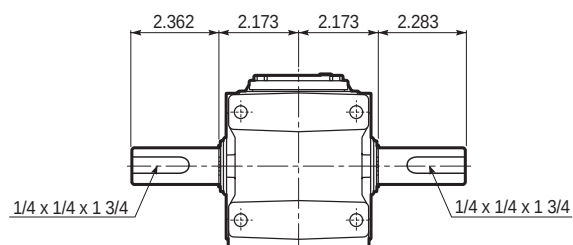
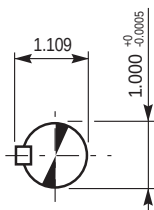
A 05...NUR

OUTPUT
(Inch Series)



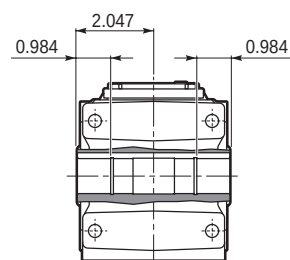
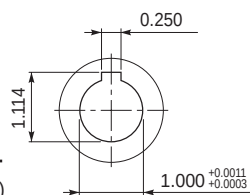
A 05...NUD

OUTPUT
(Inch Series)

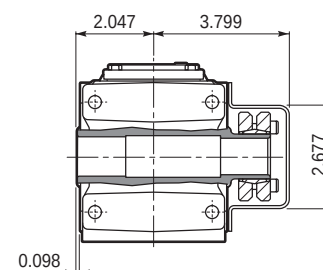
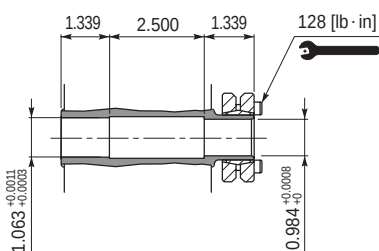


A 05...NUH

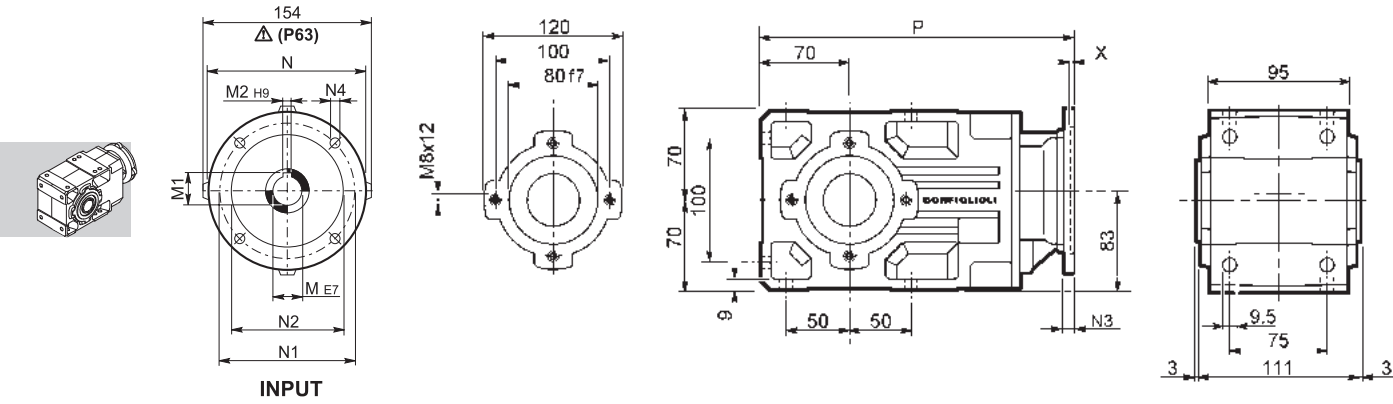
OUTPUT
(Inch Series)



A 05...US



A 10...P(IEC)

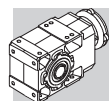
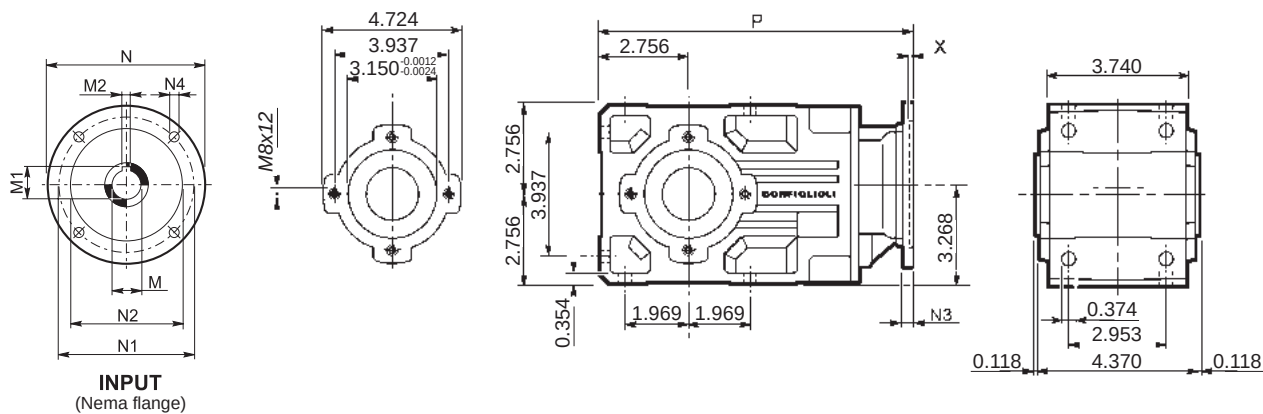


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 10 2	P63	11	12.8	4	140	115	95	—	M8x10	4	282.5	8
A 10 2	P71	14	16.3	5	160	130	110	—	M8x10	4.5	282.5	9
A 10 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	302	9
A 10 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	302	9
A 10 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	312	13
A 10 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	312	13

Metric output versions available also in combination with NEMA motor adaptor

A 10...N(NEMA Input)

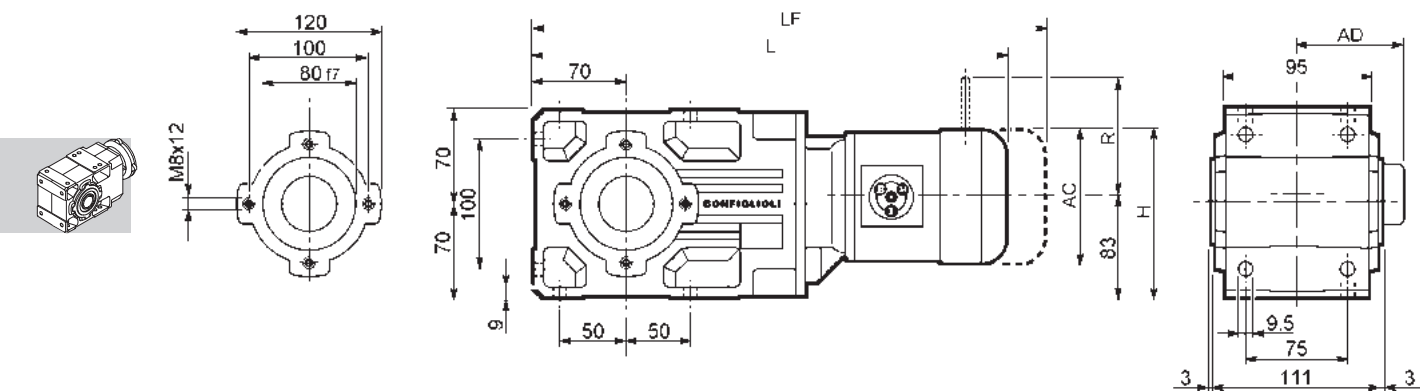


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	
A 10 2	N56C	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	11.909	20
A 10 2	N140TC	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	11.909	20
A 10 2	N180TC	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	12.736	29

Imperial output versions available also in combination with IEC motor adaptor

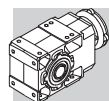
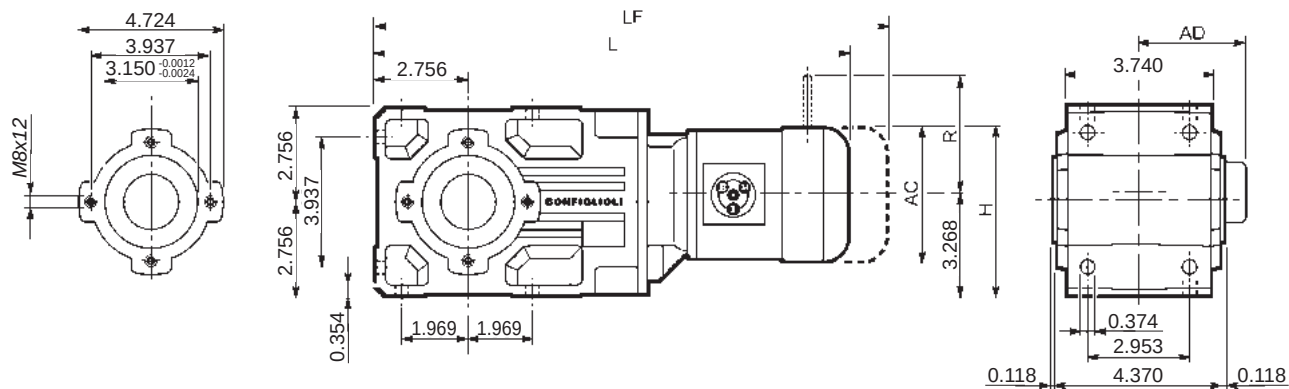
A 10...M/ME



Dimensions are in mm

			AC	H	L	AD	Kg	M...FD M...FA		M...FD		M...FA	
								LF	Kg	R	AD	R	AD
A 10 2	S05	M05	121	143.5	408.5	95	12	474.5	14	96	122	116	95
A 10 2	S1	M1	138	152	437.5	108	14	498.5	17	103	135	124	108
A 10 2	S2	ME2S	156	161	466.5	119	18	—	—	—	—	—	—
A 10 2	S3	ME3S	195	180.5	509.5	142	24.5	—	—	—	—	—	—
A 10 2	S3	ME3L	195	180.5	541.5	142	30	—	—	—	—	—	—

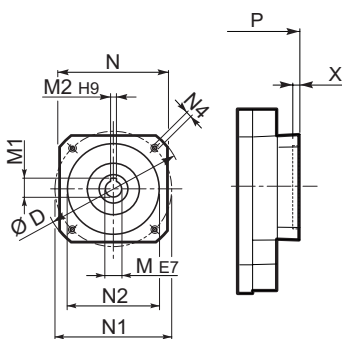
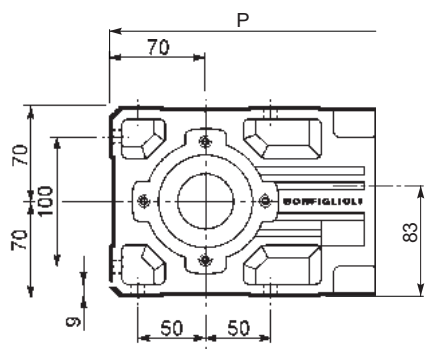
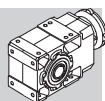
A 10...M/ME



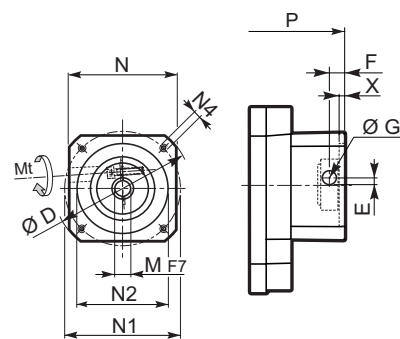
Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 10 2	S05	M05	4.764	5.650	16.083	3.740	26	18.681	31	3.780	4.803	4.567	3.740
A 10 2	S1	M1	5.433	5.984	17.224	4.252	31	19.626	37	4.055	5.315	4.882	4.252
A 10 2	S2	ME2S	6.142	6.339	18.366	4.685	40	—	—	—	—	—	—
A 10 2	S3	ME3S	7.677	7.106	20.059	5.591	54	—	—	—	—	—	—
A 10 2	S3	ME3L	7.677	7.106	21.319	5.591	66	—	—	—	—	—	—

A 10...SK / SC



SK...



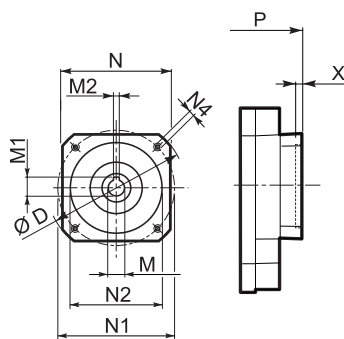
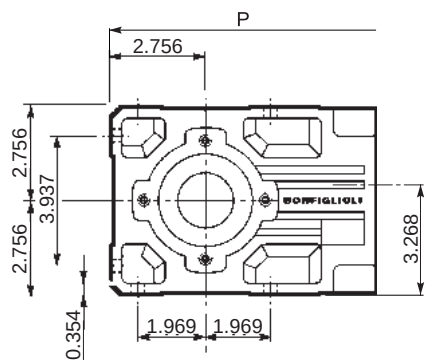
SC...

Dimensions are in mm

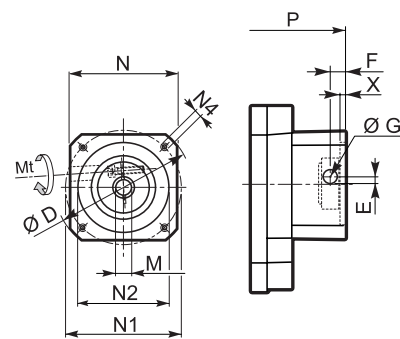
		D	M	M1	M2	N	N1	N2	N4	X	P	Kg
A 10 2	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	254	8
A 10 2	SK60B	102	14	16.3	5	82	75	60	M5x10	4	261	8
A 10 2	SK80A	115	14	16.3	5	90	100	80	M6x12	4	261	8
A 10 2	SK80C	120	19	21.8	6	96	100	80	M6x12	4	302	9
A 10 2	SK95A	130	14	16.3	5	102	115	95	M8x12	4	302	9
A 10 2	SK95B	130	19	21.8	6	102	115	95	M8x12	4	302	9
A 10 2	SK95C	130	24	27.3	8	102	115	95	M8x12	4	302	9
A 10 2	SK110A	150	19	21.8	6	120	130	110	M8x12	5	302	9
A 10 2	SK110B	150	24	27.3	8	120	130	110	M8x12	5	302	9

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	Kg
A 10 2	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	281	9
A 10 2	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	281	9
A 10 2	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	281	9
A 10 2	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	325.5	10
A 10 2	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	325.5	10
A 10 2	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	325.5	10
A 10 2	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	325.5	10
A 10 2	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	325.5	12
A 10 2	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	325.5	12

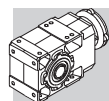
A 10...SK / SC



SK...



SC...

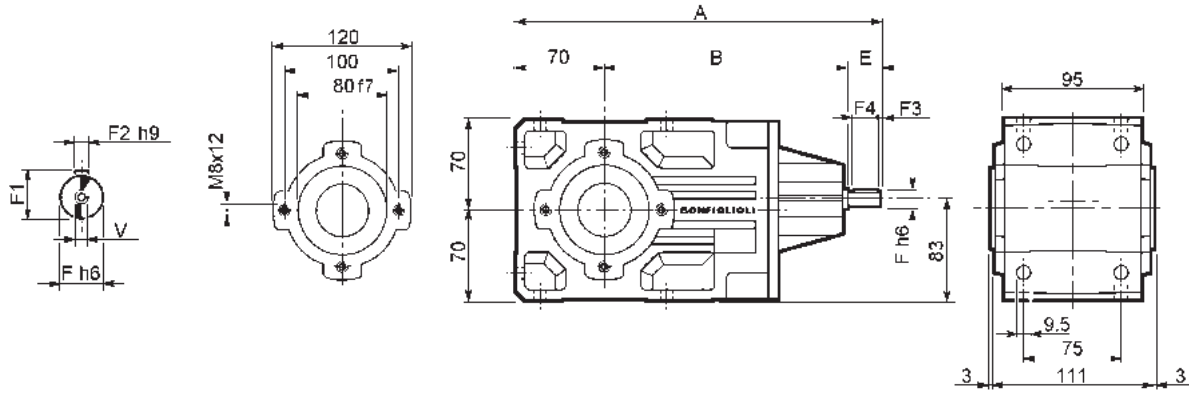


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P	lbs
A 10 2	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	10.000	18
A 10 2	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	10.276	18
A 10 2	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	10.276	18
A 10 2	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	11.890	20
A 10 2	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.890	20
A 10 2	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.890	20
A 10 2	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.890	20
A 10 2	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	11.890	20
A 10 2	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	11.890	20

			Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P	lbs
A 10 2	SC60A	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	11.063	20
A 10 2	SC60B	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	11.063	20
A 10 2	SC80A	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	11.063	20
A 10 2	SC80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	12.815	22
A 10 2	SC95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	12.815	22
A 10 2	SC95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.815	22
A 10 2	SC95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.815	22
A 10 2	SC110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.815	26
A 10 2	SC110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.815	26

A 10...HS

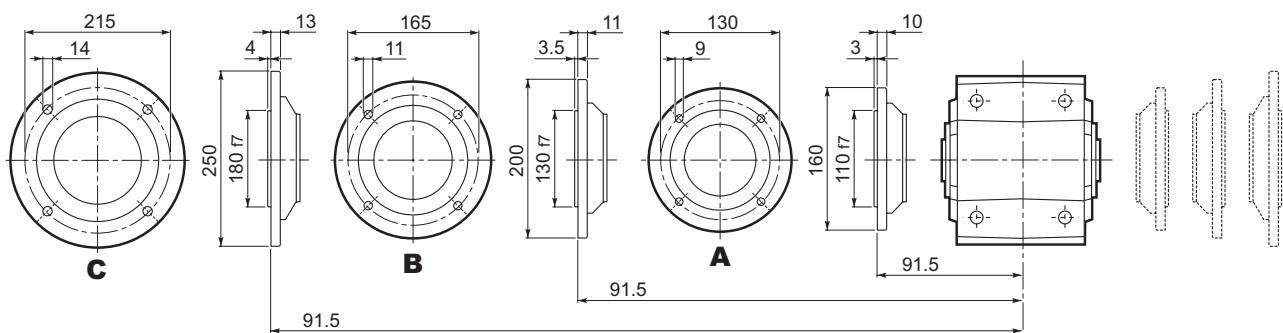


Dimensions are in mm

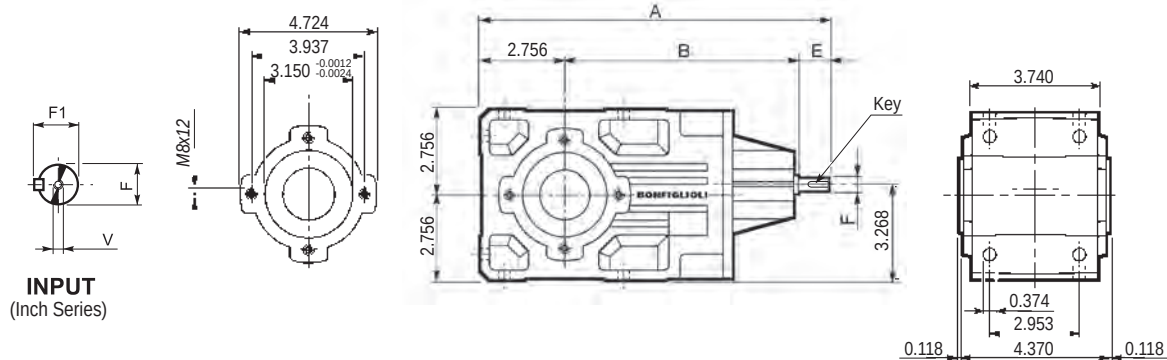
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 10 2	HS	289.5	179.5	40	16	18	5	2.5	35	M6x16	7.8

Metric output versions available also in combination with NHS input

A 10...F...



A 10...NHS

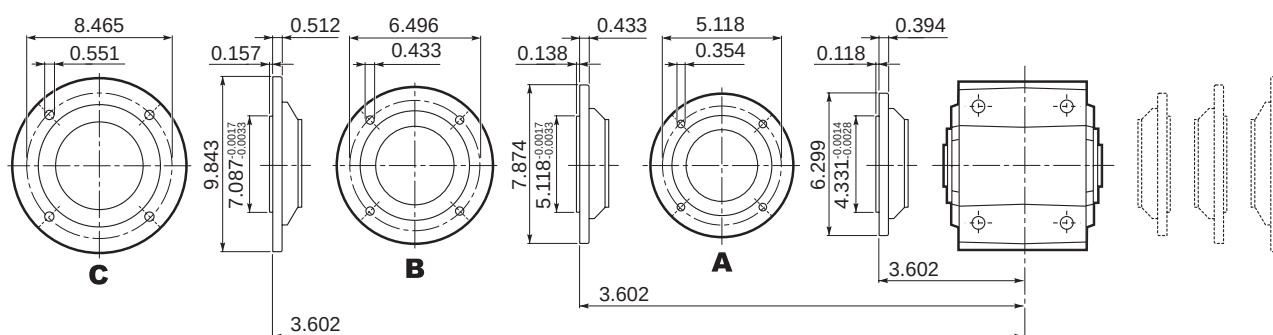


Dimensions are in Inch except when shown in *italic* [mm]

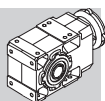
		A	B	E	F	F1	V	Key	lbs
A 10 2	NHS	11.398	7.067	1.575	0.625 $\begin{smallmatrix} +0 \\ -0.0004 \end{smallmatrix}$	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	17

Imperial output versions available also in combination with HS input

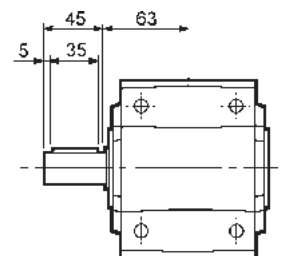
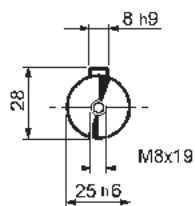
A 10...F...



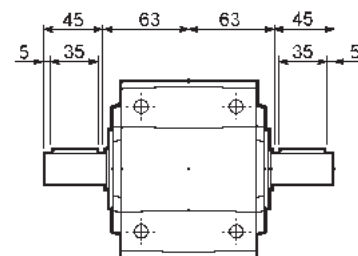
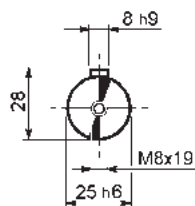
A 10



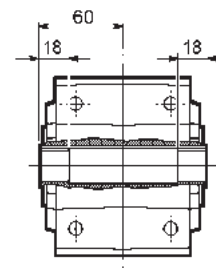
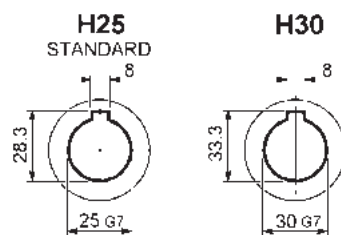
A 10...UR



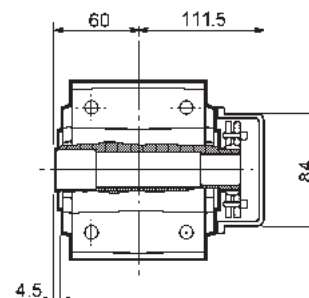
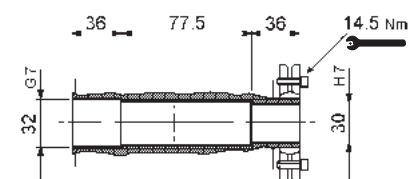
A 10...UD



A 10...UH

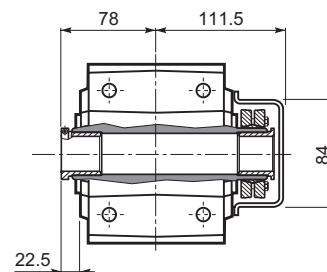
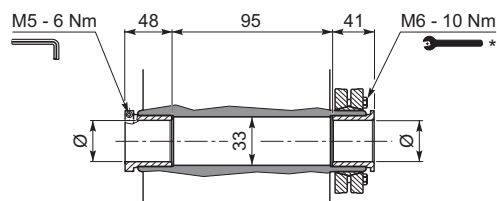


A 10...US



A 10...QF

	Ø
QF25	25
QF30	30

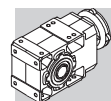
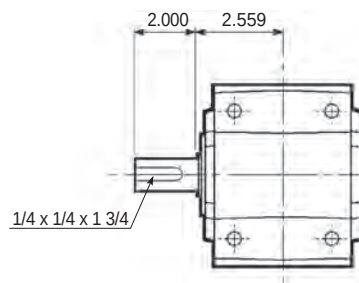
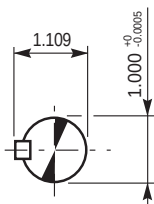


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 10

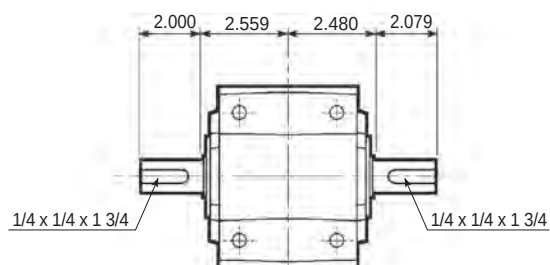
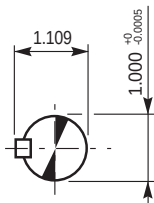
A 10...NUR

OUTPUT
(Inch Series)



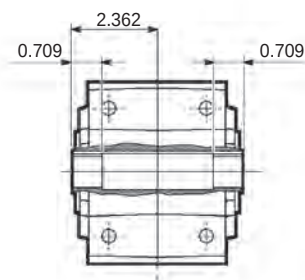
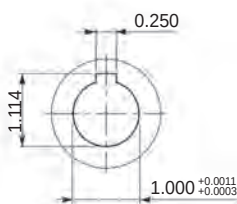
A 10...NUD

OUTPUT
(Inch Series)

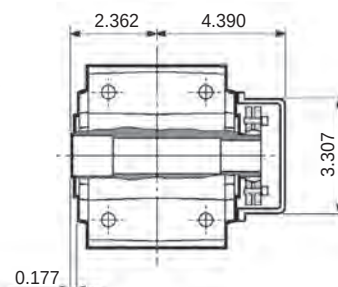
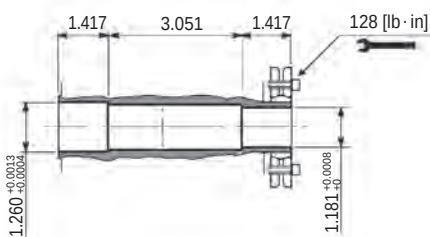


A 10...NUH

OUTPUT
(Inch Series)

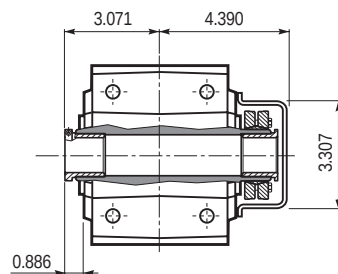
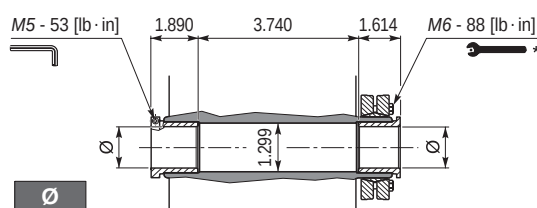


A 10...US



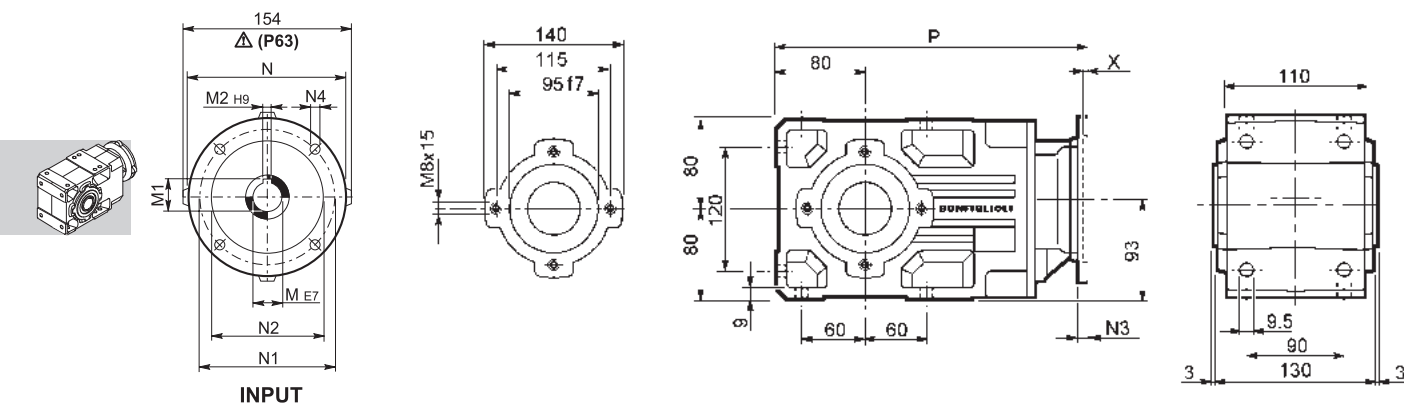
A 10...NQF

	Ø
NQF1	1.000
NQF1-3/16	1.188



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 20...P(IEC)

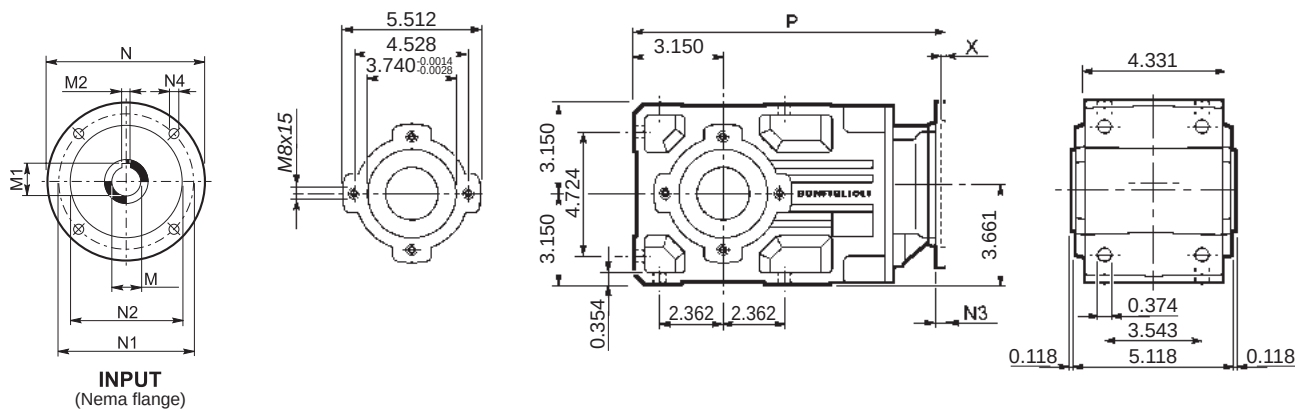


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 20 2	P63	11	12.8	4	140	115	95	—	M8x19	4	306	12
A 20 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	306	12
A 20 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	325.5	13
A 20 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	325.5	13
A 20 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	335.5	17
A 20 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	335.5	17
A 20 3	P63	11	12.8	4	140	115	95	—	M8x19	4	361.5	13
A 20 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	361.5	13
A 20 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	381	14
A 20 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	381	14
A 20 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	391	18
A 20 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	391	18

Metric output versions available also in combination with NEMA motor adaptor

A 20...N(NEMA Input)

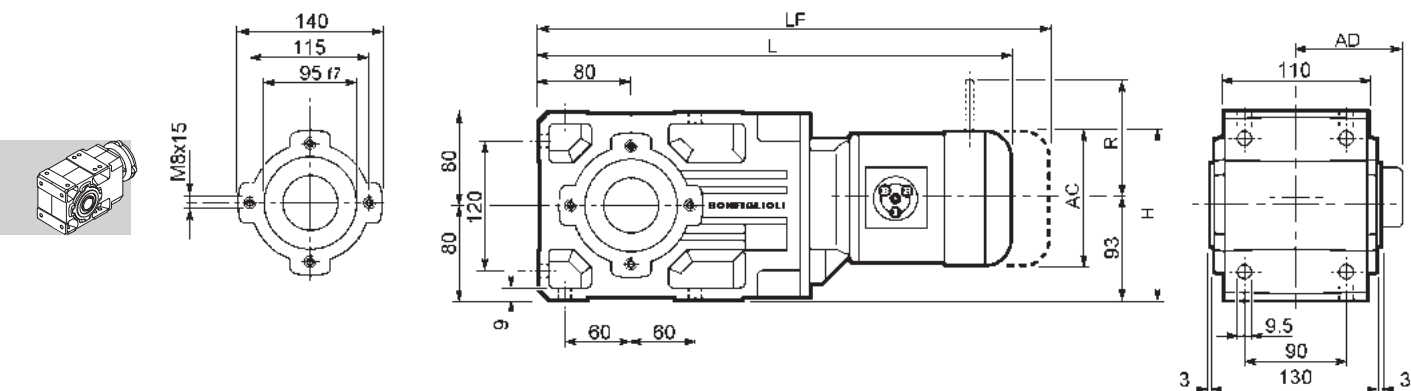


Dimensions are in Inch except when shown in *italic [mm]*

		M	M1	M2	N	N1	N2	N3	N4	X	P	
												
A 20 2	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.835	26
A 20 2	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.835	29
A 20 2	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	13.661	37
A 20 3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.835	26
A 20 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	12.835	29
A 20 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	13.661	37

Imperial output versions available also in combination with IEC motor adaptor

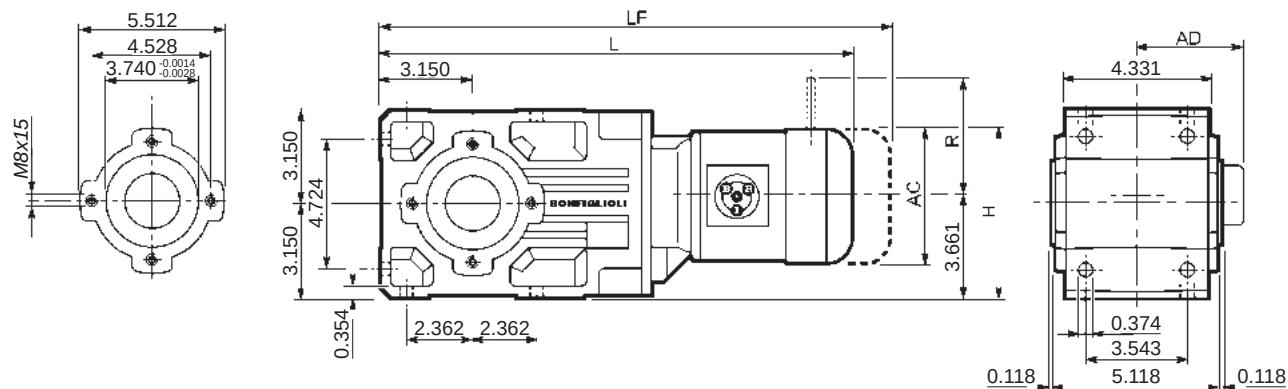
A 20...M/ME



Dimensions are in mm

			AC	H	L	AD	Kg	M...FD M...FA		M...FD		M...FA	
								LF	Kg	R	AD	R	AD
A 20 2	S05	M05	121	143.5	432	95	16	498	18	96	122	116	95
A 20 2	S1	M1	138	152	461	108	18	522	21	103	135	124	108
A 20 2	S2	ME2S	156	161	490	119	22	—	—	—	—	—	—
A 20 2	S3	ME3S	195	180.5	533	142	28.5	—	—	—	—	—	—
A 20 2	S3	ME3L	195	180.5	565	142	34	—	—	—	—	—	—
A 20 3	S05	M05	121	143.5	457.5	95	16	553.5	18	96	122	116	95
A 20 3	S1	M1	138	152	486.5	108	19	577.5	21	103	135	124	108
A 20 3	S2	ME2S	156	161	545.5	119	23	—	—	—	—	—	—
A 20 3	S3	ME3S	195	180.5	588.5	142	29.5	—	—	—	—	—	—
A 20 3	S3	ME3L	195	180.5	620.5	142	35	—	—	—	—	—	—

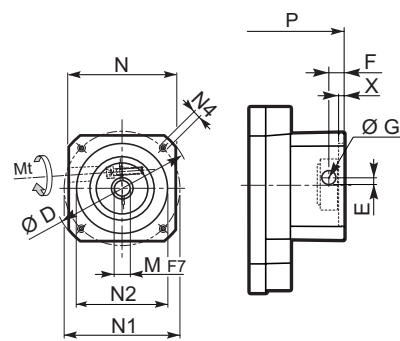
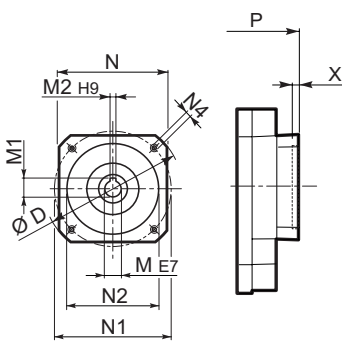
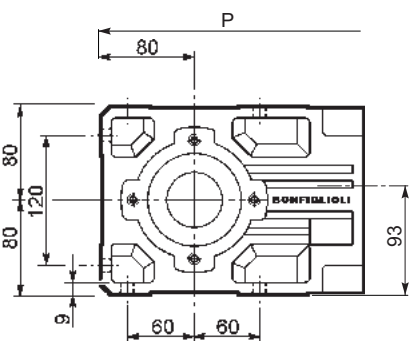
A 20...M/ME



Dimensions are in Inch except when shown in *italic [mm]*

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 20 2	S05	M05	4.764	5.650	17.008	3.740	35	19.606	40	3.780	4.803	4.567	3.740
A 20 2	S1	M1	5.433	5.984	18.150	4.252	40	20.551	46	4.055	5.315	4.882	4.252
A 20 2	S2	ME2S	6.142	6.339	19.291	4.685	49	—	—	—	—	—	—
A 20 2	S3	ME3S	7.677	7.106	20.984	5.591	63	—	—	—	—	—	—
A 20 2	S3	ME3L	7.677	7.106	22.244	5.591	75	—	—	—	—	—	—
A 20 3	S05	M05	4.764	5.650	18.012	3.740	35	21.791	40	3.780	4.803	4.567	3.740
A 20 3	S1	M1	5.433	5.984	19.154	4.252	42	22.736	46	4.055	5.315	4.882	4.252
A 20 3	S2	ME2S	6.142	6.339	21.476	4.685	51	—	—	—	—	—	—
A 20 3	S3	ME3S	7.677	7.106	23.169	5.591	65	—	—	—	—	—	—
A 20 3	S3	ME3L	7.677	7.106	24.429	5.591	77	—	—	—	—	—	—

A 20...SK / SC



SK...

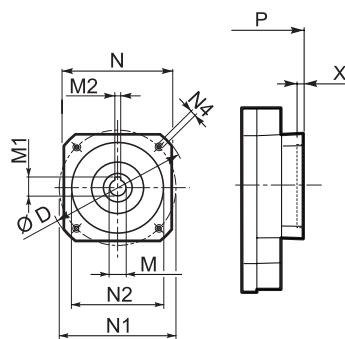
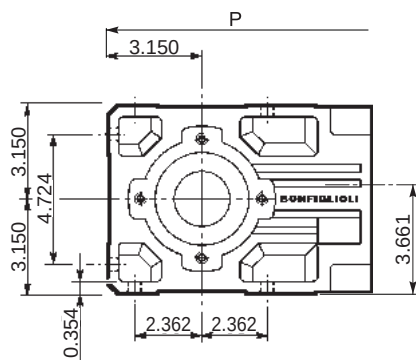
SC...

Dimensions are in mm

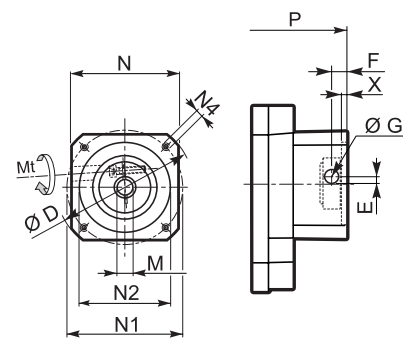
		D	M	M1	M2	N	N1	N2	N4	X	P 		
											2x 	3x 	
A 20 2/3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	277.5	333	11/12
A 20 2/3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	284.5	340	12/13
A 20 2/3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	284.5	340	12/13
A 20 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	325.5	381	13/14
A 20 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	325.5	381	13/14
A 20 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	325.5	381	13/14
A 20 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	325.5	381	13/14
A 20 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	325.5	381	13/14
A 20 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	325.5	381	13/14

		 Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P  		
A 20 2/3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	2x 304.5	3x 360	12/13
A 20 2/3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	2x 304.5	3x 360	13/14
A 20 2/3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	2x 304.5	3x 360	13/14
A 20 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	2x 349	3x 404.5	14/15
A 20 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	2x 349	3x 404.5	14/15
A 20 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	2x 349	3x 404.5	14/15
A 20 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	2x 349	3x 404.5	14/15
A 20 2/3	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	2x 349	3x 404.5	15/16
A 20 2/3	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	2x 349	3x 404.5	15/16

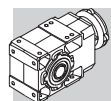
A 20...SK / SC



SK...



SC...

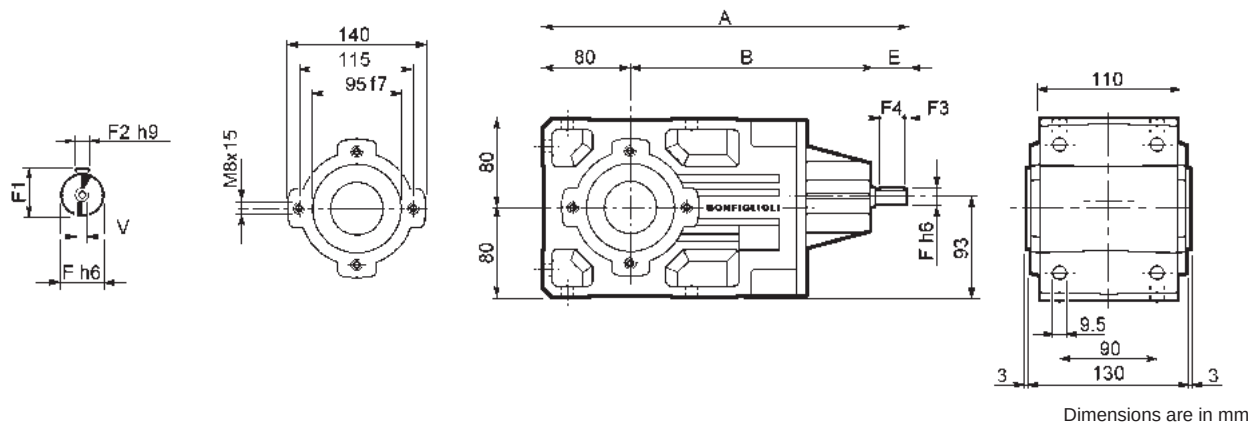
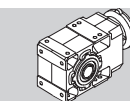


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		lbs
											2x	3x	
A 20 2/3	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	10.925	13.110	24/26
A 20 2/3	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	11.201	13.386	26/29
A 20 2/3	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	11.201	13.386	26/29
A 20 2/3	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	12.815	15.000	29/31
A 20 2/3	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.815	15.000	26/31
A 20 2/3	SK95B	5.118	0.748 ^{+0.0020} / _{+0.0013}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.815	15.000	29/31
A 20 2/3	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.815	15.000	29/31
A 20 2/3	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	12.815	15.000	31/31
A 20 2/3	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	12.815	15.000	29/31

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P		lbs
													2x	3x	
A 20 2/3	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	11.988	14.173	26/29
A 20 2/3	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	11.988	14.173	29/31
A 20 2/3	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	11.988	14.173	29/31
A 20 2/3	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	13.740	15.925	31/33
A 20 2/3	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	13.740	15.925	31/33
A 20 2/3	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	13.740	15.925	31/33
A 20 2/3	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	13.740	15.925	31/33
A 20 2/3	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	13.740	15.925	33/35
A 20 2/3	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	13.740	15.925	33/35

A 20...HS

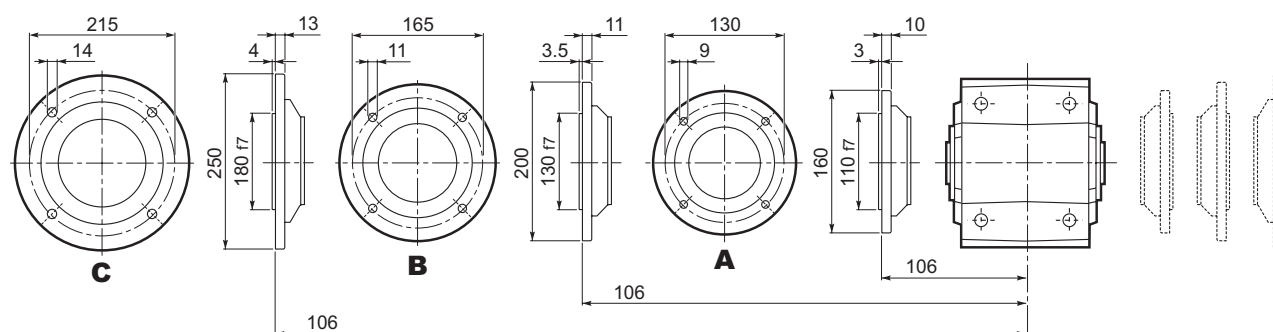


Dimensions are in mm

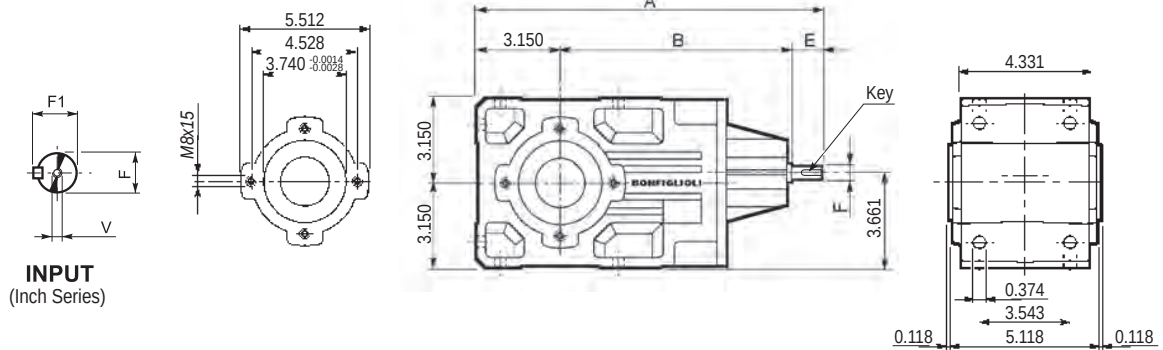
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 20 2	HS	356	236	40	19	21.5	6	2.5	35	M6x16	11.9
A 20 3		368.5	248.5	40	16	18	5	2.5	35	M6x16	12.2

Metric output versions available also in combination with NHS input

A 20...F...



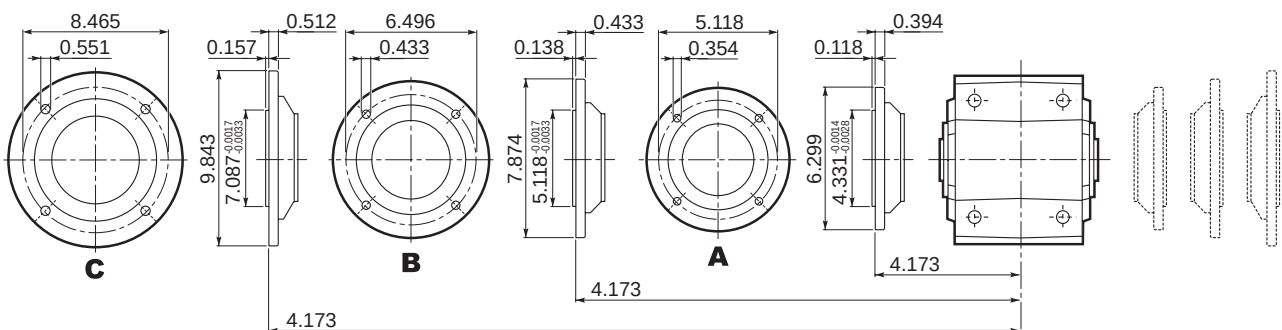
A 20...NHS



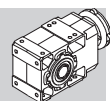
		A	B	E	F	F1	V	Key	lbs
									
A 20 2	NHS	14.016	9.291	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	26
A 20 3	NHS	14.508	9.783	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	27

Imperial output versions available also in combination with HS input

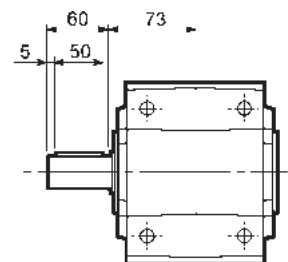
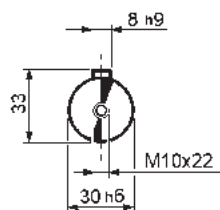
A 20...F...



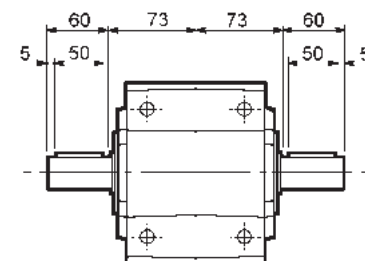
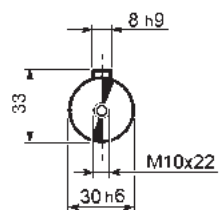
A 20



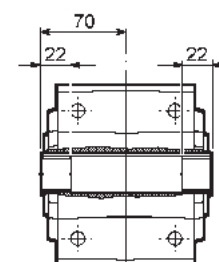
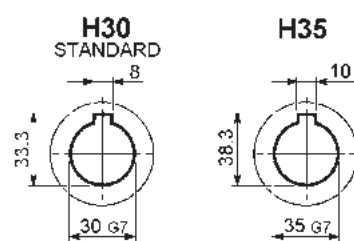
A 20...UR



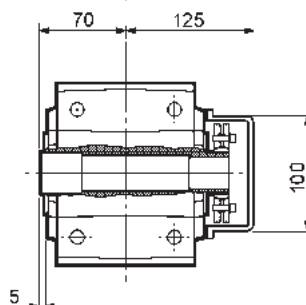
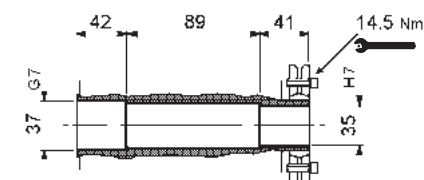
A 20...UD



A 20...UH

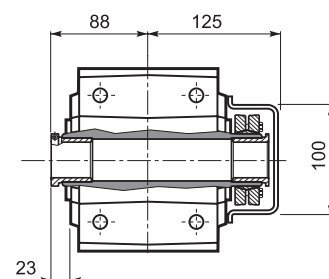
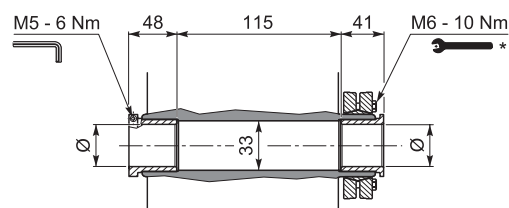


A 20...US

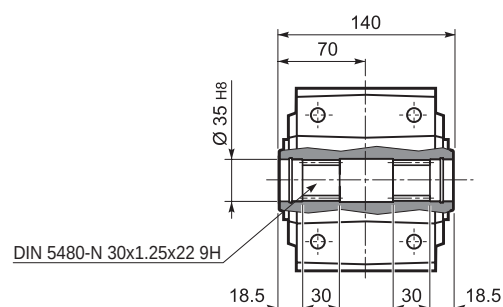


A 20...QF

	Ø
QF25	25
QF30	30



A 20...UV

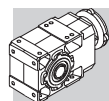
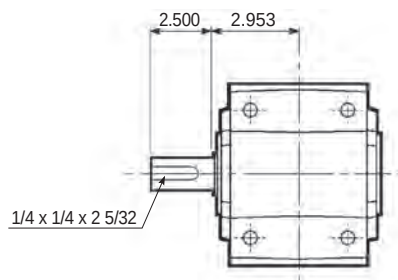
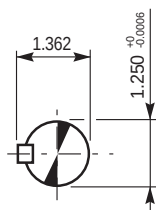


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 20

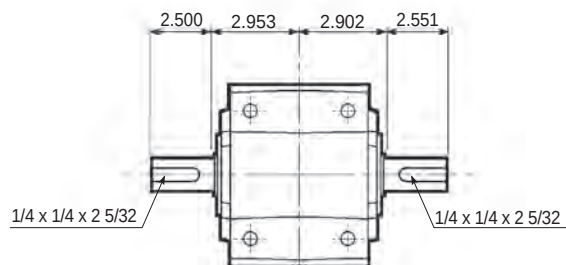
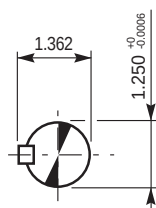
A 20...NUR

OUTPUT
(Inch Series)



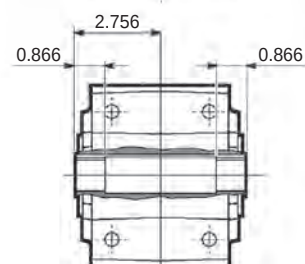
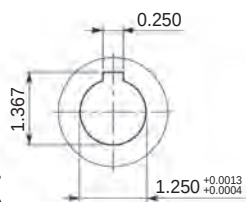
A 20...NUD

OUTPUT
(Inch Series)

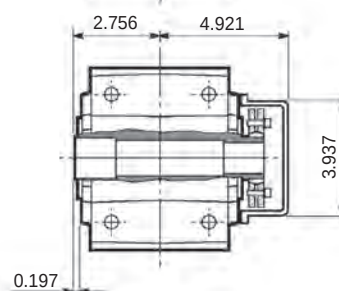
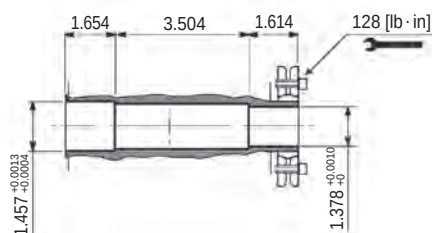


A 20...NUH

OUTPUT
(Inch Series)

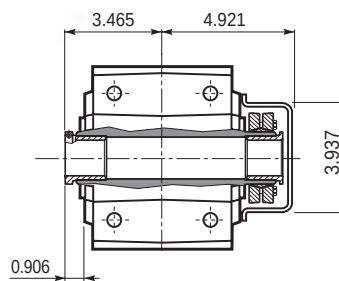
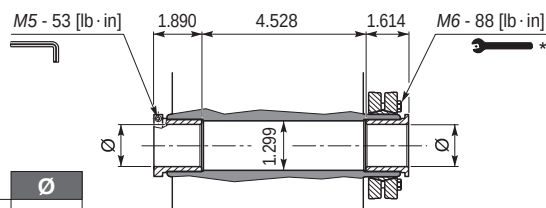


A 20...US

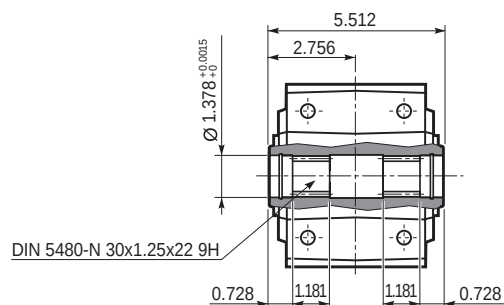


A 20...NQF

	Ø
NQF1	1.000
NQF1-3/16	1.188

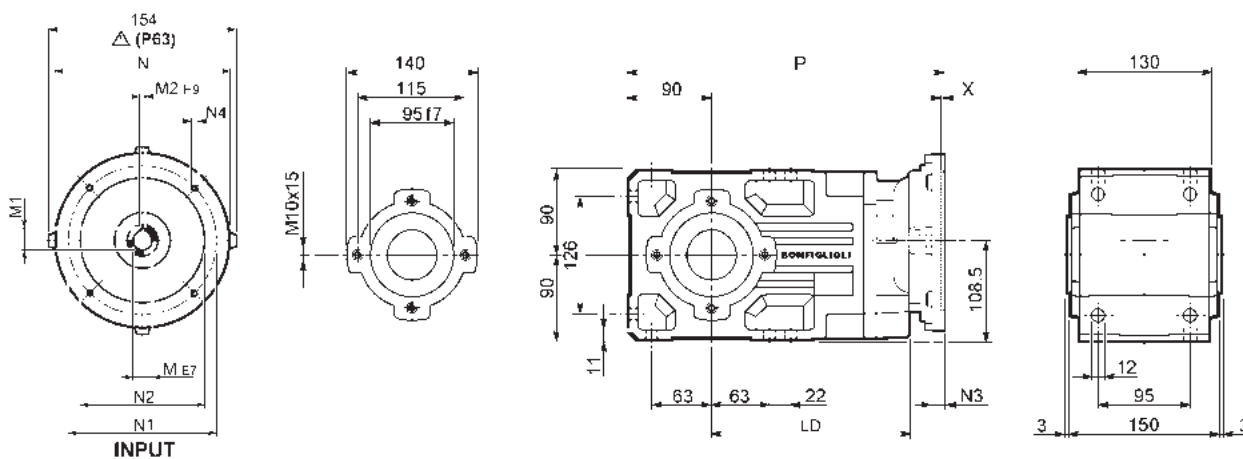
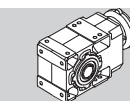


A 20...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 30...P(IEC)

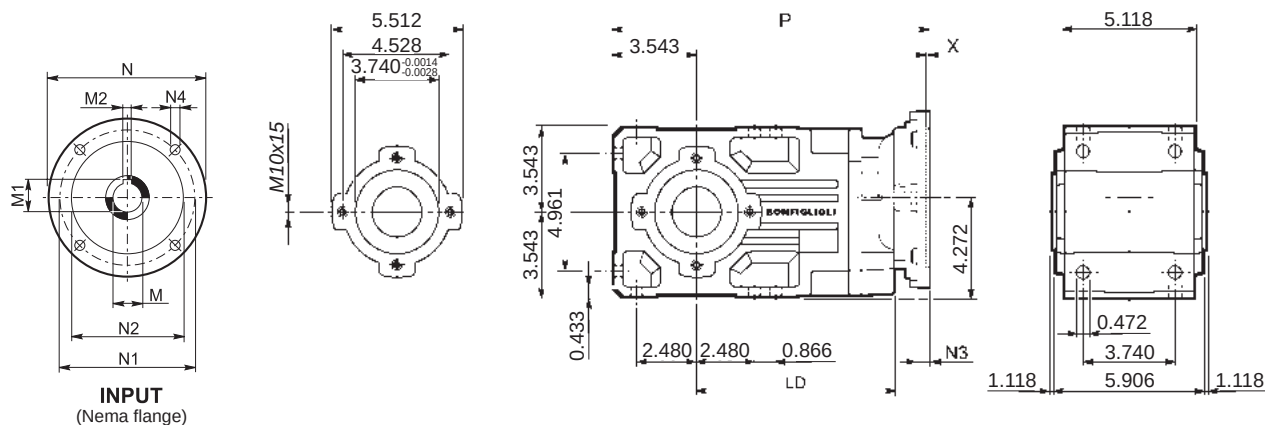


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	 Kg
A 30 2	P63	213	11	12.8	4	140	115	95	—	M8x19	4	333	16
A 30 2	P71	213	14	16.3	5	160	130	110	—	M8x16	4.5	333	16
A 30 2	P80	223	19	21.8	6	200	165	130	—	M10x14.5	4	352.5	17
A 30 2	P90	223	24	27.3	8	200	165	130	—	M10x14.5	4	352.5	17
A 30 2	P100	223	28	31.3	8	250	215	180	—	M12x16	4.5	362.5	20
A 30 2	P112	223	28	31.3	8	250	215	180	—	M12x16	4.5	362.5	20
A 30 3	P63	—	11	12.8	4	140	115	95	—	M8x19	4	390.5	17
A 30 3	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	390.5	17
A 30 3	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	410	18
A 30 3	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	410	18
A 30 3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	420	22
A 30 3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	420	22

Metric output versions available also in combination with NEMA motor adaptor

A 30...N(NEMA Input)

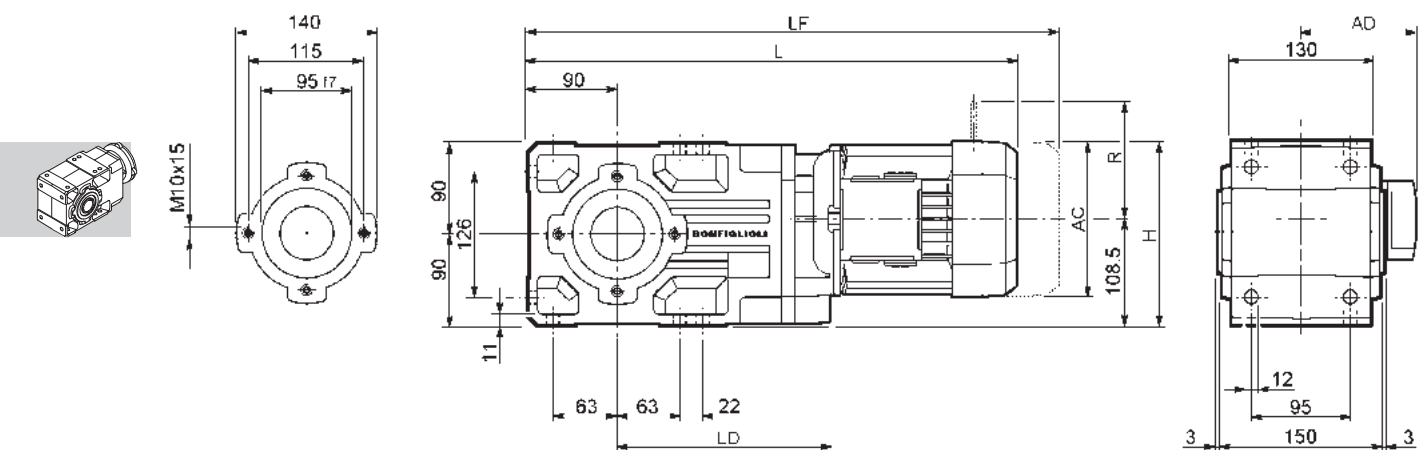


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
	A 30 2 N56C	8.386	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.898	35
	A 30 2 N140TC	8.386	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	13.898	37
	A 30 2 N180TC	8.780	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	14.724	44
	A 30 3 N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.161	37
	A 30 3 N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	16.161	40
	A 30 3 N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	16.988	49

Imperial output versions available also in combination with IEC motor adaptor

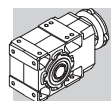
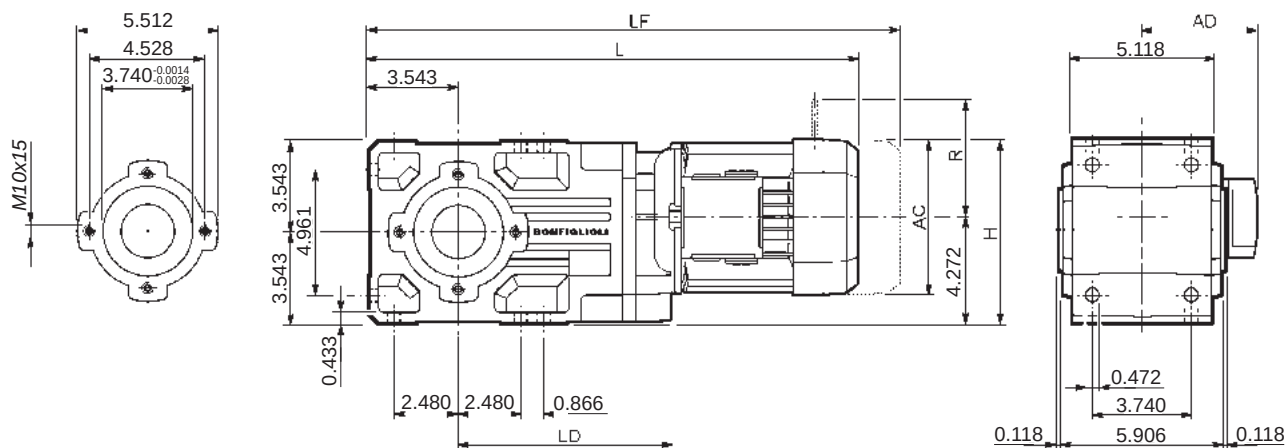
A 30...M/ME



Dimensions are in mm

			AC	H	L	LD	AD	Kg	M...FD M...FA		M...FD		M...FA	
									LF	Kg	R	AD	R	AD
A 30 2	S1	M1	138	177.5	488	201	108	22	549	24	103	135	124	108
A 30 2	S2	ME2S	156	186.5	517	213	119	25	—	—	—	—	—	—
A 30 2	S3	ME3S	195	206	560	223	142	31.5	—	—	—	—	—	—
A 30 2	S3	ME3L	195	206	592	223	142	38	—	—	—	—	—	—
A 30 3	S05	M05	121	169	516.5	—	95	21	582.5	22	96	122	116	95
A 30 3	S1	M1	138	177.5	545.5	—	108	23	606.5	26	103	135	124	108
A 30 3	S2	ME2S	156	186.5	574.5	—	119	25	—	—	—	—	—	—
A 30 3	S3	ME3S	195	206	617.5	—	142	31.5	—	—	—	—	—	—
A 30 3	S3	ME3L	195	206	649.5	—	142	38	—	—	—	—	—	—

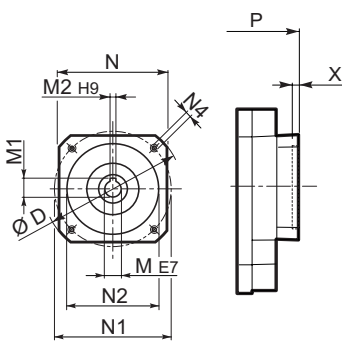
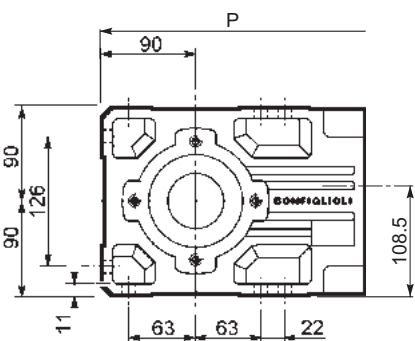
A 30...M/ME



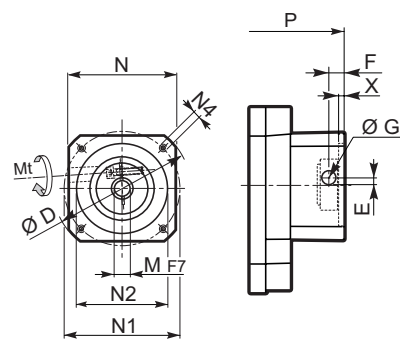
Dimensions are in Inch except when shown in *italic* [mm]

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	lbs		LF	lbs	R	AD	R	AD
A 30 2	S1	M1	5.433	6.988	19.213	7.913	4.252	49		21.614	53	4.055	5.315	4.882	4.252
A 30 2	S2	ME2S	6.142	7.343	20.354	8.386	4.685	55	—	—	—	—	—	—	—
A 30 2	S3	ME3S	7.677	8.110	22.047	8.780	5.591	69	—	—	—	—	—	—	—
A 30 2	S3	ME3L	7.677	8.110	23.307	8.780	5.591	84	—	—	—	—	—	—	—
A 30 3	S05	M05	4.764	6.654	20.335	—	3.740	46	22.933	49	3.780	4.803	4.567	3.740	
A 30 3	S1	M1	5.433	6.988	21.476	—	4.252	51	23.878	57	4.055	5.315	4.882	4.252	
A 30 3	S2	ME2S	6.142	7.343	22.618	—	4.685	55	—	—	—	—	—	—	—
A 30 3	S3	ME3S	7.677	8.110	24.311	—	5.591	69	—	—	—	—	—	—	—
A 30 3	S3	ME3L	7.677	8.110	25.571	—	5.591	84	—	—	—	—	—	—	—

A 30...SK / SC



SK...



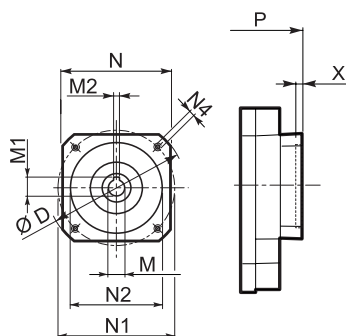
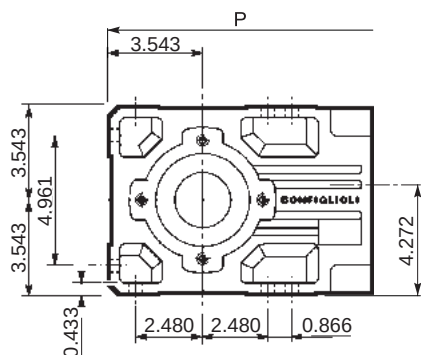
SC...

Dimensions are in mm

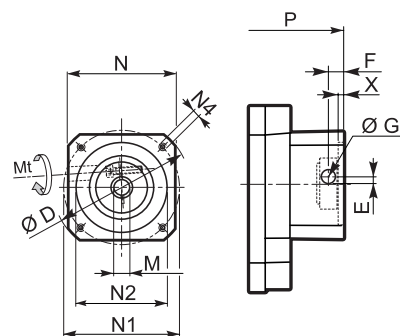
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2x	3x	Kg
A 30 2/3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	304.5	362	15/16
A 30 2/3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	311.5	369	16/17
A 30 2/3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	311.5	369	16/17
A 30 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	352.5	410	17/18
A 30 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	352.5	410	17/18
A 30 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	352.5	410	17/18
A 30 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	352.5	410	17/18
A 30 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	352.5	410	17/18
A 30 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	352.5	410	17/18
A 30 2	SK130A	188	24	27.3	8	142	165	130	M10x20	5	352.5	—	18

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
													2x	3x	Kg
A 30 2/3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	331.5	389	16/17
A 30 2/3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	331.5	389	17/18
A 30 2/3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	331.5	389	17/18
A 30 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	376	433.5	18/19
A 30 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	376	433.5	18/19
A 30 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	376	433.5	18/19
A 30 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	376	433.5	18/19
A 30 2/3	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	376	433.5	19/20
A 30 2/3	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	376	433.5	19/20
A 30 2	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	376	—	20

A 30...SK / SC



SK...



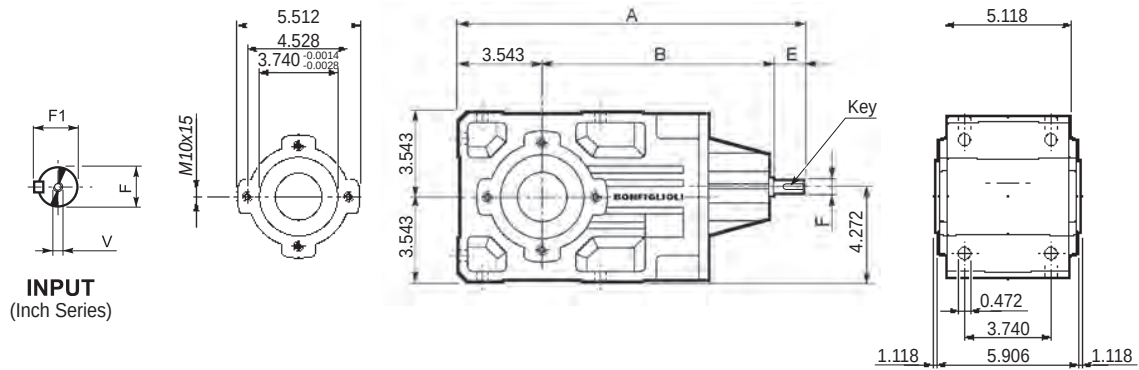
SC...

Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P 			
											2x 	3x 	lbs	
A 30 2/3	SK60A	4.016	0.433	^{+0.0020} _{+0.0013}	0.157	^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.138	11.988	14.252	33/35
A 30 2/3	SK60B	4.016	0.551	^{+0.0020} _{+0.0013}	0.642	^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.157	12.264	14.528	35/37
A 30 2/3	SK80A	4.528	0.551	^{+0.0020} _{+0.0013}	0.642	^{+0.0012} ₊₀	3.543	3.937	3.150	M6x12	0.157	12.264	14.528	35/37
A 30 2/3	SK80C	4.724	0.748	^{+0.0024} _{+0.0016}	0.858	^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	13.878	16.142	37/40
A 30 2/3	SK95A	5.118	0.551	^{+0.0020} _{+0.0013}	0.642	^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	13.878	16.142	37/40
A 30 2/3	SK95B	5.118	0.748	^{+0.0024} _{+0.0016}	0.858	^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	13.878	16.142	37/40
A 30 2/3	SK95C	5.118	0.945	^{+0.0024} _{+0.0016}	1.075	^{+0.0014} ₊₀	4.016	4.528	3.740	M8x12	0.157	13.878	16.142	37/40
A 30 2/3	SK110A	5.906	0.748	^{+0.0024} _{+0.0016}	0.858	^{+0.0012} ₊₀	4.724	5.118	4.331	M8x12	0.197	13.878	16.142	37/40
A 30 2/3	SK110B	5.906	0.945	^{+0.0024} _{+0.0016}	1.075	^{+0.0014} ₊₀	4.724	5.118	4.331	M8x12	0.197	13.878	16.142	37/40
A 30 2	SK130A	7.402	0.945	^{+0.0024} _{+0.0016}	1.075	^{+0.0014} ₊₀	5.591	6.496	5.118	M10x20	0.197	13.878	—	40

		 Mt [lb·in]	D	E	F	G	M	N	N1	N2	N4	X	P		
													2x 	3x 	
A 30 2/3	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	13.051	15.315	35/37
A 30 2/3	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	13.051	15.315	37/40
A 30 2/3	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	13.051	15.315	37/40
A 30 2/3	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	14.803	17.067	40/42
A 30 2/3	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	14.803	17.067	40/42
A 30 2/3	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.803	17.067	40/42
A 30 2/3	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	14.803	17.067	40/42
A 30 2/3	SC 110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.803	17.067	42/44
A 30 2/3	SC 110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	14.803	17.067	42/44
A 30 2	SC 130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	14.803	—	44

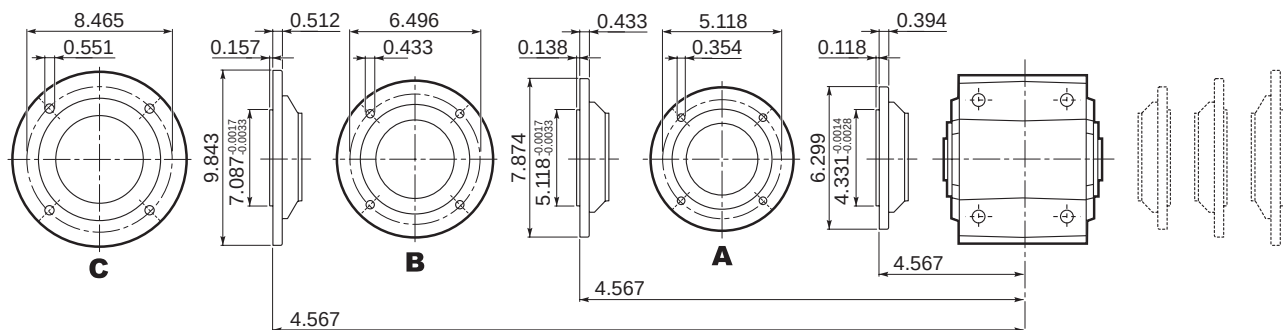
A 30...NHS



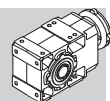
		A	B	E	F	F1	V	Key	lbs
A 30 2	NHS	15.079	9.961	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	37
A 30 3	NHS	15.650	10.531	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	36

Imperial output versions available also in combination with HS input

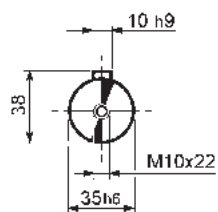
A 30...F...



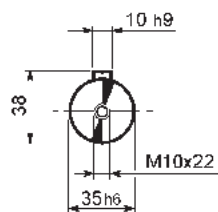
A 30



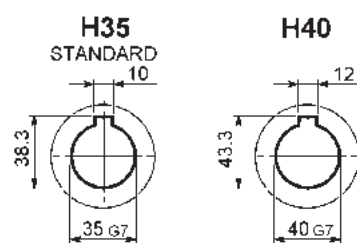
A 30...UR



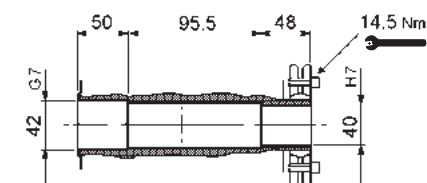
A 30...UD



A 30...UH

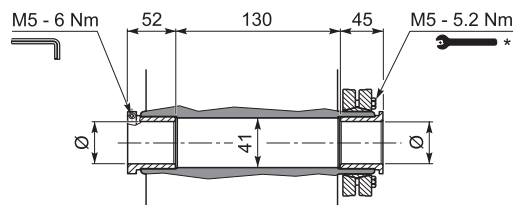


A 30...US

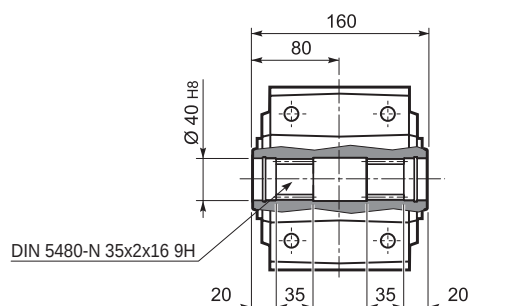


A 30...QF

	Ø
QF35	35
QF40	40



A 30...UV

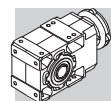
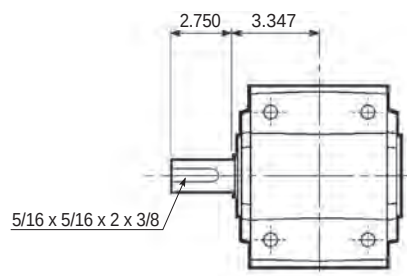
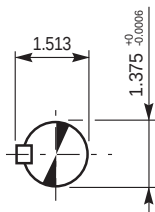


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 30

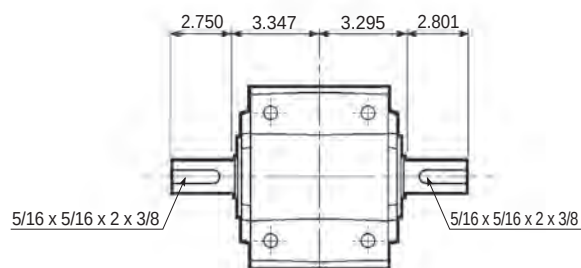
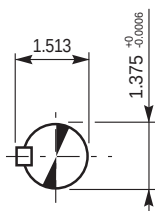
A 30...NUR

OUTPUT
(Inch Series)



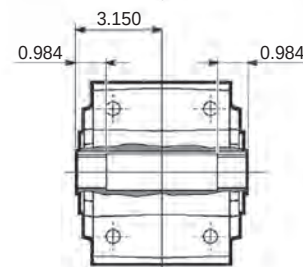
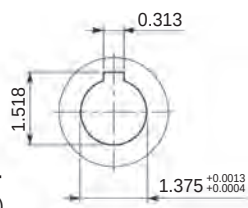
A 30...NUD

OUTPUT
(Inch Series)

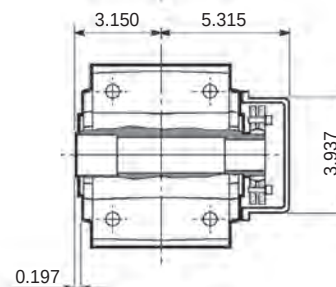
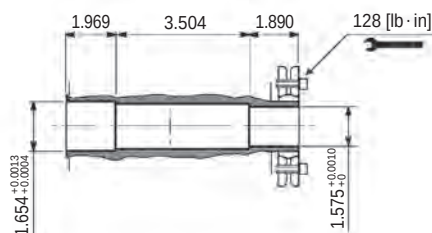


A 30...NUH

OUTPUT
(Inch Series)

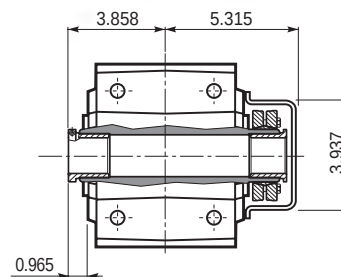
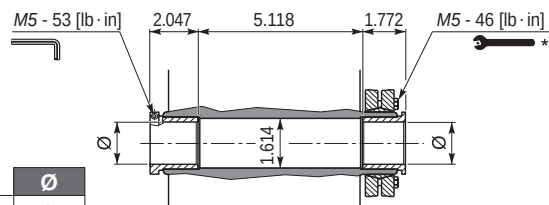


A 30...US

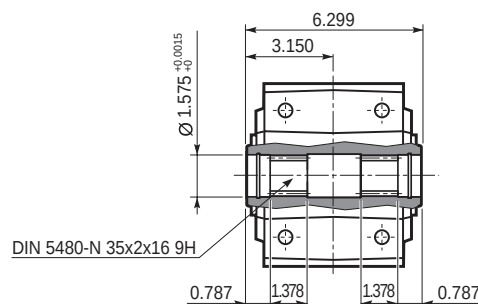


A 30...NQF

	Ø
NQF1-3/8	1.375
NQF1-7/16	1.438

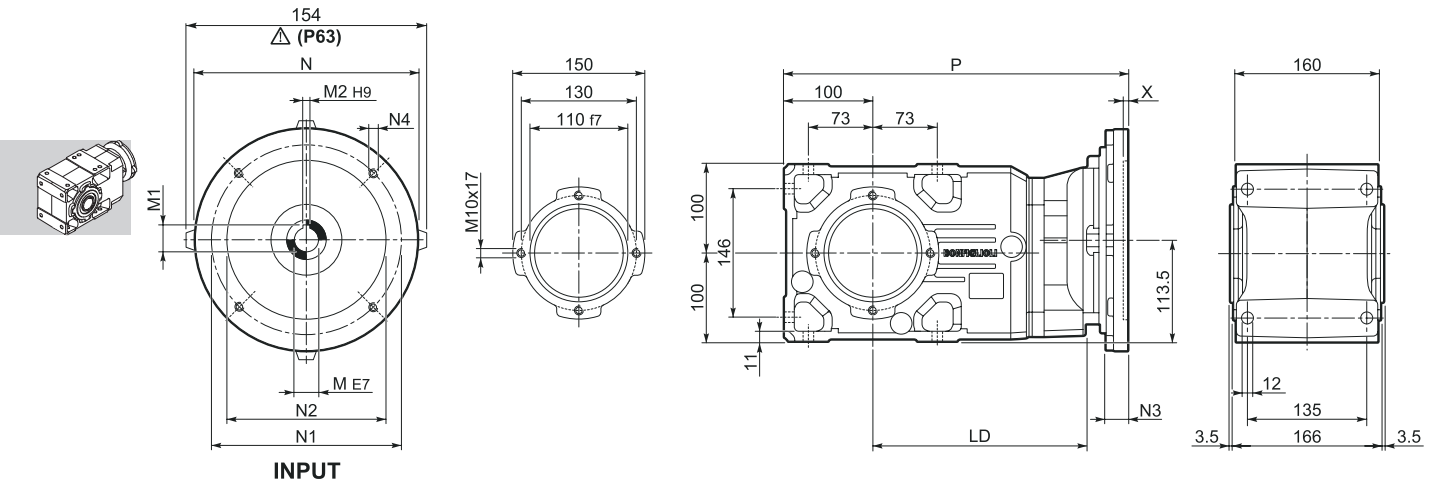


A 30...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 35...P(IEC)

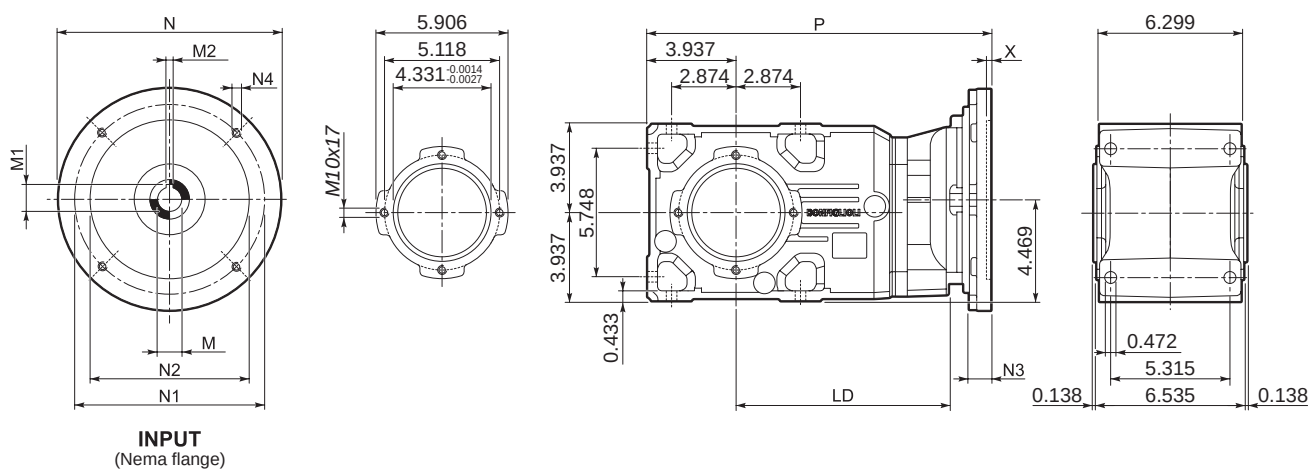


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	kg
A 35 2	P63	229.5	11	12.8	4	140	115	95	—	M8x19	4	359.5	28
A 35 2	P71	229.5	14	16.3	5	160	130	110	—	M8x16	4.5	359.5	28
A 35 2	P80	239.5	19	21.8	6	200	165	130	—	M10x14.5	4	379	29
A 35 2	P90	239.5	24	27.3	8	200	165	130	—	M10x14.5	4	379	29
A 35 2	P100	239.5	28	31.3	8	250	215	180	—	M12x16	4.5	389	32
A 35 2	P112	239.5	28	31.3	8	250	215	180	—	M12x16	4.5	389	32
A 35 2	P132	—	38	41.3	10	300	265	230	16	14	5	425.5	40
A 35 3	P63	—	11	12.8	4	140	115	95	—	M8x19	4	417	29
A 35 3	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	417	29
A 35 3	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	436.5	30
A 35 3	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	436.5	30
A 35 3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	446.5	34
A 35 3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	446.5	34

Metric output versions available also in combination with NEMA motor adaptor

A 35...N(NEMA Input)

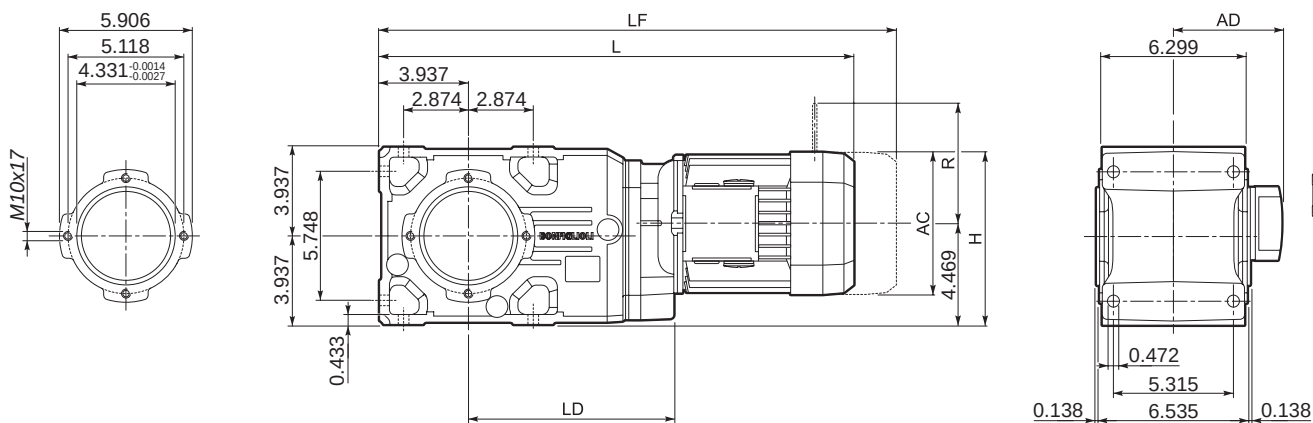


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 35 2	N56C	9.035	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	14.941	62
A 35 2	N140TC	9.035	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	14.941	64
A 35 2	N180TC	9.429	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	15.768	71
A 35 2	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	16.929	88
A 35 3	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.205	64
A 35 3	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.205	64
A 35 3	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	18.031	75

Imperial output versions available also in combination with IEC motor adaptor

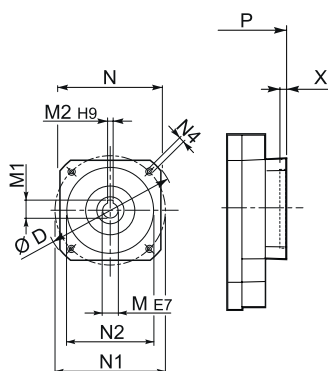
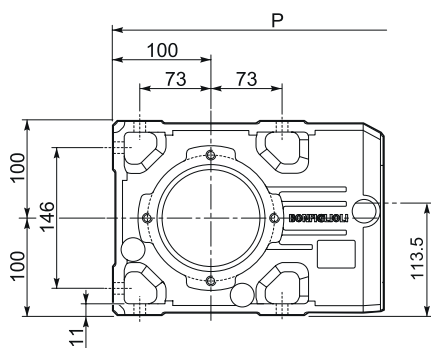
A 35...M/ME



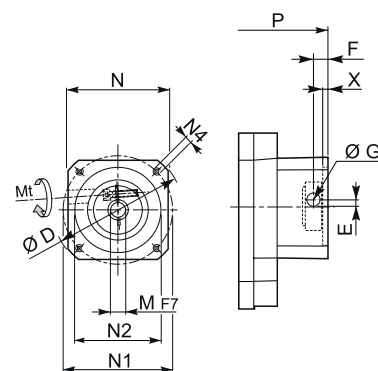
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	L	LD	AD	lbs	M...FD M...FA		M...FD		M...FA	
									LF	lbs	R	AD	R	AD
A 35 2	S1	M1	5.433	7.185	20.256	8.563	4.252	75	22.657	79	4.055	5.315	4.882	4.252
A 35 2	S2	ME2S	6.142	7.539	21.398	9.035	4.685	82	—	—	—	—	—	—
A 35 2	S3	ME3S	7.677	8.307	23.091	9.429	5.591	96	—	—	—	—	—	—
A 35 2	S3	ME3L	7.677	8.307	24.350	9.429	5.591	110	—	—	—	—	—	—
A 35 2	S4	ME4	10.157	9.547	28.602	—	7.598	196	—	—	—	—	—	—
A 35 2	S4	ME4LB	10.157	9.547	29.980	—	7.598	214	—	—	—	—	—	—
A 35 3	S05	M05S	4.764	6.850	21.378	—	3.740	73	23.976	75	3.780	4.803	4.567	3.740
A 35 3	S1	M1	5.433	7.185	22.520	—	4.252	77	24.921	84	4.055	5.315	4.882	4.252
A 35 3	S2	ME2S	6.142	7.539	23.661	—	4.685	82	—	—	—	—	—	—
A 35 3	S3	ME3S	7.677	8.307	25.354	—	5.591	96	—	—	—	—	—	—
A 35 3	S3	ME3L	7.677	8.307	26.614	—	5.591	110	—	—	—	—	—	—

A 35...SK / SC



SK...



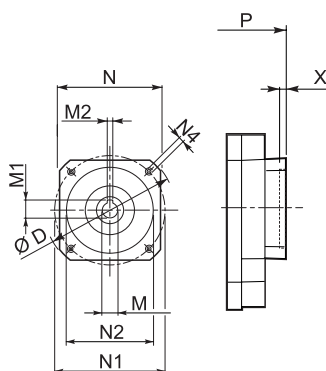
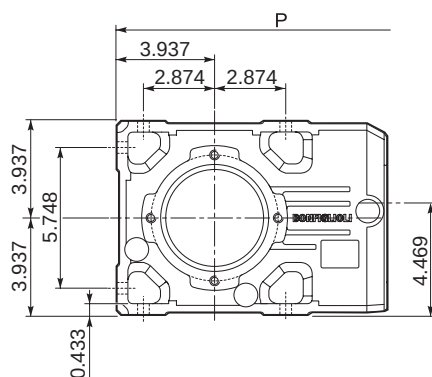
SC...

Dimensions are in mm

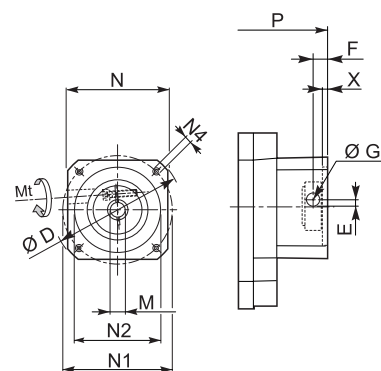
		D	M	M1	M2	N	N1	N2	N4	X	P		Kg
											2x	3x	
A 35 2/3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	331	388.5	27/28
A 35 2/3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	338	395.5	28/29
A 35 2/3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	338	395.5	28/29
A 35 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	379	436.5	29/30
A 35 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	379	436.5	29/30
A 35 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	379	436.5	29/30
A 35 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	379	436.5	29/30
A 35 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	379	436.5	29/30
A 35 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	379	436.5	29/30
A 35 2	SK130A	188	24	27.3	8	142	165	130	M10x20	5	379	—	30

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		Kg
													2x	3x	
A 35 2/3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	358	415.5	28/29
A 35 2/3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	358	415.5	29/30
A 35 2/3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	358	415.5	29/30
A 35 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	402.5	460	30/31
A 35 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	402.5	460	30/31
A 35 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	402.5	460	30/31
A 35 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	402.5	460	30/31
A 35 2/3	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	402.5	460	32/33
A 35 2/3	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	402.5	460	32/33
A 35 2	SC130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	402.5	—	33

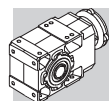
A 35...SK / SC



SK...



SC...

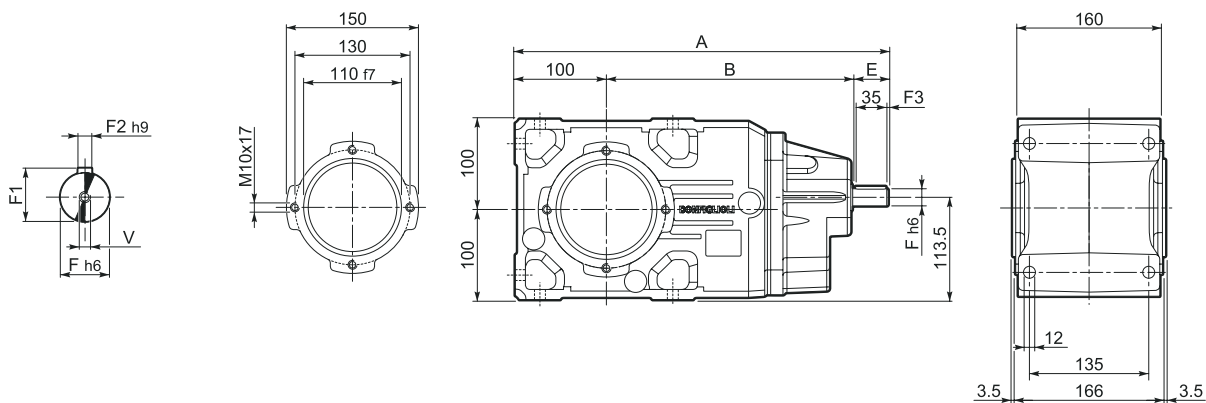
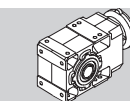


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		lbs
											2x	3x	
A 35 2/3	SK60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	13.031	15.295	60/62
A 35 2/3	SK60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	13.307	15.571	62/64
A 35 2/3	SK80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	13.307	15.571	62/64
A 35 2/3	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	14.921	17.185	64/66
A 35 2/3	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	14.921	17.185	64/66
A 35 2/3	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	14.921	17.185	64/66
A 35 2/3	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	14.921	17.185	64/66
A 35 2/3	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	14.921	17.185	64/66
A 35 2/3	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	14.921	17.185	64/66
A 35 2	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	14.921	—	66

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P		lbs
													2x	3x	
A 35 2/3	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	14.094	16.358	62/64
A 35 2/3	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	14.094	16.358	64/66
A 35 2/3	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	14.094	16.358	64/66
A 35 2/3	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	15.846	18.110	66/68
A 35 2/3	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	15.846	18.110	66/68
A 35 2/3	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	15.846	18.110	66/68
A 35 2/3	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	15.846	18.110	66/68
A 35 2/3	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	15.846	18.110	71/73
A 35 2/3	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	15.846	18.110	71/73
A 35 2	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	15.846	—	73

A 35...HS

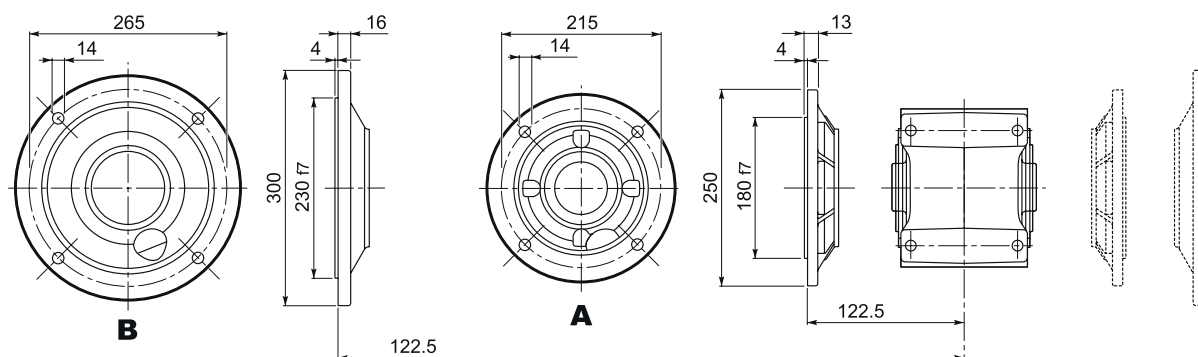


Dimensions are in mm

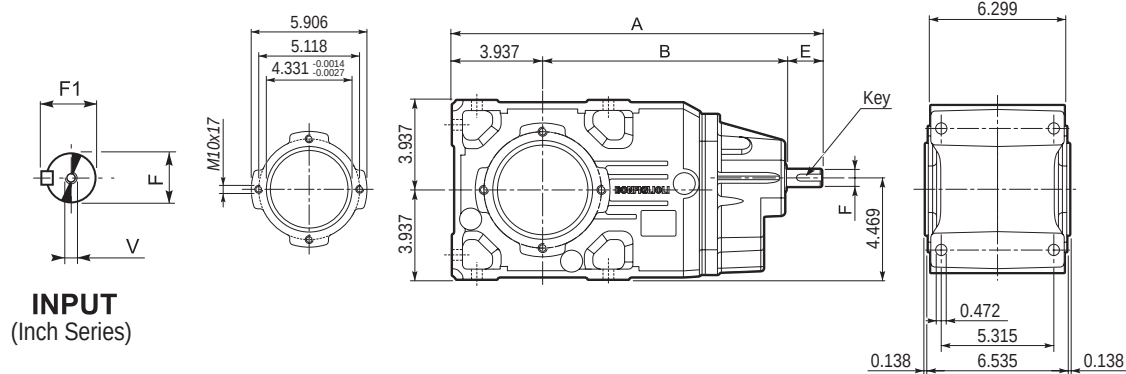
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 35 2	HS	409.5	269.5	40	19	21.5	6	2.5	35	M6x16	29
A 35 3		424	284	40	16	18	5	2.5	35	M6x16	29

Metric output versions available also in combination with NHS input

A 35...F...



A 35...NHS

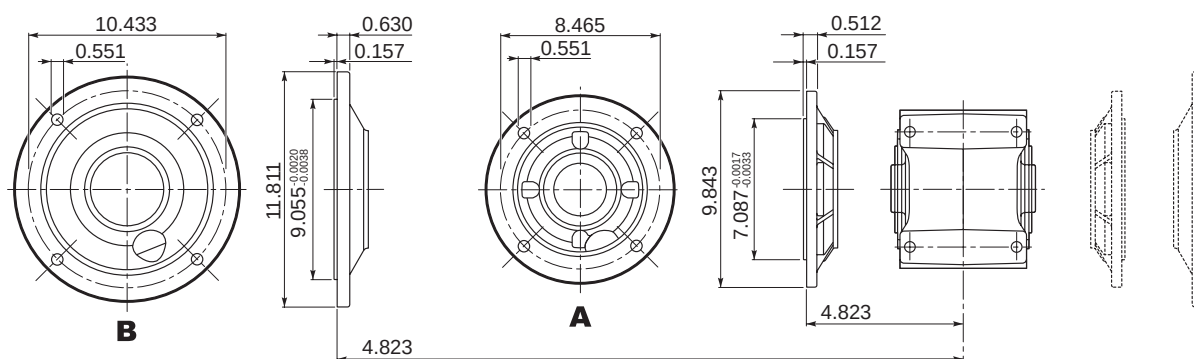


Dimensions are in Inch except when shown in *italic* [mm]

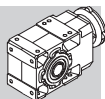
		A	B	E	F	F1	V	Key	
									
A 35 2	NHS	16.122	10.610	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	64
A 35 3	NHS	16.693	11.181	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	64

Imperial output versions available also in combination with HS input

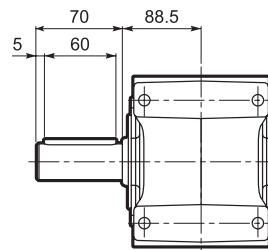
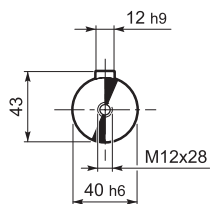
A 35...F...



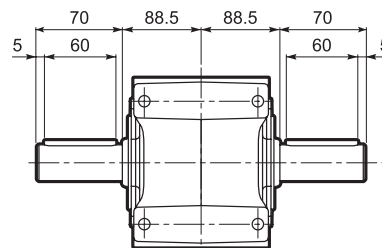
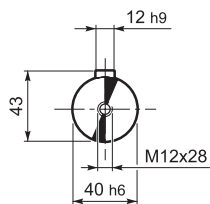
A 35



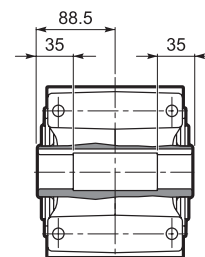
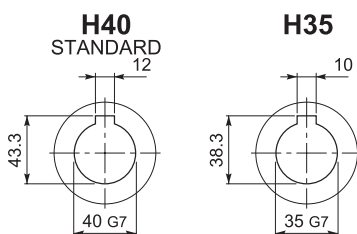
A 35...UR



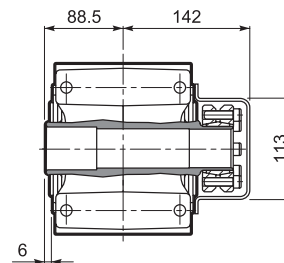
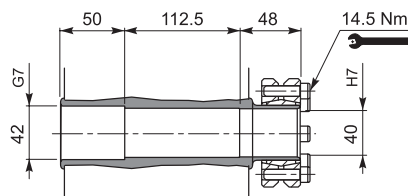
A 35...UD



A 35...UH



A 35...US

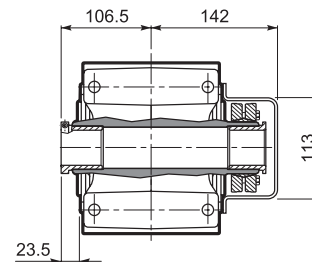
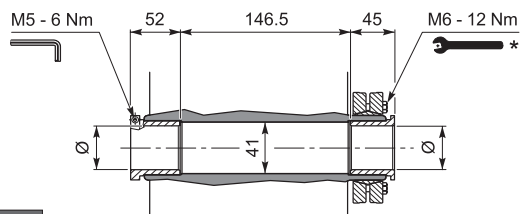


A 35...QF

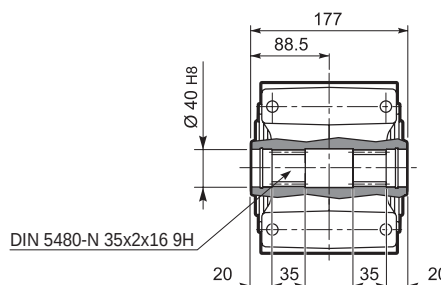
	Ø
QF35	35
QF40	40



	T _{n2} max [lb · in]
A 35 QF35	4872



A 35...UV

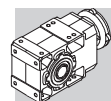
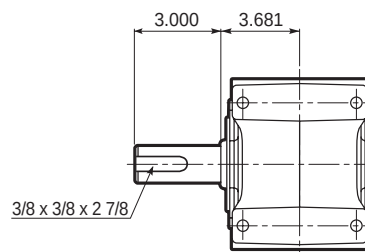
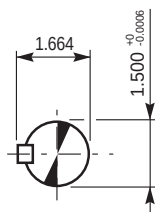


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 35

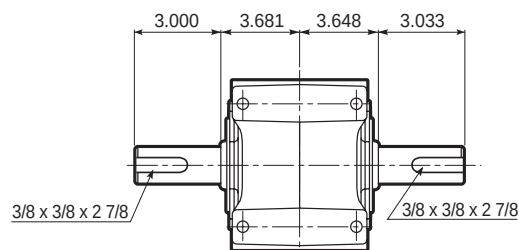
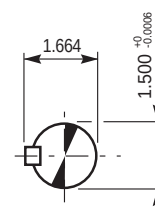
A 35...NUR

OUTPUT
 (Inch Series)



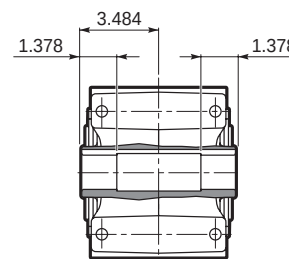
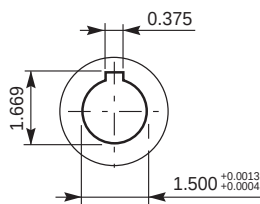
A 35...NUD

OUTPUT
 (Inch Series)

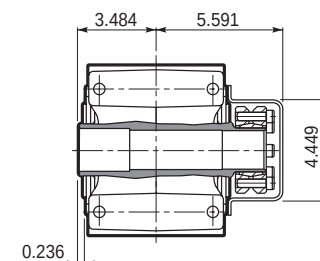
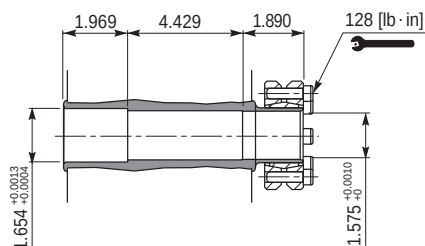


A 35...NUH

OUTPUT
 (Inch Series)



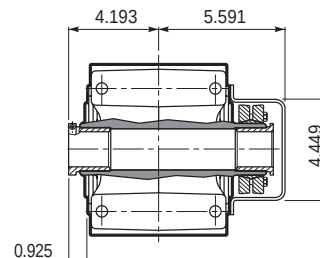
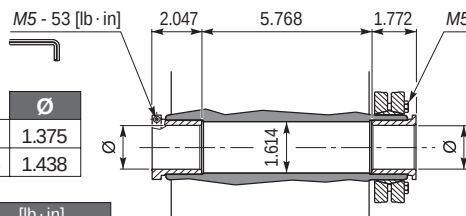
A 35...US



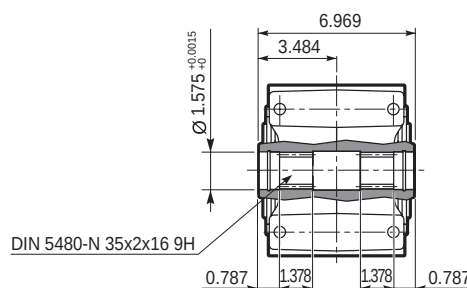
A 35...NQF



		$M5 - 53 \text{ [lb · in]}$	2.047	5.768	1.772	$M5 - 106 \text{ [lb · in]}$	*
	$\emptyset$						
	NQF1-3/8	1.375					
	NQF1-7/16	1.438					
	$T_{n2} \text{ max [lb · in]}$						
	A 35 NQF1-3/8	4872					

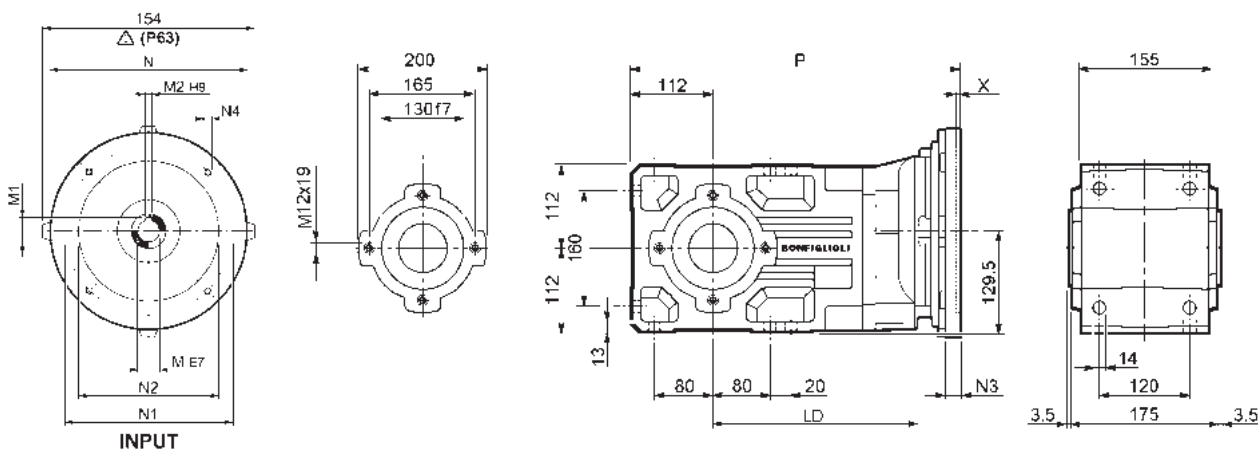


A 35...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 41...P(IEC)

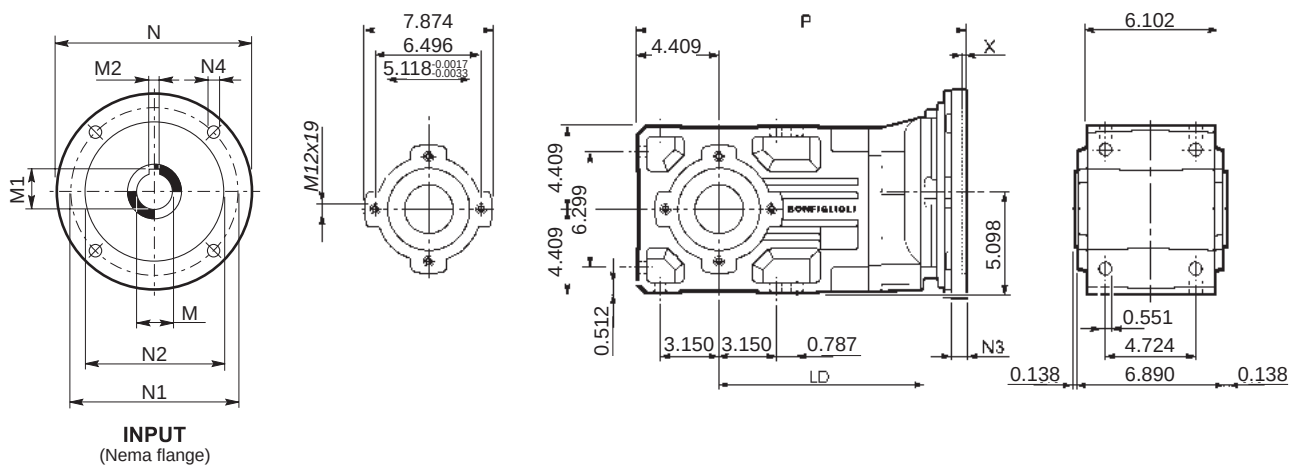


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 41 2	P63	232	11	12.8	4	140	115	95	—	M8x19	4	375	37
A 41 2	P71	232	14	16.3	5	160	130	110	—	M8x16	4.5	375	38
A 41 2	P80	248	19	21.8	6	200	165	130	—	M10x14.5	4	394.5	39
A 41 2	P90	248	24	27.3	8	200	165	130	—	M10x14.5	4	394.5	39
A 41 2	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	404.5	43
A 41 2	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	404.5	43
A 41 2	P132	—	38	41.3	10	300	265	230	16	14	5	441	46
A 41 3	P63	—	11	12.8	4	140	115	95	—	M8x19	4	436.5	39
A 41 3	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	436.5	39
A 41 3	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	456	40
A 41 3	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	456	40
A 41 3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	466	44
A 41 3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	466	44

Metric output versions available also in combination with NEMA motor adaptor

A 41...N(NEMA Input)

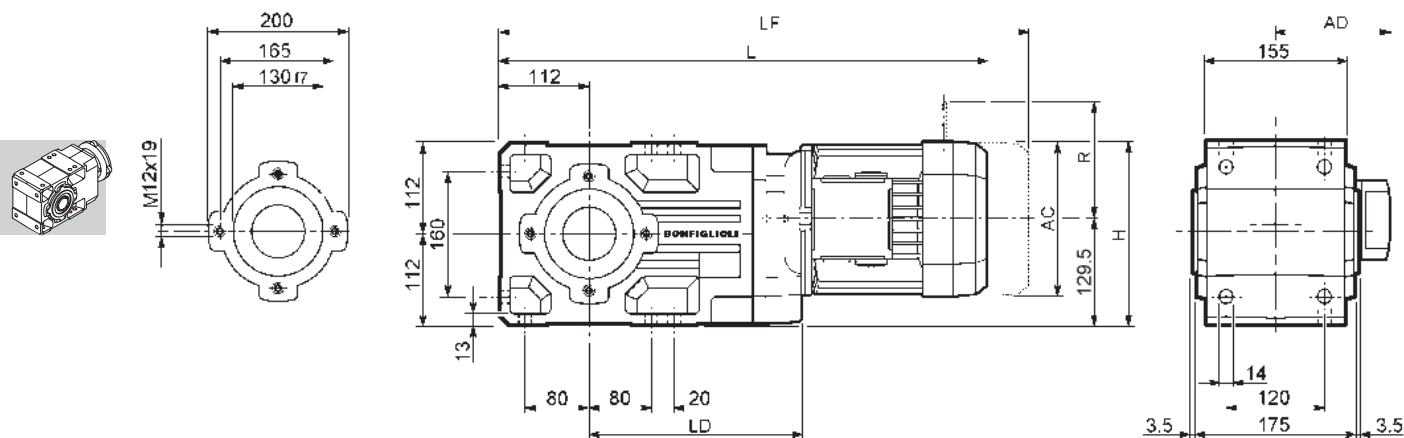


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 41 2	N56C	9.035	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	14.941	62
A 41 2	N140TC	9.035	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	14.941	64
A 41 2	N180TC	9.429	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	15.768	71
A 41 2	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	16.929	88
A 41 3	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.205	64
A 41 3	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	17.205	64
A 41 3	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	18.031	75

Imperial output versions available also in combination with IEC motor adaptor

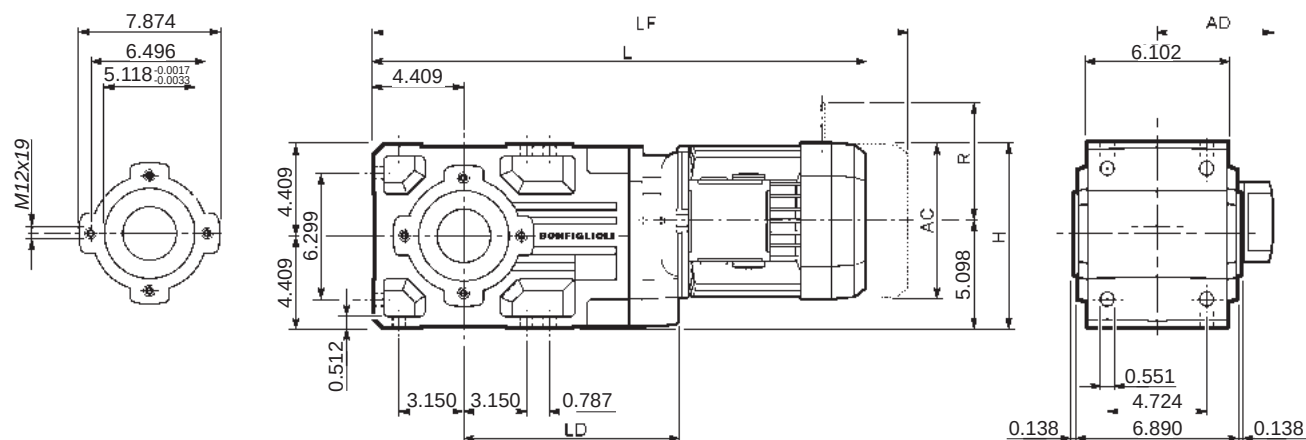
A 41...M/ME



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	Kg		LF	Kg	R	AD	R	AD
A 41 2	S1	M1	138	198.5	530	216.5	108	41	591	44	103	135	124	108	
A 41 2	S2	ME2S	156	207.5	559	232	119	45	—	—	—	—	—	—	—
A 41 2	S3	ME3S	195	227	602	248	142	51.5	—	—	—	—	—	—	—
A 41 2	S3	ME3L	195	227	634	248	142	58	—	—	—	—	—	—	—
A 41 2	S4	ME4	258	258.5	742	—	193	92	—	—	—	—	—	—	—
A 41 2	S4	ME4LB	258	258.5	777	—	193	100	—	—	—	—	—	—	—
A 41 3	S05	M05	121	245	562.5	—	95	44	628.5	46	96	122	116	95	
A 41 3	S1	M1	138	198.5	591.5	—	108	46	652.5	49	103	135	124	108	
A 41 3	S2	ME2S	156	207.5	620.5	—	119	50	—	—	—	—	—	—	—
A 41 3	S3	ME3S	195	227	663.5	—	142	56.5	—	—	—	—	—	—	—
A 41 3	S3	ME3L	195	227	695.5	—	142	61	—	—	—	—	—	—	—

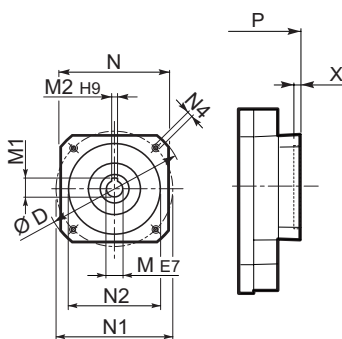
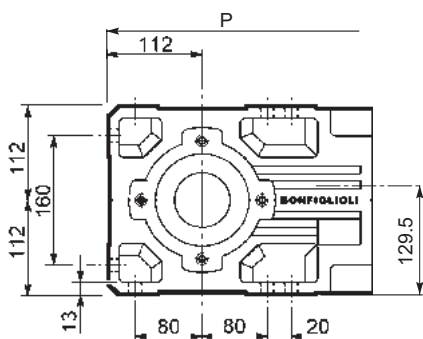
A 41...M/ME



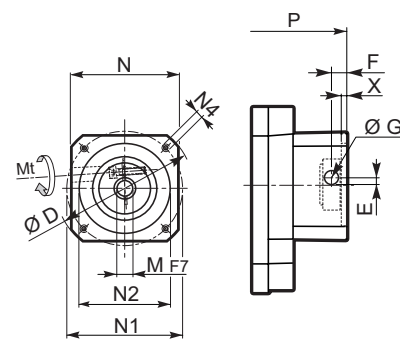
Dimensions are in Inch except when shown in *italic* [mm]

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	lbs	LF	lbs	R	AD	R	AD
A 41 2	S1	M1	5.433	7.185	20.256	8.563	4.252	75	22.657	79	4.055	5.315	4.882	4.252
A 41 2	S2	ME2S	6.142	7.539	21.398	9.035	4.685	82	—	—	—	—	—	—
A 41 2	S3	ME3S	7.677	8.307	23.091	9.429	5.591	96	—	—	—	—	—	—
A 41 2	S3	ME3L	7.677	8.307	24.350	9.429	5.591	110	—	—	—	—	—	—
A 41 2	S4	ME4	10.157	9.547	28.602	—	7.598	196	—	—	—	—	—	—
A 41 2	S4	ME4LB	10.157	9.547	29.980	—	7.598	214	—	—	—	—	—	—
A 41 3	S05	M05	4.764	6.850	21.378	—	3.740	73	23.976	75	3.780	4.803	4.567	3.740
A 41 3	S1	M1	5.433	7.185	22.520	—	4.252	77	24.921	84	4.055	5.315	4.882	4.252
A 41 3	S2	ME2S	6.142	7.539	23.661	—	4.685	82	—	—	—	—	—	—
A 41 3	S3	ME3S	7.677	8.307	25.354	—	5.591	96	—	—	—	—	—	—
A 41 3	S3	ME3L	7.677	8.307	26.614	—	5.591	110	—	—	—	—	—	—

A 41...SK / SC



SK...



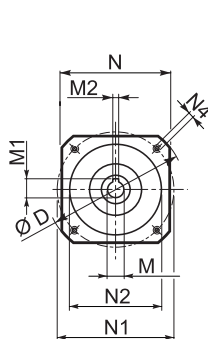
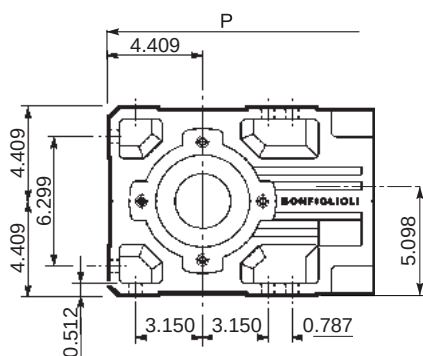
SC...

Dimensions are in mm

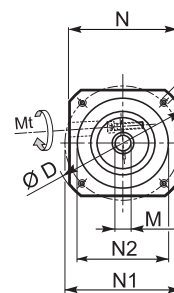
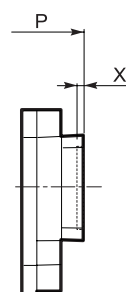
		D	M	M1	M2	N	N1	N2	N4	X	P	Kg
											2x 0.6 3x 0.6	
A41 3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	—	408
A41 3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	—	415
A41 3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	—	415
A41 2	SK80B	120	14	16.3	5	96	100	80	M6x12	4	394.5	—
A41 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	394.5	456
A41 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	394.5	456
A41 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	394.5	456
A41 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	394.5	456
A41 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	394.5	456
A41 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	394.5	456
A41 2	SK130A	188	24	27.3	8	142	165	130	M10x20	5	394.5	—
A41 2	SK130B	189	32	35.3	10	160	165	130	M10x20	5	441	—
A41 2	SK180A	240	32	35.3	10	192	215	180	M12x19	5	441	—
A41 2	SK180B	240	38	41.3	10	192	215	180	M12x19	5	441	—

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	Kg
													2x 0.6 3x 0.6	
A41 3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	—	435
A41 3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	—	435
A41 3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	—	435
A41 2	SC80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	418	—
A41 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	418	479.5
A41 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	418	479.5
A41 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	418	479.5
A41 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	418	479.5
A41 2/3	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	418	479.5
A41 2/3	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	418	479.5
A41 2	SC130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	418	—
A41 2	SC130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	464	—
A41 2	SC180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	468	—
A41 2	SC180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	468	—

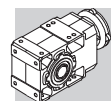
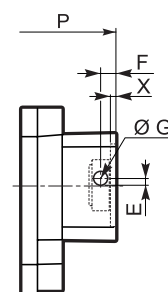
A 41...SK / SC



SK...



SC...

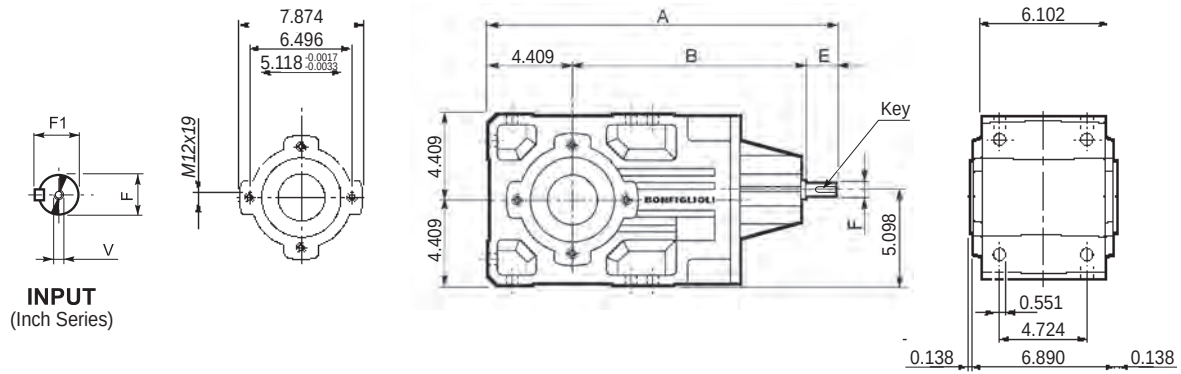


Dimensions are in Inch except when shown in *italics* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		
													
A41 3	SK60A	4.016	0.433 ^{+0.0020} _{+0.0013}	0.504	0.157 ^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.138	—	16.063	88
A41 3	SK60B	4.016	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	3.228	2.953	2.362	M5x10	0.157	—	16.339	88
A41 3	SK80A	4.528	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	3.543	3.937	3.150	M6x12	0.157	—	16.339	88
A41 2	SK80B	4.724	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	15.531	—	86
A41 2/3	SK80C	4.724	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	3.780	3.937	3.150	M6x12	0.157	15.531	17.953	86/88
A41 2/3	SK95A	5.118	0.551 ^{+0.0020} _{+0.0013}	0.642	0.197 ^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.531	17.953	86/88
A41 2/3	SK95B	5.118	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.531	17.953	86/90
A41 2/3	SK95C	5.118	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	4.016	4.528	3.740	M8x12	0.157	15.531	17.953	86/97
A41 2/3	SK110A	5.906	0.748 ^{+0.0024} _{+0.0016}	0.858	0.236 ^{+0.0012} ₊₀	4.724	5.118	4.331	M8x12	0.197	15.531	17.953	86/97
A41 2/3	SK110B	5.906	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	4.724	5.118	4.331	M8x12	0.197	15.531	17.953	86/97
A41 2	SK130A	7.402	0.945 ^{+0.0024} _{+0.0016}	1.075	0.315 ^{+0.0014} ₊₀	5.591	6.496	5.118	M10x20	0.197	15.531	—	90
A41 2	SK130B	7.441	1.260 ^{+0.0030} _{+0.0020}	1.390	0.394 ^{+0.0014} ₊₀	6.299	6.496	5.118	M10x20	0.197	17.362	—	95
A41 2	SK180A	9.449	1.260 ^{+0.0030} _{+0.0020}	1.390	0.394 ^{+0.0014} ₊₀	7.559	8.465	7.087	M12x19	0.197	17.362	—	95
A41 2	SK180B	9.449	1.496 ^{+0.0030} _{+0.0020}	1.626	0.394 ^{+0.0014} ₊₀	7.559	8.465	7.087	M12x19	0.197	17.362	—	95

		 Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P		
													2x 	3x 	lbs
A41 3	SC60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	17.126	90
A41 3	SC60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	17.126	90
A41 3	SC80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	—	17.126	90
A41 2	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	16.457	—	88
A41 2/3	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	16.457	18.878	88/90
A41 2/3	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	16.457	18.878	88/93
A41 2/3	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	16.457	18.878	88/93
A41 2/3	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	16.457	18.878	88/95
A41 2/3	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	16.457	18.878	90/104
A41 2/3	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	16.457	18.878	90/104
A41 2	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	16.457	—	93
A41 2	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	18.268	—	101
A41 2	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	18.425	—	101
A41 2	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	18.425	—	101

A 41...NHS

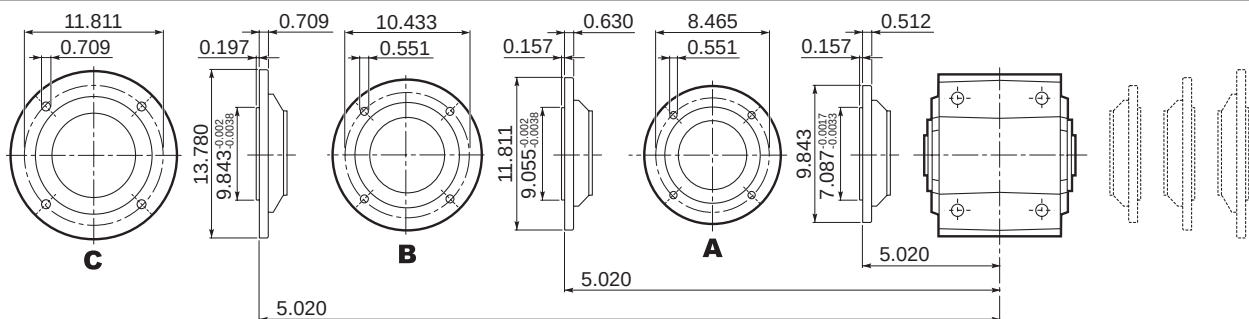


Dimensions are in Inch except when shown in *italic* [mm]

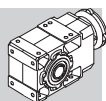
		A	B	E	F	F1	V	Key	
									
A 41 2	NHS	18.268	11.890	1.969	1.000 ± 0.0005	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	90
A 41 3	NHS	19.154	13.169	1.575	0.750 ± 0.0005	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	87

Imperial output versions available also in combination with HS input

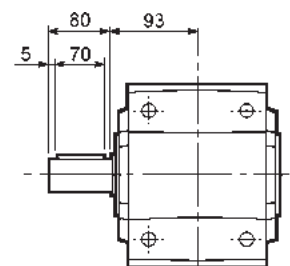
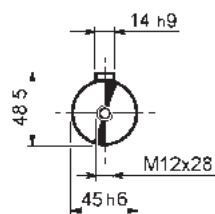
A 41...F...



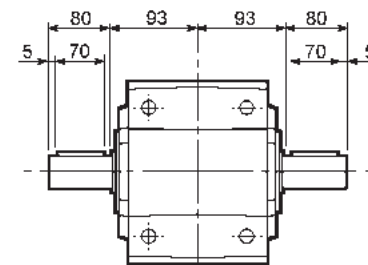
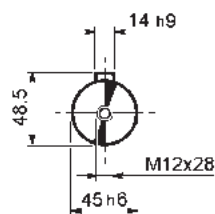
A 41



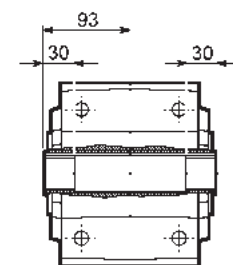
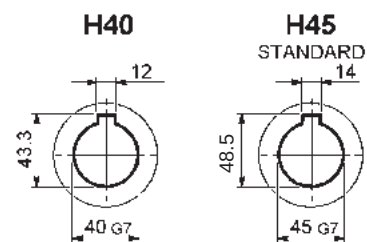
A 41...UR



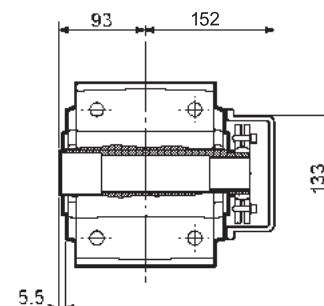
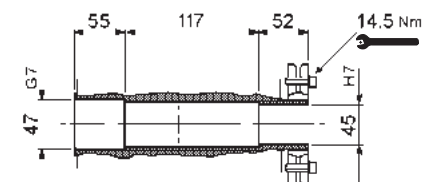
A 41...UD



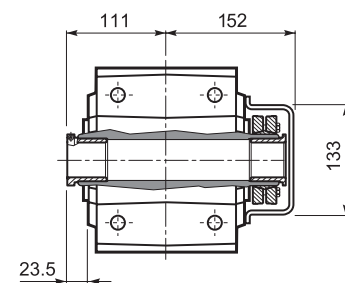
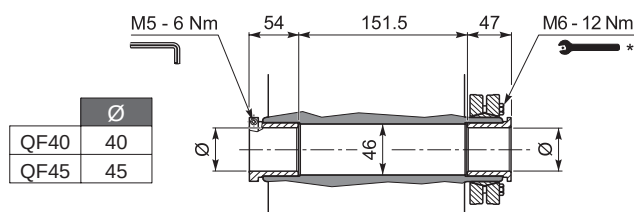
A 41...UH



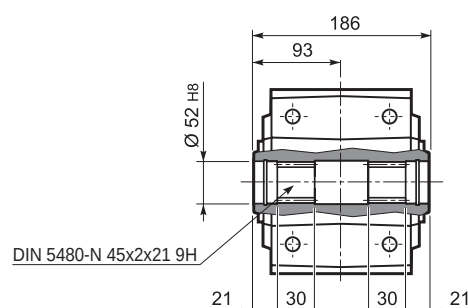
A 41...US



A 41...QF



A 41...UV

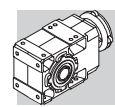
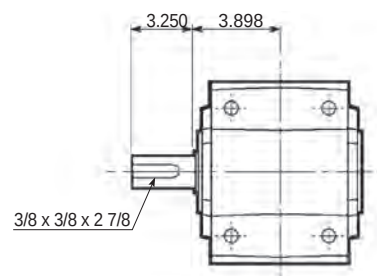
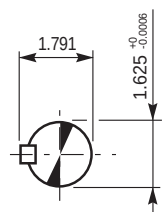


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 41

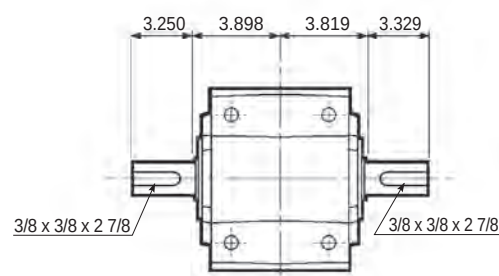
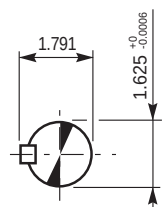
A 41...NUR

OUTPUT
 (Inch Series)



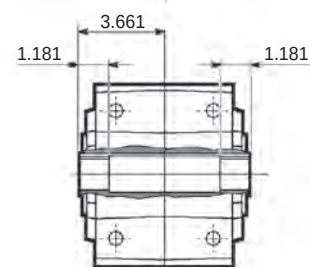
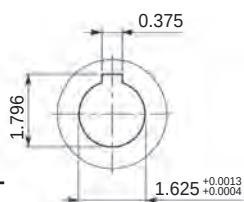
A 41...NUD

OUTPUT
 (Inch Series)

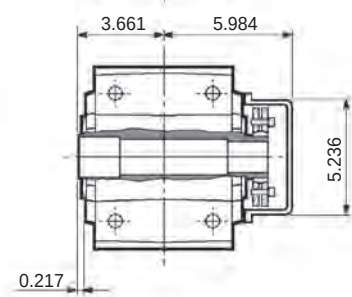
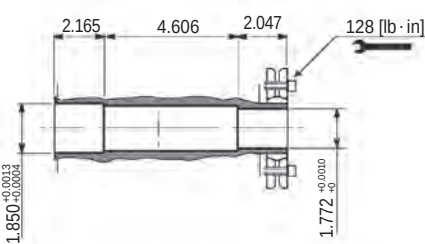


A 41...NUH

OUTPUT
 (Inch Series)

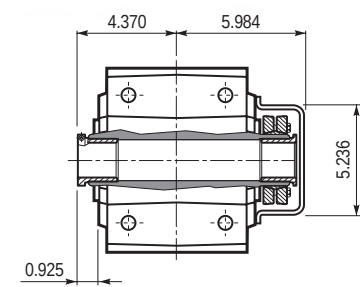
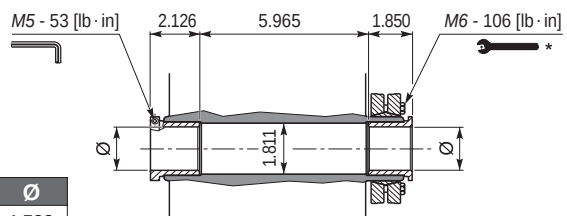


A 41...US

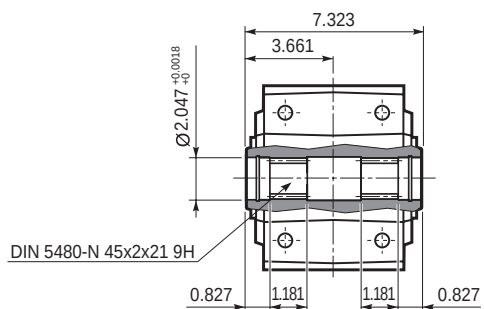


A 41...NQF

	Ø
NQF1-1/2	1.500
NQF1-5/8	1.625

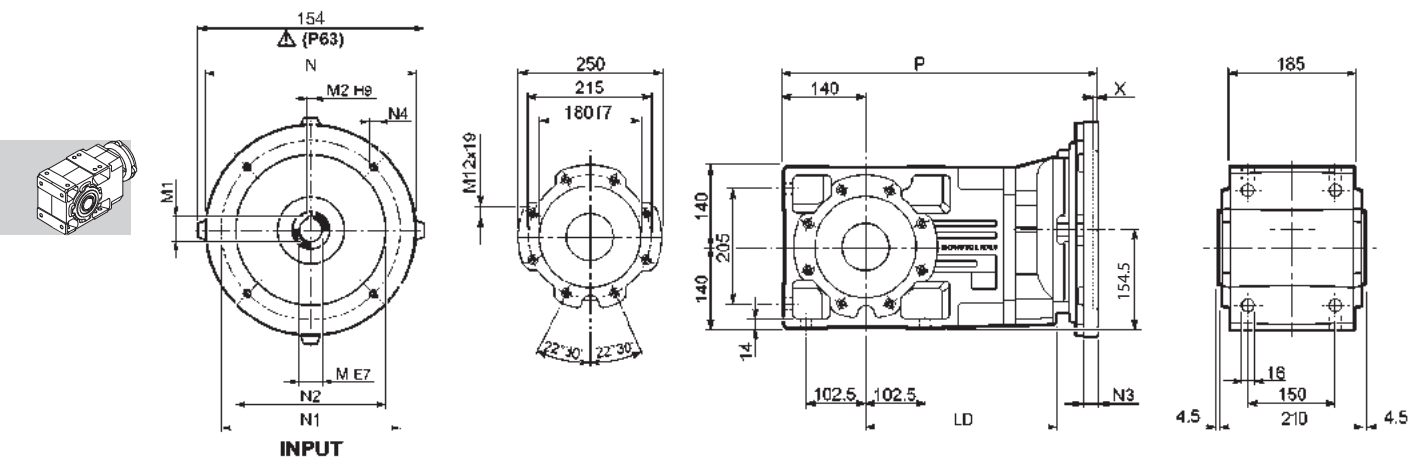


A 41...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 50...P(IEC)

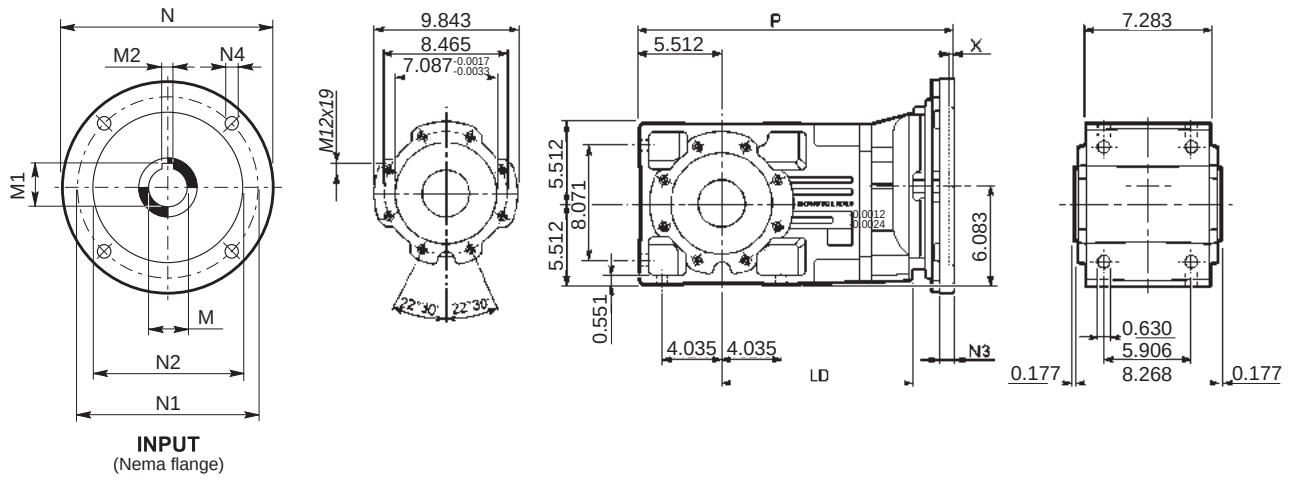


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
A 50 2/3	P63	284.5	11	12.8	4	140	115	95	—	M8x19	4	454.5	60
A 50 2/3	P71	284.5	14	16.3	5	160	130	110	—	M8x16	4.5	454.5	60
A 50 2/3	P80	299.5	19	21.8	6	200	165	130	—	M10x14.5	4	474	61
A 50 2/3	P90	299.5	24	27.3	8	200	165	130	—	M10x14.5	4	474	61
A 50 2/3	P100	284.5	28	31.3	8	250	215	180	—	M12x16	4.5	484	65
A 50 2/3	P112	284.5	28	31.3	8	250	215	180	—	M12x16	4.5	484	65
A 50 2/3	P132	284.5	38	41.3	10	300	265	230	16	14	5	520.5	68
A 50 2/3	P160	—	42	45.3	12	350	300	250	23	18	5.5	571	72
A 50 2/3	P180	—	48	51.8	14	350	300	250	23	18	5.5	571	72
A 50 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	526	62
A 50 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	526	62
A 50 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	545.5	63
A 50 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	545.5	63
A 50 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	555.5	67
A 50 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	555.5	67

Metric output versions available also in combination with NEMA motor adaptor

A 50...N(NEMA Input)

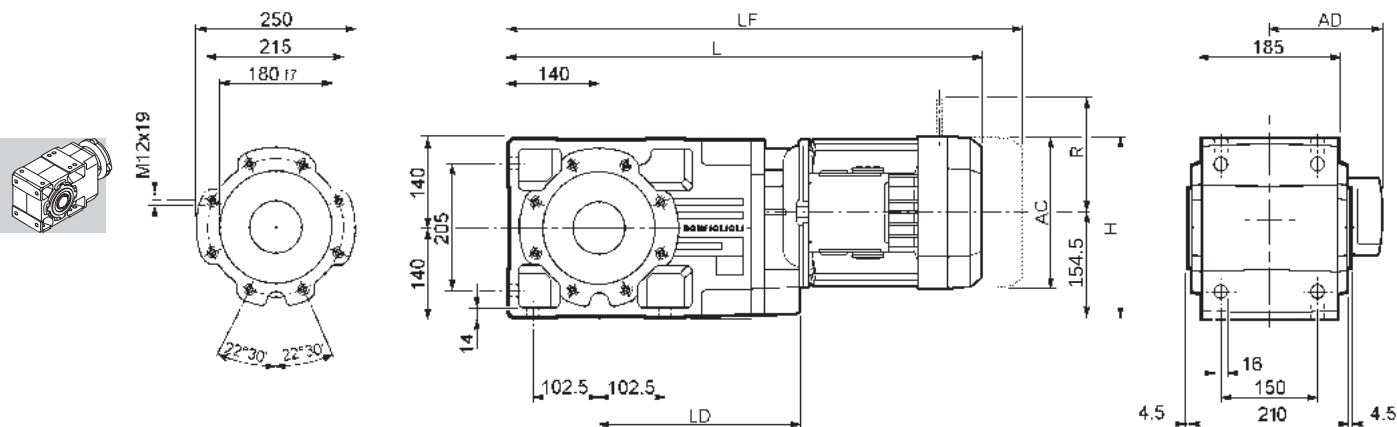


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 50 2/3	N56C	11.201	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	18.681	132
A 50 2/3	N140TC	11.201	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	18.681	134
A 50 2/3	N180TC	11.791	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	19.429	143
A 50 2/3	N210TC	11.201	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	20.669	150
A 50 2/3	N250TC	—	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	23.465	188
A 50 2/3	N280TC	—	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	23.661	192
A 50 4	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	21.496	137
A 50 4	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	21.496	139
A 50 4	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	22.323	148

Imperial output versions available also in combination with IEC motor adaptor

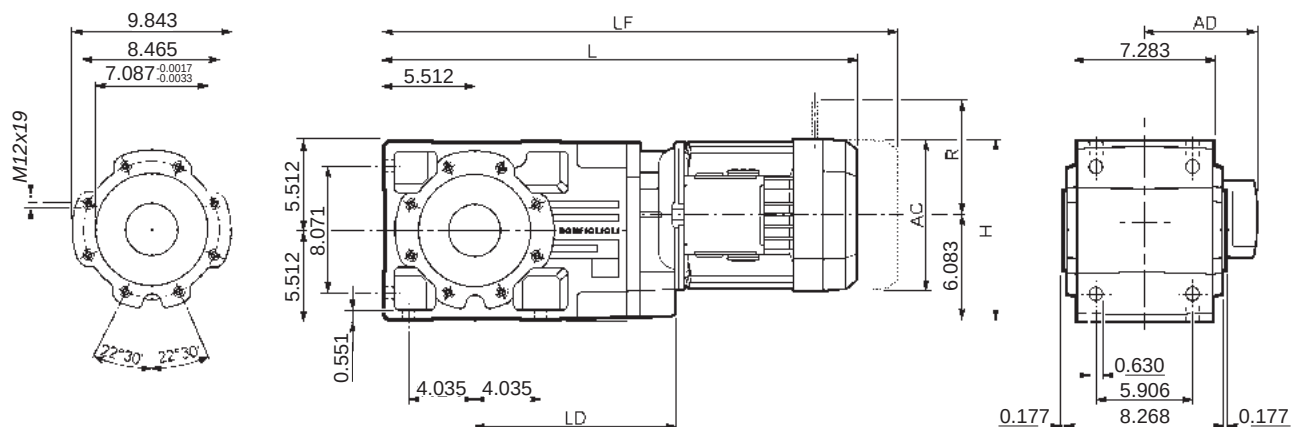
A 50...M/ME



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	Kg		LF	Kg	R	AD	R	AD
A 50 2/3	S1	M1	138	223	609.5	—	108	66	670.5	69	103	135	124	108	
A 50 2/3	S2	ME2S	156	232	638.5	284.5	119	68	—	—	—	—	—	—	
A 50 2/3	S3	ME3S	195	251.5	681.5	299.5	142	74.5	—	—	—	—	—	—	
A 50 2/3	S3	ME3L	195	251.5	713.5	299.5	142	81	—	—	—	—	—	—	
A 50 2/3	S4	ME4	258	283	821.5	284.5	193	115	—	—	—	—	—	—	
A 50 2/3	S4	ME4LB	258	283	856.5	284.5	193	123	—	—	—	—	—	—	
A 50 2/3	S5	ME5S	310	309	908	—	245	143	—	—	—	—	—	—	
A 50 2/3	S5	ME5L	310	309	952	—	245	159	—	—	—	—	—	—	
A 50 4	S1	M1	138	223	681	—	108	67	742	70	103	135	124	108	
A 50 4	S2	ME2S	156	232	710	—	119	71	—	—	—	—	—	—	
A 50 4	S3	ME3S	195	251.5	753	—	142	77.5	—	—	—	—	—	—	
A 50 4	S3	ME3L	195	251.5	785	—	142	83	—	—	—	—	—	—	

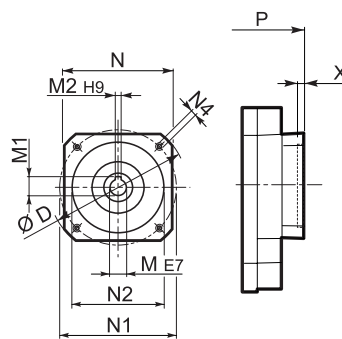
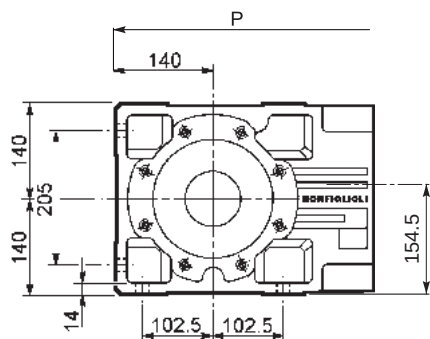
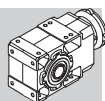
A 50...M/ME



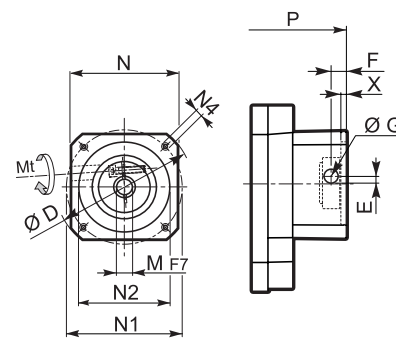
Dimensions are in Inch except when shown in *italic* [mm]

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	lbs	LF	lbs	R	AD	R	AD
A 50 2/3	S1	M1	5.433	8.780	23.996	—	4.252	146	26.398	152	4.055	5.315	4.882	4.252
A 50 2/3	S2	ME2S	6.142	9.134	25.138	11.201	4.685	150	—	—	—	—	—	—
A 50 2/3	S3	ME3S	7.677	9.902	26.831	11.791	5.591	164	—	—	—	—	—	—
A 50 2/3	S3	ME3L	7.677	9.902	28.091	11.791	5.591	179	—	—	—	—	—	—
A 50 2/3	S4	ME4	10.157	11.142	32.343	11.201	7.598	254	—	—	—	—	—	—
A 50 2/3	S4	ME4LB	10.157	11.142	33.720	11.201	7.598	271	—	—	—	—	—	—
A 50 2/3	S5	ME5S	12.205	12.165	35.748	—	9.646	315	—	—	—	—	—	—
A 50 2/3	S5	ME5L	12.205	12.165	37.480	—	9.646	351	—	—	—	—	—	—
A 50 4	S1	M1	5.433	8.780	26.811	—	4.252	148	29.213	154	4.055	5.315	4.882	4.252
A 50 4	S2	ME2S	6.142	9.134	27.953	—	4.685	157	—	—	—	—	—	—
A 50 4	S3	ME3S	7.677	9.902	29.646	—	5.591	171	—	—	—	—	—	—
A 50 4	S3	ME3L	7.677	9.902	30.906	—	5.591	183	—	—	—	—	—	—

A 50...SK / SC



SK...



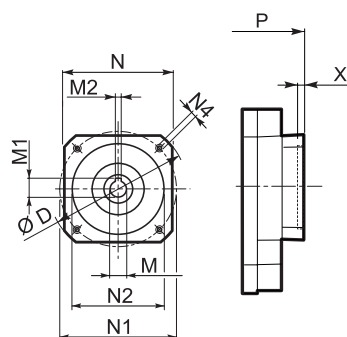
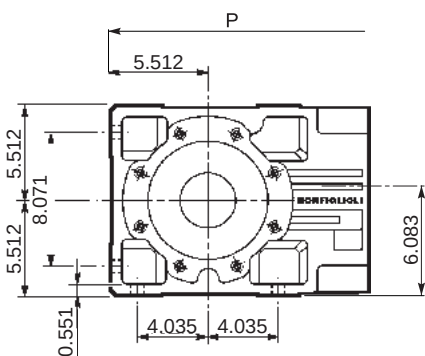
SC...

Dimensions are in mm

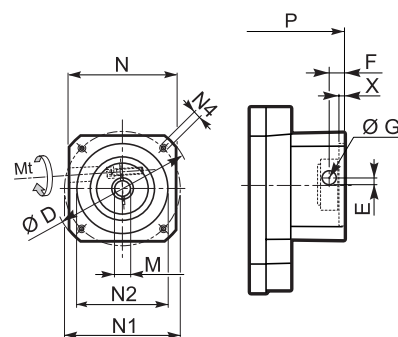
		D	M	M1	M2	N	N1	N2	N4	X	P 		
											 2/3x	 4x	
A 50 2/3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	474	—	61/61
A 50 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	474	545.5	61/61/63
A 50 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	474	545.5	61/61/63
A 50 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	474	545.5	61/61/63
A 50 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	474	545.5	61/61/63
A 50 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	474	545.5	61/61/65
A 50 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	474	575	61/61/65
A 50 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	474	575	63/63/66
A 50 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	520.5	—	69/69
A 50 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	520.5	—	69/69
A 50 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	520.5	—	69/69

		 Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P  2/3x  3x 		
A 50 2/3	SC80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	497.5	—	62/62
A 50 2/3/4	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	497.5	569	62/62/64
A 50 2/3/4	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	497.5	569	62/62/64
A 50 2/3/4	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	497.5	569	62/62/64
A 50 2/3/4	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	497.5	569	62/62/64
A 50 2/3/4	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	497.5	569	63/63/66
A 50 2/3/4	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	497.5	569	63/63/66
A 50 2/3/4	SC130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	497.5	569	64/64/67
A 50 2/3	SC130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	543.5	—	68/68
A 50 2/3	SC180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	547.5	—	68/68
A 50 2/3	SC180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	547.5	—	68/68

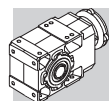
A 50...SK / SC



SK...



SC...

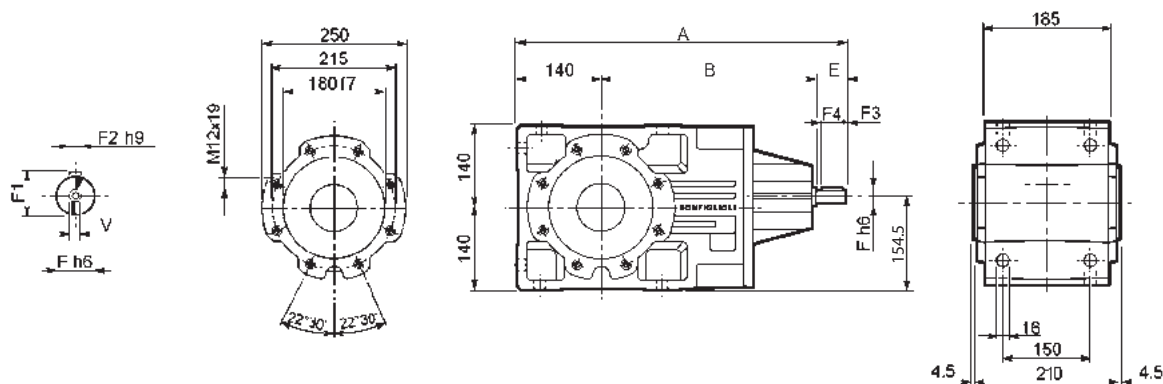
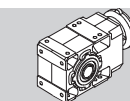


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		lbs
											2/3x	4x	
A 50 2/3	SK80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	18.661	—	134/134
A 50 2/3/4	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	18.661	21.476	134/134/139
A 50 2/3/4	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	18.661	21.476	134/134/139
A 50 2/3/4	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	18.661	21.476	134/134/139
A 50 2/3/4	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	18.661	21.476	134/134/139
A 50 2/3/4	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	18.661	21.476	134/134/143
A 50 2/3/4	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	18.661	22.638	134/134/143
A 50 2/3/4	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	18.661	22.638	139/139/146
A 50 2/3	SK130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	20.492	—	152/152
A 50 2/3	SK180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	20.492	—	152/152
A 50 2/3	SK180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	20.492	—	152/152

		Mt [lb-in]	D	E	F	G	M	N	N1	N2	N4	X	P		lbs
													2/3x	3x	
A 50 2/3	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	19.587	—	137/137
A 50 2/3/4	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	19.587	22.402	137/137/141
A 50 2/3/4	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	19.587	22.402	137/137/141
A 50 2/3/4	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	19.587	22.402	137/137/141
A 50 2/3/4	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	19.587	22.402	137/137/141
A 50 2/3/4	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	19.587	22.402	139/139/146
A 50 2/3/4	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	19.587	22.402	139/139/146
A 50 2/3/4	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	19.587	22.402	141/141/148
A 50 2/3	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	21.398	—	150/150
A 50 2/3	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	21.555	—	150/150
A 50 2/3	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	21.555	—	150/150

A 50...HS

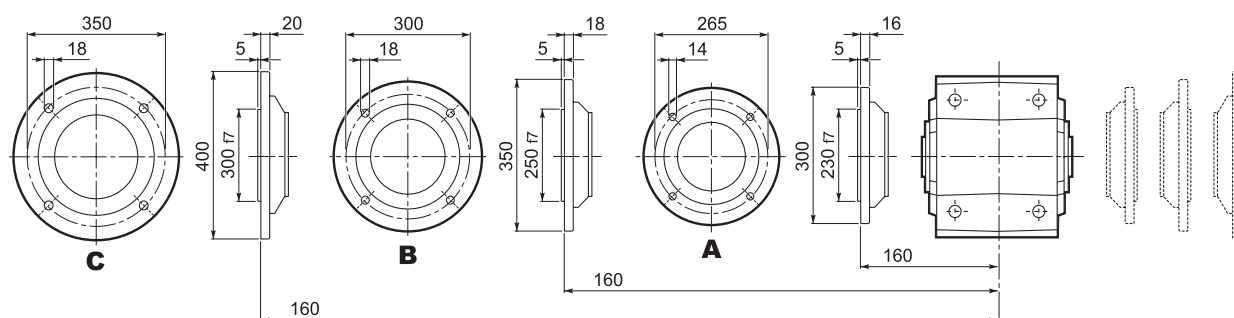


Dimensions are in mm

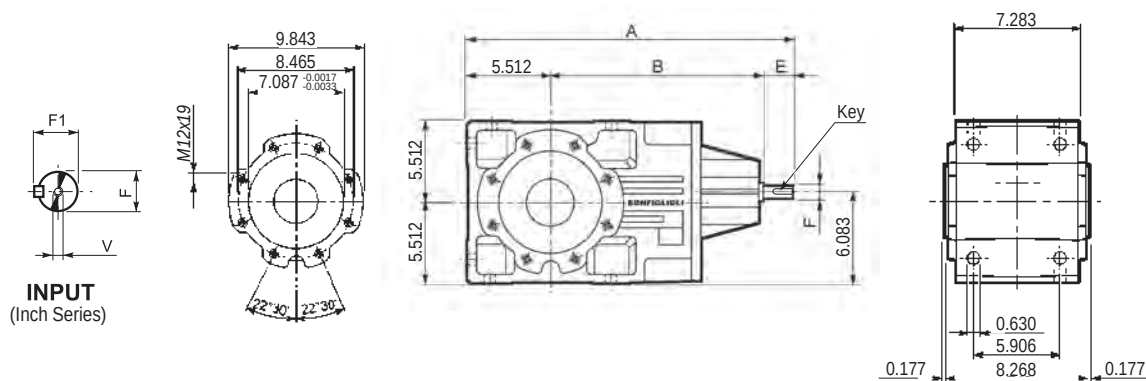
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 50 2	HS	543.5	353.5	50	24	27	8	2.5	45	M8x19	72
A 50 3		543.5	353.5	50	24	27	8	2.5	45	M8x19	76
A 50 4		576	396	40	19	21.5	6	2.5	35	M6x16	77

Metric output versions available also in combination with NHS input

A 50...F...



A 50...NHS

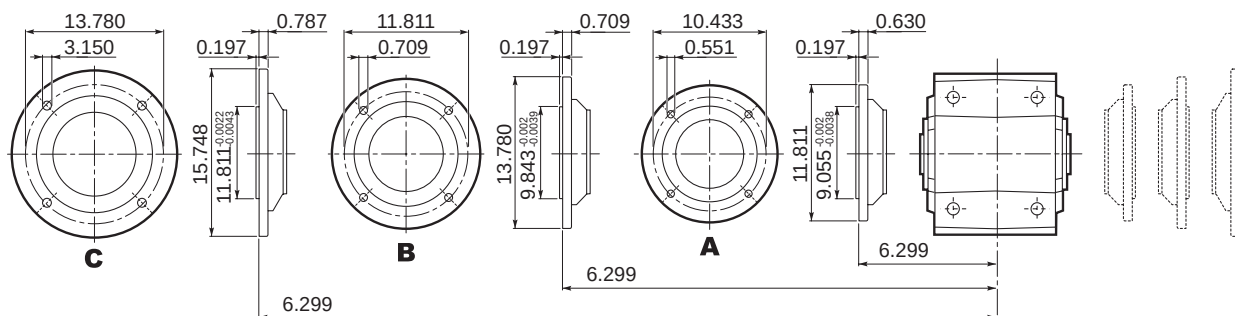


Dimensions are in Inch except when shown in *italic [mm]*

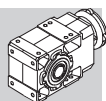
		A	B	E	F	F1	V	Key	lbs
A 50 2	NHS	21.398	13.917	1.969	1.000 ^{+0/-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	159
A 50 3	NHS	21.398	13.917	1.969	1.000 ^{+0/-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	168
A 50 4	NHS	22.677	15.591	1.575	0.750 ^{+0/-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	170

Imperial output versions available also in combination with HS input

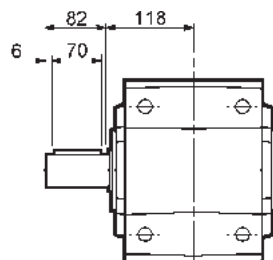
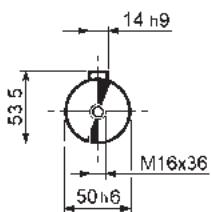
A 50...F...



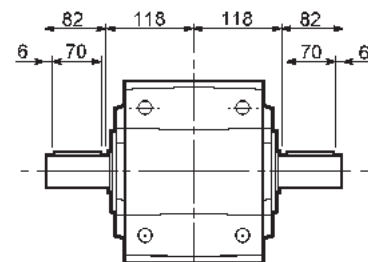
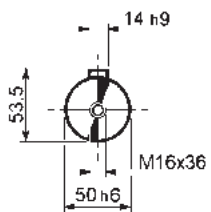
A 50



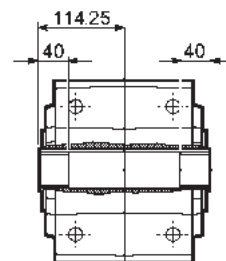
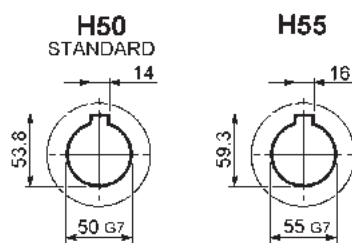
A 50...UR



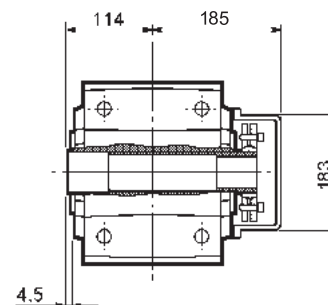
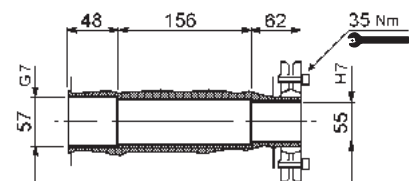
A 50...UD



A 50...UH

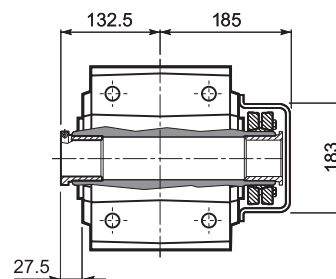
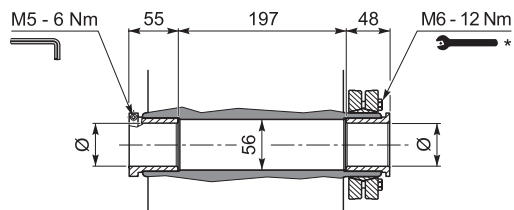


A 50...US

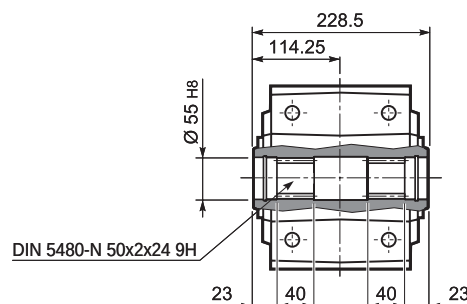


A 50...QF

	Ø
QF50	50
QF55	55



A 50...UV

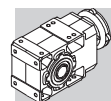
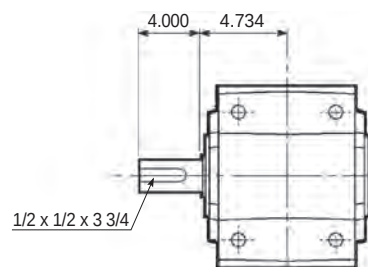
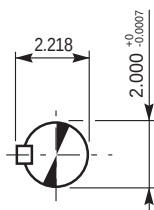


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 50

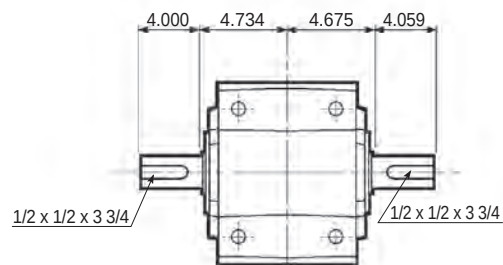
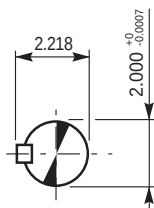
A 50...NUR

OUTPUT
(Inch Series)



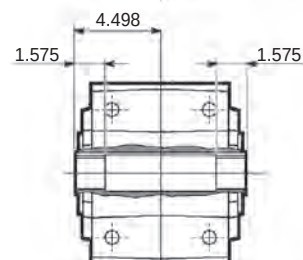
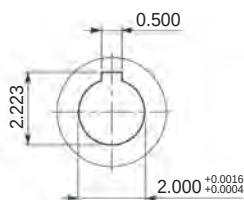
A 50...NUD

OUTPUT
(Inch Series)

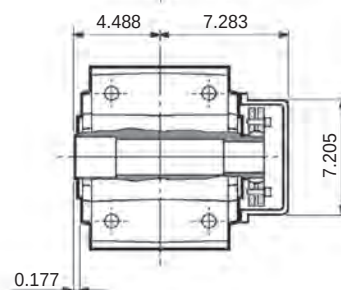
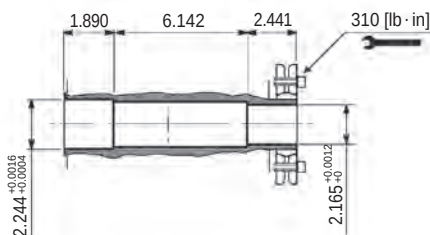


A 50...NUH

OUTPUT
(Inch Series)

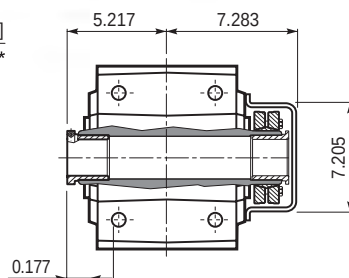
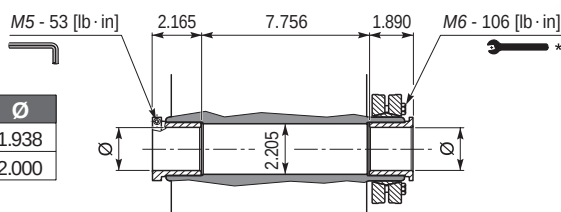


A 50...US

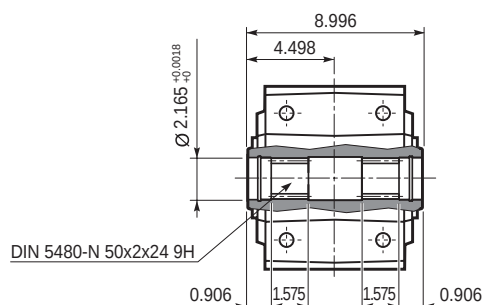


A 50...NQF

	Ø
NQF1-15/16	1.938
NQF2	2.000

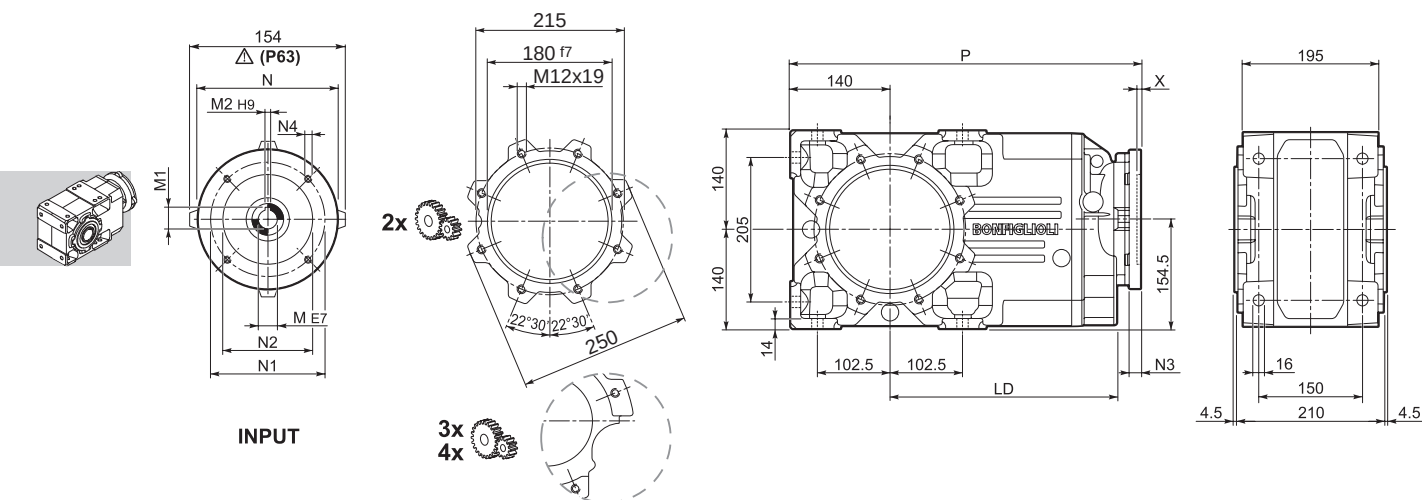


A 50...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 55...P(IEC)

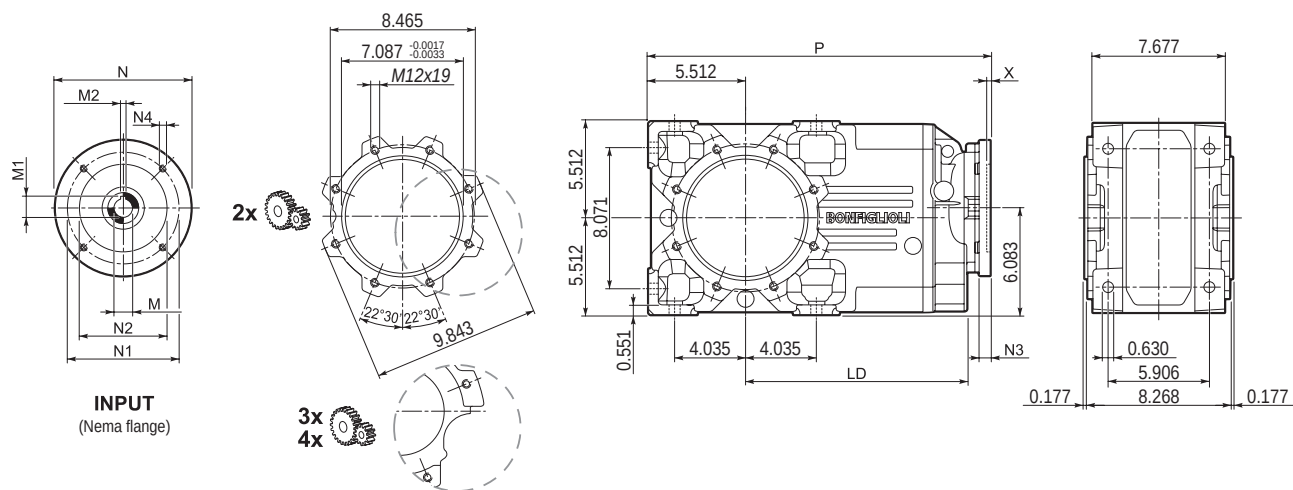


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
A 55 3	P63	302.5	11	12.8	4	140	115	95	—	M8x19	4	472.5	75
A 55 3	P71	302.5	14	16.3	5	160	130	110	—	M8x16	4.5	472.5	75
A 55 2/3	P80	317.5	19	21.8	6	200	165	130	—	M10x14.5	4	492	81
A 55 2/3	P90	317.5	24	27.3	8	200	165	130	—	M10x14.5	4	492	81
A 55 2/3	P100	302.5	28	31.3	8	250	215	180	—	M12x16	4.5	502	85
A 55 2/3	P112	302.5	28	31.3	8	250	215	180	—	M12x16	4.5	502	85
A 55 2/3	P132	302.5	38	41.3	10	300	265	230	16	14	5	538.5	93
A 55 2/3	P160	—	42	45.3	12	350	300	250	23	18	5.5	589	110
A 55 2/3	P180	—	48	51.8	14	350	300	250	23	18	5.5	589	110
A 55 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	544	77
A 55 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	544	77
A 55 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	563.5	78
A 55 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	563.5	78
A 55 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	573.5	82
A 55 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	573.5	82

Metric output versions available also in combination with NEMA motor adaptor

A 55...N(NEMA Input)

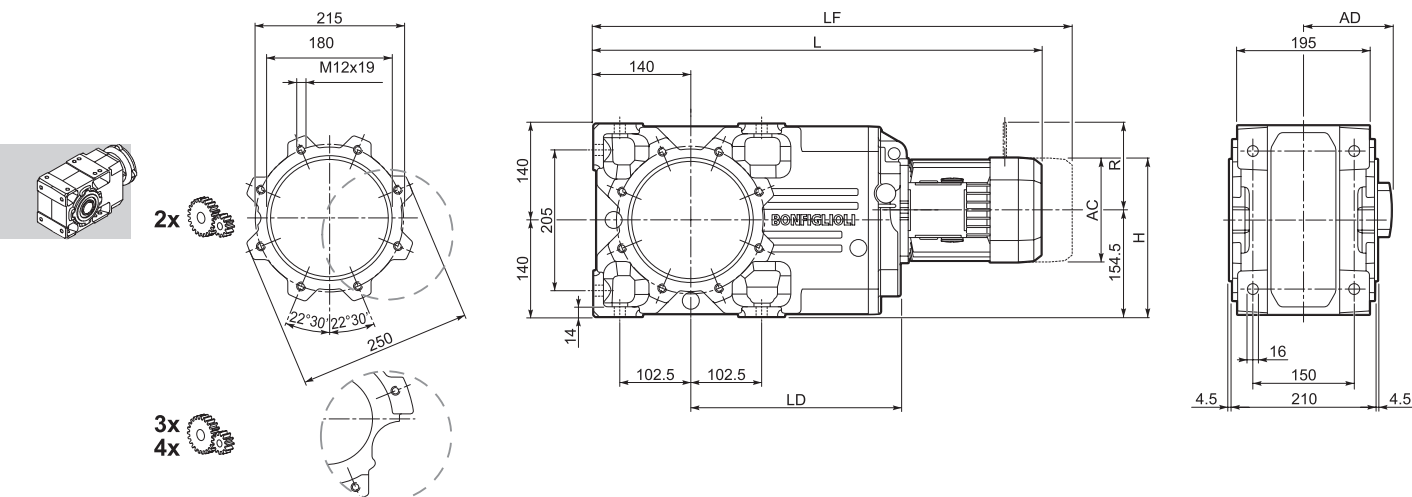


Dimensions are in Inch except when shown in *italic [mm]*

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
A 55 3	N56C	11.909	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	19.390	165
A 55 3	N140TC	11.909	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	19.390	179
A 55 2/3	N180TC	12.500	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	20.138	187
A 55 2/3	N210TC	11.909	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	21.378	205
A 55 2/3	N250TC	—	1.625 ^{+0.0030} _{+0.0020}	1.796	0.375 ^{+0.0014} ₊₀	13.780	7.250	8.500	—	0.551	0.217	24.173	272
A 55 2/3	N280TC	—	1.875 ^{+0.0030} _{+0.0020}	2.102	0.500 ^{+0.0017} ₊₀	13.740	10.500	9.000	—	0.551	0.217	24.370	276
A 55 4	N56C	—	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	22.205	170
A 55 4	N140TC	—	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ^{+0.0012} ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	22.205	172
A 55 4	N180TC	—	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ^{+0.0014} ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	23.031	181

Imperial output versions available also in combination with IEC motor adaptor

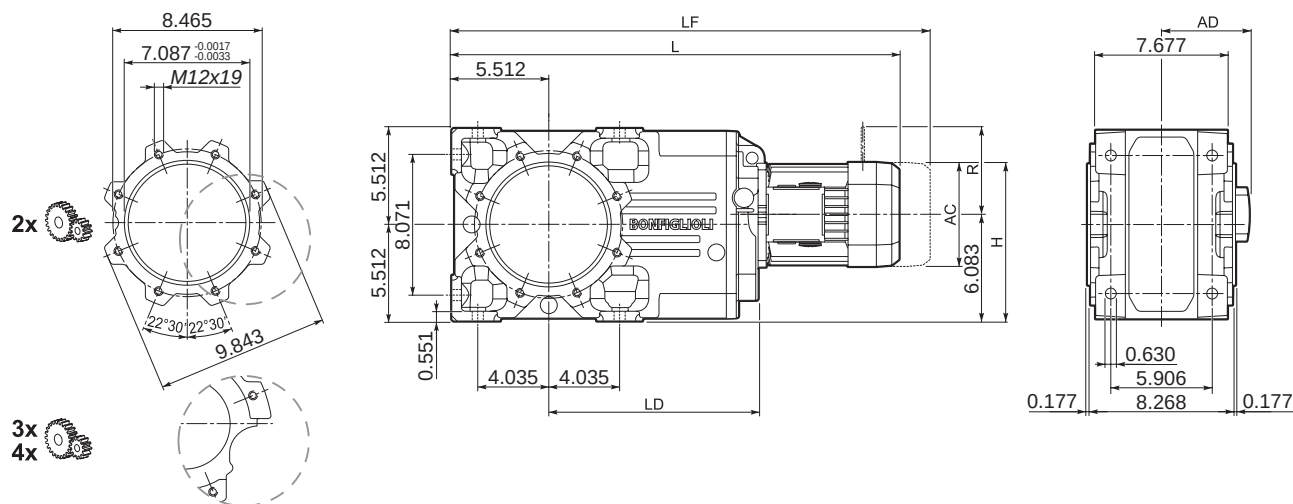
A 55...M/ME



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	Kg		LF	Kg	R	AD	R	AD
A 55 3	S1	M1	138	198.5	627.5	—	108	81		688.5	84	103	135	124	108
A 55 2/3	S2	ME2S	156	232	656.5	302.5	119	88		—	—	—	—	—	—
A 55 2/3	S3	ME3S	195	251	699.5	317.5	142	94.5		—	—	—	—	—	—
A 55 2/3	S3	ME3L	195	251	731.5	317.5	142	101		—	—	—	—	—	—
A 55 2/3	S4	ME4	258	283	839.5	302.5	193	135		—	—	—	—	—	—
A 55 2/3	S4	ME4LB	258	283	874.5	302.5	193	143		—	—	—	—	—	—
A 55 2/3	S5	ME5S	310	309.5	926	—	245	163		—	—	—	—	—	—
A 55 2/3	S5	ME5L	310	309.5	970	—	245	179		—	—	—	—	—	—
A 55 4	S1	M1	138	223	699	—	108	82		760	85	103	135	124	108
A 55 4	S2	ME2S	156	232	728	—	119	86		—	—	—	—	—	—
A 55 4	S3	ME3S	195	251.5	771	—	142	92.5		—	—	—	—	—	—
A 55 4	S3	ME3L	195	251.5	803	—	142	98		—	—	—	—	—	—

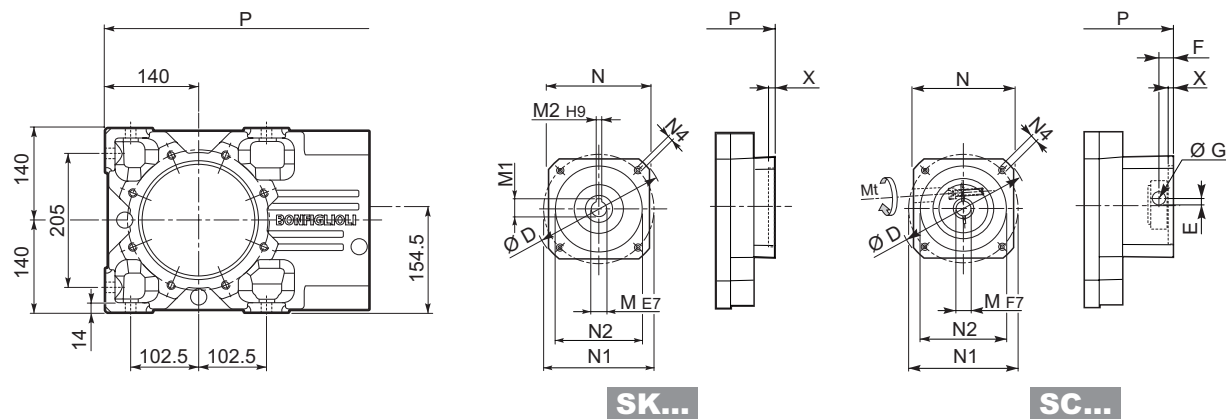
A 55...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD			LF		R	AD	R	AD
A 55 3	S1	M1	5.433	7.815	24.705	—	4.252	179		27.106	185	4.055	5.315	4.882	4.252
A 55 2/3	S2	ME2S	6.142	9.134	25.846	11.909	4.685	194		—	—	—	—	—	—
A 55 2/3	S3	ME3S	7.677	9.882	27.539	12.500	5.591	208		—	—	—	—	—	—
A 55 2/3	S3	ME3L	7.677	9.882	28.799	12.500	5.591	223		—	—	—	—	—	—
A 55 2/3	S4	ME4	10.157	11.142	33.051	11.909	7.598	298		—	—	—	—	—	—
A 55 2/3	S4	ME4LB	10.157	11.142	34.429	11.909	7.598	315		—	—	—	—	—	—
A 55 2/3	S5	ME5S	12.205	12.185	36.457	—	9.646	359		—	—	—	—	—	—
A 55 2/3	S5	ME5L	12.205	12.185	38.189	—	9.646	395		—	—	—	—	—	—
A 55 4	S1	M1	5.433	8.780	27.520	—	4.252	181		29.921	187	4.055	5.315	4.882	4.252
A 55 4	S2	ME2S	6.142	9.134	28.661	—	4.685	190		—	—	—	—	—	—
A 55 4	S3	ME3S	7.677	9.902	30.354	—	5.591	204		—	—	—	—	—	—
A 55 4	S3	ME3L	7.677	9.902	31.614	—	5.591	216		—	—	—	—	—	—

A 55...SK / SC

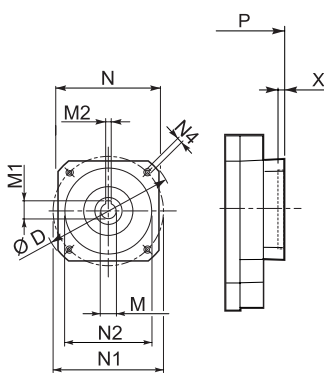
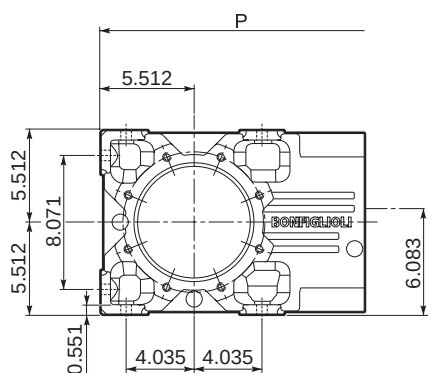


Dimensions are in mm

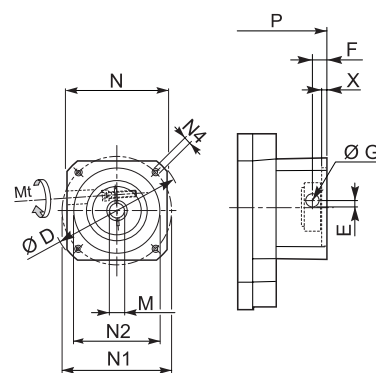
		D	M	M1	M2	N	N1	N2	N4	X	P		
													
A 55 3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	492	—	81
A 55 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	492	563.5	81/81/77
A 55 3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	492	563.5	81/81/77
A 55 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	492	563.5	81/81/77
A 55 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	492	563.5	81/81/77
A 55 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	492	593	81/81/78
A 55 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	492	593	81/81/78
A 55 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	492	593	83/83/79
A 55 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	538.5	—	90/90
A 55 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	538.5	—	90/90
A 55 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	538.5	—	90/90

		 Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P  		
A 55 3	SC80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	515.5	—	82
A 55 2/3/4	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	515.5	587	82/82/78
A 55 3/4	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	515.5	587	82/82/78
A 55 2/3/4	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	515.5	587	82/82/78
A 55 2/3/4	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	515.5	587	82/82/78
A 55 2/3/4	SC110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	515.5	587	83/83/79
A 55 2/3/4	SC110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	515.5	587	83/83/79
A 55 2/3/4	SC130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	515.5	587	84/84/80
A 55 2/3	SC130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	561.5	—	93/93
A 55 2/3	SC180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	565.5	—	93/93
A 55 2/3	SC180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	565.5	—	93/93

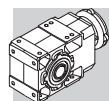
A 55...SK / SC



SK...



SC...

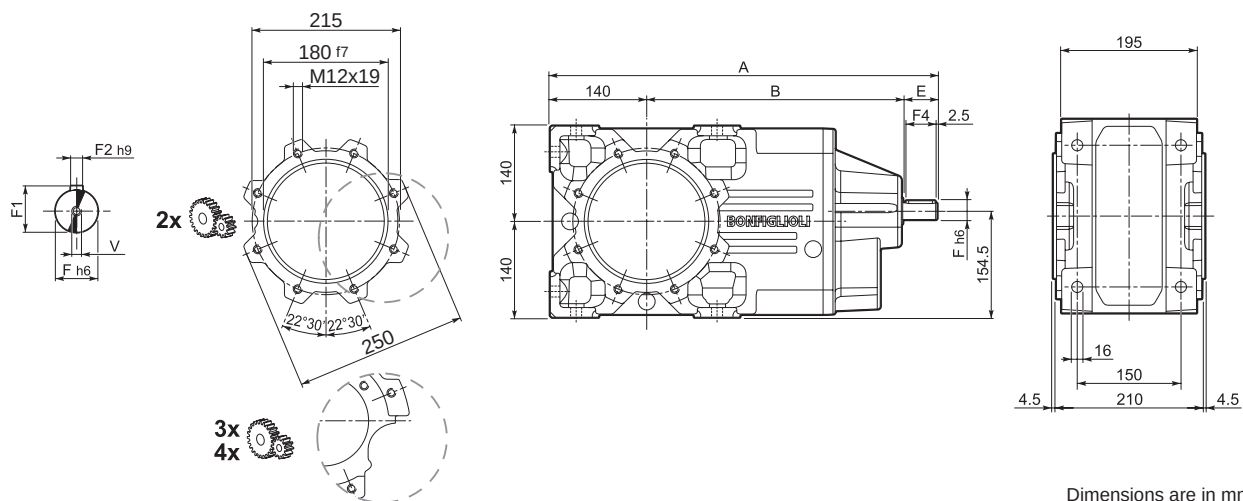


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x	4x	lbs
A 55 3	SK80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	19.370	—	179
A 55 2/3/4	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	19.370	22.185	179/179/170
A 55 3/4	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	19.370	22.185	179/179/170
A 55 2/3/4	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	19.370	22.185	179/179/170
A 55 2/3/4	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	19.370	22.185	179/179/170
A 55 2/3/4	SK110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	19.370	23.346	179/179/172
A 55 2/3/4	SK110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	19.370	23.346	179/179/172
A 55 2/3/4	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	19.370	23.346	183/183/174
A 55 2/3	SK130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	21.201	—	198/198
A 55 2/3	SK180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	21.201	—	198/198
A 55 2/3	SK180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	21.201	—	198/198

		Mt [lb·in]	D	E	F	G	M	N	N1	N2	N4	X	P		lbs
													2/3x	3x	
A 55 3	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	20.295	—	181
A 55 2/3/4	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	20.295	23.110	181/181/172
A 55 3/4	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	20.295	23.110	181/181/172
A 55 2/3/4	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	20.295	23.110	181/181/172
A 55 2/3/4	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	20.295	23.110	181/181/172
A 55 2/3/4	SC110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	20.295	23.110	183/183/174
A 55 2/3/4	SC110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	20.295	23.110	183/183/174
A 55 2/3/4	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	20.295	23.110	185/185/176
A 55 2/3	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	22.106	—	205/205
A 55 2/3	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	22.264	—	205/205
A 55 2/3	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	22.264	—	205/205

A 55...HS

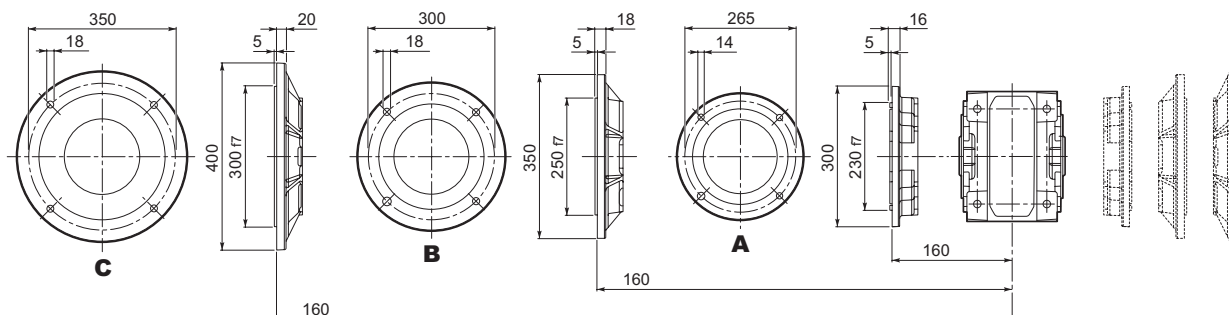


Dimensions are in mm

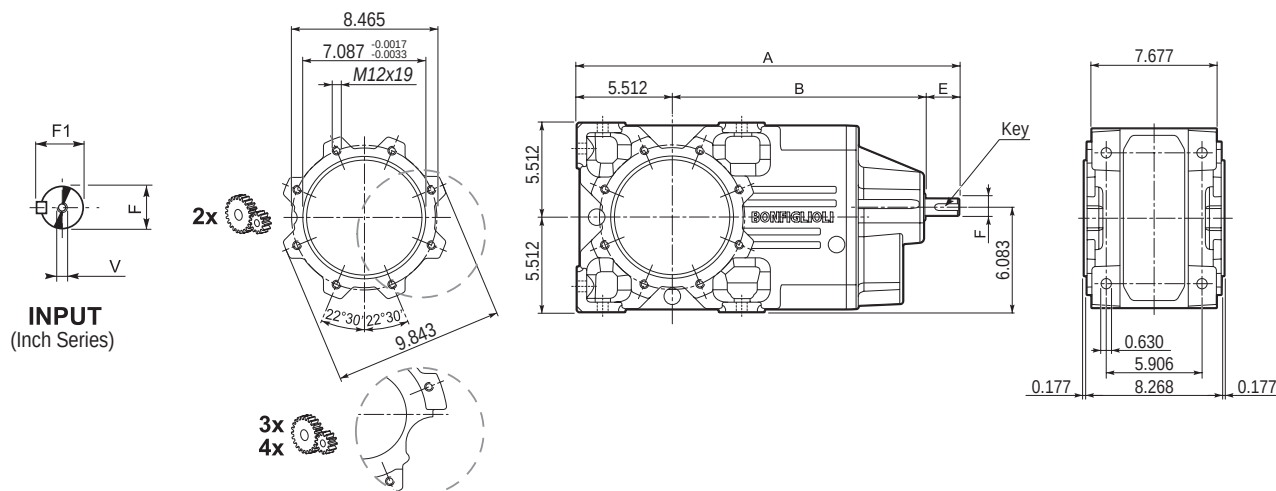
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 55 2	HS	561.5	371.5	50	24	27	8	2.5	45	M8x19	96
A 55 3		561.5	371.5	50	24	27	8	2.5	45	M8x19	91
A 55 4		594	414	40	19	21.5	6	2.5	35	M6x16	92

Metric output versions available also in combination with NHS input

A 55...F...



A 55...NHS

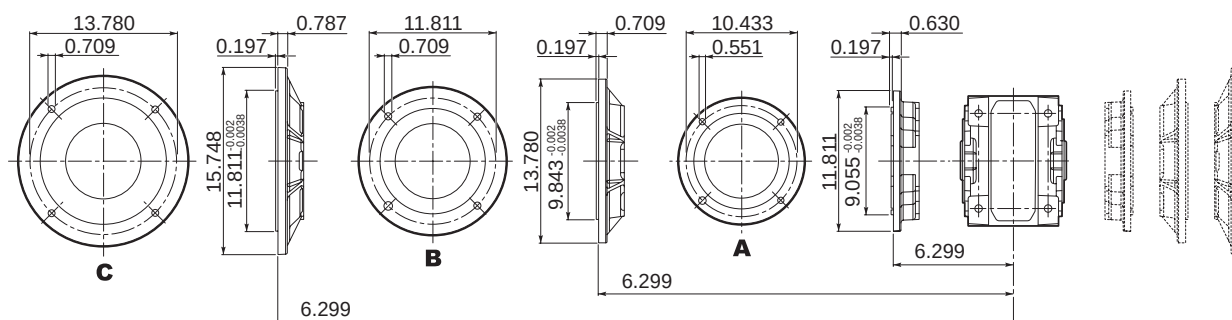


Dimensions are in Inch except when shown in *italic [mm]*

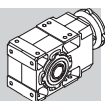
		A	B	E	F	F1	V	Key	
A 55 2	NHS	22.106	14.626	1.969	1.000 ^{+0 -0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	212
A 55 3	NHS	22.106	14.626	1.969	1.000 ^{+0 -0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	201
A 55 4	NHS	23.386	16.299	1.575	0.750 ^{+0 -0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	203

Imperial output versions available also in combination with HS input

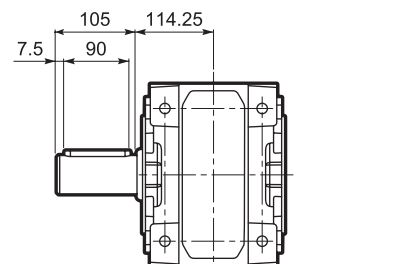
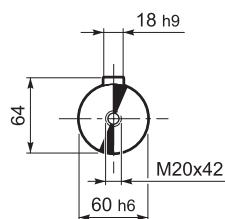
A 55...F...



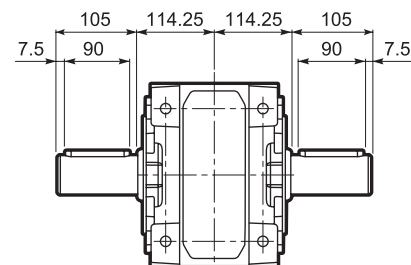
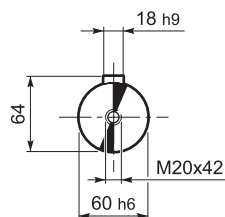
A 55



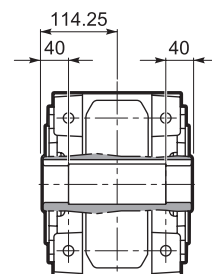
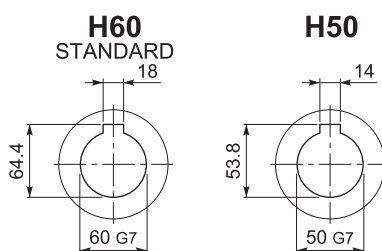
A 55...UR



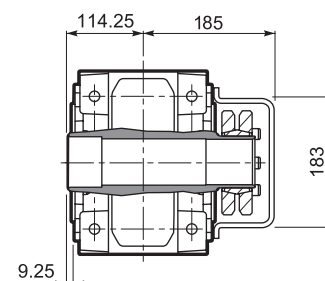
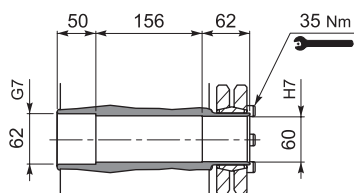
A 55...UD



A 55...UH

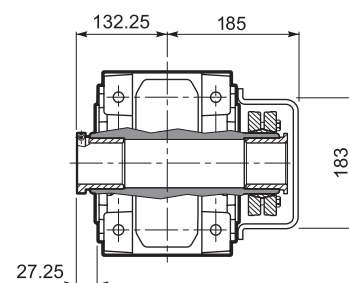
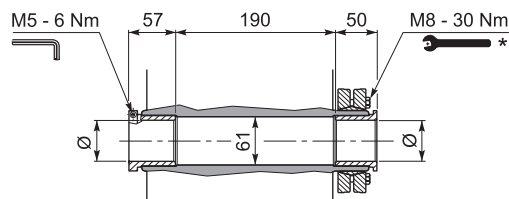


A 55...US



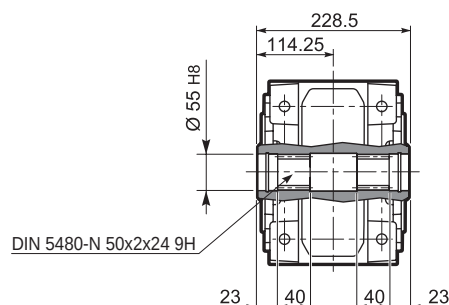
A 55...QF

	Ø
QF55	55
QF60	60



T _{n2} max	[lb · in]
A 55 QF55	16830

A 55...UV

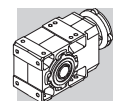
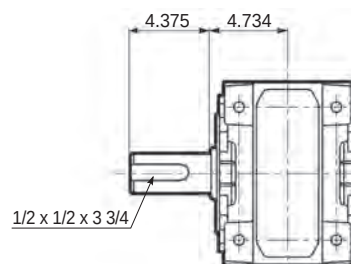
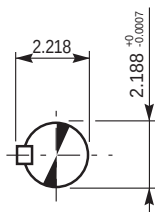


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 55

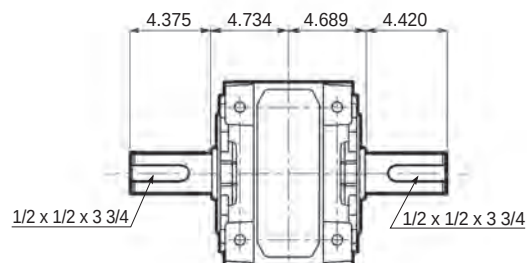
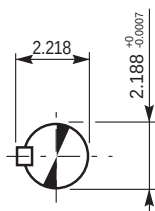
A 55...NUR

OUTPUT
(Inch Series)



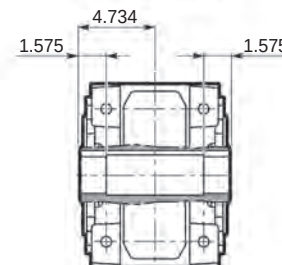
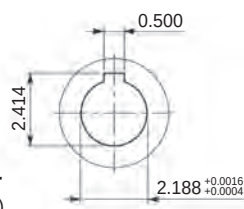
A 55...NUD

OUTPUT
(Inch Series)

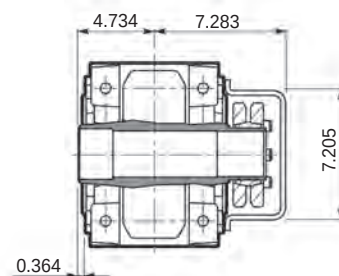
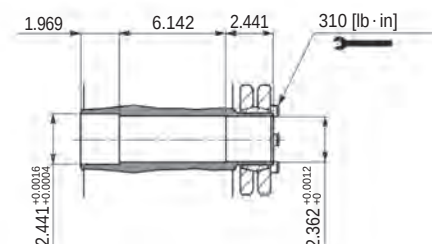


A 55...NUH

OUTPUT
(Inch Series)

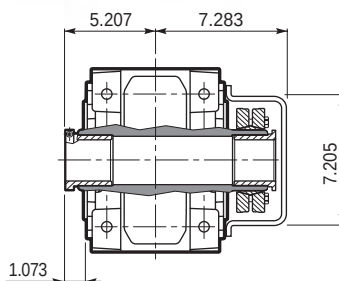
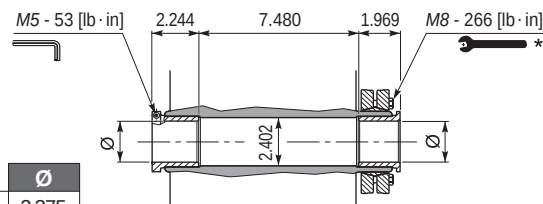


A 55...US

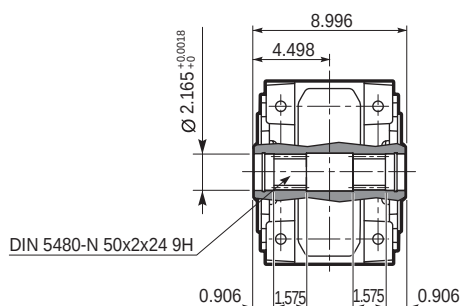


A 55...NQF

NQF2-3/8	Ø
	2.375

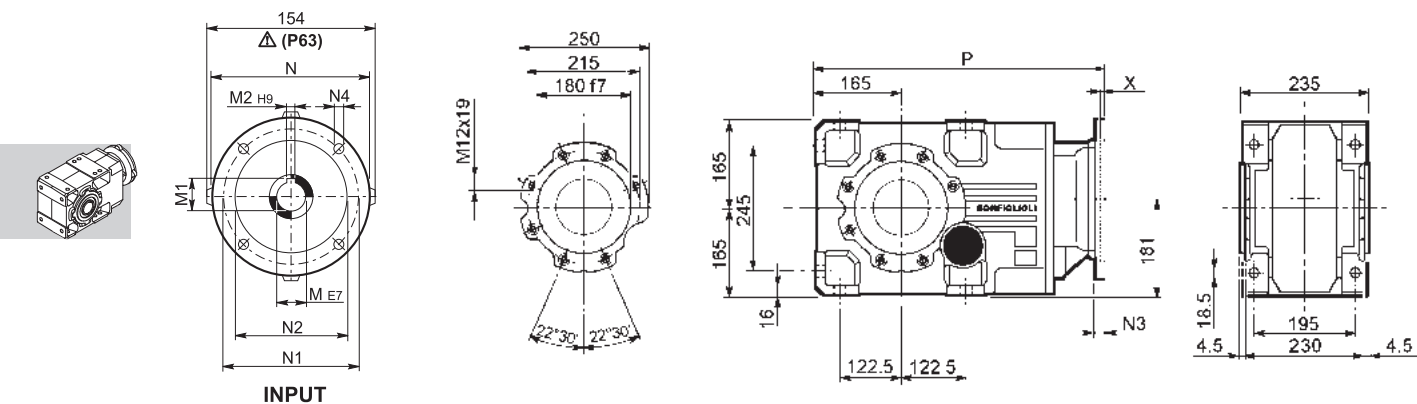


A 55...UV



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox supplied with the gearbox.

A 60...P(IEC)

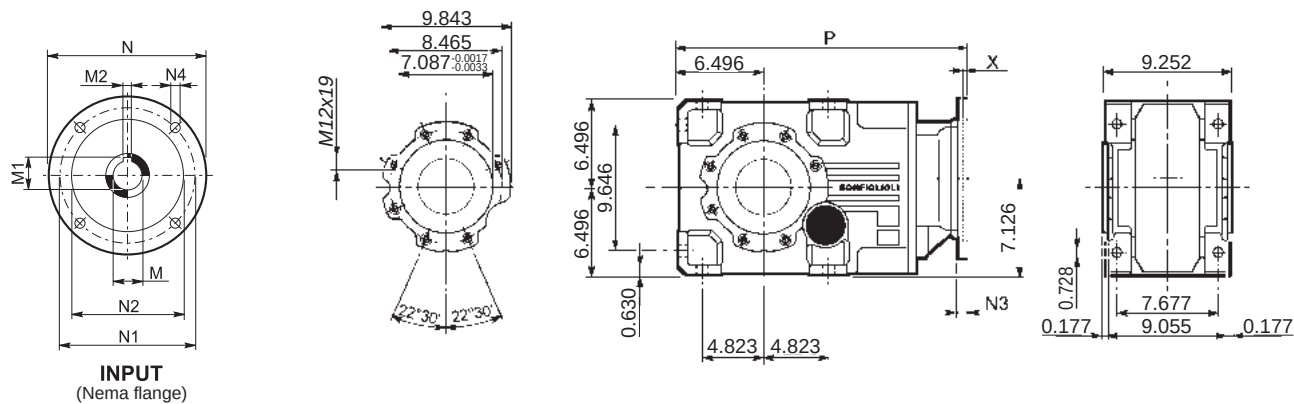


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 60 3	P63	11	12.8	4	140	115	95	—	M8x19	4	516.5	90
A 60 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	516.5	90
A 60 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	536	91
A 60 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	536	91
A 60 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	546	95
A 60 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	546	95
A 60 2/3	P132	38	41.3	10	300	265	230	16	14	5	582.5	104
A 60 2/3	P160	42	45.3	12	350	300	250	23	18	5.5	633	121
A 60 2/3	P180	48	51.8	14	350	300	250	23	18	5.5	633	121
A 60 4	P63	11	12.8	4	140	115	95	—	M8x19	4	587	88
A 60 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	587	88
A 60 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	606.5	90
A 60 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	606.5	90
A 60 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	616.5	94
A 60 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	616.5	94

Metric output versions available also in combination with NEMA motor adaptor

A 60...N(NEMA Input)

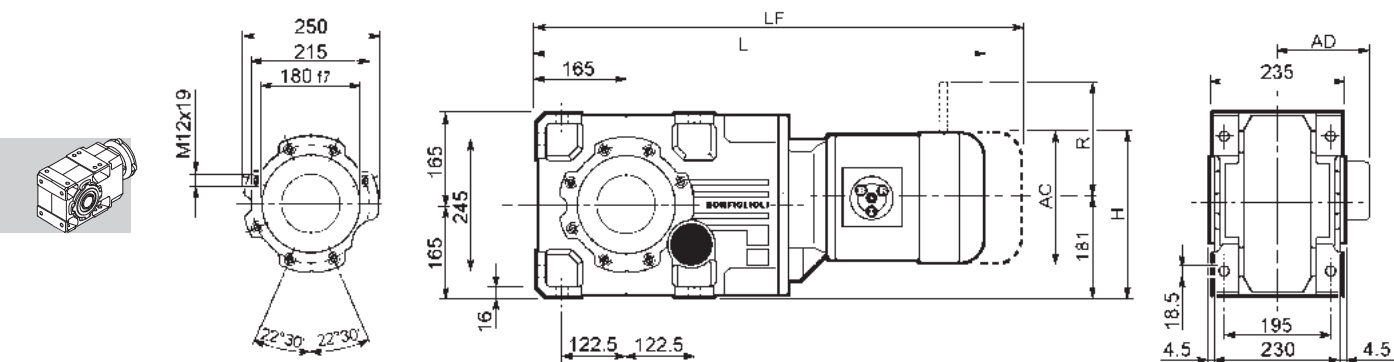


Dimensions are in Inch except when shown in *italic [mm]*

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 60 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	21.122	201
A 60 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	21.870	209
A 60 2/3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	23.110	229
A 60 2/3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	25.906	297
A 60 2/3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	26.102	300
A 60 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	23.898	194
A 60 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	23.898	198
A 60 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	24.724	207

Imperial output versions available also in combination with IEC motor adaptor

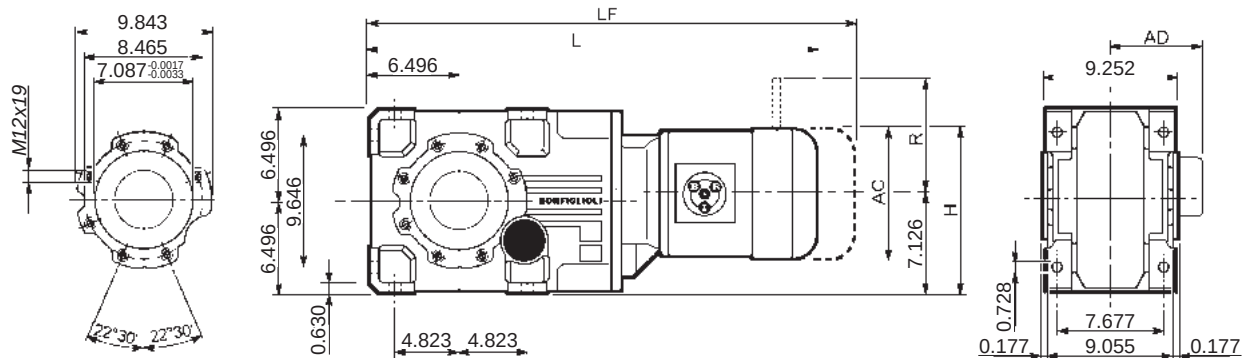
A 60...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 60 2/3	S2	ME2S	156	256.5	700.5	119	98	—	—	—	—	—	—
A 60 2/3	S3	ME3S	195	276	743.5	142	103	—	—	—	—	—	—
A 60 2/3	S3	ME3L	195	276	775.5	142	111	—	—	—	—	—	—
A 60 2/3	S4	ME4	258	307.5	883.5	193	145	—	—	—	—	—	—
A 60 2/3	S4	ME4LB	258	307.5	918.5	193	153	—	—	—	—	—	—
A 60 2/3	S5	ME5S	310	333.5	970	245	173	—	—	—	—	—	—
A 60 2/3	S5	ME5L	310	333.5	1014	245	189	—	—	—	—	—	—
A 60 4	S1	M1	138	247.5	742	108	100	803	103	103	135	124	108
A 60 4	S2	ME2S	156	256.5	771	119	104	—	—	—	—	—	—
A 60 4	S3	ME3S	195	276	814	142	109	—	—	—	—	—	—
A 60 4	S3	ME3L	195	276	846	142	117	—	—	—	—	—	—

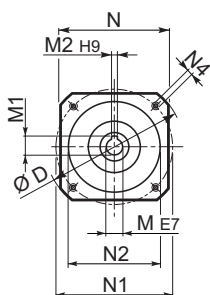
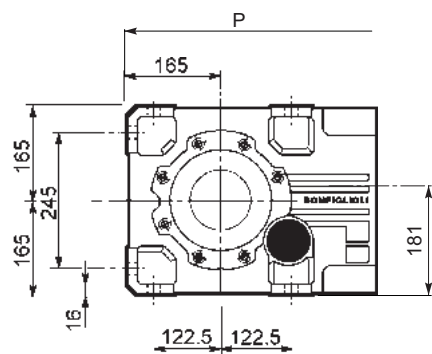
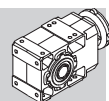
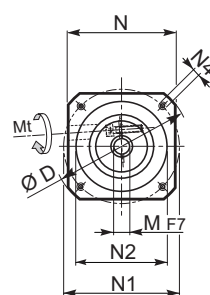
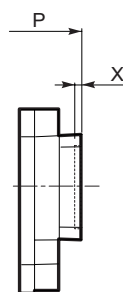
A 60...M/ME



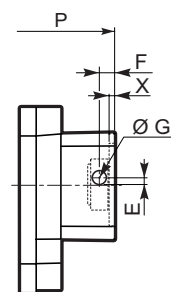
Dimensions are in Inch except when shown in *italic* [mm]

			AC	H	L	AD	lbs	M...FD M...FA		M...FD		M...FA	
								LF	lbs	R	AD	R	AD
A 60 2/3	S2	ME2S	6.142	10.098	27.579	4.685	216	—	—	—	—	—	—
A 60 2/3	S3	ME3S	7.677	10.866	29.272	5.591	227	—	—	—	—	—	—
A 60 2/3	S3	ME3L	7.677	10.866	30.531	5.591	245	—	—	—	—	—	—
A 60 2/3	S4	ME4	10.157	12.106	34.783	7.598	320	—	—	—	—	—	—
A 60 2/3	S4	ME4LB	10.157	12.106	36.161	7.598	337	—	—	—	—	—	—
A 60 2/3	S5	ME5S	12.205	13.130	38.189	9.646	381	—	—	—	—	—	—
A 60 2/3	S5	ME5L	12.205	13.130	39.921	9.646	417	—	—	—	—	—	—
A 60 4	S1	M1	5.433	9.744	29.213	4.252	220	31.614	227	4.055	5.315	4.882	4.252
A 60 4	S2	ME2S	6.142	10.098	30.354	4.685	229	—	—	—	—	—	—
A 60 4	S3	ME3S	7.677	10.866	32.047	5.591	240	—	—	—	—	—	—
A 60 4	S3	ME3L	7.677	10.866	33.307	5.591	258	—	—	—	—	—	—

A 60...SK / SC

**SK...**

SC...

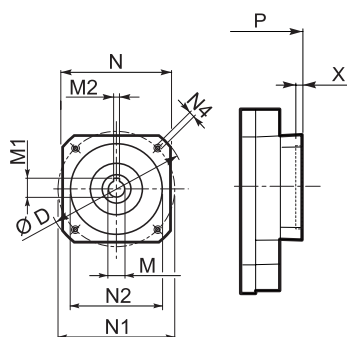
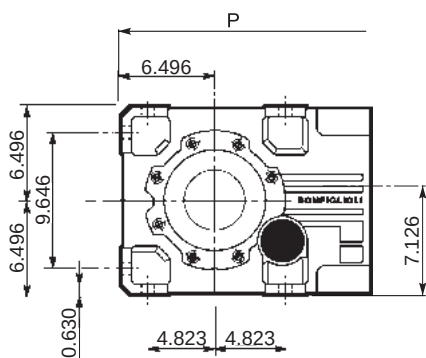


Dimensions are in mm

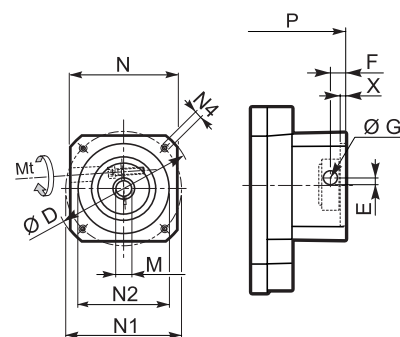
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x 	4x 	
A 60 4	SK80B	120	14	16.3	5	96	100	80	M6x12	4	—	606.5	89
A 60 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	536	606.5	93/93/92
A 60 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	536	606.5	93/93/92
A 60 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	536	606.5	93/93/92
A 60 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	536	606.5	93/93/92
A 60 2/3/4	SK110A	140	19	21.8	6	120	130	110	M8x12	5	536	606.5	93/93/92
A 60 2/3/4	SK110B	140	24	27.3	8	120	130	110	M8x12	5	536	606.5	93/93/92
A 60 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	536	606.5	97/97/103
A 60 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	582.5	—	102/102
A 60 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	582.5	—	102/102
A 60 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	582.5	—	102/102

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P  		
A 60 4	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	—	630	90
A 60 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	559.5	630	94/94/93
A 60 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	559.5	630	94/94/93
A 60 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	559.5	630	94/94/93
A 60 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	559.5	630	94/94/93
A 60 2/3/4	SC110A	M6	15	140	16.5	16	17.75	19	120	130	110	M8x16	5	559.5	630	95/95/93
A 60 2/3/4	SC110B	M6	15	140	16.5	16	17.75	24	120	130	110	M8x16	5	559.5	630	95/95/93
A 60 2/3/4	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	559.5	630	96/96/104
A 60 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	605.5	—	105/105
A 60 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	609.5	—	105/105
A 60 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	609.5	—	105/105

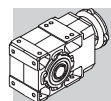
A 60...SK / SC



SK...



SC...

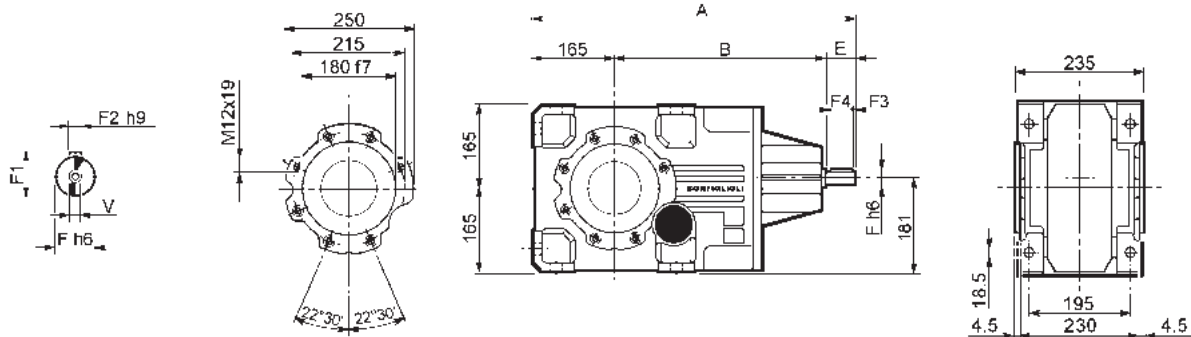


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P		lbs
											2/3x	4x	
A 60 4	SK80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	—	23.878	196
A 60 2/3/4	SK80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	21.102	23.878	205/205/203
A 60 2/3/4	SK95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	21.102	23.878	205/205/203
A 60 2/3/4	SK95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	21.102	23.878	205/205/203
A 60 2/3/4	SK95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	21.102	23.878	205/205/203
A 60 2/3/4	SK110A	5.512	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	21.102	23.878	205/205/203
A 60 2/3/4	SK110B	5.512	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	21.102	23.878	205/205/203
A 60 2/3/4	SK130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	21.102	23.878	214/214/227
A 60 2/3	SK130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	22.933	—	225/225
A 60 2/3	SK180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	22.933	—	225/225
A 60 2/3	SK180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	22.933	—	225/225

		Mt [lb·in]	D	E	F	G	M	N	N1	N2	N4	X	P		lbs
													2/3x	3x	
A 60 4	SC80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	—	24.803	198
A 60 2/3/4	SC80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	22.028	24.803	207/207/205
A 60 2/3/4	SC95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	22.028	24.803	207/207/205
A 60 2/3/4	SC95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	22.028	24.803	207/207/205
A 60 2/3/4	SC95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	22.028	24.803	207/207/205
A 60 2/3/4	SC110A	M6 133	5.512	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	22.028	24.803	209/209/205
A 60 2/3/4	SC110B	M6 133	5.512	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	22.028	24.803	209/209/205
A 60 2/3/4	SC130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	22.028	24.803	212/212/229
A 60 2/3	SC130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	23.839	—	231/231
A 60 2/3	SC180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	23.996	—	231/231
A 60 2/3	SC180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	23.996	—	231/231

A 60...HS

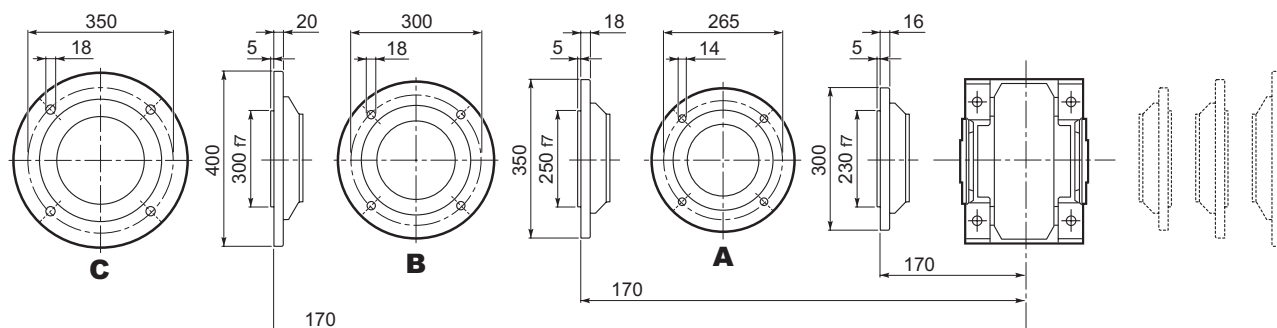


Dimensions are in mm

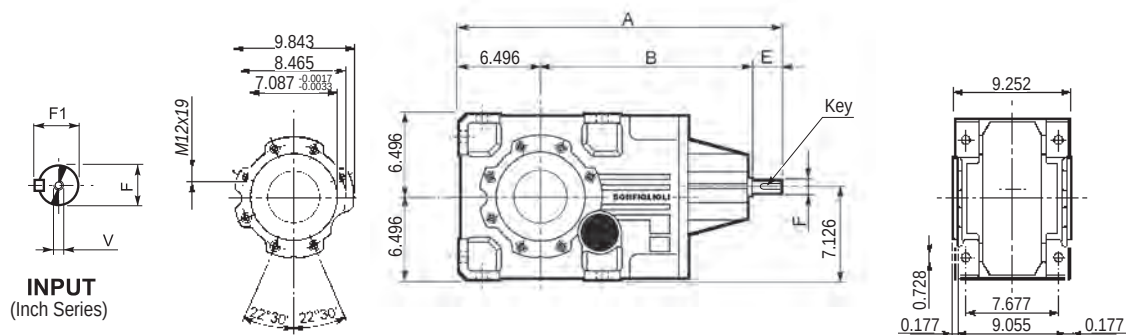
		A	B	E	F	F1	F2	F3	F4	V	Kg
A 60 2	HS	633	408	60	28	31	8	5.0	50	M10x22	106
A 60 3		633	408	60	28	31	8	5.0	50	M10x22	106
A 60 4		676	461	50	24	27	8	2.5	45	M8x19	112

Metric output versions available also in combination with NHS input

A 60...F...



A 60...NHS

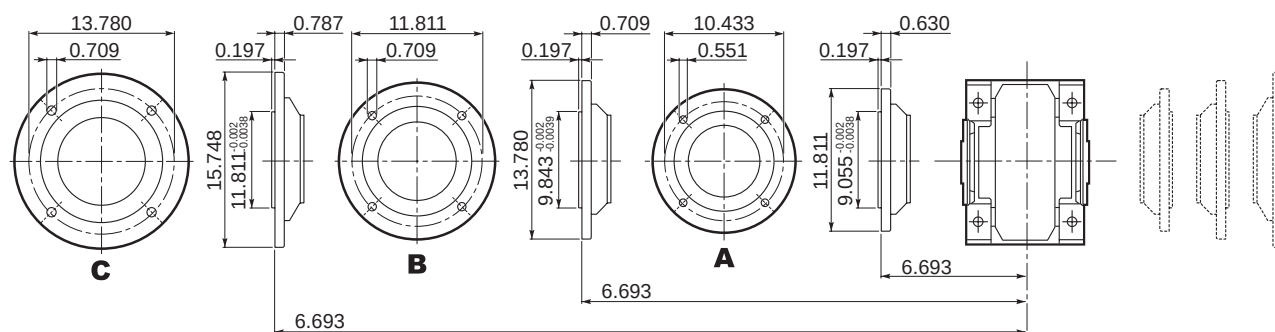


Dimensions are in Inch except when shown in *italic* [mm]

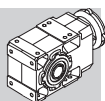
		A	B	E	F	F1	V	Key	lbs
A 60 2	NHS	24.921	16.063	2.362	1.125 ⁺⁰ _{-0.0005}	1.236	3/8 - 16 UNC	1/4 x 1/4 x 2 5/32	234
A 60 3	NHS	24.921	16.063	2.362	1.125 ⁺⁰ _{-0.0005}	1.236	3/8 - 16 UNC	1/4 x 1/4 x 2 5/32	234
A 60 4	NHS	26.614	18.150	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	247

Imperial output versions available also in combination with HS input

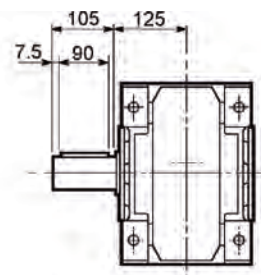
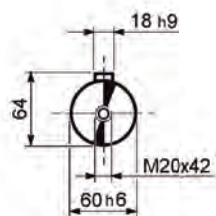
A 60...F...



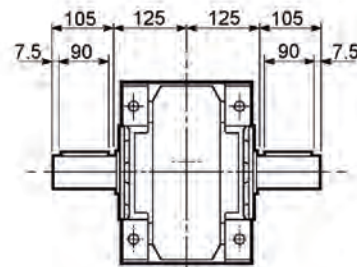
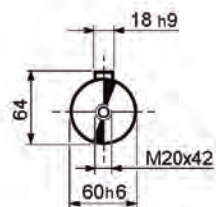
A 60



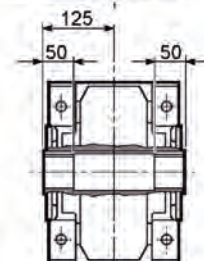
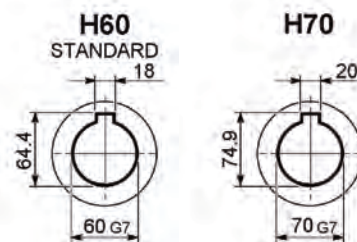
A 60...UR



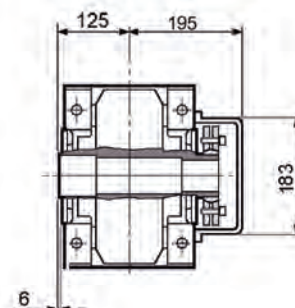
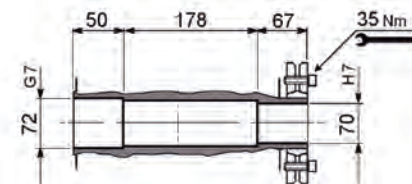
A 60...UD



A 60...UH

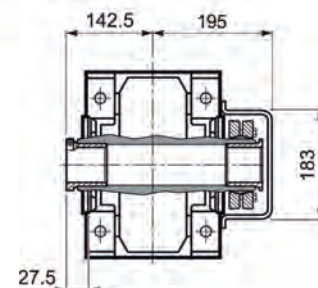
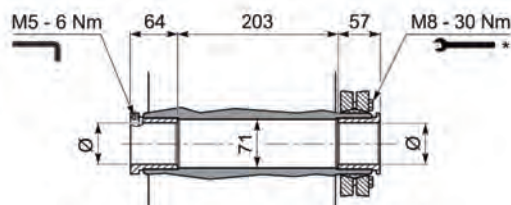


A 60...US

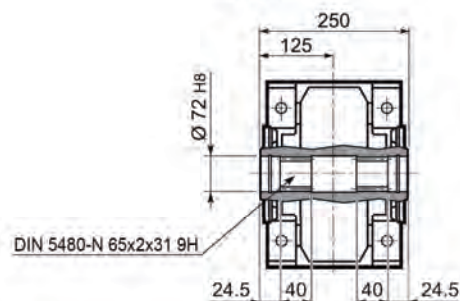


A 60...QF

	Ø
QF60	60
QF65	65
QF70	70



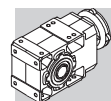
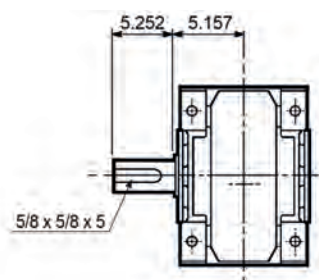
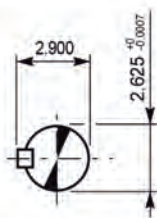
A 60...UV



A 60

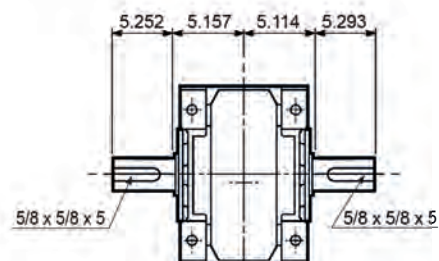
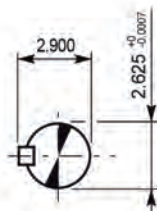
A 60...NUR

OUTPUT
(Inch Series)



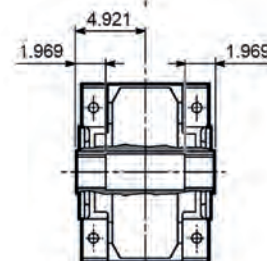
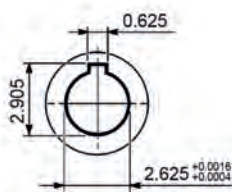
A 60...NUD

OUTPUT
(Inch Series)

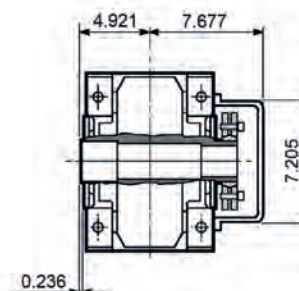
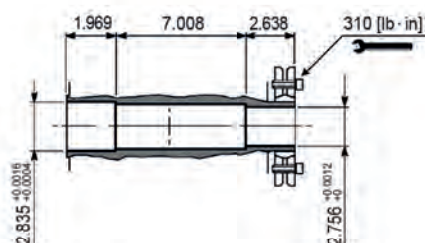


A 60...NUH

OUTPUT
(Inch Series)

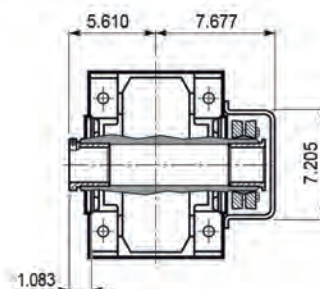
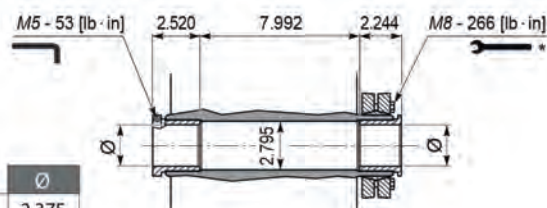


A 60...US

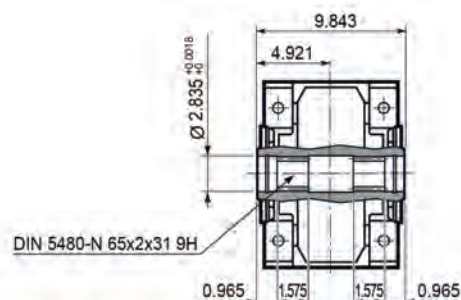


A 60...NQF

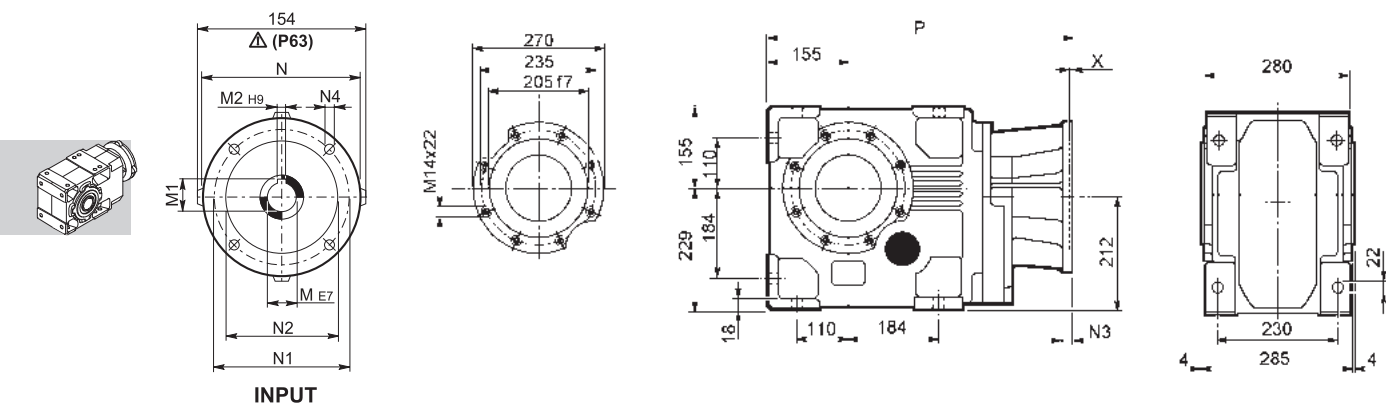
	Ø
NQF2-3/8	2.375
NQF2-7/16	2.438
NQF2-3/4	2.750



A 60...UV



A 70...P (IEC)

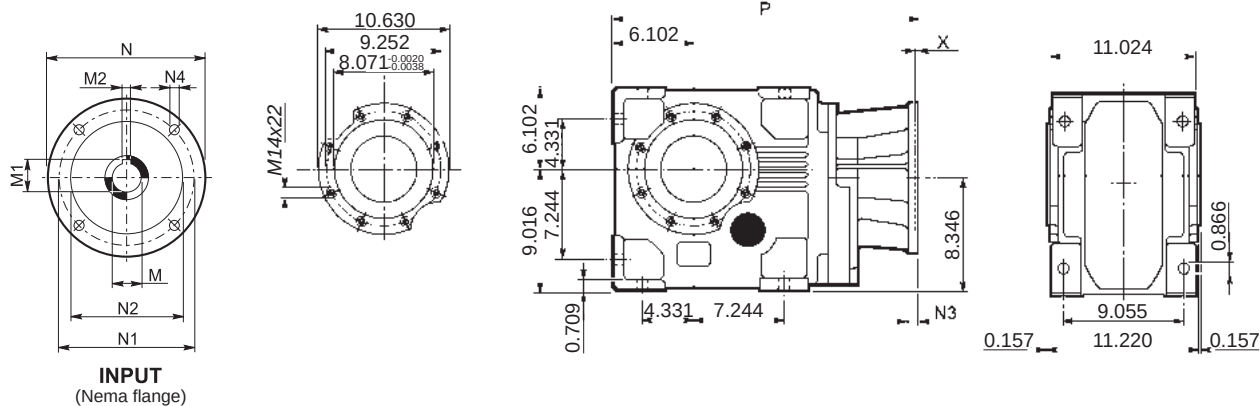


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
A 70 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	524	144
A 70 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	524	144
A 70 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	534	146
A 70 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	534	146
A 70 3	P132	38	41.3	10	300	265	230	16	14	5	570.5	154
A 70 3	P160	42	45.3	12	350	300	250	23	18	6	626	169
A 70 3	P180	48	51.8	14	350	300	250	23	18	6	626	169
A 70 3	P200	55	59.3	16	400	350	300	—	M16x25	7	651	179
A 70 4	P63	11	12.8	4	140	115	95	—	M8x19	4	555.5	146
A 70 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	555.5	146
A 70 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	575	147
A 70 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	575	147
A 70 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	585	148
A 70 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	585	148
A 70 4	P132	38	41.3	10	300	265	230	16	14	5	618.5	157

Metric output versions available also in combination with NEMA motor adaptor

A 70...N(NEMA Input)

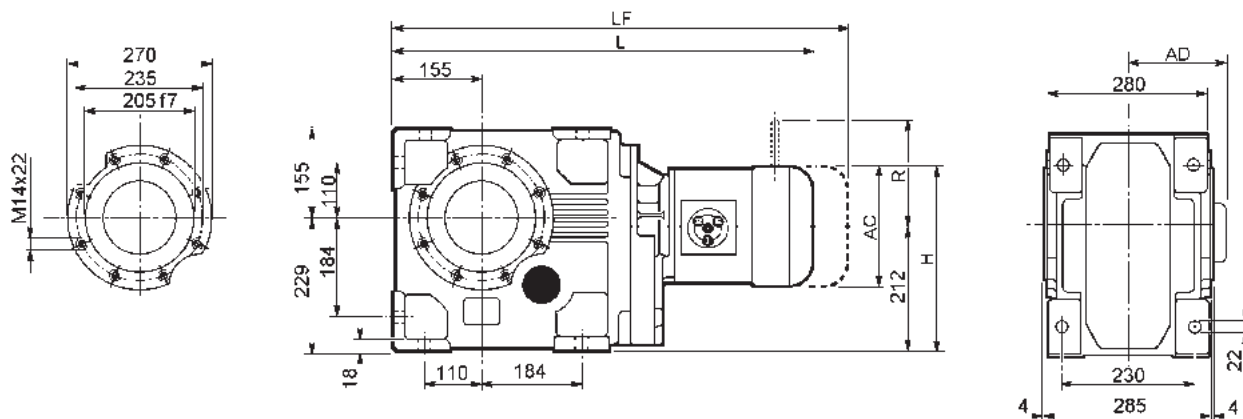
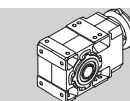


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 70 3	N140TC	0.875 +0.0024 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	20.827	317
A 70 3	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	21.398	322
A 70 3	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	22.638	340
A 70 3	N250TC	1.625 +0.0030 +0.0020	1.796	0.375 +0.0014 +0	13.780	7.250	8.500	—	0.551	0.217	25.630	402
A 70 3	N280TC	1.875 +0.0030 +0.0020	2.102	0.500 +0.0017 +0	13.740	10.500	9.000	—	0.551	0.217	25.827	406
A 70 4	N56C	0.625 +0.0020 +0.0013	0.710	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	22.657	322
A 70 4	N140TC	0.875 +0.0024 +0.0016	0.964	0.188 +0.0012 +0	6.496	5.875	4.500	0.472	0.394	0.197	22.657	324
A 70 4	N180TC	1.125 +0.0024 +0.0016	1.241	0.250 +0.0014 +0	8.996	7.250	8.500	0.630	0.551	0.217	23.406	326
A 70 4	N210TC	1.375 +0.0030 +0.0020	1.518	0.312 +0.0014 +0	8.996	7.250	8.500	0.531	0.531	0.217	24.528	346

Imperial output versions available also in combination with IEC motor adaptor

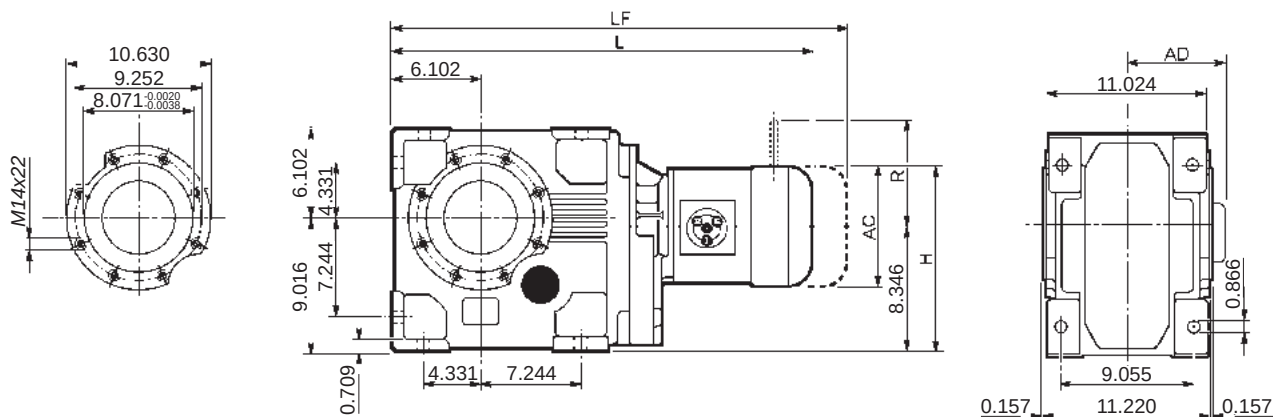
A 70...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
A 70 3	S2	ME2S	156	290	688.5	119	152	—	—	—	—	—	—
A 70 3	S3	ME3S	195	309.5	731.5	142	158.5	—	—	—	—	—	—
A 70 3	S3	ME3L	195	309.5	763.5	142	164	—	—	—	—	—	—
A 70 3	S4	ME4	258	341	872.5	193	198	—	—	—	—	—	—
A 70 3	S4	ME4LB	258	341	907.5	193	206	—	—	—	—	—	—
A 70 3	S5	ME5S	310	367	958	245	226	—	—	—	—	—	—
A 70 3	S5	ME5L	310	367	1002	245	242	—	—	—	—	—	—
A 70 4	S1	M1	138	281	710.5	108	152	771.5	155	103	135	124	108
A 70 4	S2	ME2S	156	290	739.5	119	156	—	—	—	—	—	—
A 70 4	S3	ME3S	195	309.5	782.5	142	162.5	—	—	—	—	—	—
A 70 4	S3	ME3L	195	309.5	814.5	142	168	—	—	—	—	—	—
A 70 4	S4	ME4	258	341	922.5	193	202	—	—	—	—	—	—
A 70 4	S4	ME4LB	258	341	957.5	193	210	—	—	—	—	—	—

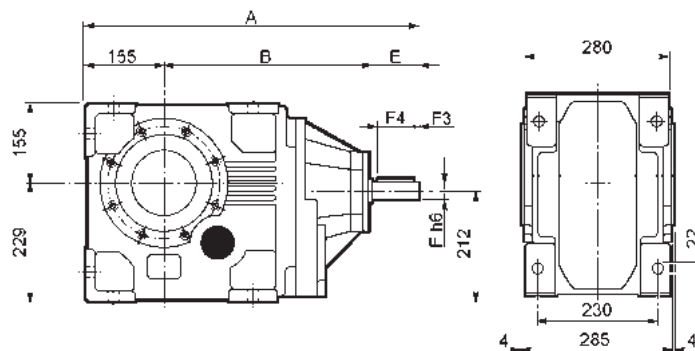
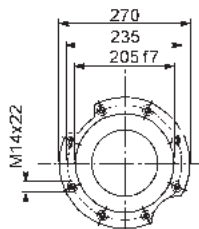
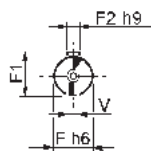
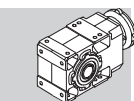
A 70...M/ME



Dimensions are in Inch except when shown in *italic [mm]*

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 70 3	S2	ME2S	6.142	11.417	27.106	4.685	335	—	—	—	—	—	—
A 70 3	S3	ME3S	7.677	12.185	28.799	5.591	349	—	—	—	—	—	—
A 70 3	S3	ME3L	7.677	12.185	30.059	5.591	362	—	—	—	—	—	—
A 70 3	S4	ME4	10.157	13.425	34.350	7.598	437	—	—	—	—	—	—
A 70 3	S4	ME4LB	10.157	13.425	35.728	7.598	454	—	—	—	—	—	—
A 70 3	S5	ME5S	12.205	14.449	37.717	9.646	498	—	—	—	—	—	—
A 70 3	S5	ME5L	12.205	14.449	39.449	9.646	534	—	—	—	—	—	—
A 70 4	S1	M1	5.433	11.063	27.972	4.252	335	30.374	342	4.055	5.315	4.882	4.252
A 70 4	S2	ME2S	6.142	11.417	29.114	4.685	344	—	—	—	—	—	—
A 70 4	S3	ME3S	7.677	12.185	30.807	5.591	358	—	—	—	—	—	—
A 70 4	S3	ME3L	7.677	12.185	32.067	5.591	370	—	—	—	—	—	—
A 70 4	S4	ME4	10.157	13.425	36.319	7.598	445	—	—	—	—	—	—
A 70 4	S4	ME4LB	10.157	13.425	37.697	7.598	463	—	—	—	—	—	—

A 70...HS

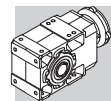
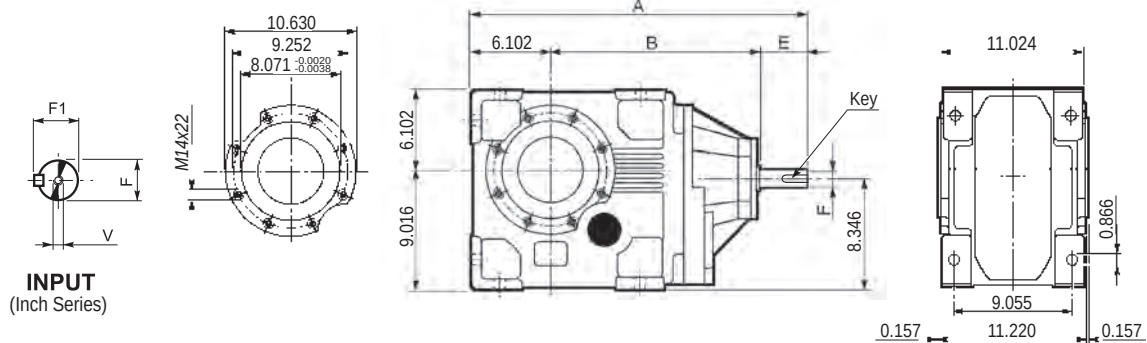


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
A 70 3	HS	708.5	443.5	110	42	45	12	10	90	M12x28	165
A 70 4		644.5	439.5	50	24	27	8	2.5	45	M8x19	149

Metric output versions available also in combination with NHS input

A 70...NHS

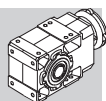


Dimensions are in Inch except when shown in *italic [mm]*

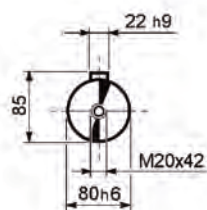
		A	B	E	F	F1	V	Key	lbs
A 70 3	NHS	27.813	17.461	4.25	1.625 ⁺⁰ _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	364
A 70 4	NHS	25.374	17.303	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	328

Imperial output versions available also in combination with HS input

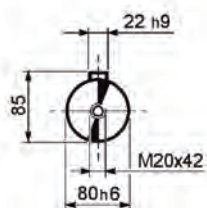
A 70



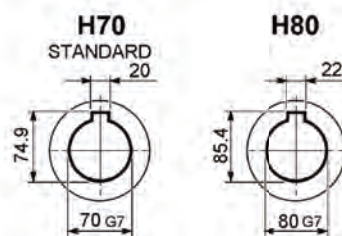
A 70...UR



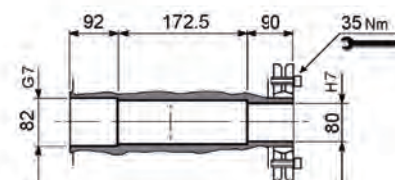
A 70...UD



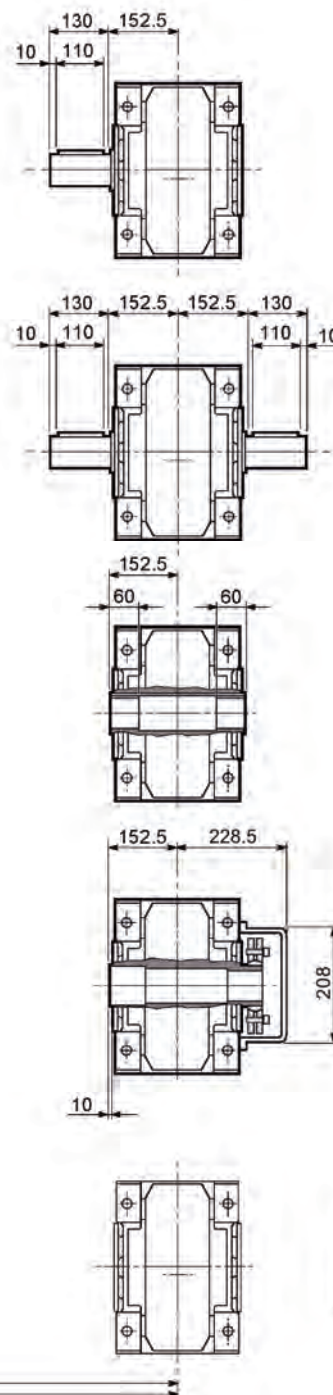
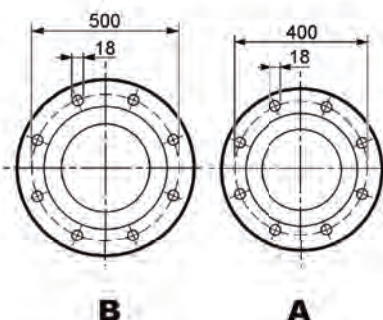
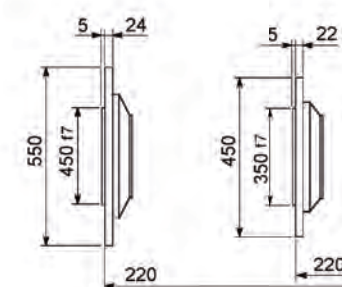
A 70...UH



A 70...US



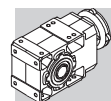
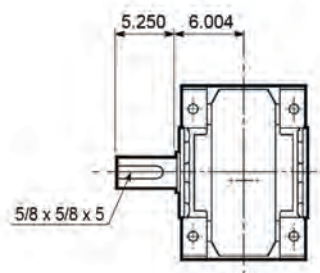
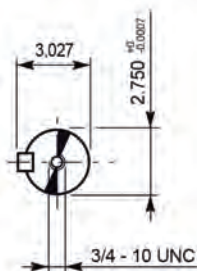
A 70...F...



A 70

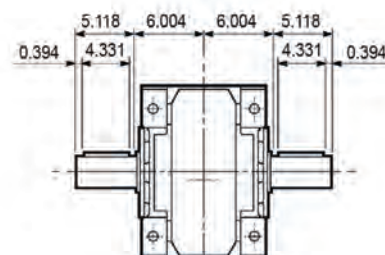
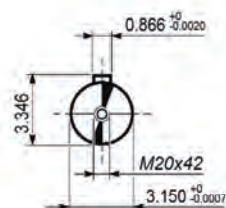
A 70...NUR

OUTPUT
 (Inch Series)



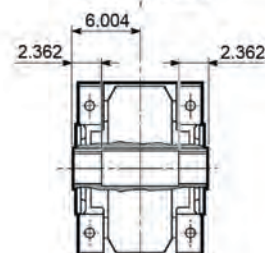
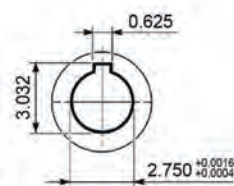
A 70...UD

OUTPUT

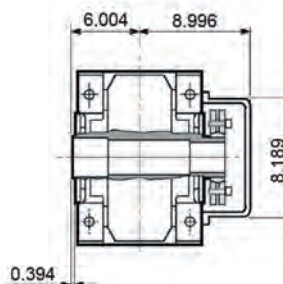
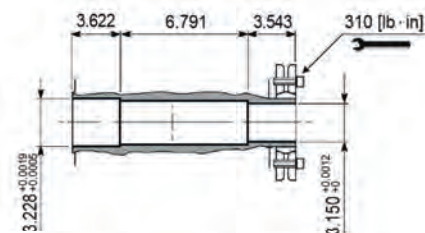


A 70...NUH

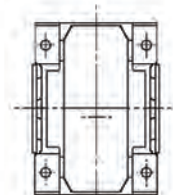
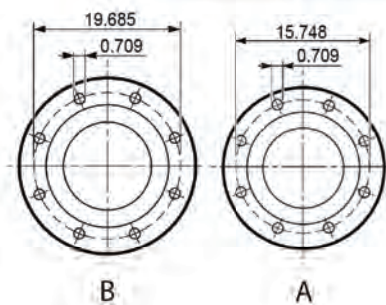
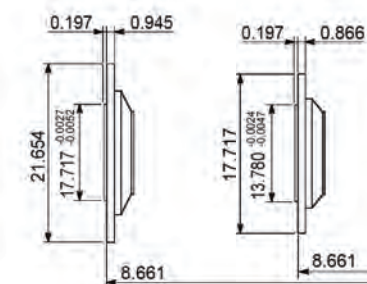
OUTPUT
 (Inch Series)



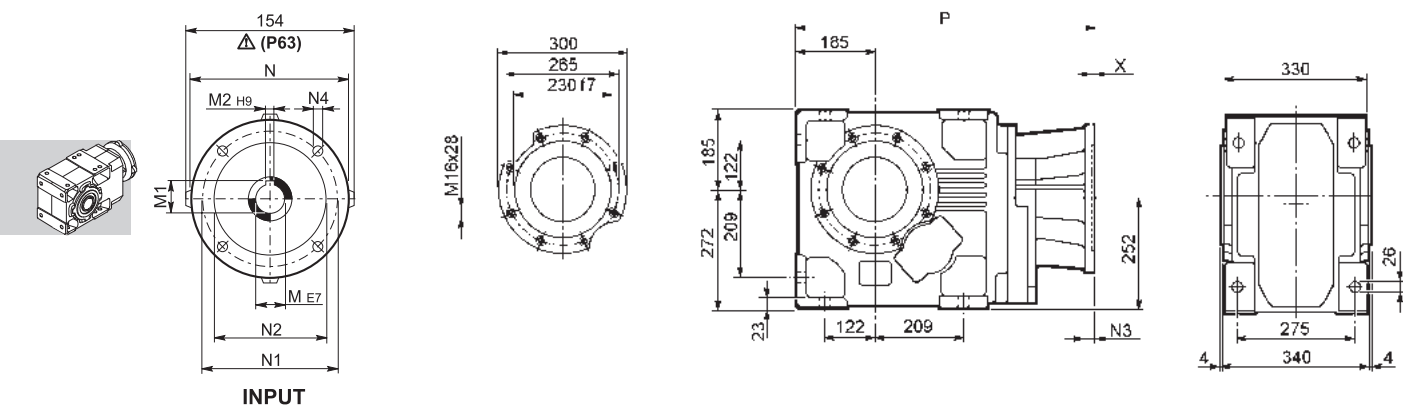
A 70...US



A 70...F...



A 80...P(IEC)

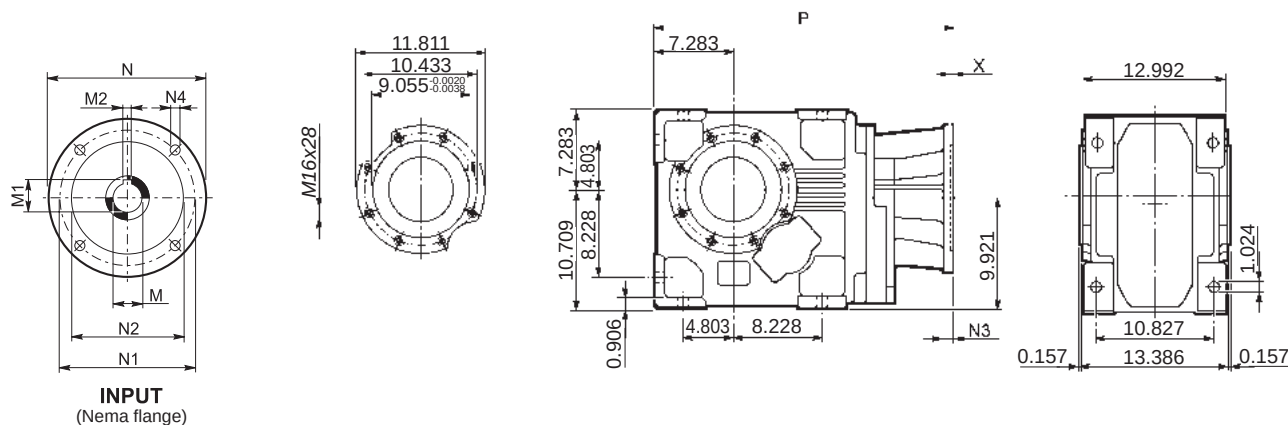


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	kg
A 80 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	602	243
A 80 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	602	243
A 80 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	612	245
A 80 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	612	245
A 80 3	P132	38	41.3	10	300	265	230	16	14	5	648.5	253
A 80 3	P160	42	45.3	12	350	300	250	23	18	6	704	268
A 80 3	P180	48	51.8	14	350	300	250	23	18	6	704	268
A 80 3	P200	55	59.3	16	400	350	300	—	M16x25	7	729	279
A 80 3	P225	60	64.4	18	450	400	350	25	18	6	774.5	298
A 80 4	P63	11	12.8	4	140	115	95	—	M8x19	4	645.5	248
A 80 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	645.5	248
A 80 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	665	249
A 80 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	665	249
A 80 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	675	250
A 80 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	675	250
A 80 4	P132	38	41.3	10	300	265	230	16	M12x16	5	711.5	259

Metric output versions available also in combination with NEMA motor adaptor

A 80...N(NEMA Input)

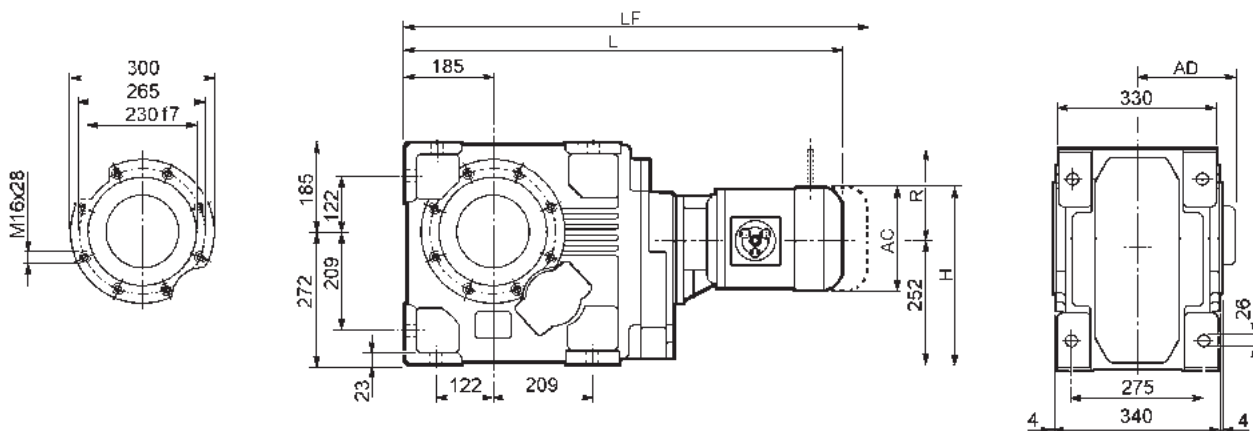
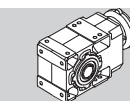


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	
A 80 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	24.469	540
A 80 3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	25.709	558
A 80 3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	28.701	621
A 80 3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	28.898	624
A 80 3	N320TC	2.125 ^{+0.0035} / _{+0.0024}	2.350	0.500 ^{+0.0017} / ₊₀	17.677	11.000	12.500	—	0.669	0.217	31.752	723
A 80 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	26.201	547
A 80 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	26.201	549
A 80 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	26.949	551
A 80 4	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	28.189	571

Imperial output versions available also in combination with IEC motor adaptor

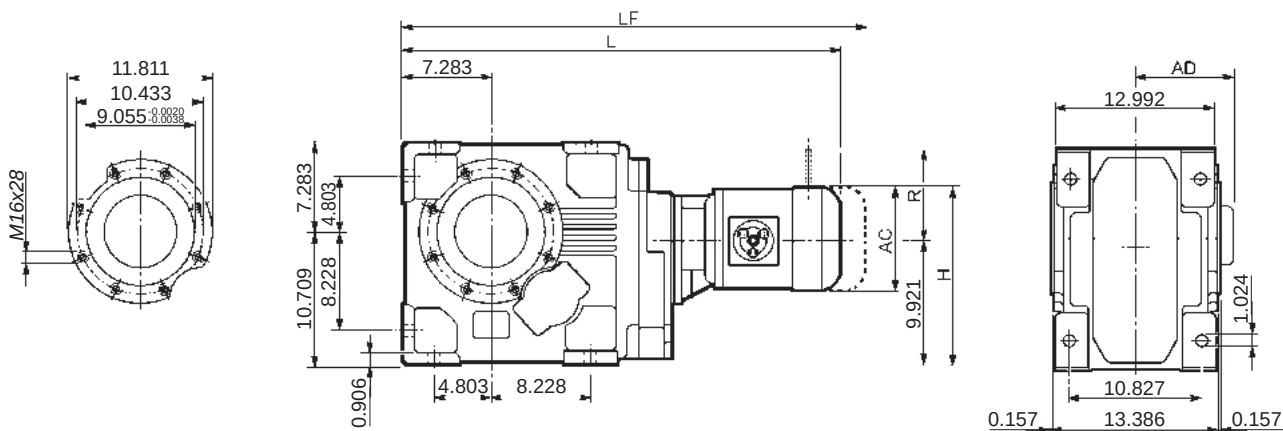
A 80...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 80 3	S3	ME3S	195	349.5	809.5	142	257.5	—	—	—	—	—	—
A 80 3	S3	ME3L	195	349.5	841.5	142	264	—	—	—	—	—	—
A 80 3	S4	ME4	258	381	949.5	193	298	—	—	—	—	—	—
A 80 3	S4	ME4LB	258	381	984.5	193	306	—	—	—	—	—	—
A 80 3	S5	ME5S	310	407	1036	245	326	—	—	—	—	—	—
A 80 3	S5	ME5L	310	407	1080	245	342	—	—	—	—	—	—
A 80 4	S1	M1	138	321	800.5	108	246	861.5	249	103	135	124	108
A 80 4	S2	M2S	156	330	829.5	119	250	899.5	254	129	146	134	119
A 80 4	S2	ME2S	156	330	829.5	119	250	—	—	—	—	—	—
A 80 4	S3	ME3S	195	349.5	872.5	142	256.5	—	—	—	—	—	—
A 80 4	S3	ME3L	195	349.5	904.5	142	262	—	—	—	—	—	—
A 80 4	S4	ME4	258	381	1012.5	193	296	—	—	—	—	—	—
A 80 4	S4	ME4LB	258	381	1047.5	193	304	—	—	—	—	—	—

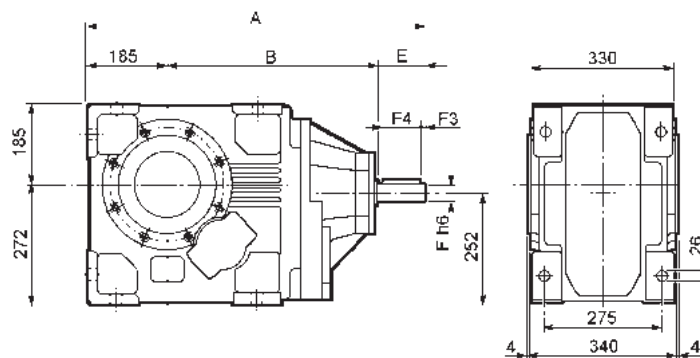
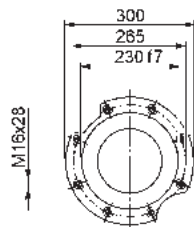
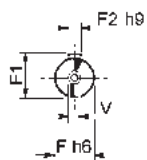
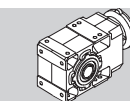
A 80...M/ME



Dimensions are in Inch except when shown in *italic [mm]*

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 80 3	S3	ME3S	7.677	13.760	31.870	5.591	568	—	—	—	—	—	—
A 80 3	S3	ME3L	7.677	13.760	33.130	5.591	582	—	—	—	—	—	—
A 80 3	S4	ME4	10.157	15.000	37.382	7.598	657	—	—	—	—	—	—
A 80 3	S4	ME4LB	10.157	15.000	38.760	7.598	675	—	—	—	—	—	—
A 80 3	S5	ME5S	12.205	16.024	40.787	9.646	719	—	—	—	—	—	—
A 80 3	S5	ME5L	12.205	16.024	42.520	9.646	754	—	—	—	—	—	—
A 80 4	S1	M1	5.433	12.638	31.516	4.252	542	33.917	549	4.055	5.315	4.882	4.252
A 80 4	S2	M2S	6.142	12.992	32.657	4.685	551	35.413	560	5.079	5.748	5.276	4.685
A 80 4	S2	ME2S	6.142	12.992	32.657	4.685	551	—	—	—	—	—	—
A 80 4	S3	ME3S	7.677	13.760	34.350	5.591	565	—	—	—	—	—	—
A 80 4	S3	ME3L	7.677	13.760	35.610	5.591	578	—	—	—	—	—	—
A 80 4	S4	ME4	10.157	15.000	39.862	7.598	653	—	—	—	—	—	—
A 80 4	S4	ME4LB	10.157	15.000	41.240	7.598	670	—	—	—	—	—	—

A 80...HS

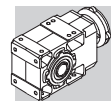
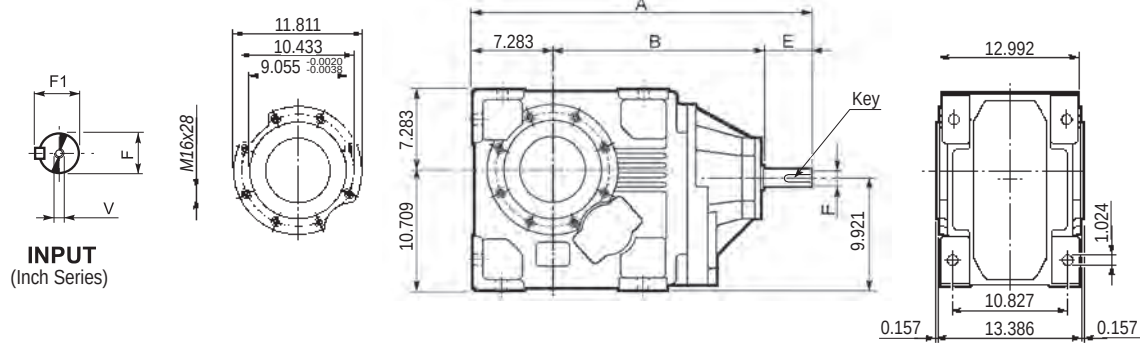


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
A 80 3	HS	786.5	491.5	110	42	45	12	10	90	M12x28	265
A 80 4		735	500	50	24	27	8	2.5	45	M8x19	250

Metric output versions available also in combination with NHS input

A 80...NHS

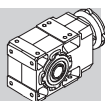


Dimensions are in Inch except when shown in *italic* [mm]

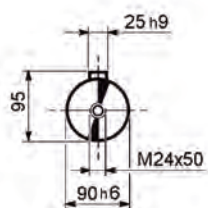
		A	B	E	F	F1	V	Key	
A 80 3	NHS	30.884	19.350	4.25	1.625 ⁺⁰ _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	584
A 80 4	NHS	28.937	19.685	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	551

Imperial output versions available also in combination with HS input

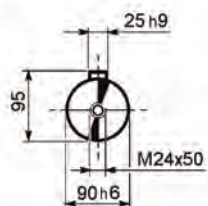
A 80



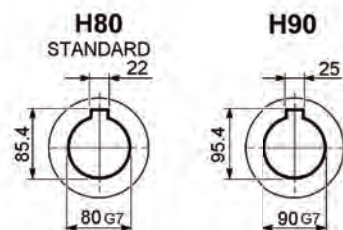
A 80...UR



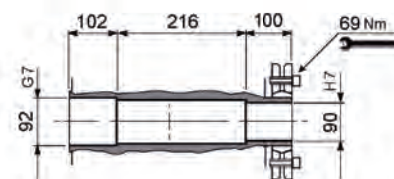
A 80...UD



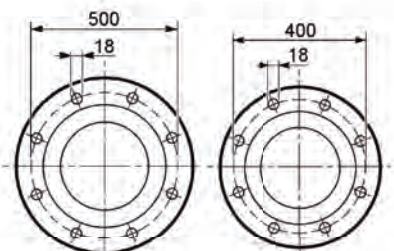
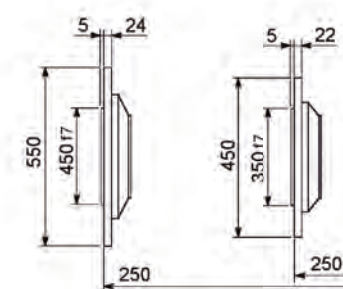
A 80...UH



A 80...US

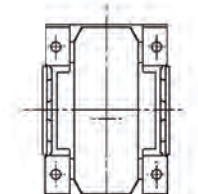
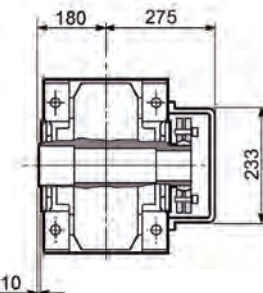
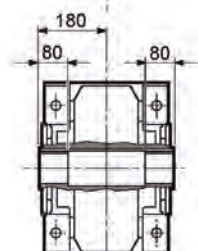
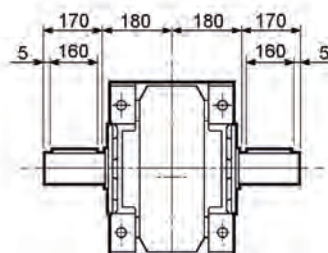
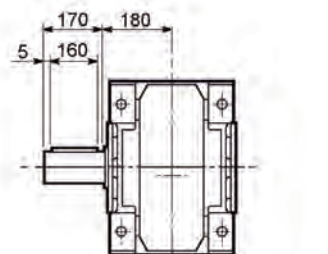


A 80...F...



B

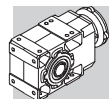
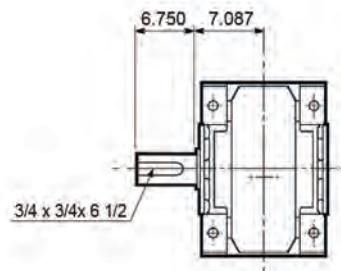
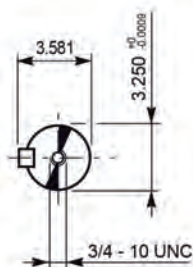
A



A 80

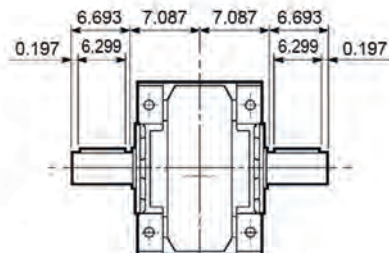
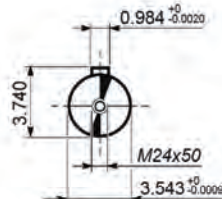
A 80...NUR

OUTPUT
(Inch Series)



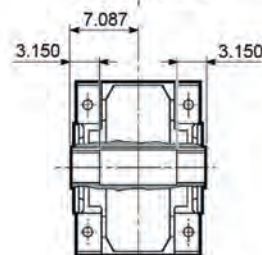
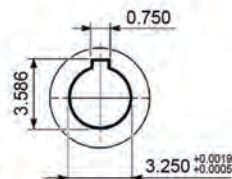
A 80...UD

OUTPUT

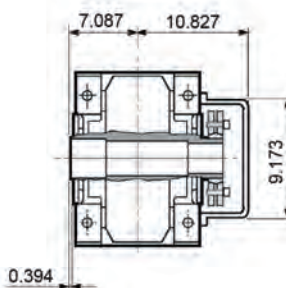
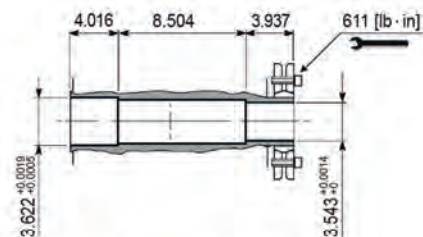


A 80...NUH

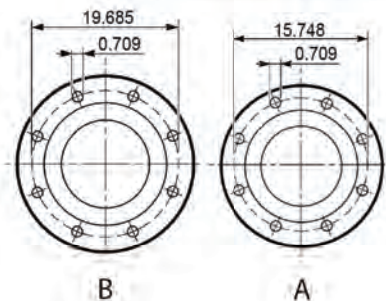
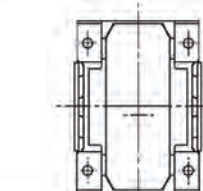
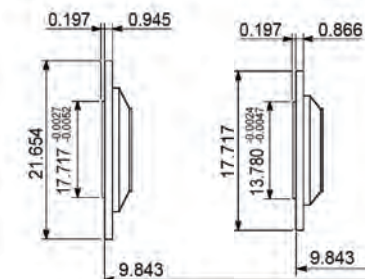
OUTPUT
(Inch Series)



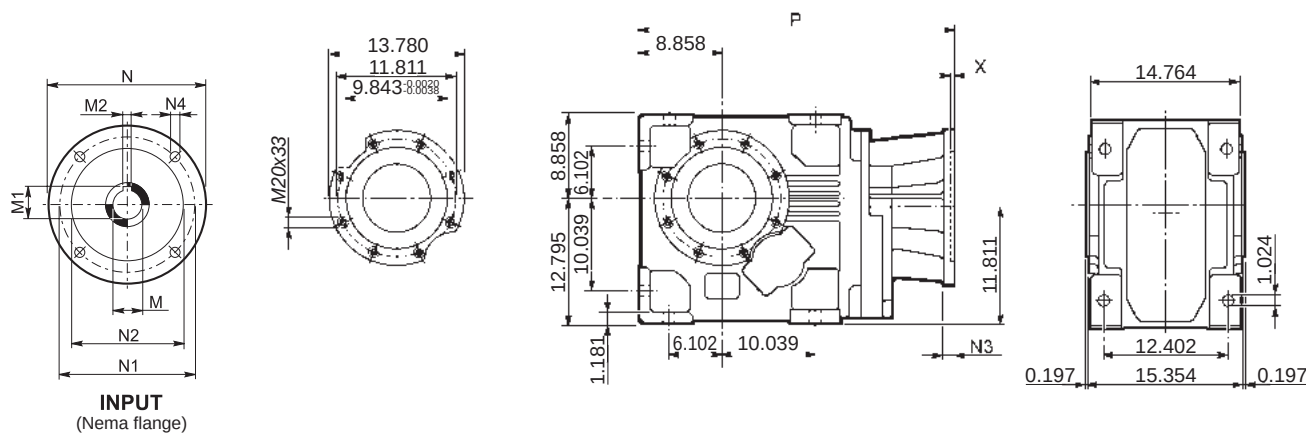
A 80...US



A 80...F...



A 90...N(NEMA Input)

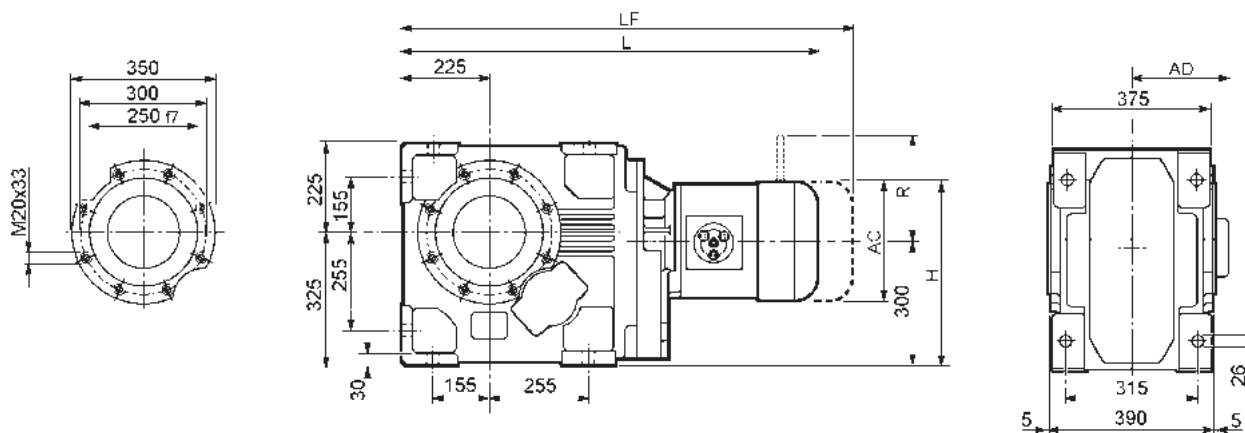
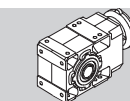


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
A 90 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	29.232	884
A 90 3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	30.472	902
A 90 3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	33.465	973
A 90 3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	33.661	977
A 90 3	N320TC	2.125 ^{+0.0035} / _{+0.0024}	2.350	0.500 ^{+0.0017} / ₊₀	17.677	11.000	12.500	—	0.669	0.217	36.516	1107
A 90 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	31.752	908
A 90 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ^{+0.0012} / ₊₀	6.496	5.875	4.500	0.472	0.394	0.197	31.752	910
A 90 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.630	0.551	0.217	32.500	915
A 90 4	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ^{+0.0014} / ₊₀	8.996	7.250	8.500	0.531	0.531	0.217	33.740	933
A 90 4	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ^{+0.0014} / ₊₀	13.780	7.250	8.500	—	0.551	0.217	36.535	987
A 90 4	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ^{+0.0017} / ₊₀	13.740	10.500	9.000	—	0.551	0.217	36.732	990

Imperial output versions available also in combination with IEC motor adaptor

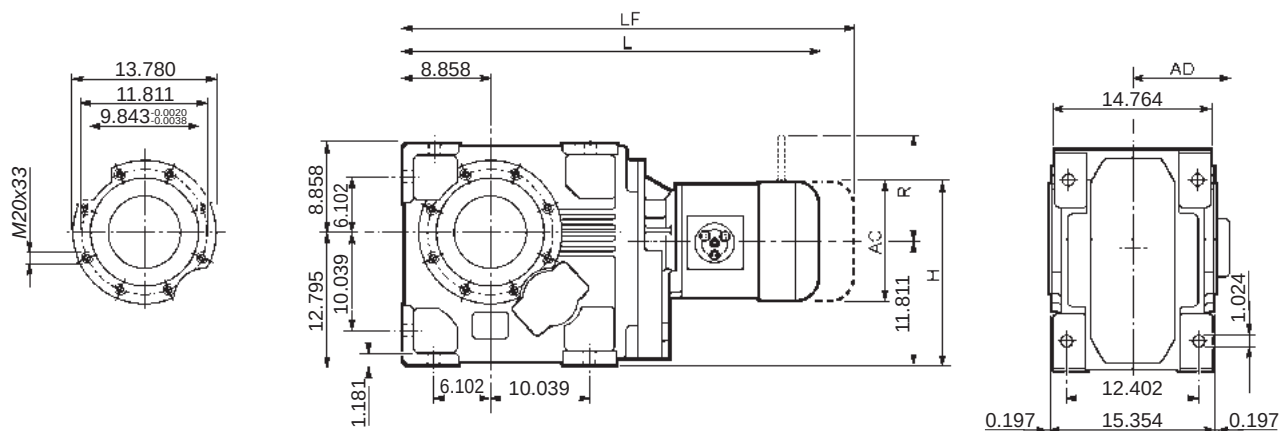
A 90...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
A 90 3	S3	ME3S	195	397.5	930.5	142	414.5	—	—	—	—	—	—
A 90 3	S3	ME3L	195	397.5	962.5	142	420	—	—	—	—	—	—
A 90 3	S4	ME4	258	429	1070.5	193	454	—	—	—	—	—	—
A 90 3	S4	ME4LB	258	429	1105.5	193	462	—	—	—	—	—	—
A 90 3	S5	ME5S	310	455	1157	245	482	—	—	—	—	—	—
A 90 3	S5	ME5L	310	455	1201	245	498	—	—	—	—	—	—
A 90 4	S1	M1	138	369	941.5	108	412	1002.5	249	103	135	124	108
A 90 4	S2	M2S	156	378	970.5	119	422	1040.5	426	129	146	134	119
A 90 4	S2	ME2S	156	378	970.5	119	422	—	—	—	—	—	—
A 90 4	S3	ME3S	195	397.5	1013.5	142	428.5	—	—	—	—	—	—
A 90 4	S3	ME3L	195	397.5	1045.5	142	434	—	—	—	—	—	—
A 90 4	S4	ME4	258	429	1153.5	193	468	—	—	—	—	—	—
A 90 4	S4	ME4LB	258	429	1188.5	193	476	—	—	—	—	—	—

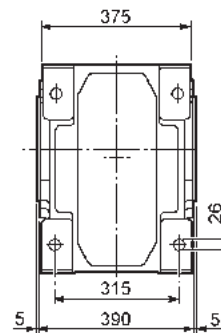
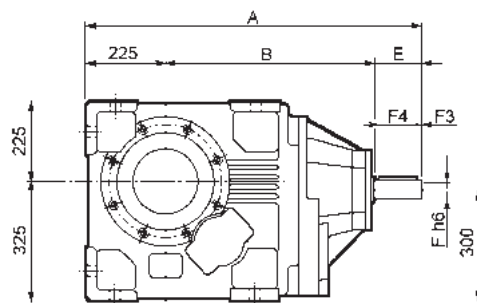
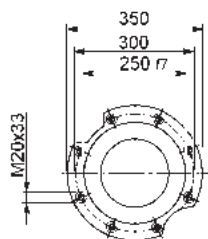
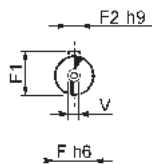
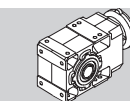
A 90...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
A 90 3	S3	ME3S	7.677	15.650	36.634	5.591	914	—	—	—	—	—	—
A 90 3	S3	ME3L	7.677	15.650	37.894	5.591	926	—	—	—	—	—	—
A 90 3	S4	ME4	10.157	16.890	42.146	7.598	1001	—	—	—	—	—	—
A 90 3	S4	ME4LB	10.157	16.890	43.524	7.598	1019	—	—	—	—	—	—
A 90 3	S5	ME5S	12.205	17.913	45.551	9.646	1063	—	—	—	—	—	—
A 90 3	S5	ME5L	12.205	17.913	47.283	9.646	1098	—	—	—	—	—	—
A 90 4	S1	M1	5.433	14.528	37.067	4.252	908	39.469	549	4.055	5.315	4.882	4.252
A 90 4	S2	M2S	6.142	14.882	38.209	4.685	930	40.965	939	5.079	5.748	5.276	4.685
A 90 4	S2	ME2S	6.142	14.882	38.209	4.685	930	—	—	—	—	—	—
A 90 4	S3	ME3S	7.677	15.650	39.902	5.591	945	—	—	—	—	—	—
A 90 4	S3	ME3L	7.677	15.650	41.161	5.591	957	—	—	—	—	—	—
A 90 4	S4	ME4	10.157	16.890	45.413	7.598	1032	—	—	—	—	—	—
A 90 4	S4	ME4LB	10.157	16.890	46.791	7.598	1049	—	—	—	—	—	—

A 90...HS

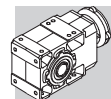
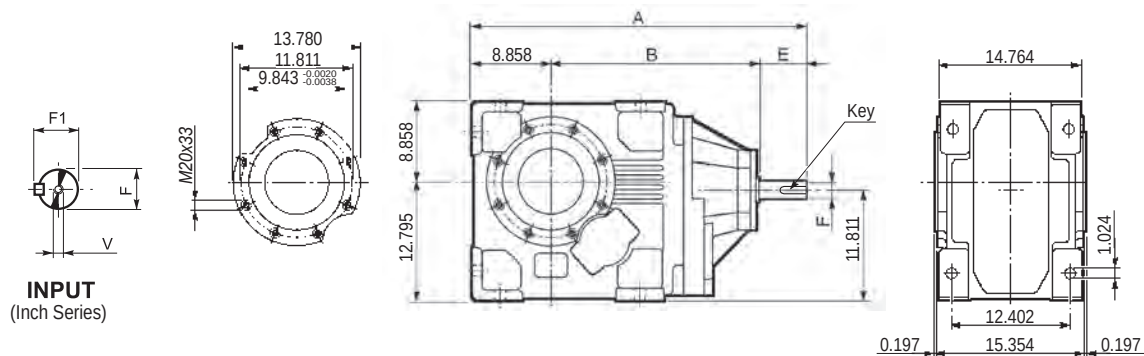


Dimensions are in mm

		A	B	E	F	F1	F2	F3	F4	V	Kg
A 90 3	HS	1009	644	140	60	64	18	10	120	M16x36	465
A 90 4		875.5	600.5	50	24	27	8	2.5	45	M8x19	415

Metric output versions available also in combination with NHS input

A 90...NHS

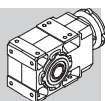


Dimensions are in Inch except when shown in *italic [mm]*

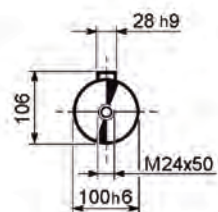
		A	B	E	F	F1	V	Key	
A 90 3	NHS	39.213	25.354	5	2.125 $\begin{smallmatrix} +0 \\ -0.0006 \end{smallmatrix}$	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	1025
A 90 4	NHS	34.469	23.642	1.969	1.000 $\begin{smallmatrix} +0 \\ -0.0005 \end{smallmatrix}$	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	915

Imperial output versions available also in combination with HS input

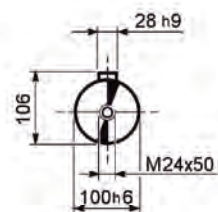
A 90



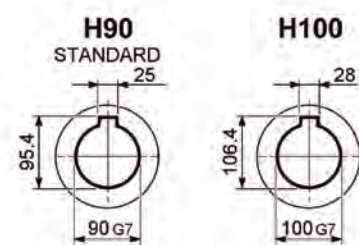
A 90...UR



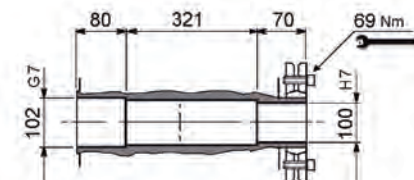
A 90...UD



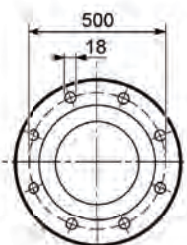
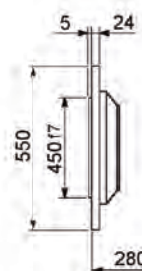
A 90...UH



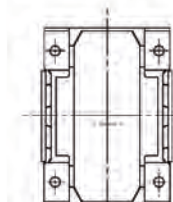
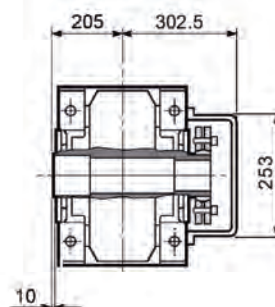
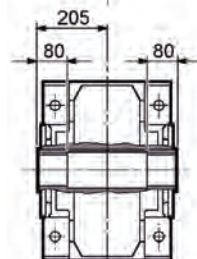
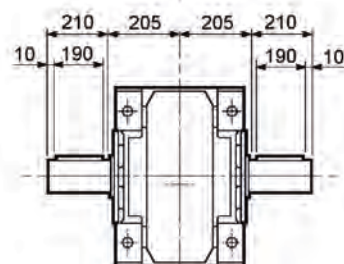
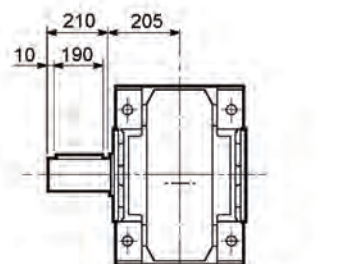
A 90...US



A 90...F...



A

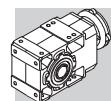
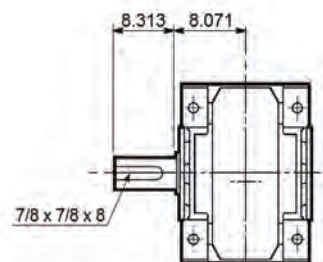
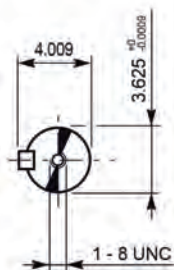


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

A 90

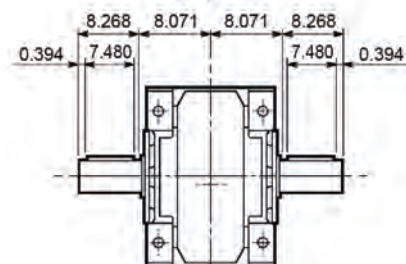
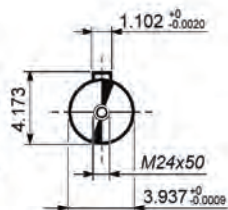
A 90...NUR

OUTPUT
(Inch Series)



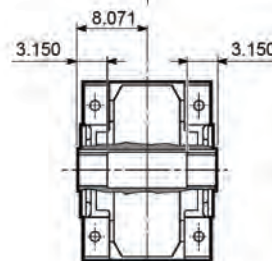
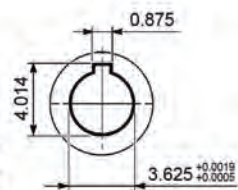
A 90...UD

OUTPUT

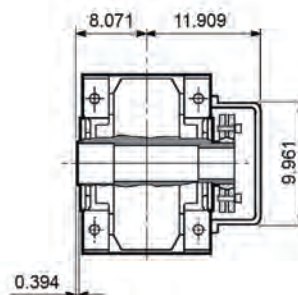
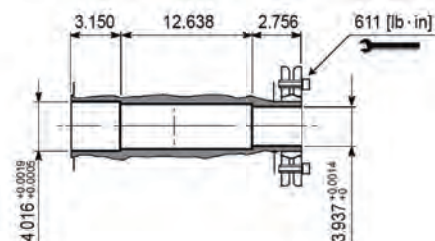


A 90...NUH

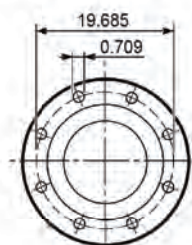
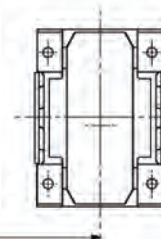
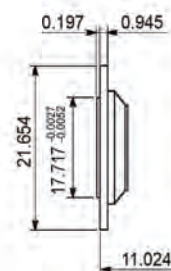
OUTPUT
(Inch Series)



A 90...US

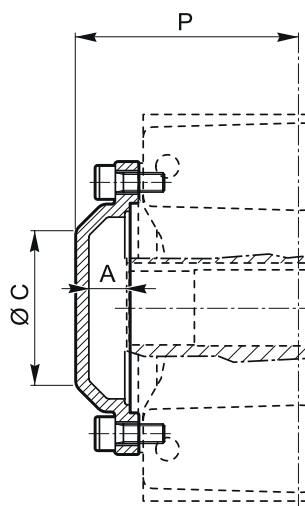


A 90...F...



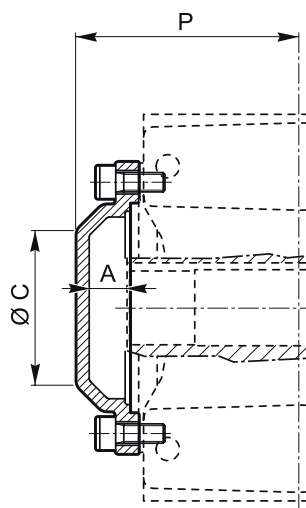
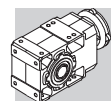
44 ACCESSORIES

44.1 Safety cover



Dimensions are in mm

	A	Ø C	P
A 05	17.5	36	73.5
A 10	20.5	60	84.5
A 20	20	75	94
A 30	20	75	104
A 35	19.5	80	114
A 41	21	110	120
A 50	26	100	148.5
A 55	27	100	149
A 60	25	100	158
A 70	33.5	120	193.5
A 80	38	140	228
A 90	43	152	258

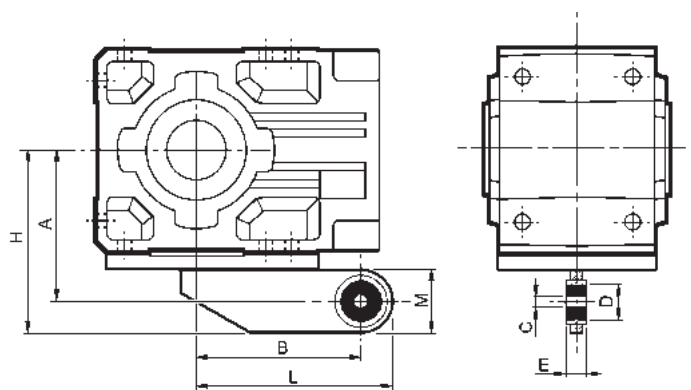
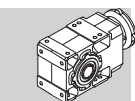


Dimensions are in Inch except when shown in *italic* [mm]

	A	Ø C	P
A 05	0.689	1.417	2.894
A 10	0.807	2.362	3.327
A 20	0.787	2.953	3.701
A 30	0.787	2.953	4.094
A 35	0.768	3.150	4.488
A 41	0.827	4.331	4.724
A 50	1.024	3.937	5.846
A 55	1.063	3.937	5.866
A 60	0.984	3.937	6.220
A 70	1.319	4.724	7.618
A 80	1.496	5.512	8.976
A 90	1.693	5.984	10.157

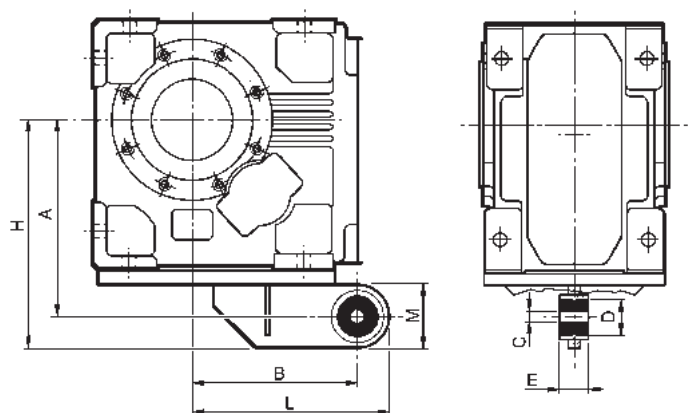
44.2 Torque arm

Torque arm comes complete with fastening bolts.



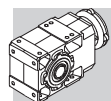
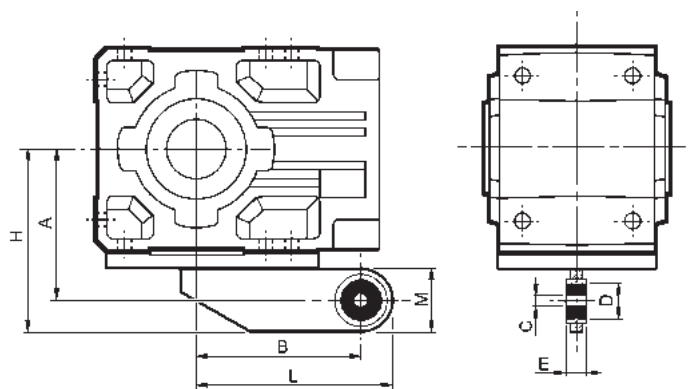
Dimensions are in mm

	A	B	C	D	E	H	L	M
A 05	90.5	80	10	30	20	115.5	105	50
A 10	108	118	10	30	20	138	148	60
A 20	118	137	10	30	20	148	167	60
A 30	135	150	20	40	25	170	185	70
A 35	145	165	20	40	25	180	200	70
A 41	157	200	20	40	25	192	235	70
A 50	200	250	32	56	40	245	295	90
A 55	200	250	32	56	40	245	295	90
A 60	225	300	32	56	40	270	345	90



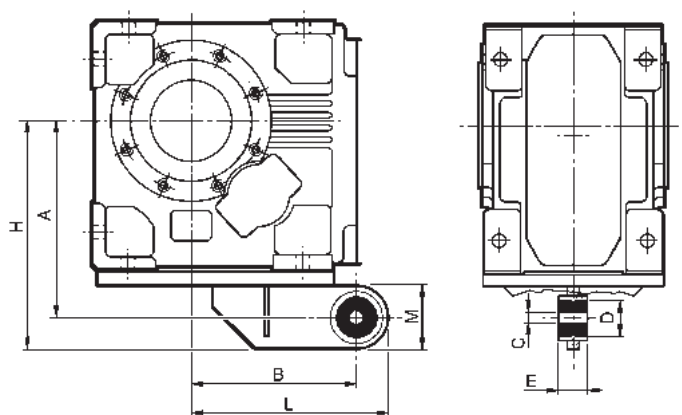
Dimensions are in mm

	A	B	C	D	E	H	L	M
A 70	289	250	32	56	40	334	295	90
A 80	357	300	42	78	60	422	365	130
A 90	410	350	42	78	60	475	415	130



Dimensions are in Inch except when shown in *italic* [mm]

	A	B	C	D	E	H	L	M
A 05	3.563	3.150	0.394	1.181	0.787	4.547	4.134	1.969
A 10	4.252	4.646	0.394	1.181	0.787	5.433	5.827	2.362
A 20	4.646	5.394	0.394	1.181	0.787	5.827	6.575	2.362
A 30	5.315	5.906	0.787	1.575	0.984	6.693	7.283	2.756
A 35	5.709	6.496	0.787	1.575	0.984	7.087	7.874	2.756
A 41	6.181	7.874	0.787	1.575	0.984	7.559	9.252	2.756
A 50	7.874	9.843	1.260	2.205	1.575	9.646	11.614	3.543
A 55	7.874	9.843	1.260	2.205	1.575	9.646	11.614	3.543
A 60	8.858	11.811	1.260	2.205	1.575	10.630	13.583	3.543



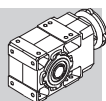
Dimensions are in Inch except when shown in *italic* [mm]

	A	B	C	D	E	H	L	M
A 70	11.378	9.843	1.260	2.205	1.575	13.150	11.614	3.543
A 80	14.055	11.811	1.654	3.071	2.362	16.614	14.370	5.118
A 90	16.142	13.780	1.654	3.071	2.362	18.701	16.339	5.118

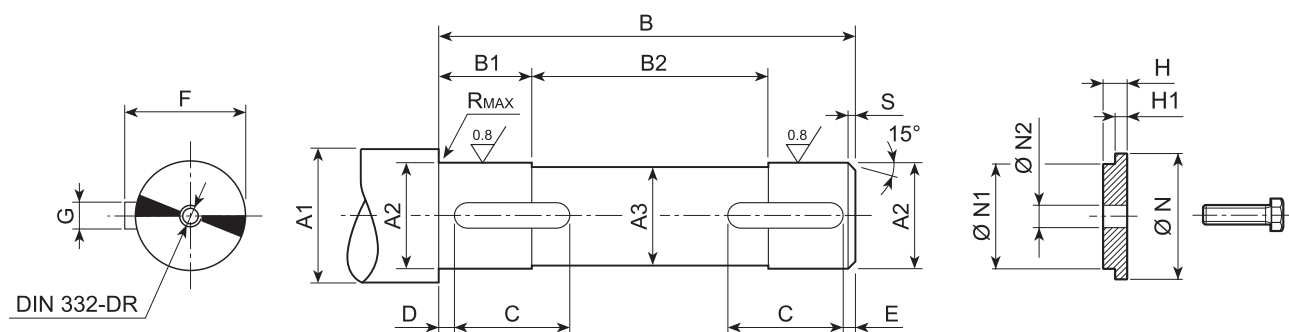
45 CUSTOMER' SHAFT

Make the driven shaft to be coupled to the gear unit's output shaft from a good quality steel, respecting the dimensions given in the table.

A device such as that illustrated below should also be installed to secure the shaft axially. Take care to verify and dimension the various components to suit the needs of the application.



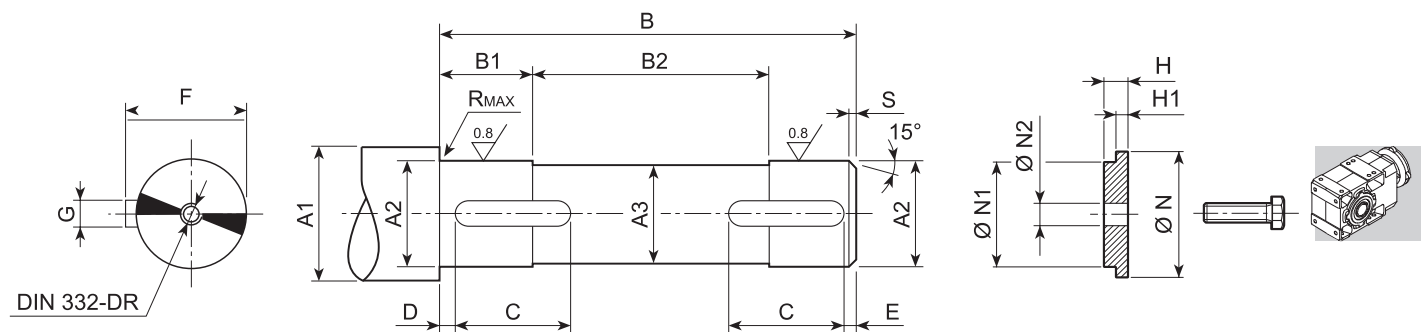
UH_



Dimensions are in mm

	A1	A2	A3	B	B1	B2	C	D	E	F	G	R	S		N	N1	N2	H	H1	
														UNI 6604						UNI 5739
A05 UH25	≥ 30	25 h7	24	102	21	62	20	2	2	28	8 h9	0.5	1.5	8x7x20 A	35	25 d9	9	7	5.5	M8x25
A10 UH30	≥ 35	30 h7	29	118	16	87	20	2	2	33	8 h9	0.5	1.5	8x7x20 A	35	30 d9	11	8.5	7	M10x30
A10 UH25	≥ 30	25 h7	24	118	16	87	20	2	2	28	8 h9	0.5	1.5	8x7x20 A	30÷35	25 d9	9	7	5.5	M8x25
A20 UH35	≥ 42	35 h7	34	138	20	98	20	2	2	38	10 h9	0.5	1.5	10x8x20 A	42	35 d9	11	8.5	7	M10x30
A20 UH30	≥ 35	30 h7	29	138	20	98	25	2	2	33	8 h9	0.5	1.5	8x7x25 A	35÷42	30 d9	11	8.5	7	M10x30
A30 UH40	≥ 47	40 h7	39	158	23	112	30	2	2	43	12 h9	0.5	1.5	12x8x30 A	47	40 d9	14	8.5	7	M12x35
A30 UH35	≥ 42	35 h7	34	158	23	112	30	2	2	38	10 h9	0.5	1.5	10x8x30 A	42÷47	35 d9	11	8.5	7	M10x30
A35 UH40	≥ 47	40 h7	39	175	33	109	40	2	2	43	12 h9	1	1.5	12x8x40 A	47	40 d9	14	8.5	7	M12x35
A35 UH35	≥ 42	35 h7	34	175	33	109	40	2	2	38	10 h9	1	1.5	10x8x40 A	42÷47	35 d9	11	8.5	7	M10x30
A41 UH45	≥ 52	45 h7	44	184	28	128	45	2.5	2.5	48.5	14 h9	1	2	14x9x45 A	52	45 d9	14	8.5	7	M12x35
A41 UH40	≥ 47	40 h7	39	184	28	128	50	2.5	2.5	43	12 h9	1	2	12x8x50 A	47÷52	40 d9	14	8.5	7	M12x35
A50 UH55	≥ 63	55 h7	54	226	37.5	151	55	2.5	2.5	59	16 h9	1	2	16x10x55 A	63	55 d9	22	10	8	M20x50
A50 UH50	≥ 57	50 h7	49	226	37.5	151	65	2.5	2.5	53.5	14 h9	1	2	14x9x65 A	57÷63	50 d9	18	10	8	M16x45
A55 UH60	≥ 70	60 h7	59	226	37.5	151	65	2.5	2.5	64	18 h9	2	2	18x11x65 A	70	60 d9	22	10	8	M20x50
A55 UH50	≥ 60	50 h7	49	226	37.5	151	75	2.5	2.5	53.5	14 h9	2	2	14x9x75 A	60÷70	50 d9	18	10	8	M16x45
A60 UH70	≥ 78	70 h7	69	248	48	152	70	2.5	2.5	74.5	20 h9	2.5	2	20x12x70 A	78	70 d9	22	10	8.5	M20x50
A60 UH60	≥ 68	60 h7	59	248	48	152	80	2.5	2.5	64	18 h9	2.5	2	18x11x80 A	68÷78	60 d9	22	10	8.5	M20x50
A70 UH80	≥ 89	80 h7	79	303	58	187	90	3	3	85	22 h9	2.5	2.5	22x14x90 A	89	80 d9	22	10	8.5	M20x50
A70 UH70	≥ 78	70 h7	69	303	58	187	110	3	3	74.5	20 h9	2.5	2.5	20x12x110 A	78÷89	70 d9	22	10	8.5	M20x50
A80 UH90	≥ 99	90 h7	89	358	78	202	120	3	3	95	25 h9	2.5	2.5	25x14x120 A	99	90 d9	26	22	20.5	M24x70
A80 UH80	≥ 89	80 h7	79	358	78	202	130	3	3	85	22 h9	2.5	2.5	22x14x130 A	89÷99	80 d9	22	10	8.5	M20x50
A90 UH100	≥ 111	100 h7	99	408	78	252	160	3	3	106	28 h9	2.5	2.5	28x16x160 A	111	100 d9	26	22	20.5	M24x70
A90 UH90	≥ 99	90 h7	89	408	78	252	190	3	3	95	25 h9	2.5	2.5	25x14x190 A	99÷111	90 d9	26	22	20.5	M24x70

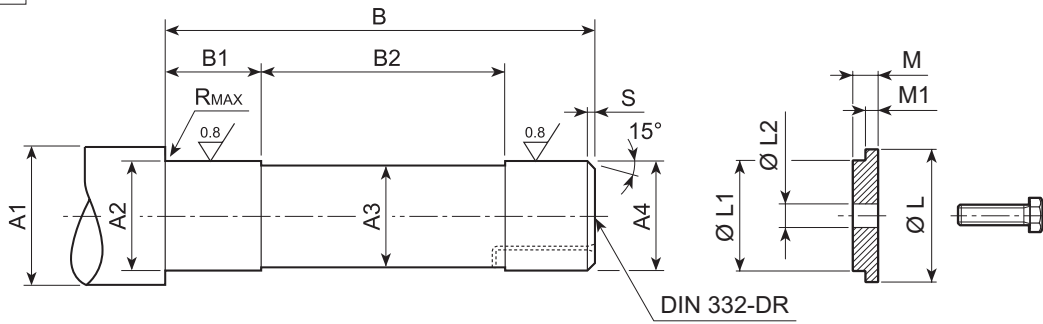
NUH_



Dimensions are in Inch except when shown in *italic* [mm]

	A1	A2	A3	B	B1	B2	C	D	E	F	G	R	S	Key	N	N1	N2	H	H1	UNI 5739
A05 UH25	≥ 1.20	1.000 ⁺⁰ _{-0.0008}	0.961	4.016	0.827	2.441	0.875	0.079	0.079	1.109	0.250 ⁺⁰ _{-0.0014}	0.020	0.059	1/4 x 1/4 x 7/8	1.378	1.000 ^{-0.0026} _{-0.0046}	0.354	0.276	0.217	M8x25
A10 UH25	≥ 1.20	1.000 ⁺⁰ _{-0.0008}	0.961	4.646	0.630	3.425	0.875	0.079	0.079	1.109	0.250 ⁺⁰ _{-0.0014}	0.020	0.059	1/4 x 1/4 x 7/8	1.201 [±] _{1.378}	1.000 ^{-0.0026} _{-0.0046}	0.354	0.276	0.217	M8x25
A20 UH30	≥ 1.46	1.250 ⁺⁰ _{-0.0010}	1.211	5.433	0.787	3.858	1.000	0.079	0.079	1.362	0.250 ⁺⁰ _{-0.0014}	0.020	0.059	1/4 x 1/4 x 1	1.457 [±] _{1.654}	1.250 ^{-0.0031} _{-0.0056}	0.433	0.335	0.276	M10x30
A30 UH35	≥ 1.65	1.375 ⁺⁰ _{-0.0010}	1.336	6.220	0.906	4.409	1.250	0.079	0.079	1.513	0.313 ⁺⁰ _{-0.0014}	0.020	0.059	5/16 x 5/16 x 1 1/4	1.654 [±] _{1.850}	1.375 ^{-0.0031} _{-0.0056}	0.433	0.335	0.276	M10x30
A35 UH35	≥ 1.77	1.500 ⁺⁰ _{-0.0010}	1.461	6.890	1.299	4.291	2.000	0.079	0.079	1.664	0.375 ⁺⁰ _{-0.0014}	0.039	0.059	3/8 x 3/8 x 2	1.772 [±] _{1.850}	1.500 ^{-0.0031} _{-0.0056}	0.433	0.335	0.276	M10x30
A41 UH40	≥ 1.91	1.625 ⁺⁰ _{-0.0010}	1.586	7.244	1.102	5.039	2.000	0.098	0.098	1.791	0.375 ⁺⁰ _{-0.0014}	0.039	0.079	3/8 x 3/8 x 2	1.909 [±] _{2.047}	1.625 ^{-0.0031} _{-0.0056}	0.551	0.335	0.276	M12x35
A50 UH50	≥ 2.28	2.000 ⁺⁰ _{-0.0012}	1.961	8.898	1.476	5.945	2.500	0.098	0.098	2.218	0.500 ⁺⁰ _{-0.0017}	0.039	0.079	1/2 x 1/2 x 2 1/2	2.283 [±] _{2.480}	2.000 ^{-0.0039} _{-0.0069}	0.709	0.394	0.315	M16x45
A55 UH50	≥ 2.56	2.188 ⁺⁰ _{-0.0012}	2.148	8.898	1.476	5.945	2.500	0.098	0.098	2.409	0.500 ⁺⁰ _{-0.0017}	0.079	0.079	1/2 x 1/2 x 2 1/2	2.559 [±] _{2.756}	2.188 ^{-0.0039} _{-0.0069}	0.709	0.394	0.315	M16x45
A60 UH60	≥ 2.95	2.625 ⁺⁰ _{-0.0012}	2.586	9.764	1.890	5.984	3.000	0.098	0.098	2.900	0.625 ⁺⁰ _{-0.0017}	0.098	0.079	5/8 x 5/8 x 3	2.953 [±] _{3.071}	2.625 ^{-0.0039} _{-0.0069}	0.866	0.394	0.335	M20x50
A70 UH70	≥ 3.07	2.750 ⁺⁰ _{-0.0012}	2.711	11.929	2.283	7.362	3.000	0.118	0.118	3.027	0.625 ⁺⁰ _{-0.0017}	0.098	0.098	5/8 x 5/8 x 3	3.071 [±] _{3.504}	2.750 ^{-0.0039} _{-0.0069}	0.866	0.394	0.335	M20x50
A80 UH80	≥ 3.60	3.250 ⁺⁰ _{-0.0014}	3.211	14.094	3.071	7.953	4.156	0.118	0.118	3.581	0.750 ⁺⁰ _{-0.0020}	0.098	0.098	3/4 x 3/4 x 4 5/32	3.602 [±] _{3.898}	3.250 ^{-0.0047} _{-0.0081}	0.866	0.394	0.335	M20x50
A90 UH90	≥ 3.98	3.625 ⁺⁰ _{-0.0014}	3.586	16.063	3.071	9.921	5.500	0.118	0.118	4.009	0.875 ⁺⁰ _{-0.0020}	0.098	0.098	7/8 x 7/8 x 5 1/2	3.976 [±] _{4.370}	3.625 ^{-0.0047} _{-0.0081}	1.024	0.866	0.807	M24x70

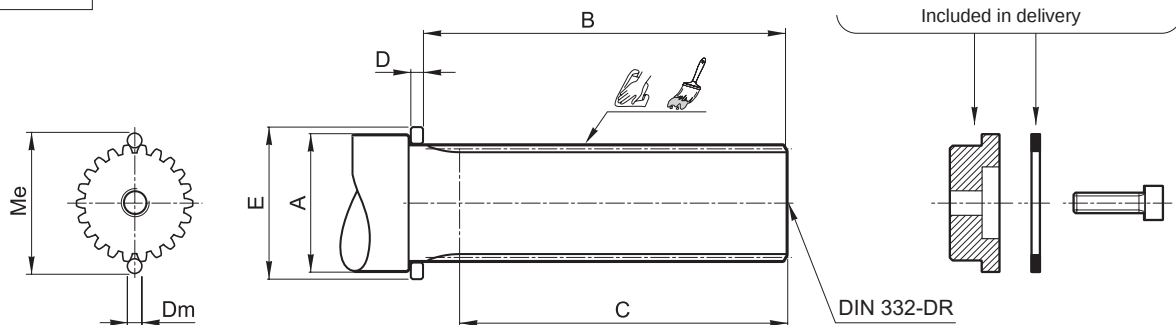
US



Dimensions are in mm

	A1	A2	A3	A4	B	B1	B2	R	S	L	L1	L2	M	M1	 UNI 5739
A 05	≥ 35	27 h7	24	25 h6	129.5	32	63.5	0.5	1.5	29.5	25 d9	11	8.5	7	M10x30
A 10	≥ 42	32 h7	29	30 h6	147.5	34	77.5	0.5	1.5	35.5	30 d9	11	8.5	7	M10x30
A 20	≥ 48	37 h7	34	35 h6	170	40	89	0.5	1.5	43	35 d9	14	8.5	7	M12x35
A 30	≥ 54	42 h7	39	40 h6	191.5	48	95.5	0.5	1.5	49	40 d9	18	10	8.5	M16x45
A 35	≥ 54	42 h7	39	40 h6	208.5	48	112.5	0.5	1.5	49	40 d9	18	10	8.5	M16x45
A 41	≥ 60	47 h7	44	45 h6	222	53	117	1	2	54	45 d9	18	10	8.5	M16x45
A 50	≥ 72	57 h7	54	55 g6	264	46	156	1	2	72	55 d9	22	10	8.5	M20x50
A 55	≥ 72	62 h7	59	60 g6	266	46	158	2.5	2	72	60 d9	22	10	8.5	M20x50
A 60	≥ 90	72 h7	69	70 g6	293	48	178	2.5	2.5	85	70 d9	22	10	8.5	M20x50
A 70	≥ 104	82 h7	79	80 g6	352.5	90	172.5	2.5	2.5	95	80 d9	22	10	8.5	M20x50
A 80	≥ 114	92 h7	89	90 g6	416	100	216	2.5	2.5	105	90 d9	26	22	20.5	M24x70
A 90	≥ 126	102 h7	99	100 g6	469	78	321	2.5	2.5	120	100 d9	26	22	20.5	M24x70

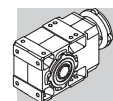
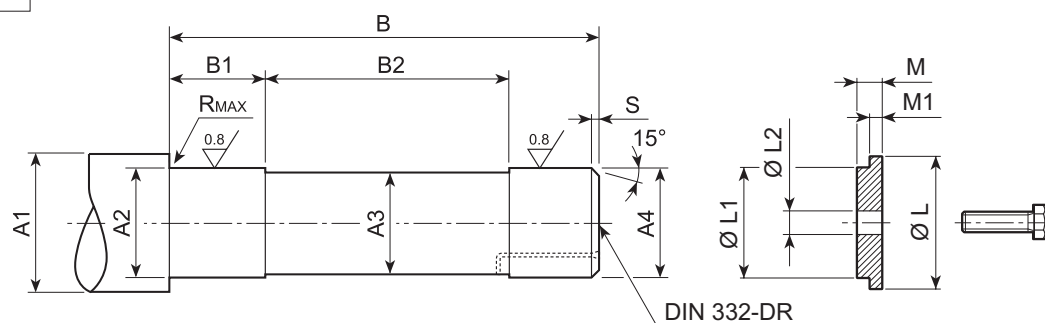
UV



Dimensions are in mm

	 DIN 5480	Me	Dm	A	B	C	D	E	 ISO 4762
A 20	30x1.25x22	33.04 +0/-0.04	2.75	≥ 40	111.5	≥ 95	7	45	M10x35
A 30	35x2x16	38.93 +0/-0.04	4	≥ 45	130.5	≥ 112	7	50	M12x40
A 35	35x2x16	38.93 +0/-0.04	4	≥ 45	147.5	≥ 129	7	50	M12x40
A 41	45x2x21	48.86 +0/-0.04	4	≥ 55	155.5	≥ 136	7	60	M16x45
A 50	50x2x24	54.14 +0/-0.05	4	≥ 60	196	≥ 175	7	65	M16x45
A 55	50x2x24	54.14 +0/-0.05	4	≥ 60	196	≥ 175	7	65	M16x45
A 60	65x2x31	68.97 +0 /-0.05	4	≥ 75	213.5	≥ 191	7	80	M20x55

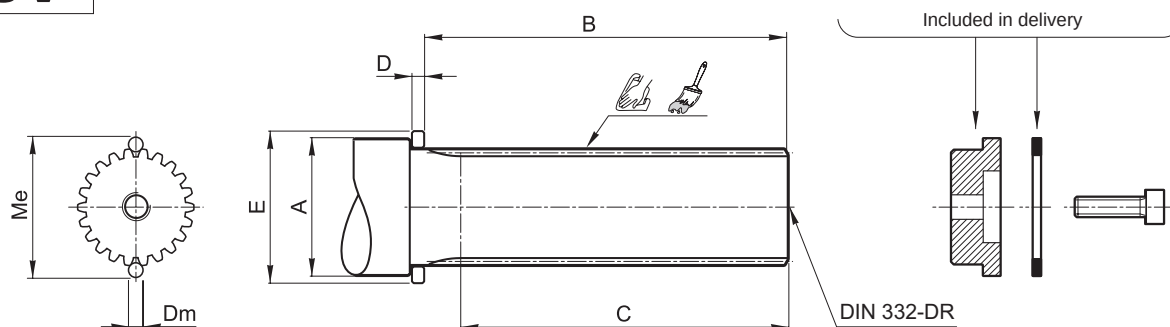
US



Dimensions are in Inch except when shown in *italic* [mm]

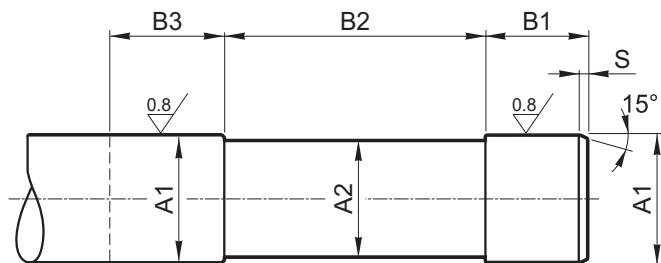
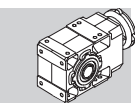
	A1	A2	A3	A4	B	B1	B2	R	S	L	L1	L2	M	M1	
															UNI 5739
A 05	≥ 1.378	1.063 ⁺⁰ / _{-0.0008}	0.945	0.984 ⁺⁰ / _{-0.0005}	5.098	1.260	2.500	0.020	0.059	1.161	0.984 ^{-0.0026} / _{-0.0046}	0.433	0.335	0.276	M10x30
A 10	≥ 1.654	1.260 ⁺⁰ / _{-0.0010}	1.142	1.181 ⁺⁰ / _{-0.0005}	5.807	1.339	3.051	0.020	0.059	1.398	1.181 ^{-0.0026} / _{-0.0046}	0.433	0.335	0.276	M10x30
A 20	≥ 1.890	1.457 ⁺⁰ / _{-0.0010}	1.339	1.378 ⁺⁰ / _{-0.0006}	6.693	1.575	3.504	0.020	0.059	1.693	1.378 ^{-0.0031} / _{-0.0056}	0.551	0.335	0.276	M12x35
A 30	≥ 2.126	1.654 ⁺⁰ / _{-0.0010}	1.535	1.575 ⁺⁰ / _{-0.0006}	7.539	1.890	3.760	0.020	0.059	1.929	1.575 ^{-0.0031} / _{-0.0056}	0.709	0.394	0.335	M16x45
A 35	≥ 2.126	1.654 ⁺⁰ / _{-0.0010}	1.535	1.575 ⁺⁰ / _{-0.0006}	8.209	1.890	4.429	0.020	0.059	1.929	1.575 ^{-0.0031} / _{-0.0056}	0.709	0.394	0.335	M16x45
A 41	≥ 2.362	1.850 ⁺⁰ / _{-0.0010}	1.732	1.772 ⁺⁰ / _{-0.0006}	8.740	2.087	4.606	0.039	0.079	2.126	1.772 ^{-0.0031} / _{-0.0056}	0.709	0.394	0.335	M16x45
A 50	≥ 2.835	2.244 ⁺⁰ / _{-0.0012}	2.126	2.165 ^{-0.0004} / _{-0.0011}	10.394	1.811	6.142	0.039	0.079	2.835	2.165 ^{-0.0039} / _{-0.0069}	0.866	0.394	0.335	M20x50
A 55	≥ 2.835	2.441 ⁺⁰ / _{-0.0012}	2.323	2.362 ^{-0.0004} / _{-0.0011}	10.472	1.811	6.220	0.098	0.079	2.835	2.362 ^{-0.0039} / _{-0.0069}	0.866	0.394	0.335	M20x50
A 60	≥ 3.543	2.835 ⁺⁰ / _{-0.0012}	2.717	2.756 ^{-0.0004} / _{-0.0011}	11.535	1.890	7.008	0.098	0.098	3.346	2.756 ^{-0.0039} / _{-0.0069}	0.866	0.394	0.335	M20x50
A 70	≥ 4.094	3.228 ⁺⁰ / _{-0.0014}	3.110	3.150 ^{-0.0004} / _{-0.0011}	13.878	3.543	6.791	0.098	0.098	3.740	3.150 ^{-0.0039} / _{-0.0069}	0.866	0.394	0.335	M20x50
A 80	≥ 4.488	3.622 ⁺⁰ / _{-0.0014}	3.504	3.543 ^{-0.0005} / _{-0.0013}	16.378	3.937	8.504	0.098	0.098	4.134	3.543 ^{-0.0047} / _{-0.0081}	1.024	0.866	0.807	M24x70
A 90	≥ 4.961	4.016 ⁺⁰ / _{-0.0014}	3.898	3.937 ^{-0.0005} / _{-0.0013}	18.465	3.071	12.638	0.098	0.098	4.724	3.937 ^{-0.0047} / _{-0.0081}	1.024	0.866	0.807	M24x70

UV



Dimensions are in Inch except when shown in *italic* [mm]

		Me	Dm	A	B	C	D	E	
	DIN 5480								ISO 4762
A 20	30x1.25x22	1.301 ⁺⁰ / _{-0.0016}	0.108	≥ 1.575	4.390	≥ 3.740	0.276	1.772	M10x35
A 30	35x2x16	1.533 ⁺⁰ / _{-0.0016}	0.157	≥ 1.772	5.138	≥ 4.409	0.276	1.969	M12x40
A 35	35x2x16	1.533 ⁺⁰ / _{-0.0016}	0.157	≥ 1.772	5.807	≥ 5.079	0.276	1.969	M12x40
A 41	45x2x21	1.924 ⁺⁰ / _{-0.0016}	0.157	≥ 2.165	6.122	≥ 5.354	0.276	2.362	M16x45
A 50	50x2x24	2.131 ⁺⁰ / _{-0.0020}	0.157	≥ 2.362	7.717	≥ 6.890	0.276	2.559	M16x45
A 55	50x2x24	2.131 ⁺⁰ / _{-0.0020}	0.157	≥ 2.362	7.717	≥ 6.890	0.276	2.559	M16x45
A 60	65x2x31	2.715 ⁺⁰ / _{-0.0020}	0.157	≥ 2.953	8.406	≥ 7.520	0.276	3.150	M20x55



Dimensions are in mm

QF

		A1	A2	B1	B2	B3	S
A 10	QF25	25 h6	24	41	95	≥ 50	1.5
	QF30	30 h6	29				
A 20	QF25	25 h6	24	41	115	≥ 50	1.5
	QF30	30 h6	29				
A 30	QF35	35 h6	34	45	130	≥ 54	1.5
	QF40	40 h6	39				
A 35	QF35	35 h6	34	45	146.5	≥ 54	1.5
	QF40	40 h6	39				
A 41	QF40	40 h6	39	47	151.5	≥ 56	2
	QF45	45 h6	44				
A 50	QF50	50 h6	49	48	197	≥ 57	2
	QF55	55 h6	54				
A 55	QF55	55 h6	54	50	190	≥ 59	2
	QF60	60 h6	59				
A 60	QF60	60 h6	59	57	203	≥ 66	2.5
	QF65	65 h6	64				
	QF70	70 h6	69				

Dimensions are in Inch except when shown in *italic [mm]*

NQF

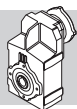
		A1	A2	B1	B2	B3	S
A 10	NQF1	1.000 ⁺⁰ / _{-0.0005}	0.961	1.614	3.740	≥ 1.969	0.059
	NQF1-3/16	1.1875 ⁺⁰ / _{-0.0006}	1.148				
A 20	NQF1	1.000 ⁺⁰ / _{-0.0005}	0.961	1.614	4.528	≥ 1.969	0.059
	NQF1-3/16	1.1875 ⁺⁰ / _{-0.0006}	1.148				
A 30	NQF1-3/8	1.375 ⁺⁰ / _{-0.0006}	1.336	1.772	5.118	≥ 2.126	0.059
	NQF1-7/16	1.4375 ⁺⁰ / _{-0.0006}	1.398				
A 35	NQF1-3/8	1.375 ⁺⁰ / _{-0.0006}	1.336	1.772	5.768	≥ 2.126	0.059
	NQF1-7/16	1.4375 ⁺⁰ / _{-0.0006}	1.398				
A 41	NQF1-1/2	1.500 ⁺⁰ / _{-0.0006}	1.461	1.850	5.965	≥ 2.205	0.079
	NQF1-5/8	1.625 ⁺⁰ / _{-0.0006}	1.586				
A 50	NQF1-15/16	1.9375 ⁺⁰ / _{-0.0006}	1.898	1.890	7.756	≥ 2.244	0.079
	NQF2	2.000 ⁺⁰ / _{-0.0007}	1.961				
A 55	NQF2-3/8	2.375 ⁺⁰ / _{-0.0007}	2.336	1.969	7.480	≥ 2.323	0.079
A 60	NQF2-3/8	2.375 ⁺⁰ / _{-0.0007}	2.336	2.244	7.992	≥ 2.598	0.098
	NQF2-7/16	2.4375 ⁺⁰ / _{-0.0007}	2.398				
	NQF2-3/4	2.750 ⁺⁰ / _{-0.0007}	2.711				

SHAFT MOUNTED GEAR UNITS SERIES F

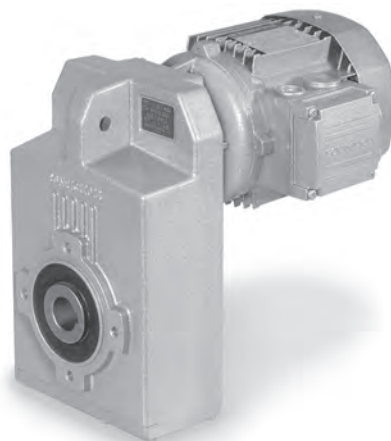
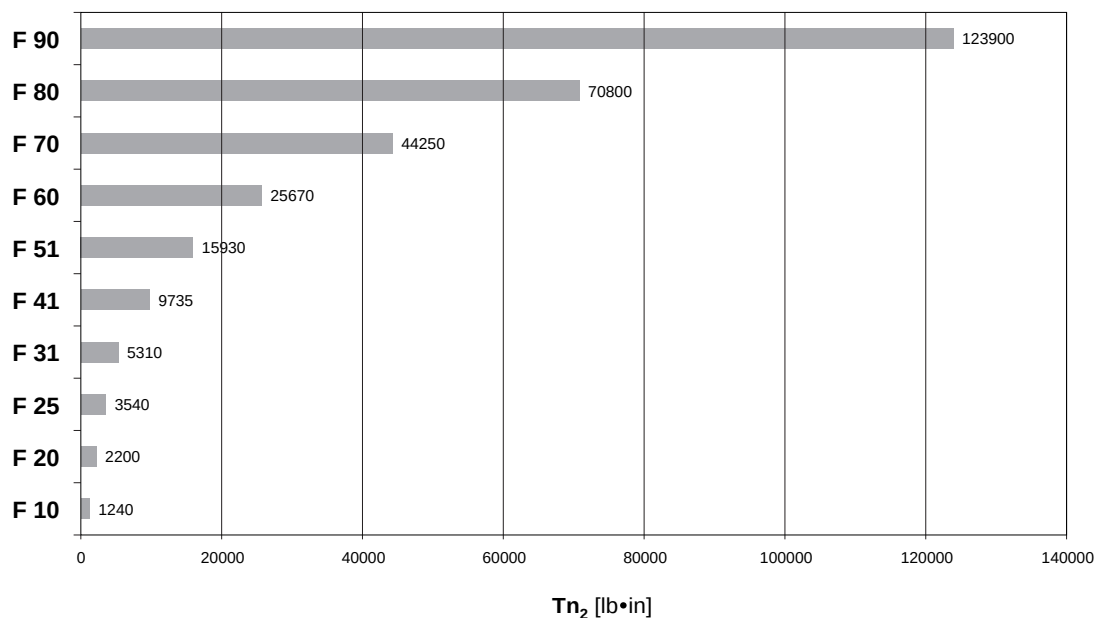
46 DESIGN FEATURES

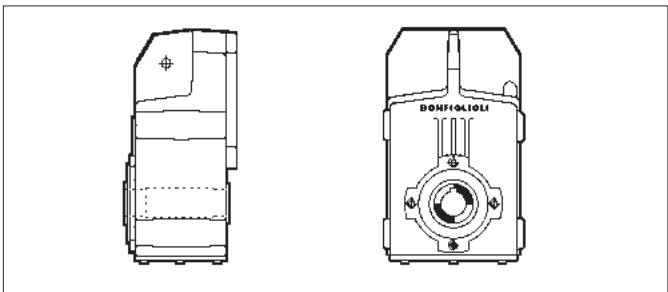
The main design characteristics are:

- modularity
- space effectiveness
- universal mounting
- high efficiency
- quiet operation
- gears in hardened and case-hardened steel
- bare aluminium housing for sizes 10, 20 and 25,
high strength painted cast-iron housings for larger frame sizes.



(D 45)

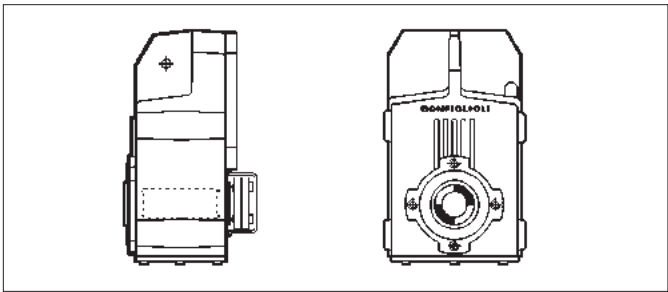




H / NH

Hollow output shaft and keyway

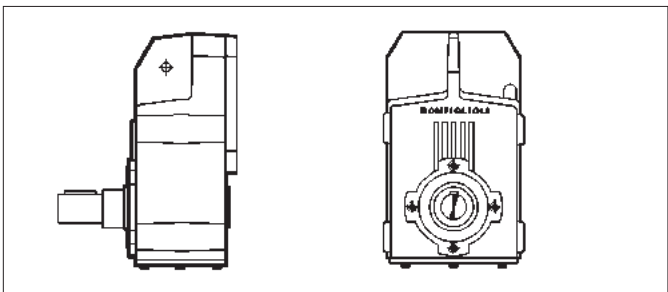
F 10 ... F 90



S

Hollow output shaft and shrink disc

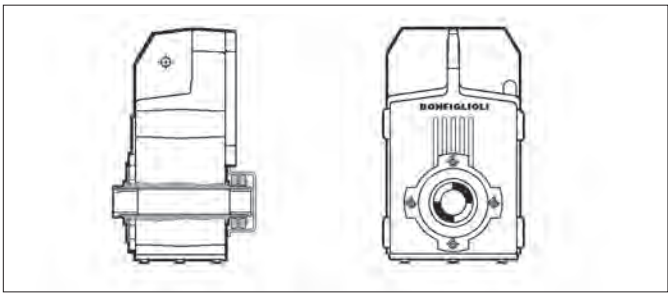
F 10 ... F 90



R / NR

Solid output shaft

F 10 ... F 90



QF / NQF
(Quick-fit)

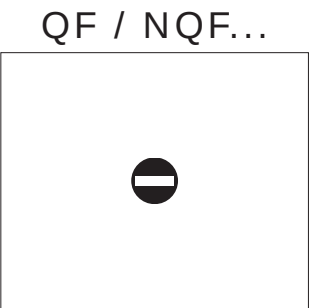
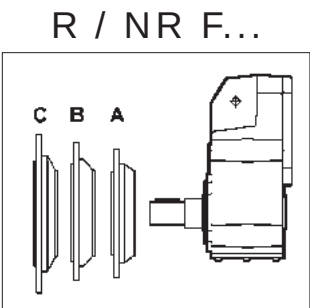
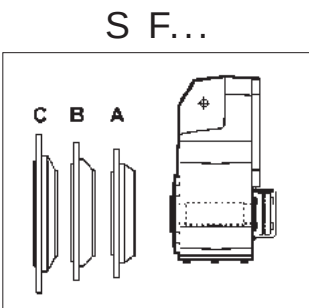
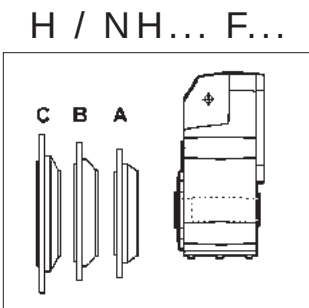
Hollow shaft with
adapter bushings
and shrink disc

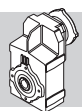
F 10 ... F 60

T _{n2} max [lb•in]			
F 25	QF30	NQF 1-3/16	3100
F 41	QF42	NQF 1-5/8	7529
	QF45	NQF 1-3/4	8857
F 51	QF50	NQF 1-15/16 NQF 2	15500

Basic versions with bolted flange

The sketches show the applicable flanges to the basic versions.





GEAR UNIT

F 10 2 NH FA 9.8 S2 H5

OPTIONS

MOUNTING POSITION

H1 (Default), H2, H3, H4, H5, H6

INPUT CONFIGURATION

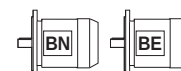


S05 ... S5



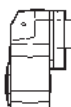
IEC

P63 ... P180



NEMA

N56C ... N320TC



SK

SC



HS

NHS

GEAR RATIO

OUTPUT FLANGE SIZE AND POSITION (specify only if requested)

F = Flanged version

A, B, C = Flange size

VERSION



H / NH



S



R / NR



QF / NQF

	F 10	F 20	F 25	F 31	F 41	F 51	F 60	F 70	F 80	F 90
Standard	H25	H30	H35	H35	H40	H50	H60	H80	H90	H100
Alternative	H30	H35	H40	H40	H45	H55	H70	H70	H80	H90

(F 10...F 90)

(F 10...F 90)

(F 10...F 90)

Alternative diameters available on request

REDUCTIONS

2 (F 10...F 51), 3 (F 20...F 90), 4 (F 31...F 90)

GEAR FRAME SIZE

10, 20, 25, 31, 41, 51, 60, 70, 80, 90

TYPE

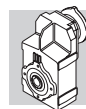
F = helical shaft-mounted gear unit

MOTOR								BRAKE				
M	1 LA	4	230/400-60	IP54	CLF		W	FD	7.5 R	SB	220 SA	
												OPTIONS
												BRAKE SUPPLY
												RECTIFIER TYPE AC/DC NB, SB, NBR, SBR
												BRAKE HAND RELEASE R, RM
												BRAKE TORQUE (specify Nm!) [1 ft•lb = 1.356 Nm]
												BRAKE TYPE FD (d.c. brake) FA (a.c. brake)
												TERMINAL BOX POSITION W (default), N, E, S
												MOTOR MOUNTING — (compact motor) B5 (IEC - motor)
												INSULATION CLASS CL F standard CL H option
												DEGREE OF PROTECTION IP55 standard (IP56 option) IP54, IP55 brake motor
												VOLTAGE - FREQUENCY
												POLE NUMBER 2, 4, 6
												MOTOR SIZE 0B ... 5LA (compact motor) 63A ... 280M (IEC motor)

MOTOR TYPE

ME = compact 3-phase, class IE2 **M** = compact 3-phase
BE = IEC 3-phase, class IE2 **BN** = IEC 3-phase

NEMA motors to be specified thru their ordering numbers



48.1 Gearbox options

AL, AR

On request the gear unit can be provided complete with a backstop device allowing the output shaft to rotate only in the direction specified at the time of ordering.

The following table shows the gearboxes in which the anti-run back device can be installed.

(D 46)

F 31 2*	F 41 2 ⊖ (6.7; 10.8)					
F 31 3*	F 41 3	F 51 3	F 60 3	F 70 3	F 80 3	F 90 3
		F 51 4	F 60 4	F 70 4	F 80 4	F 90 4

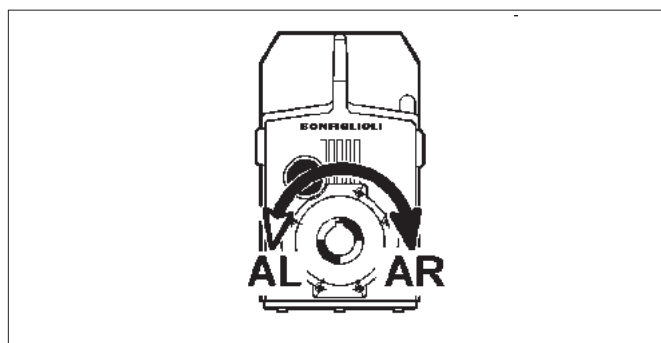
* The supply of the backstop will ban the configuration of servomotor adapters type S_60A, S_60B, S_80A.

When ordering the gear unit, the direction of free rotation must be specified through either the AR or the AL option (Table D47).



N.B. When the anti-run back device operates very frequently make sure that the torque backdriving the gearbox does not exceed 70% of the rated torque T_{n2} for the captioned gear unit.

(D 47)



SO

Gear units F 10 through F 41 usually factory filled with oil, to be supplied unlubricated.

LO

Gearboxes F 51 through F 90, usually supplied without oil, to be supplied with synthetic oil currently used by BONFIGLIOLI RIDUTTORI and filled according to the mounting position specified.

DV

Dual oil seals on input shaft. (Only available for integral gearmotors).

VV

Oil seal in Fluoro elastomer compound on input shaft.

PV

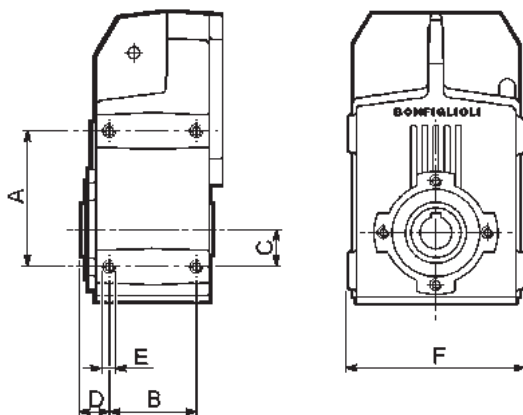
Both input and output shafts feature oil seal in Fluoro elastomer compound.

FL

Gear units F 10...F 41 can be side machined and tapped by specifying the FL option.

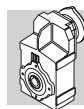
Mounting dimensions relevant to the FL option are given in the following chart. Gear units type F 51 through F 90 are side machined and tapped as standard.

(D 48)



Dimensions are in Inch except when shown in *italic* [mm]

	A	B	C	D	E	F
F 10	4.528	2.362	1.378	0.837	<i>M8x16</i>	6.417
F 20	5.118	2.756	1.575	1.043	<i>M10x20</i>	7.126
F 25	5.118	2.756	1.575	1.083	<i>M10x20</i>	7.126
F 31	5.787	3.150	1.772	1.181	<i>M12x20</i>	7.992
F 41	7.480	3.740	2.362	1.280	<i>M12x22</i>	9.252



SURFACE PROTECTION

When no specific protection class is requested, the painted (ferrous) surfaces of gearboxes are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, gearboxes can be delivered with **C3** and **C4** surface protection, obtained by painting the complete gearbox.

(D 49)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C [248 F°]	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C [248 F°]	C4

Gearboxes with optional protection to class **C3** or **C4** are available in a choice of colours.

If no specific colour is requested (see the "PAINTING" option) gearboxes are finished in RAL 7042.

Gearboxes can also be supplied with surface protection for corrosivity class **C5** according to UNI EN ISO 12944-2. Contact our Technical Service for further details.

PAINTING

Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(D 50)

PAINTING	Colour	RAL number
RAL7042*	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010

* Gearboxes are supplied in this standard colour if no other colour is specified.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.

CERTIFICATES

AC - Certificate of compliance

The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

CC - Inspection certificate

The document entails checking on order compliance, the visual inspection of external conditions and of mating dimensions. Checking on main functional parameters in unloaded conditions is also performed along with oil seal proofing, both in static and in running conditions. Units inspected are sampled within the shipping batch and marked individually.

48.2 Accessories

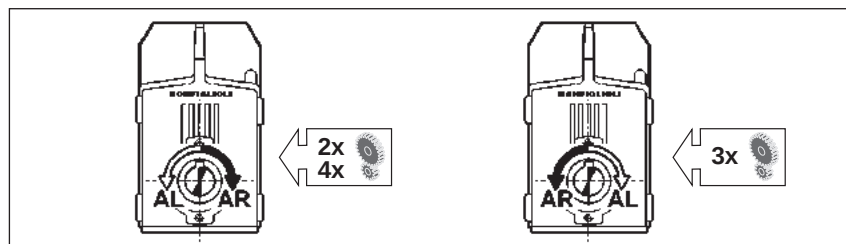
See chapter 59 of this catalogue.

48.3 Motor options

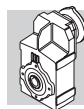
AL, AR

A backstop device on the motor itself, as described in the electric motors section of this catalogue, is available for gearmotors with integral M and ME Series motors. The following table shows the direction of free rotation of the gearbox, on the basis of which the correct option must be selected.

(D 51)



For further information on options, consult the electric motors section.



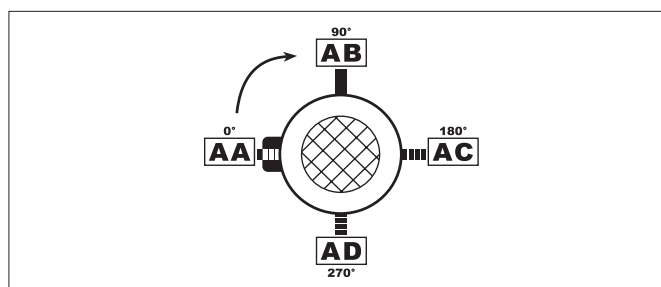
49 MOUNTING POSITION AND TERMINAL BOX ANGULAR LOCATION

Location of motor terminal box can be specified by viewing the motor from the fan side; standard location is shown in black (W).

Angular location of the brake release lever.

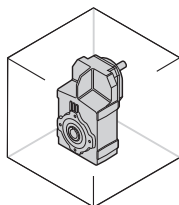
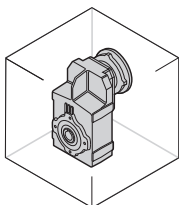
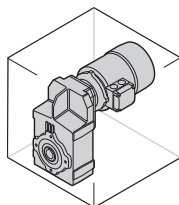
Unless otherwise specified, brake motors have the manual device side located, 90° apart from terminal box. Different angles can be specified through the relevant options available.

(D 52)



F ...

H1



_S

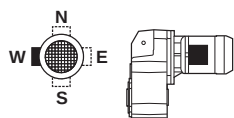
_P(IEC)

_N(NEMA)

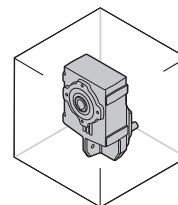
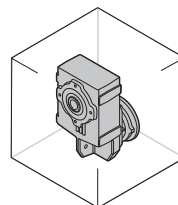
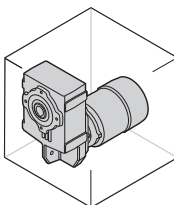
_SK / _SC

_HS

_NHS



H2



_S

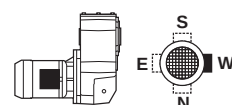
_P(IEC)

_N(NEMA)

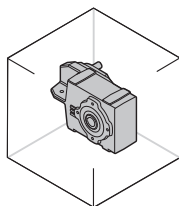
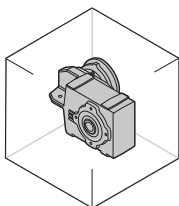
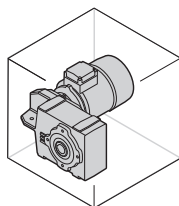
_SK / _SC

_HS

_NHS



H3



_S

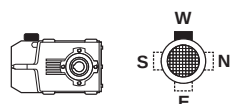
_P(IEC)

_N(NEMA)

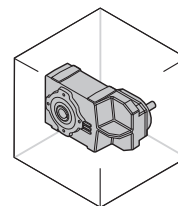
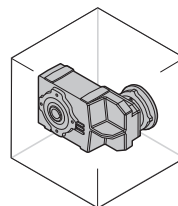
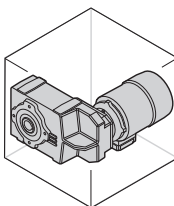
_SK / _SC

_HS

_NHS



H4



_S

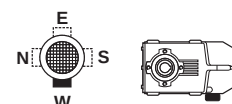
_P(IEC)

_N(NEMA)

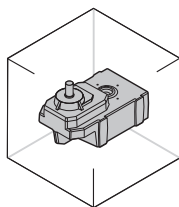
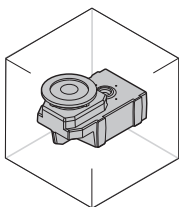
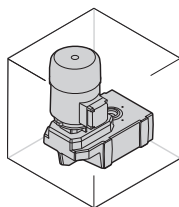
_SK / _SC

_HS

_NHS



H5



_S

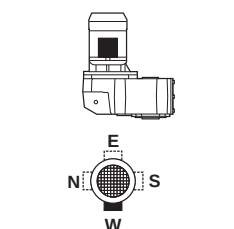
_P(IEC)

_N(NEMA)

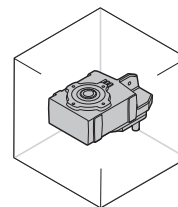
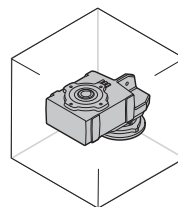
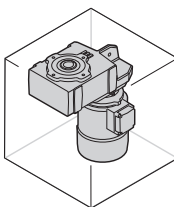
_SK / _SC

_HS

_NHS



H6



_S

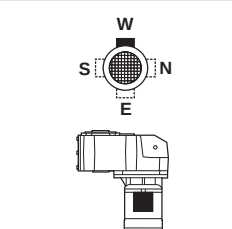
_P(IEC)

_N(NEMA)

_SK / _SC

_HS

_NHS



W = Default

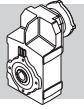
50 OVERHUNG LOADS

External transmissions keyed onto input and/or output shaft generate loads that act radially onto same shaft.

Resulting shaft loading must be compatible with both the bearing and the shaft capacity. Namely shaft loading (R_{c1} for input shaft, R_{c2} for output shaft), must be equal or lower than admissible overhung load capacity for shaft under study (R_{n1} for input shaft, R_{n2} for output shaft). OHL capability listed in the rating chart section.

In the formulas given below, index (1) applies to parameters relating to input shaft, whereas index (2) refers to output shaft.

The load generated by an external transmission can be calculated with close approximation by the following equations:



$$R_{c1} [\text{lbs}] = \frac{2 \cdot T_1 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad ; \quad R_{c2} [\text{lbs}] = \frac{2 \cdot T_2 [\text{lb}\cdot\text{in}] \cdot K_r}{d [\text{in}]} \quad (35)$$

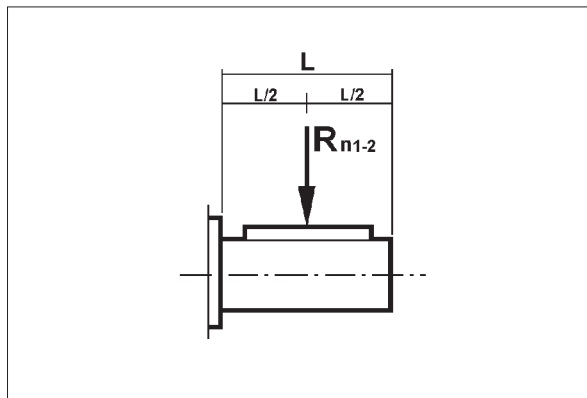
(D 53)

T_1 [lb·in]	Torque applied to input shaft
T_2 [lb·in]	Torque drawn at output shaft
d [in]	Pitch diameter of element keyed onto shaft
$K_r = 1$	Chain transmission

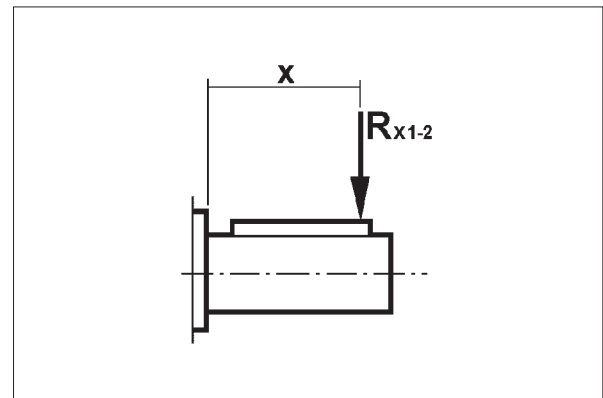
$K_r = 1.25$	Gear transmission
$K_r = 1.5$	V-belt transmission
$K_r = 2.0$	Flat belt transmission

Verification of OHL capability varies depending on whether load applies at midpoint of shaft or it is shifted further out:

(D 54)



(D 55)



a) Load applied at midpoint of shaft, tab. (D54)

A comparison of shaft loading with catalogue OHL ratings should verify the following condition:

$$Rc1 \leq Rn1 \quad [\text{input shaft}]$$

or

$$Rc2 \leq Rn2 \quad [\text{output shaft}]$$

b) Load off the midpoint tab. (D55)

When load is shifted at an "x" distance from shaft shoulder, permissible load must be calculated for that distance.

Revised permissible overhung loads Rx1 (input) and Rx2 (output) are calculated respectively from original rated values Rn1 and Rn2 through factor:

$$\frac{a}{b+x} \quad (36)$$

(D 56)

	Load location factors [in]					
	Output shaft			Input shaft		
	a	b	c	a	b	c
F 10 2	4.8	4.0	17.7	0.8	0	11.8
F 20 2	5.7	4.5	23.6	1.6	0.8	13.8
F 20 3	5.7	4.5	23.6	0.8	0	11.8
F 25 2 - F 25 3	6.2	5.0	31.5	1.6	0.8	13.8
F 25 4	6.2	5.0	31.5	0.8	0	11.8
F 31 2 - F 31 3	6.5	5.3	33.5	1.5	0.7	13.8
F 31 4	6.5	5.3	33.5	0.8	0	11.8
F 41 2 - F 41 3	7.5	6.0	39.4	1.9	1.0	17.7
F 41 4	7.5	6.0	39.4	1.6	0.8	13.8
F 51 2 - F 51 3	9.2	7.2	51.2	1.9	1.0	17.7
F 51 4	9.2	7.2	51.2	1.5	0.7	13.8
F 60 3	10.2	7.8	43.3	2.2	1.0	23.6
F 60 4	10.2	7.8	43.3	1.9	1.0	17.7
F 70 3	13.5	10.9	63.0	3.4	1.2	39.4
F 70 4	13.5	10.9	63.0	1.9	1.0	17.7
F 80 3	15.2	11.9	70.9	3.4	1.2	39.4
F 80 4	15.2	11.9	70.9	1.9	1.0	17.7
F 90 3	18.1	13.9	94.5	4.6	1.8	55.1
F 90 4	18.1	13.9	94.5	1.9	1.0	17.7

Verification procedure is described here after.

INPUT SHAFT

1. Calculate:

$$R_{x1} = R_{n1} \cdot \frac{a}{b+x} \quad (37)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (38)$$

Finally, the following condition must be verified:

$$R_{c1} \leq R_{x1} \quad (39)$$

OUTPUT SHAFT

1. Calculate:

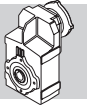
$$R_{x2} = R_{n2} \cdot \frac{a}{b+x} \quad (40)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (41)$$

Finally, the following condition must be verified:

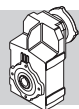
$$R_{c2} \leq R_{x2} \quad (42)$$



51 THRUST LOADS, A_{n1} , A_{n2}

Permissible thrust loads on input [A_{n1}] and output [A_{n2}] shafts are obtained from the radial loading for the shaft under consideration [R_{n1}] and [R_{n2}] through the following equation:

$$\begin{aligned} A_{n1} &= R_{n1} \cdot 0.2 \\ A_{n2} &= R_{n2} \cdot 0.2 \end{aligned} \quad (43)$$



The thrust loads calculated through these formulas apply to thrust forces occurring at the same time as rated radial loads.

In the only case that no overhung load acts on the shaft the value of the admissible thrust load [A_n] amounts to 50% of rated OHL [R_n] on same shaft.

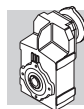
Where thrust loads exceed permissible value or largely prevail over radial loads, contact Bonfiglioli Riduttori for an in-depth analysis of the application.

52 GEARMOTOR RATING CHARTS



The selection of motors without brake takes into account the requirements of Regulation EC 640/2009 (see section **M** of this catalogue). When the motor rated power is below 0.75kW (1HP), BN/M motors can be provided.

Considering that the Regulation EC 640/2009 shall not apply to the motors equipped with brake, the brakemotor selection takes into account BN/M motors only, without taking into account the rated power. BE/ME brakemotors are available on request.



0.16 hp									
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
1.2	7797	2.0	1439.5	2468	F514_1439	S05 + M05A4	P63 + BN63A4	N56C	550...553
1.2	7641	1.3	1410.5	1752	F414_1411		P63 + BN63A4	N56C	540...543
1.3	7018	2.3	1295.5	2468	F514_1296		P63 + BN63A4	N56C	550...553
1.4	6573	1.5	1213.4	1752	F414_1213		P63 + BN63A4	N56C	540...543
1.4	6325	2.5	1167.6	2468	F514_1168		P63 + BN63A4	N56C	550...553
1.5	5915	1.6	1092.0	1752	F414_1092	S05 + M05A4	P63 + BN63A4	N56C	540...543
1.6	5798	2.7	1070.3	2468	F514_1070	S05 + M05A4	P63 + BN63A4	N56C	550...553
1.6	5647	0.9	1042.5	1287	F314_1042		P63 + BN63A4	N56C	530...533
1.7	5322	1.8	982.4	1752	F414_982.4	S05 + M05A4	P63 + BN63A4	N56C	540...543
1.8	5082	1.0	938.2	1339	F314_938.2	S05 + M05A4	P63 + BN63A4	N56C	530...533
1.9	4878	2.0	900.5	1752	F414_900.5	S05 + M05A4	P63 + BN63A4	N56C	540...543
2.0	4505	1.2	831.6	1339	F314_831.6	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.1	4408	2.2	813.8	1752	F414_813.8	S05 + M05A4	P63 + BN63A4	N56C	540...543
2.2	4129	1.3	762.3	1339	F314_762.3	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.3	4005	2.4	739.4	1752	F414_739.4	S05 + M05A4	P63 + BN63A4	N56C	540...543
2.4	3893	0.9	718.7	1275	F254_718.7	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.4	3738	2.6	690.1	1752	F414_690.1	S05 + M05A4	P63 + BN63A4	N56C	540...543
2.5	3714	1.4	685.6	1339	F314_685.6	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.6	3485	1.0	643.3	1337	F254_643.3	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.7	3358	1.6	619.9	1339	F314_619.9	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.9	3194	1.1	589.7	1337	F254_589.7	S05 + M05A4	P63 + BN63A4	N56C	530...533
2.9	3134	1.7	578.6	1339	F314_578.6	S05 + M05A4	P63 + BN63A4	N56C	530...533
3.2	2859	1.9	527.8	1339	F314_527.8	S05 + M05A4	P63 + BN63A4	N56C	530...533
3.2	2856	1.2	527.3	1337	F254_527.3	S05 + M05A4	P63 + BN63A4	N56C	530...533
3.6	2524	1.4	466.0	1337	F254_466.0	S05 + M05A4	P63 + BN63A4	N56C	530...533
3.7	2506	2.1	462.6	1339	F314_462.6	S05 + M05A4	P63 + BN63A4	N56C	530...533
3.9	2356	1.5	434.9	1337	F254_434.9	S05 + M05A4	P63 + BN63A4	N56C	530...533
4.0	2347	0.9	419.3	825	F203_419.3	S05 + M05A4	P63 + BN63A4	N56C	510...513
4.0	2269	2.3	418.9	1339	F314_418.9	S05 + M05A4	P63 + BN63A4	N56C	530...533
4.3	2134	1.7	393.9	1337	F254_393.9	S05 + M05A4	P63 + BN63A4	N56C	530...533
4.5	2096	2.5	374.4	1339	F313_374.4	S05 + M05A4	P63 + BN63A4	N56C	530...533
4.5	2087	1.1	372.9	825	F203_372.9		P63 + BN63A4	N56C	510...513
5.1	1865	1.9	333.1	1337	F253_333.1	S05 + M05A4	P63 + BN63A4	N56C	530...533
5.1	1863	2.9	332.8	1339	F313_332.8	S05 + M05A4	P63 + BN63A4	N56C	530...533
5.3	1774	1.2	316.9	825	F203_316.9		P63 + BN63A4	N56C	510...513
5.9	1613	2.2	288.1	1337	F253_288.1	S05 + M05A4	P63 + BN63A4	N56C	530...533
5.9	1596	1.4	285.2	825	F203_285.2	S05 + M05A4	P63 + BN63A4	N56C	510...513
6.6	1434	2.5	256.1	1337	F253_256.1	S05 + M05A4	P63 + BN63A4	N56C	530...533
6.6	1429	1.5	255.3	825	F203_255.3	S05 + M05A4	P63 + BN63A4	N56C	510...513

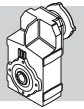
0.16 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
7.2	1310	1.7	234.0	825	F203_234.0	S05 + M05A4	P63 + BN63A4	N56C	510...513
7.4	1275	2.8	227.8	1337	F253_227.8	S05 + M05A4	P63 + BN63A4	N56C	530...533
8.1	1171	1.9	209.3	825	F203_209.3	S05 + M05A4	P63 + BN63A4	N56C	510...513
9.1	1035	2.1	184.9	825	F203_184.9	S05 + M05A4	P63 + BN63A4	N56C	510...513
9.8	966	2.3	172.6	825	F203_172.6	S05 + M05A4	P63 + BN63A4	N56C	510...513
10.8	875	2.5	156.3	825	F203_156.3	S05 + M05A4	P63 + BN63A4	N56C	510...513
12.8	756	2.9	132.2	825	F202_132.2	S05 + M05A4	P63 + BN63A4	N56C	510...513
13.3	727	1.7	127.1	580	F102_127.1	S05 + M05A4	P63 + BN63A4	N56C	500...503
15.9	606	2.0	106.0	580	F102_106.0	S05 + M05A4	P63 + BN63A4	N56C	500...503
18.5	523	2.4	91.5	580	F102_91.5	S05 + M05A4	P63 + BN63A4	N56C	500...503
20.8	465	2.7	81.3	580	F102_81.3	S05 + M05A4	P63 + BN63A4	N56C	500...503

0.25 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
0.76	18471	2.4	2187.5	7278	F704_2188		P63 + BN63B4	N56C	570...573
0.83	17050	2.6	2019.2	7278	F704_2019		P63 + BN63B4	N56C	570...573
1.2	12155	1.3	1439.5	2468	F514_1439		P63 + BN63B4	N56C	550...553
1.3	10939	1.5	1295.5	2468	F514_1296		P63 + BN63B4	N56C	550...553
1.4	10246	1.0	1213.4	1752	F414_1213	S05 + M05B4	P63 + BN63B4	N56C	540...543
1.4	9859	1.6	1167.6	2468	F514_1168		P63 + BN63B4	N56C	550...553
1.5	9638	2.7	1141.4	4159	F604_1141		P63 + BN63B4	N56C	560...563
1.5	9221	1.1	1092.0	1752	F414_1092	S05 + M05B4	P63 + BN63B4	N56C	540...543
1.6	9037	1.8	1070.3	2468	F514_1070		P63 + BN63B4	N56C	550...553
1.6	8897	2.9	1053.6	4159	F604_1054		P63 + BN63B4	N56C	560...563
1.7	8295	1.2	982.4	1752	F414_982.4	S05 + M05B4	P63 + BN63B4	N56C	540...543
1.7	8270	1.9	979.4	2468	F514_979.4		P63 + BN63B4	N56C	550...553
1.9	7604	1.3	900.5	1752	F414_900.5	S05 + M05B4	P63 + BN63B4	N56C	540...543
1.9	7477	2.1	885.5	2468	F514_885.5		P63 + BN63B4	N56C	550...553
2.0	6978	2.3	826.4	2468	F514_826.4		P63 + BN63B4	N56C	550...553
2.1	6871	1.4	813.8	1752	F414_813.8	S05 + M05B4	P63 + BN63B4	N56C	540...543
2.3	6243	1.6	739.4	1752	F414_739.4	S05 + M05B4	P63 + BN63B4	N56C	540...543
2.4	5827	1.7	690.1	1752	F414_690.1	S05 + M05B4	P63 + BN63B4	N56C	540...543
2.4	5790	0.9	685.6	1287	F314_685.6	S05 + M05B4	P63 + BN63B4	N56C	530...533
2.5	5711	2.8	676.3	2468	F514_676.3		P63 + BN63B4	N56C	550...553
2.7	5235	1.0	619.9	1339	F314_619.9	S05 + M05B4	P63 + BN63B4	N56C	530...533
2.9	4886	1.1	578.6	1339	F314_578.6	S05 + M05B4	P63 + BN63B4	N56C	530...533
3.0	4643	2.1	549.8	1752	F414_549.8	S05 + M05B4	P63 + BN63B4	N56C	540...543
3.2	4456	1.2	527.8	1339	F314_527.8	S05 + M05B4	P63 + BN63B4	N56C	530...533
3.6	3906	1.4	462.6	1339	F314_462.6	S05 + M05B4	P63 + BN63B4	N56C	530...533
3.8	3672	1.0	434.9	1337	F254_434.9	S05 + M05B4	P63 + BN63B4	N56C	530...533
3.9	3662	2.7	433.7	1752	F414_433.7	S05 + M05B4	P63 + BN63B4	N56C	540...543
4.0	3537	1.5	418.9	1339	F314_418.9	S05 + M05B4	P63 + BN63B4	N56C	530...533
4.2	3326	1.1	393.9	1337	F254_393.9	S05 + M05B4	P63 + BN63B4	N56C	530...533
4.5	3267	1.6	374.4	1339	F313_374.4		P63 + BN63B4	N56C	530...533
5.0	2907	1.2	333.1	1337	F253_333.1	S05 + M05B4	P63 + BN63B4	N56C	530...533
5.0	2904	1.8	332.8	1339	F313_332.8		P63 + BN63B4	N56C	530...533
5.7	2564	2.1	293.8	1339	F313_293.8		P63 + BN63B4	N56C	530...533
5.8	2514	1.4	288.1	1337	F253_288.1	S05 + M05B4	P63 + BN63B4	N56C	530...533
6.5	2235	1.6	256.1	1337	F253_256.1	S05 + M05B4	P63 + BN63B4	N56C	530...533
6.5	2227	1.0	255.3	825	F203_255.3	S05 + M05B4	P63 + BN63B4	N56C	510...513
6.6	2213	2.4	253.6	1339	F313_253.6		P63 + BN63B4	N56C	530...533
7.1	2042	1.1	234.0	825	F203_234.0	S05 + M05B4	P63 + BN63B4	N56C	510...513

0.25 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
7.3	1991	2.7	228.2	1339	F313_228.2		P63 + BN63B4	N56C	530...533
7.3	1988	1.8	227.8	1337	F253_227.8	S05 + M05B4	P63 + BN63B4	N56C	530...533
8.0	1826	1.2	209.3	825	F203_209.3	S05 + M05B4	P63 + BN63B4	N56C	510...513
8.6	1689	2.1	193.6	1337	F253_193.6	S05 + M05B4	P63 + BN63B4	N56C	530...533
9.0	1613	1.4	184.9	825	F203_184.9	S05 + M05B4	P63 + BN63B4	N56C	510...513
9.6	1520	2.3	174.2	1337	F253_174.2	S05 + M05B4	P63 + BN63B4	N56C	530...533
9.7	1506	1.5	172.6	825	F203_172.6	S05 + M05B4	P63 + BN63B4	N56C	510...513
10.7	1364	1.6	156.3	825	F203_156.3	S05 + M05B4	P63 + BN63B4	N56C	510...513
10.7	1361	2.6	155.9	1337	F253_155.9	S05 + M05B4	P63 + BN63B4	N56C	530...533
11.7	1247	2.8	143.0	1337	F253_143.0	S05 + M05B4	P63 + BN63B4	N56C	530...533
12.6	1178	1.9	132.2	825	F202_132.2	S05 + M05B4	P63 + BN63B4	N56C	510...513
13.1	1133	1.1	127.1	580	F102_127.1	S05 + M05B4	P63 + BN63B4	N56C	500...503
14.6	1019	2.2	114.3	825	F202_114.3	S05 + M05B4	P63 + BN63B4	N56C	510...513
15.8	945	1.3	106.0	580	F102_106.0	S05 + M05B4	P63 + BN63B4	N56C	500...503
16.4	906	2.4	101.6	825	F202_101.6	S05 + M05B4	P63 + BN63B4	N56C	510...513
18.3	815	1.5	91.5	580	F102_91.5	S05 + M05B4	P63 + BN63B4	N56C	500...503
18.5	806	2.7	90.4	825	F202_90.4	S05 + M05B4	P63 + BN63B4	N56C	510...513
20.5	725	1.7	81.3	580	F102_81.3	S05 + M05B4	P63 + BN63B4	N56C	500...503
23.5	634	2.0	71.1	580	F102_71.1	S05 + M05B4	P63 + BN63B4	N56C	500...503
26.5	561	2.2	63.0	580	F102_63.0	S05 + M05B4	P63 + BN63B4	N56C	500...503
29.5	505	2.5	56.7	580	F102_56.7	S05 + M05B4	P63 + BN63B4	N56C	500...503
34	434	2.9	48.7	580	F102_48.7	S05 + M05B4	P63 + BN63B4	N56C	500...503



0.33 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
0.76	24396	1.8	2187.5	7278	F704_2188		P71 + BN71A4	N56C	570...573
0.83	22519	2.0	2019.2	7278	F704_2019		P71 + BN71A4	N56C	570...573
0.97	19145	2.3	1716.7	7278	F704_1717		P71 + BN71A4	N56C	570...573
1.1	17672	2.5	1584.6	7278	F704_1585		P71 + BN71A4	N56C	570...573
1.1	16522	2.7	1481.5	7278	F704_1481		P71 + BN71A4	N56C	570...573
1.2	16053	1.0	1439.5	2468	F514_1439		P71 + BN71A4	N56C	550...553
1.2	15251	2.9	1367.5	7278	F704_1368		P71 + BN71A4	N56C	570...573
1.3	14448	1.1	1295.5	2468	F514_1296		P71 + BN71A4	N56C	550...553
1.4	13021	1.2	1167.6	2468	F514_1168		P71 + BN71A4	N56C	550...553
1.5	12729	2.0	1141.4	4159	F604_1141		P71 + BN71A4	N56C	560...563
1.6	11936	1.3	1070.3	2468	F514_1070		P71 + BN71A4	N56C	550...553
1.6	11750	2.2	1053.6	4159	F604_1054		P71 + BN71A4	N56C	560...563
1.7	10922	1.5	979.4	2468	F514_979.4		P71 + BN71A4	N56C	550...553
1.7	10694	2.4	958.9	4159	F604_958.9		P71 + BN71A4	N56C	560...563
1.9	10043	1.0	900.5	1752	F414_900.5		P71 + BN71A4	N56C	540...543
1.9	9875	1.6	885.5	2468	F514_885.5		P71 + BN71A4	N56C	550...553
1.9	9871	2.6	885.1	4159	F604_885.1		P71 + BN71A4	N56C	560...563
2.0	9217	1.7	826.4	2468	F514_826.4		P71 + BN71A4	N56C	550...553
2.0	9133	2.8	819.0	4159	F604_819.0		P71 + BN71A4	N56C	560...563
2.1	9075	1.1	813.8	1752	F414_813.8	S05 + M05C4	P71 + BN71A4	N56C	540...543
2.3	8246	1.2	739.4	1752	F414_739.4	S05 + M05C4	P71 + BN71A4	N56C	540...543
2.4	7696	1.3	690.1	1752	F414_690.1	S05 + M05C4	P71 + BN71A4	N56C	540...543
2.5	7542	2.1	676.3	2468	F514_676.3		P71 + BN71A4	N56C	550...553
3.0	6132	1.6	549.8	1752	F414_549.8	S05 + M05C4	P71 + BN71A4	N56C	540...543
3.1	5916	2.7	530.5	2468	F514_530.5		P71 + BN71A4	N56C	550...553
3.2	5886	0.9	527.8	1287	F314_527.8	S05 + M05C4	P71 + BN71A4	N56C	530...533
3.6	5159	1.0	462.6	1339	F314_462.6	S05 + M05C4	P71 + BN71A4	N56C	530...533

0.33 hp

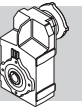
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
3.9	4837	2.0	433.7	1752	F414_433.7	S05 + M05C4	P71 + BN71A4	N56C	540...543
4.0	4671	1.1	418.9	1339	F314_418.9	S05 + M05C4	P71 + BN71A4	N56C	530...533
4.5	4315	1.2	374.4	1339	F313_374.4		P71 + BN71A4	N56C	530...533
4.8	3973	2.5	344.8	1752	F413_344.8	S05 + M05C4	P71 + BN71A4	N56C	540...543
5.0	3839	0.9	333.1	1337	F253_333.1		P71 + BN71A4	N56C	530...533
5.0	3836	1.4	332.8	1339	F313_332.8		P71 + BN71A4	N56C	530...533
5.6	3418	2.8	296.6	1752	F413_296.6		P71 + BN71A4	N56C	540...543
5.7	3386	1.6	293.8	1339	F313_293.8		P71 + BN71A4	N56C	530...533
5.8	3321	1.1	288.1	1337	F253_288.1	S05 + M05C4	P71 + BN71A4	N56C	530...533
6.5	2952	1.2	256.1	1337	F253_256.1	S05 + M05C4	P71 + BN71A4	N56C	530...533
6.6	2922	1.8	253.6	1339	F313_253.6		P71 + BN71A4	N56C	530...533
7.3	2630	2.0	228.2	1339	F313_228.2		P71 + BN71A4	N56C	530...533
7.3	2626	1.3	227.8	1337	F253_227.8	S05 + M05C4	P71 + BN71A4	N56C	530...533
8.0	2411	0.9	209.3	825	F203_209.3	S05 + M05C4	P71 + BN71A4	N56C	510...513
8.3	2331	2.3	202.3	1339	F313_202.3		P71 + BN71A4	N56C	530...533
8.6	2231	1.6	193.6	1337	F253_193.6	S05 + M05C4	P71 + BN71A4	N56C	530...533
9.0	2137	2.5	185.4	1339	F313_185.4		P71 + BN71A4	N56C	530...533
9.0	2131	1.0	184.9	825	F203_184.9	S05 + M05C4	P71 + BN71A4	N56C	510...513
9.6	2008	1.8	174.2	1337	F253_174.2	S05 + M05C4	P71 + BN71A4	N56C	530...533
9.7	1989	1.1	172.6	825	F203_172.6	S05 + M05C4	P71 + BN71A4	N56C	510...513
10.0	1922	2.8	166.8	1339	F313_166.8		P71 + BN71A4	N56C	530...533
10.7	1801	1.2	156.3	825	F203_156.3	S05 + M05C4	P71 + BN71A4	N56C	510...513
10.7	1797	2.0	155.9	1337	F253_155.9	S05 + M05C4	P71 + BN71A4	N56C	530...533
11.7	1647	2.1	143.0	1337	F253_143.0	S05 + M05C4	P71 + BN71A4	N56C	530...533
12.6	1556	1.4	132.2	825	F202_132.2	S05 + M05C4	P71 + BN71A4	N56C	510...513
13.1	1473	2.4	127.8	1337	F253_127.8	S05 + M05C4	P71 + BN71A4	N56C	530...533
14.6	1346	1.6	114.3	825	F202_114.3	S05 + M05C4	P71 + BN71A4	N56C	510...513
14.8	1302	2.7	113.0	1337	F253_113.0	S05 + M05C4	P71 + BN71A4	N56C	530...533
15.8	1248	1.0	106.0	580	F102_106.0	S05 + M05C4	P71 + BN71A4	N56C	500...503
15.8	1215	2.9	105.4	1337	F253_105.4	S05 + M05C4	P71 + BN71A4	N56C	530...533
16.4	1196	1.8	101.6	825	F202_101.6	S05 + M05C4	P71 + BN71A4	N56C	510...513
18.3	1077	1.2	91.5	580	F102_91.5	S05 + M05C4	P71 + BN71A4	N56C	500...503
18.5	1064	2.1	90.4	825	F202_90.4	S05 + M05C4	P71 + BN71A4	N56C	510...513
20.5	957	1.3	81.3	580	F102_81.3	S05 + M05C4	P71 + BN71A4	N56C	500...503
21.7	904	2.4	76.8	825	F202_76.8	S05 + M05C4	P71 + BN71A4	N56C	510...513
23.5	837	1.5	71.1	580	F102_71.1	S05 + M05C4	P71 + BN71A4	N56C	500...503
24.2	814	2.7	69.1	825	F202_69.1	S05 + M05C4	P71 + BN71A4	N56C	510...513
26.5	742	1.7	63.0	580	F102_63.0	S05 + M05C4	P71 + BN71A4	N56C	500...503
29.5	667	1.9	56.7	580	F102_56.7	S05 + M05C4	P71 + BN71A4	N56C	500...503
34	574	2.2	48.7	580	F102_48.7	S05 + M05C4	P71 + BN71A4	N56C	500...503
37	526	2.4	44.7	580	F102_44.7	S05 + M05C4	P71 + BN71A4	N56C	500...503
42	467	2.7	39.6	580	F102_39.6	S05 + M05C4	P71 + BN71A4	N56C	500...503
47	416	3.0	35.3	580	F102_35.3	S05 + M05C4	P71 + BN71A4	N56C	500...503

0.50 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
0.78	36420	1.2	2187.5	7278	F704_2188	S1 + M1SD4	P71 + BN71B4	N56C	570...573
0.84	33618	1.3	2019.2	7278	F704_2019	S1 + M1SD4	P71 + BN71B4	N56C	570...573
0.86	33078	2.1	1986.8	9378	F804_1987	S1 + M1SD4	P71 + BN71B4	N56C	578...581
0.93	30534	2.3	1834.0	9378	F804_1834	S1 + M1SD4	P71 + BN71B4	N56C	578...581
0.99	28581	1.5	1716.7	7278	F704_1717	S1 + M1SD4	P71 + BN71B4	N56C	570...573
0.99	28455	2.5	1709.1	9378	F804_1709	S1 + M1SD4	P71 + BN71B4	N56C	578...581

0.50 hp

n2 rpm	T2 lb-in	S	i	Rn2 lbs					
1.1	26382	1.7	1584.6	7278	F704_1585	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.1	26266	2.7	1577.6	9378	F804_1578	S1 + M1SD4	P71 + BN71B4	N56C	578...581
1.1	24665	1.8	1481.5	7278	F704_1481	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.2	22768	1.9	1367.5	7278	F704_1368	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.4	19676	2.2	1181.8	7278	F704_1182	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.5	19003	1.4	1141.4	4159	F604_1141	S1 + M1SD4	P71 + BN71B4	N56C	560...563
1.6	18163	2.4	1090.9	7278	F704_1091	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.6	17541	1.5	1053.6	4159	F604_1054	S1 + M1SD4	P71 + BN71B4	N56C	560...563
1.7	16305	1.0	979.4	2468	F514_979.4	S1 + M1SD4	P71 + BN71B4	N56C	550...553
1.7	16222	2.7	974.4	7278	F704_974.4	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.8	15964	1.6	958.9	4159	F604_958.9	S1 + M1SD4	P71 + BN71B4	N56C	560...563
1.9	14974	3.0	899.4	7278	F704_899.4	S1 + M1SD4	P71 + BN71B4	N56C	570...573
1.9	14742	1.1	885.5	2468	F514_885.5	S1 + M1SD4	P71 + BN71B4	N56C	550...553
1.9	14736	1.7	885.1	4159	F604_885.1	S1 + M1SD4	P71 + BN71B4	N56C	560...563
2.1	13759	1.2	826.4	2468	F514_826.4	S1 + M1SD4	P71 + BN71B4	N56C	550...553
2.1	13635	1.9	819.0	4159	F604_819.0	S1 + M1SD4	P71 + BN71B4	N56C	560...563
2.2	12586	2.0	756.0	4159	F604_756.0	S1 + M1SD4	P71 + BN71B4	N56C	560...563
2.5	11260	1.4	676.3	2468	F514_676.3	S1 + M1SD4	P71 + BN71B4	N56C	550...553
2.6	11028	2.3	662.4	4159	F604_662.4	S1 + M1SD4	P71 + BN71B4	N56C	560...563
2.8	10180	2.5	611.4	4159	F604_611.4	S1 + M1SD4	P71 + BN71B4	N56C	560...563
3.1	9154	1.1	549.8	1752	F414_549.8	S1 + M1SD4	P71 + BN71B4	N56C	540...543
3.2	8835	2.9	530.7	4159	F604_530.7	S1 + M1SD4	P71 + BN71B4	N56C	560...563
3.2	8832	1.8	530.5	2468	F514_530.5	S1 + M1SD4	P71 + BN71B4	N56C	550...553
3.9	7220	1.3	433.7	1752	F414_433.7	S1 + M1SD4	P71 + BN71B4	N56C	540...543
4.0	7144	2.2	429.1	2468	F514_429.1	S1 + M1SD4	P71 + BN71B4	N56C	550...553
4.8	6065	2.6	352.5	2468	F513_352.5	S1 + M1SD4	P71 + BN71B4	N56C	550...553
4.9	5932	1.6	344.8	1752	F413_344.8	S1 + M1SD4	P71 + BN71B4	N56C	540...543
5.1	5726	0.9	332.8	1287	F313_332.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
5.4	5458	2.9	317.3	2468	F513_317.3	S1 + M1SD4	P71 + BN71B4	N56C	550...553
5.7	5103	1.9	296.6	1752	F413_296.6	S1 + M1SD4	P71 + BN71B4	N56C	540...543
5.8	5055	1.1	293.8	1339	F313_293.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
6.4	4592	2.1	266.9	1752	F413_266.9	S1 + M1SD4	P71 + BN71B4	N56C	540...543
6.7	4363	1.2	253.6	1339	F313_253.6	S1 + M1SD4	P71 + BN71B4	N56C	530...533
7.1	4131	2.4	240.1	1752	F413_240.1	S1 + M1SD4	P71 + BN71B4	N56C	540...543
7.4	3926	1.4	228.2	1339	F313_228.2	S1 + M1SD4	P71 + BN71B4	N56C	530...533
7.5	3920	0.9	227.8	1275	F253_227.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
7.7	3787	2.6	220.1	1752	F413_220.1	S1 + M1SD4	P71 + BN71B4	N56C	540...543
8.4	3480	1.5	202.3	1339	F313_202.3	S1 + M1SD4	P71 + BN71B4	N56C	530...533
8.5	3422	2.8	198.9	1752	F413_198.9	S1 + M1SD4	P71 + BN71B4	N56C	540...543
8.8	3330	1.1	193.6	1337	F253_193.6	S1 + M1SD4	P71 + BN71B4	N56C	530...533
9.2	3190	1.7	185.4	1339	F313_185.4	S1 + M1SD4	P71 + BN71B4	N56C	530...533
9.8	2997	1.2	174.2	1337	F253_174.2	S1 + M1SD4	P71 + BN71B4	N56C	530...533
10.2	2869	1.9	166.8	1339	F313_166.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
10.9	2683	1.3	155.9	1337	F253_155.9	S1 + M1SD4	P71 + BN71B4	N56C	530...533
11.3	2594	2.0	150.8	1339	F313_150.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
11.9	2459	1.4	143.0	1337	F253_143.0	S1 + M1SD4	P71 + BN71B4	N56C	530...533
12.1	2421	2.2	140.7	1339	F313_140.7	S1 + M1SD4	P71 + BN71B4	N56C	530...533
12.9	2323	1.0	132.2	825	F202_132.2	S1 + M1SD4	P71 + BN71B4	N56C	510...513
13.2	2209	2.4	128.4	1339	F313_128.4	S1 + M1SD4	P71 + BN71B4	N56C	530...533
13.3	2199	1.6	127.8	1337	F253_127.8	S1 + M1SD4	P71 + BN71B4	N56C	530...533
14.9	2009	1.1	114.3	825	F202_114.3	S1 + M1SD4	P71 + BN71B4	N56C	510...513
15.0	1943	1.8	113.0	1337	F253_113.0	S1 + M1SD4	P71 + BN71B4	N56C	530...533
15.1	1936	2.7	112.5	1339	F313_112.5	S1 + M1SD4	P71 + BN71B4	N56C	530...533
16.1	1814	2.0	105.4	1337	F253_105.4	S1 + M1SD4	P71 + BN71B4	N56C	530...533
16.7	1753	2.9	101.9	1339	F313_101.9	S1 + M1SD4	P71 + BN71B4	N56C	530...533
16.7	1786	1.2	101.6	825	F202_101.6	S1 + M1SD4	P71 + BN71B4	N56C	510...513
17.8	1643	2.2	95.5	1335	F253_95.5	S1 + M1SD4	P71 + BN71B4	N56C	530...533



0.50 hp

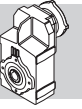
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
18.8	1589	1.4	90.4	825	F202_90.4	S1 + M1SD4	P71 + BN71B4	N56C	510...513
20.4	1435	2.5	83.4	1292	F253_83.4	S1 + M1SD4	P71 + BN71B4	N56C	530...533
22.1	1350	1.6	76.8	825	F202_76.8	S1 + M1SD4	P71 + BN71B4	N56C	510...513
22.2	1318	2.7	76.6	1267	F253_76.6	S1 + M1SD4	P71 + BN71B4	N56C	530...533
23.9	1250	1.0	71.1	580	F102_71.1	S1 + M1SD4	P71 + BN71B4	N56C	500...503
24.6	1215	1.8	69.1	825	F202_69.1	S1 + M1SD4	P71 + BN71B4	N56C	510...513
26.0	1124	3.0	65.3	1218	F253_65.3	S1 + M1SD4	P71 + BN71B4	N56C	530...533
27.0	1107	1.1	63.0	580	F102_63.0	S1 + M1SD4	P71 + BN71B4	N56C	500...503
27.5	1088	2.0	61.9	825	F202_61.9	S1 + M1SD4	P71 + BN71B4	N56C	510...513
30.0	997	2.2	56.7	825	F202_56.7	S1 + M1SD4	P71 + BN71B4	N56C	510...513
30.0	996	1.2	56.7	580	F102_56.7	S1 + M1SD4	P71 + BN71B4	N56C	500...503
34	891	2.4	50.7	804	F202_50.7	S1 + M1SD4	P71 + BN71B4	N56C	510...513
35	856	1.4	48.7	580	F102_48.7	S1 + M1SD4	P71 + BN71B4	N56C	500...503
38	788	2.6	44.8	777	F202_44.8	S1 + M1SD4	P71 + BN71B4	N56C	510...513
38	785	1.6	44.7	580	F102_44.7	S1 + M1SD4	P71 + BN71B4	N56C	500...503
41	735	2.8	41.8	763	F202_41.8	S1 + M1SD4	P71 + BN71B4	N56C	510...513
43	697	1.8	39.6	580	F102_39.6	S1 + M1SD4	P71 + BN71B4	N56C	500...503
48	621	2.0	35.3	580	F102_35.3	S1 + M1SD4	P71 + BN71B4	N56C	500...503
52	580	2.1	33.0	580	F102_33.0	S1 + M1SD4	P71 + BN71B4	N56C	500...503
57	521	2.2	29.6	580	F102_29.6	S1 + M1SD4	P71 + BN71B4	N56C	500...503
66	453	2.5	25.8	557	F102_25.8	S1 + M1SD4	P71 + BN71B4	N56C	500...503
74	401	2.8	22.8	538	F102_22.8	S1 + M1SD4	P71 + BN71B4	N56C	500...503

0.75 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
0.81	52161	2.4	2098.7	11450	F904_2099	S1 + M1LA4	P80 + BN80A4	N56C	586...589
0.86	49380	1.4	1986.8	9378	F804_1987		P80 + BN80A4	N56C	578...581
0.88	48149	2.6	1937.3	11450	F904_1937		P80 + BN80A4	N56C	586...589
0.93	45582	1.6	1834.0	9378	F804_1834		P80 + BN80A4	N56C	578...581
1.0	42666	1.0	1716.7	7278	F704_1717	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.0	42478	1.7	1709.1	9378	F804_1709	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.0	42309	2.9	1702.3	11450	F904_1702	S1 + M1LA4	P80 + BN80A4	N56C	586...589
1.1	39384	1.1	1584.6	7278	F704_1585		P80 + BN80A4	N56C	570...573
1.1	39210	1.8	1577.6	9378	F804_1578		P80 + BN80A4	N56C	578...581
1.2	36821	1.2	1481.5	7278	F704_1481		P80 + BN80A4	N56C	570...573
1.2	34392	2.1	1383.8	9378	F804_1384	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.3	33988	1.3	1367.5	7278	F704_1368	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.3	31747	2.2	1277.3	9378	F804_1277	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.4	29373	1.5	1181.8	7278	F704_1182	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.5	28489	2.5	1146.2	9378	F804_1146	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.5	28368	0.9	1141.4	4159	F604_1141	S1 + M1LA4	P80 + BN80A4	N56C	560...563
1.6	27113	1.6	1090.9	7278	F704_1091	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.6	26297	2.7	1058.1	9378	F804_1058	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.6	26186	1.0	1053.6	4159	F604_1054	S1 + M1LA4	P80 + BN80A4	N56C	560...563
1.8	24217	1.8	974.4	7278	F704_974.4	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.8	24159	2.9	972.0	9378	F804_972.0	S1 + M1LA4	P80 + BN80A4	N56C	578...581
1.8	23831	1.1	958.9	4159	F604_958.9	S1 + M1LA4	P80 + BN80A4	N56C	560...563
1.9	22354	2.0	899.4	7278	F704_899.4	S1 + M1LA4	P80 + BN80A4	N56C	570...573
1.9	21998	1.2	885.1	4159	F604_885.1	S1 + M1LA4	P80 + BN80A4	N56C	560...563
2.1	20435	2.2	822.2	7278	F704_822.2	S1 + M1LA4	P80 + BN80A4	N56C	570...573
2.1	20354	1.3	819.0	4159	F604_819.0	S1 + M1LA4	P80 + BN80A4	N56C	560...563
2.3	18864	2.3	759.0	7278	F704_759.0	S1 + M1LA4	P80 + BN80A4	N56C	570...573

0.75 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.3	18789	1.4	756.0	4159	F604_756.0	S1 + M1LA4	P80 + BN80A4	N56C	560...563
2.5	16809	0.9	676.3	2263	F514_676.3	S1 + M1LA4	P80 + BN80A4	N56C	550...553
2.6	16463	1.6	662.4	4159	F604_662.4	S1 + M1LA4	P80 + BN80A4	N56C	560...563
2.6	16339	2.7	657.4	7278	F704_657.4	S1 + M1LA4	P80 + BN80A4	N56C	570...573
2.8	15197	1.7	611.4	4159	F604_611.4	S1 + M1LA4	P80 + BN80A4	N56C	560...563
2.8	15082	2.9	606.8	7278	F704_606.8	S1 + M1LA4	P80 + BN80A4	N56C	570...573
3.2	13189	1.9	530.7	4159	F604_530.7	S1 + M1LA4	P80 + BN80A4	N56C	560...563
3.2	13185	1.2	530.5	2468	F514_530.5	S1 + M1LA4	P80 + BN80A4	N56C	550...553
3.5	12175	2.1	489.8	4159	F604_489.8	S1 + M1LA4	P80 + BN80A4	N56C	560...563
3.9	10779	0.9	433.7	1598	F414_433.7	S1 + M1LA4	P80 + BN80A4	N56C	540...543
4.0	10752	2.4	432.6	4159	F604_432.6	S1 + M1LA4	P80 + BN80A4	N56C	560...563
4.0	10665	1.5	429.1	2468	F514_429.1	S1 + M1LA4	P80 + BN80A4	N56C	550...553
4.3	9925	2.6	399.3	4159	F604_399.3	S1 + M1LA4	P80 + BN80A4	N56C	560...563
4.9	9054	1.8	352.5	2468	F513_352.5	S1 + M1LA4	P80 + BN80A4	N56C	550...553
5.0	8855	1.1	344.8	1752	F413_344.8	S1 + M1LA4	P80 + BN80A4	N56C	540...543
5.4	8148	2.0	317.3	2468	F513_317.3	S1 + M1LA4	P80 + BN80A4	N56C	550...553
5.8	7617	1.3	296.6	1752	F413_296.6	S1 + M1LA4	P80 + BN80A4	N56C	540...543
6.0	7344	2.2	285.9	2468	F513_285.9	S1 + M1LA4	P80 + BN80A4	N56C	550...553
6.4	6856	1.4	266.9	1752	F413_266.9	S1 + M1LA4	P80 + BN80A4	N56C	540...543
6.5	6732	2.4	262.1	2468	F513_262.1	S1 + M1LA4	P80 + BN80A4	N56C	550...553
7.1	6167	1.6	240.1	1752	F413_240.1	S1 + M1LA4	P80 + BN80A4	N56C	540...543
7.1	6160	2.6	239.8	2468	F513_239.8	S1 + M1LA4	P80 + BN80A4	N56C	550...553
7.5	5861	0.9	228.2	1215	F313_228.2	S1 + M1LA4	P80 + BN80A4	N56C	530...533
7.8	5654	1.7	220.1	1752	F413_220.1	S1 + M1LA4	P80 + BN80A4	N56C	540...543
7.9	5569	2.9	216.9	2468	F513_216.9	S1 + M1LA4	P80 + BN80A4	N56C	550...553
8.5	5195	1.0	202.3	1339	F313_202.3	S1 + M1LA4	P80 + BN80A4	N56C	530...533
8.6	5109	1.9	198.9	1752	F413_198.9	S1 + M1LA4	P80 + BN80A4	N56C	540...543
9.2	4762	1.1	185.4	1339	F313_185.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
9.5	4642	2.1	180.7	1752	F413_180.7	S1 + M1LA4	P80 + BN80A4	N56C	540...543
10.1	4332	2.2	168.7	1752	F413_168.7	S1 + M1LA4	P80 + BN80A4	N56C	540...543
10.3	4283	1.2	166.8	1339	F313_166.8	S1 + M1LA4	P80 + BN80A4	N56C	530...533
11.3	3873	1.4	150.8	1339	F313_150.8	S1 + M1LA4	P80 + BN80A4	N56C	530...533
12.0	3671	1.0	143.0	1275	F253_143.0	S1 + M1LA4	P80 + BN80A4	N56C	530...533
12.2	3614	1.5	140.7	1339	F313_140.7	S1 + M1LA4	P80 + BN80A4	N56C	530...533
12.7	3452	2.8	134.4	1752	F413_134.4	S1 + M1LA4	P80 + BN80A4	N56C	540...543
13.3	3297	1.6	128.4	1339	F313_128.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
13.4	3283	1.1	127.8	1323	F253_127.8	S1 + M1LA4	P80 + BN80A4	N56C	530...533
15.1	2901	1.2	113.0	1261	F253_113.0	S1 + M1LA4	P80 + BN80A4	N56C	530...533
15.2	2890	1.8	112.5	1339	F313_112.5	S1 + M1LA4	P80 + BN80A4	N56C	530...533
16.2	2708	1.3	105.4	1249	F253_105.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
16.8	2617	1.9	101.9	1339	F313_101.9	S1 + M1LA4	P80 + BN80A4	N56C	530...533
17.9	2452	1.4	95.5	1230	F253_95.5	S1 + M1LA4	P80 + BN80A4	N56C	530...533
18.9	2372	0.9	90.4	752	F202_90.4	S1 + M1LA4	P80 + BN80A4	N56C	510...513
19.6	2244	2.2	87.4	1339	F313_87.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
20.5	2142	1.7	83.4	1201	F253_83.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
21.7	2026	2.4	78.9	1339	F313_78.9	S1 + M1LA4	P80 + BN80A4	N56C	530...533
22.3	2015	1.1	76.8	825	F202_76.8	S1 + M1LA4	P80 + BN80A4	N56C	510...513
22.3	1967	1.8	76.6	1183	F253_76.6	S1 + M1LA4	P80 + BN80A4	N56C	530...533
24.7	1814	1.2	69.1	820	F202_69.1	S1 + M1LA4	P80 + BN80A4	N56C	510...513
24.8	1774	2.8	69.1	1339	F313_69.1	S1 + M1LA4	P80 + BN80A4	N56C	530...533
26.2	1678	2.0	65.3	1146	F253_65.3	S1 + M1LA4	P80 + BN80A4	N56C	530...533
27.6	1624	1.4	61.9	802	F202_61.9	S1 + M1LA4	P80 + BN80A4	N56C	510...513
29.3	1498	2.2	58.3	1117	F253_58.3	S1 + M1LA4	P80 + BN80A4	N56C	530...533
30	1488	1.5	56.7	785	F202_56.7	S1 + M1LA4	P80 + BN80A4	N56C	510...513
34	1304	2.5	50.8	1084	F253_50.8	S1 + M1LA4	P80 + BN80A4	N56C	530...533
34	1331	1.6	50.7	767	F202_50.7	S1 + M1LA4	P80 + BN80A4	N56C	510...513
35	1278	1.0	48.7	549	F102_48.7	S1 + M1LA4	P80 + BN80A4	N56C	500...503



0.75 hp

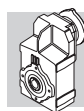
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
38	1170	2.8	45.6	1055	F253_45.6		P80 + BN80A4	N56C	530...533
38	1176	1.8	44.8	744	F202_44.8	S1 + M1LA4	P80 + BN80A4	N56C	510...513
38	1172	1.1	44.7	580	F102_44.7	S1 + M1LA4	P80 + BN80A4	N56C	500...503
38	1166	2.7	44.4	1057	F252_44.4	S1 + M1LA4	P80 + BN80A4	N56C	530...533
41	1098	1.9	41.8	732	F202_41.8	S1 + M1LA4	P80 + BN80A4	N56C	510...513
42	1068	2.9	40.7	1035	F252_40.7	S1 + M1LA4	P80 + BN80A4	N56C	530...533
43	1040	1.2	39.6	580	F102_39.6	S1 + M1LA4	P80 + BN80A4	N56C	500...503
45	994	2.0	37.9	713	F202_37.9	S1 + M1LA4	P80 + BN80A4	N56C	510...513
48	927	1.3	35.3	580	F102_35.3	S1 + M1LA4	P80 + BN80A4	N56C	500...503
52	868	2.3	33.1	689	F202_33.1	S1 + M1LA4	P80 + BN80A4	N56C	510...513
52	865	1.4	33.0	569	F102_33.0	S1 + M1LA4	P80 + BN80A4	N56C	500...503
56	797	2.6	30.4	672	F202_30.4	S1 + M1LA4	P80 + BN80A4	N56C	510...513
58	777	1.5	29.6	555	F102_29.6	S1 + M1LA4	P80 + BN80A4	N56C	500...503
66	680	2.9	25.9	645	F202_25.9	S1 + M1LA4	P80 + BN80A4	N56C	510...513
66	676	1.7	25.8	536	F102_25.8	S1 + M1LA4	P80 + BN80A4	N56C	500...503
75	599	1.9	22.8	520	F102_22.8	S1 + M1LA4	P80 + BN80A4	N56C	500...503
88	507	2.2	19.3	497	F102_19.3	S1 + M1LA4	P80 + BN80A4	N56C	500...503
101	445	2.3	17.0	478	F102_17.0	S1 + M1LA4	P80 + BN80A4	N56C	500...503
117	384	2.5	14.6	460	F102_14.6	S1 + M1LA4	P80 + BN80A4	N56C	500...503
131	342	2.5	13.0	443	F102_13.0	S1 + M1LA4	P80 + BN80A4	N56C	500...503
148	303	2.6	11.5	429	F102_11.5	S1 + M1LA4	P80 + BN80A4	N56C	500...503
175	256	2.8	9.8	408	F102_9.8	S1 + M1LA4	P80 + BN80A4	N56C	500...503
199	225	3.0	8.6	391	F102_8.6	S1 + M1LA4	P80 + BN80A4	N56C	500...503

1 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
0.83	68545	1.8	2098.7	11450	F904_2099	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
0.88	64891	1.1	1986.8	9378	F804_1987	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
0.90	63272	2.0	1937.3	11450	F904_1937	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
0.95	59899	1.2	1834.0	9378	F804_1834	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.0	55820	1.3	1709.1	9378	F804_1709	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.0	55599	2.2	1702.3	11450	F904_1702	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
1.1	51526	1.4	1577.6	9378	F804_1578	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.1	51322	2.4	1571.4	11450	F904_1571	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
1.2	48386	0.9	1481.5	7278	F704_1481	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.2	46636	2.7	1427.9	11450	F904_1428	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
1.3	45195	1.6	1383.8	9378	F804_1384	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.3	44664	1.0	1367.5	7278	F704_1368	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.3	43049	2.9	1318.1	11450	F904_1318	S2 + ME2SB4	P80 + BE80B4	N56C	586...589
1.4	41719	1.7	1277.3	9378	F804_1277	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.5	38599	1.1	1181.8	7278	F704_1182	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.5	37437	1.9	1146.2	9378	F804_1146	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.6	35630	1.2	1090.9	7278	F704_1091	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.6	34557	2.0	1058.1	9378	F804_1058	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.8	31823	1.4	974.4	7278	F704_974.4	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.8	31748	2.2	972.0	9378	F804_972.0	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
1.9	29375	1.5	899.4	7278	F704_899.4	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
1.9	29306	2.4	897.3	9378	F804_897.3	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
2.1	26854	1.6	822.2	7278	F704_822.2	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
2.1	26748	1.0	819.0	4159	F604_819.0	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
2.3	25293	2.8	774.4	9378	F804_774.4	S2 + ME2SB4	P80 + BE80B4	N56C	578...581
2.3	24789	1.8	759.0	7278	F704_759.0	S2 + ME2SB4	P80 + BE80B4	N56C	570...573

1 hp

n2 rpm	T2 lb-in	S	i	Rn2 lbs					
2.3	24690	1.0	756.0	4159	F604_756.0	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
2.6	21634	1.2	662.4	4159	F604_662.4	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
2.7	21471	2.1	657.4	7278	F704_657.4	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
2.9	19970	1.3	611.4	4159	F604_611.4	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
2.9	19820	2.2	606.8	7278	F704_606.8	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
3.3	17332	1.5	530.7	4159	F604_530.7	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
3.3	17326	0.9	530.5	2263	F514_530.5	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
3.4	16671	2.7	510.4	7278	F704_510.4	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
3.6	15999	1.6	489.8	4159	F604_489.8	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
3.7	15388	2.9	471.2	7278	F704_471.2	S2 + ME2SB4	P80 + BE80B4	N56C	570...573
4.0	14130	1.8	432.6	4159	F604_432.6	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
4.1	14014	1.1	429.1	2468	F514_429.1	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
4.4	13043	2.0	399.3	4159	F604_399.3	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
5.0	11897	1.3	352.5	2468	F513_352.5	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
5.1	11159	2.3	341.7	4159	F604_341.7	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
5.5	10708	1.5	317.3	2468	F513_317.3	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
5.5	10301	2.5	315.4	4159	F604_315.4	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
5.9	10010	1.0	296.6	1752	F413_296.6	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
6.1	9650	1.7	285.9	2468	F513_285.9	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
6.2	9473	2.7	280.7	4159	F603_280.7	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
6.5	9009	1.1	266.9	1752	F413_266.9	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
6.7	8846	1.8	262.1	2468	F513_262.1	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
6.7	8744	2.9	259.1	4159	F603_259.1	S2 + ME2SB4	P80 + BE80B4	N56C	560...563
7.3	8105	1.2	240.1	1752	F413_240.1	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
7.3	8095	2.0	239.8	2468	F513_239.8	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
7.9	7429	1.3	220.1	1752	F413_220.1	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
8.0	7319	2.2	216.9	2468	F513_216.9	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
8.6	6831	2.3	202.4	2468	F513_202.4	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
8.8	6713	1.5	198.9	1752	F413_198.9	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
9.7	6100	1.6	180.7	1752	F413_180.7	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
10.3	5693	1.7	168.7	1752	F413_168.7	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
10.5	5629	0.9	166.8	1215	F313_166.8	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
10.5	5590	2.9	165.6	2468	F513_165.6	S2 + ME2SB4	P80 + BE80B4	N56C	550...553
11.6	5089	1.0	150.8	1339	F313_150.8	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
12.4	4750	1.1	140.7	1339	F313_140.7	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
13.0	4536	2.1	134.4	1752	F413_134.4	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
13.6	4333	1.2	128.4	1339	F313_128.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
15.4	3812	0.9	113.0	1142	F253_113.0	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
15.5	3798	1.4	112.5	1339	F313_112.5	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
16.5	3578	2.7	106.0	1752	F413_106.0	S2 + ME2SB4	P80 + BE80B4	N56C	540...543
16.6	3558	1.0	105.4	1152	F253_105.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
17.1	3439	1.5	101.9	1339	F313_101.9	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
18.3	3223	1.1	95.5	1121	F253_95.5	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
20.0	2949	1.7	87.4	1339	F313_87.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
20.9	2814	1.3	83.4	1101	F253_83.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
22.1	2662	1.8	78.9	1339	F313_78.9	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
22.8	2585	1.4	76.6	1090	F253_76.6	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
25.2	2383	0.9	69.1	742	F202_69.1	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
25.3	2331	2.1	69.1	1339	F313_69.1	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
26.7	2205	1.5	65.3	1066	F253_65.3	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
27.8	2118	2.3	62.8	1339	F313_62.8	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
28.2	2133	1.0	61.9	763	F202_61.9	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
29.9	1969	1.7	58.3	1045	F253_58.3	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
31	1956	1.1	56.7	740	F202_56.7	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
33	1758	2.7	52.1	1339	F313_52.1	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
34	1714	1.9	50.8	1020	F253_50.8	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
34	1749	1.2	50.7	724	F202_50.7	S2 + ME2SB4	P80 + BE80B4	N56C	510...513



1 hp

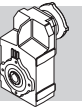
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
38	1538	2.1	45.6	1000	F253_45.6	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
39	1545	1.3	44.8	705	F202_44.8	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
39	1532	2.1	44.4	1006	F252_44.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
42	1442	1.4	41.8	695	F202_41.8	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
43	1404	2.2	40.7	985	F252_40.7	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
44	1367	0.9	39.6	528	F102_39.6	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
46	1306	1.6	37.9	680	F202_37.9	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
48	1256	2.6	36.4	963	F252_36.4	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
49	1218	1.0	35.3	538	F102_35.3	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
53	1141	1.8	33.1	660	F202_33.1	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
53	1137	1.1	33.0	549	F102_33.0	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
54	1109	3.0	32.2	934	F252_32.2	S2 + ME2SB4	P80 + BE80B4	N56C	530...533
57	1048	1.9	30.4	647	F202_30.4	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
59	1022	1.1	29.6	528	F102_29.6	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
67	894	2.2	25.9	623	F202_25.9	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
68	888	1.3	25.8	511	F102_25.8	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
75	798	2.4	23.1	604	F202_23.1	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
76	787	1.4	22.8	497	F102_22.8	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
87	695	2.6	20.2	583	F202_20.2	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
90	666	1.7	19.3	478	F102_19.3	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
97	623	2.8	18.1	565	F202_18.1	S2 + ME2SB4	P80 + BE80B4	N56C	510...513
103	585	1.8	17.0	462	F102_17.0	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
119	505	1.9	14.6	445	F102_14.6	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
134	449	1.9	13.0	429	F102_13.0	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
151	398	2.0	11.5	416	F102_11.5	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
179	337	2.1	9.8	398	F102_9.8	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
203	296	2.2	8.6	383	F102_8.6	S2 + ME2SB4	P80 + BE80B4	N56C	500...503
236	255	2.4	7.4	366	F102_7.4	S2 + ME2SB4	P80 + BE80B4	N56C	500...503

1.5 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
0.83	100310	1.2	2098.7	11450	F904_2099	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
0.90	92594	1.3	1937.3	11450	F904_1937	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.0	81364	1.5	1702.3	11450	F904_1702	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.1	75404	0.9	1577.6	9378	F804_1578	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.1	75105	1.6	1571.4	11450	F904_1571	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.2	68248	1.8	1427.9	11450	F904_1428	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.3	66139	1.1	1383.8	9378	F804_1384	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.3	62998	2.0	1318.1	11450	F904_1318	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.4	61052	1.2	1277.3	9378	F804_1277	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.4	57592	2.2	1204.9	11450	F904_1205	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.5	54786	1.3	1146.2	9378	F804_1146	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.6	53162	2.3	1112.3	11450	F904_1112	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.6	50572	1.4	1058.1	9378	F804_1058	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.8	47128	2.6	986.0	11450	F904_986.0	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.8	46571	1.0	974.4	7278	F704_974.4	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
1.8	46460	1.5	972.0	9378	F804_972.0	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
1.9	43503	2.8	910.2	11450	F904_910.2	S3 + ME3SA4	P90 + BE90S4	N140TC	586...589
1.9	42988	1.0	899.4	7278	F704_899.4	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
1.9	42886	1.7	897.3	9378	F804_897.3	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
2.1	39299	1.1	822.2	7278	F704_822.2	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
2.2	37015	1.9	774.4	9378	F804_774.4	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581

1.5 hp

n2 rpm	T2 lb-in	S	i	Rn2 lbs					
2.3	36276	1.2	759.0	7278	F704_759.0	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
2.4	34168	2.1	714.9	9378	F804_714.9	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
2.6	31421	1.4	657.4	7278	F704_657.4	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
2.8	29197	2.4	610.9	9378	F804_610.9	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
2.9	29004	1.5	606.8	7278	F704_606.8	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
3.1	26951	2.6	563.9	9378	F804_563.9	S3 + ME3SA4	P90 + BE90S4	N140TC	578...581
3.3	25364	1.0	530.7	4159	F604_530.7	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
3.4	24396	1.8	510.4	7278	F704_510.4	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
3.6	23413	1.1	489.8	4159	F604_489.8	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
3.7	22519	2.0	471.2	7278	F704_471.2	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
4.0	20677	1.2	432.6	4159	F604_432.6	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
4.3	19286	2.3	403.5	7278	F704_403.5	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
4.4	19087	1.3	399.3	4159	F604_399.3	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
4.7	17803	2.5	372.5	7278	F704_372.5	S3 + ME3SA4	P90 + BE90S4	N140TC	570...573
4.9	17411	0.9	352.5	2263	F513_352.5	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
5.1	16331	1.6	341.7	4159	F604_341.7	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
5.5	15670	1.0	317.3	2468	F513_317.3	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
5.5	15074	1.7	315.4	4159	F604_315.4	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
6.1	14122	1.1	285.9	2468	F513_285.9	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
6.2	13862	1.9	280.7	4159	F603_280.7	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
6.6	12945	1.2	262.1	2468	F513_262.1	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
6.7	12796	2.0	259.1	4159	F603_259.1	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
7.3	11846	1.3	239.8	2468	F513_239.8	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
7.4	11645	2.2	235.8	4159	F603_235.8	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
8.0	10749	2.4	217.6	4159	F603_217.6	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
8.0	10710	1.5	216.9	2468	F513_216.9	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
8.6	9996	1.6	202.4	2468	F513_202.4	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
8.6	9946	2.6	201.4	4159	F603_201.4	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
8.7	9825	1.0	198.9	1752	F413_198.9	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
9.4	9181	2.8	185.9	4159	F603_185.9	S3 + ME3SA4	P90 + BE90S4	N140TC	560...563
9.6	8927	1.1	180.7	1752	F413_180.7	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
10.3	8331	1.2	168.7	1752	F413_168.7	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
10.5	8180	1.9	165.6	2468	F513_165.6	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
12.9	6638	1.5	134.4	1752	F413_134.4	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
13.4	6416	2.5	129.9	2468	F513_129.9	S3 + ME3SA4	P90 + BE90S4	N140TC	550...553
15.5	5558	0.9	112.5	1215	F313_112.5	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
16.4	5236	1.9	106.0	1752	F413_106.0	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
17.1	5032	1.0	101.9	1339	F313_101.9	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
19.9	4315	1.1	87.4	1339	F313_87.4	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
20.5	4192	2.2	84.9	1752	F413_84.9	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
22.1	3895	1.3	78.9	1339	F313_78.9	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
22.7	3782	0.9	76.6	963	F253_76.6	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
25.2	3411	1.4	69.1	1339	F313_69.1	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
26.2	3284	2.7	66.5	1752	F413_66.5	S3 + ME3SA4	P90 + BE90S4	N140TC	540...543
26.6	3227	1.0	65.3	948	F253_65.3	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
27.7	3100	1.6	62.8	1339	F313_62.8	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
29.8	2881	1.1	58.3	926	F253_58.3	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
33	2573	1.8	52.1	1339	F313_52.1	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
34	2508	1.3	50.8	915	F253_50.8	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
37	2348	2.2	47.5	1339	F313_47.5	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
38	2250	1.5	45.6	905	F253_45.6	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
39	2261	0.9	44.8	625	F202_44.8	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
39	2252	2.2	44.6	1339	F312_44.6	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
39	2242	1.4	44.4	919	F252_44.4	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
42	2111	1.0	41.8	639	F202_41.8	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
43	2055	1.5	40.7	907	F252_40.7	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
43	2036	2.4	40.4	1339	F312_40.4	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533



1.5 hp

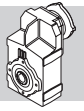
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
46	1912	1.1	37.9	629	F202_37.9	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
46	1901	2.6	37.7	1339	F312_37.7	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
48	1837	1.8	36.4	891	F252_36.4	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
51	1734	2.8	34.4	1339	F312_34.4	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
53	1669	1.2	33.1	614	F202_33.1	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
54	1624	2.0	32.2	872	F252_32.2	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
57	1533	1.3	30.4	604	F202_30.4	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
58	1515	2.2	30.0	862	F252_30.0	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
64	1373	2.4	27.2	843	F252_27.2	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
67	1308	1.5	25.9	585	F202_25.9	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
73	1199	2.8	23.8	821	F252_23.8	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
75	1168	1.6	23.1	573	F202_23.1	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
76	1152	1.0	22.8	435	F102_22.8	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
80	1101	3.0	21.8	806	F252_21.8	S3 + ME3SA4	P90 + BE90S4	N140TC	530...533
86	1017	1.8	20.2	555	F202_20.2	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
90	975	1.1	19.3	449	F102_19.3	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
96	912	1.9	18.1	540	F202_18.1	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
102	857	1.2	17.0	437	F102_17.0	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
118	747	2.2	14.8	515	F202_14.8	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
119	739	1.3	14.6	424	F102_14.6	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
134	657	1.3	13.0	410	F102_13.0	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
151	582	1.3	11.5	398	F102_11.5	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
155	567	2.5	11.2	476	F202_11.2	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
173	506	2.7	10.0	454	F202_10.0	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
178	493	1.5	9.8	381	F102_9.8	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
199	441	2.9	8.7	445	F202_8.7	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
203	433	1.5	8.6	369	F102_8.6	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503
222	395	3.0	7.8	433	F202_7.8	S3 + ME3SA4	P90 + BE90S4	N140TC	510...513
235	374	1.7	7.4	356	F102_7.4	S3 + ME3SA4	P90 + BE90S4	N140TC	500...503

2 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
0.83	137090	0.9	2098.7	11450	F904_2099	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
0.90	126545	1.0	1937.3	11450	F904_1937	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.0	111198	1.1	1702.3	11450	F904_1702	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.1	102644	1.2	1571.4	11450	F904_1571	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.2	93272	1.3	1427.9	11450	F904_1428	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.3	86098	1.4	1318.1	11450	F904_1318	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.4	78709	1.6	1204.9	11450	F904_1205	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.5	74874	0.9	1146.2	9378	F804_1146	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
1.6	72654	1.7	1112.3	11450	F904_1112	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.6	69114	1.0	1058.1	9378	F804_1058	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
1.8	64409	1.9	986.0	11450	F904_986.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.8	63495	1.1	972.0	9378	F804_972.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
1.9	59454	2.1	910.2	11450	F904_910.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
1.9	58611	1.2	897.3	9378	F804_897.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
2.2	50587	1.4	774.4	9378	F804_774.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
2.2	50523	2.5	773.4	11450	F904_773.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
2.4	46696	1.5	714.9	9378	F804_714.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
2.4	46636	2.7	714.0	11450	F904_714.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	586...589
2.6	42943	1.0	657.4	7278	F704_657.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
2.8	39903	1.8	610.9	9378	F804_610.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581

2 hp

n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.9	39639	1.1	606.8	7278	F704_606.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
3.1	36833	1.9	563.9	9378	F804_563.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
3.4	33341	1.3	510.4	7278	F704_510.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
3.6	31950	2.2	489.1	9378	F804_489.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
3.7	30776	1.4	471.2	7278	F704_471.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
3.9	29492	2.4	451.5	9378	F804_451.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
4.0	28259	0.9	432.6	4159	F604_432.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
4.3	26358	1.7	403.5	7278	F704_403.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
4.4	26085	1.0	399.3	4159	F604_399.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
4.5	25028	2.8	383.2	9378	F804_383.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	578...581
4.7	24330	1.8	372.5	7278	F704_372.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
5.1	22318	1.2	341.7	4159	F604_341.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
5.5	20602	1.2	315.4	4159	F604_315.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
5.7	19880	2.2	304.3	7278	F704_304.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
6.2	18351	2.4	280.9	7278	F704_280.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
6.2	18945	1.4	280.7	4159	F603_280.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
6.6	17692	0.9	262.1	2263	F513_262.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
6.7	17488	1.5	259.1	4159	F603_259.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
7.3	16189	1.0	239.8	2468	F513_239.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
7.4	15915	1.6	235.8	4159	F603_235.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
7.4	15322	2.9	234.6	7278	F704_234.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	570...573
8.0	14691	1.7	217.6	4159	F603_217.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
8.0	14637	1.1	216.9	2468	F513_216.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
8.6	13661	1.2	202.4	2468	F513_202.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
8.6	13593	1.9	201.4	4159	F603_201.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
9.4	12548	2.0	185.9	4159	F603_185.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
10.5	11179	1.4	165.6	2468	F513_165.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
10.7	10994	2.3	162.9	4159	F603_162.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
11.6	10149	2.5	150.4	4159	F603_150.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
12.9	9072	1.1	134.4	1752	F413_134.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
13.3	8808	2.9	130.5	4159	F603_130.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	560...563
13.4	8769	1.8	129.9	2468	F513_129.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
16.4	7156	1.4	106.0	1752	F413_106.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
16.6	7093	2.2	105.1	2468	F513_105.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
20.5	5729	1.6	84.9	1752	F413_84.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
20.9	5619	2.8	83.2	2468	F513_83.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	550...553
22.1	5324	0.9	78.9	1215	F313_78.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
25.2	4662	1.1	69.1	1339	F313_69.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
26.2	4488	2.0	66.5	1752	F413_66.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
27.7	4236	1.2	62.8	1339	F313_62.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
28.9	4067	2.2	60.2	1752	F413_60.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
33	3516	1.4	52.1	1339	F313_52.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
34	3476	2.6	51.5	1752	F413_51.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
34	3428	1.0	50.8	833	F253_50.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
36	3305	2.7	47.9	1752	F412_47.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	540...543
37	3209	1.6	47.5	1339	F313_47.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
38	3076	1.1	45.6	798	F253_45.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
39	3078	1.6	44.6	1339	F312_44.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
39	3063	1.0	44.4	860	F252_44.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
43	2808	1.1	40.7	817	F252_40.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
43	2783	1.8	40.4	1339	F312_40.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
46	2598	1.9	37.7	1339	F312_37.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
48	2511	1.3	36.4	810	F252_36.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
51	2369	2.1	34.4	1339	F312_34.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
54	2219	1.5	32.2	800	F252_32.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
57	2095	1.0	30.4	557	F202_30.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
58	2077	2.4	30.1	1339	F312_30.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533



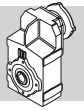
2 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
58	2071	1.6	30.0	794	F252_30.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
64	1880	2.6	27.3	1339	F312_27.3	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
64	1876	1.8	27.2	784	F252_27.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
67	1788	1.1	25.9	544	F202_25.9	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
73	1638	2.0	23.8	767	F252_23.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
75	1596	1.2	23.1	536	F202_23.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
80	1504	2.2	21.8	757	F252_21.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
86	1390	1.3	20.2	522	F202_20.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
93	1283	2.6	18.6	734	F252_18.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
96	1247	1.4	18.1	511	F202_18.1	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
105	1146	2.9	16.6	718	F252_16.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	530...533
118	1020	1.6	14.8	491	F202_14.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
119	1010	1.0	14.6	393	F102_14.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
134	898	0.9	13.0	362	F102_13.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
151	796	1.0	11.5	240	F102_11.5	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
155	775	1.9	11.2	458	F202_11.2	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
173	692	1.9	10.0	445	F202_10.0	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
178	674	1.1	9.8	364	F102_9.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
199	602	2.1	8.7	431	F202_8.7	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
203	592	1.1	8.6	354	F102_8.6	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
222	540	2.2	7.8	418	F202_7.8	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513
235	511	1.2	7.4	342	F102_7.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	500...503
271	442	2.4	6.4	398	F202_6.4	S3 + ME3SB4	P90 + BE90LA4	N140TC	510...513

3 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
1.2	136496	0.9	1427.9	11450	F904_1428	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
1.3	125996	1.0	1318.1	11450	F904_1318	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
1.4	115184	1.1	1204.9	11450	F904_1205	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
1.6	106323	1.2	1112.3	11450	F904_1112	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
1.8	94257	1.3	986.0	11450	F904_986.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
1.9	87006	1.4	910.2	11450	F904_910.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
2.3	74030	1.0	774.4	9378	F804_774.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
2.3	73935	1.7	773.4	11450	F904_773.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
2.4	68335	1.0	714.9	9378	F804_714.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
2.4	68248	1.8	714.0	11450	F904_714.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
2.8	59804	2.1	625.6	11450	F904_625.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
2.9	58394	1.2	610.9	9378	F804_610.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
3.0	55203	2.2	577.5	11450	F904_577.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
3.1	53902	1.3	563.9	9378	F804_563.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
3.4	48792	0.9	510.4	7278	F704_510.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
3.5	47373	2.6	495.6	11450	F904_495.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
3.6	46756	1.5	489.1	9378	F804_489.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
3.7	45039	1.0	471.2	7278	F704_471.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
3.8	43729	2.8	457.5	11450	F904_457.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	586...589
3.9	43159	1.6	451.5	9378	F804_451.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
4.3	38572	1.1	403.5	7278	F704_403.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
4.6	36626	1.9	383.2	9378	F804_383.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
4.7	35605	1.2	372.5	7278	F704_372.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
4.9	33809	2.1	353.7	9378	F804_353.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
5.7	29093	1.5	304.3	7278	F704_304.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
5.9	28364	2.5	296.7	9378	F804_296.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581

3 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
6.2	26855	1.6	280.9	7278	F704_280.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
6.2	27724	0.9	280.7	4159	F603_280.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
6.4	26182	2.7	273.9	9378	F804_273.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	578...581
6.7	25592	1.0	259.1	4159	F603_259.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
7.4	23290	1.1	235.8	4159	F603_235.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
7.4	22423	2.0	234.6	7278	F704_234.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
8.0	21499	1.2	217.6	4159	F603_217.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
8.1	20698	2.1	216.5	7278	F704_216.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
8.7	19892	1.3	201.4	4159	F603_201.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
8.9	19363	2.3	196.0	7278	F703_196.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
9.4	18362	1.4	185.9	4159	F603_185.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
9.6	17873	2.5	180.9	7278	F703_180.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
10.5	16463	2.7	166.7	7278	F703_166.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
10.5	16360	1.0	165.6	2468	F513_165.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
10.7	16090	1.6	162.9	4159	F603_162.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
11.3	15197	2.9	153.8	7278	F703_153.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	570...573
11.6	14852	1.7	150.4	4159	F603_150.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
13.4	12890	2.0	130.5	4159	F603_130.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
13.4	12833	1.2	129.9	2468	F513_129.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
14.5	11898	2.2	120.5	4159	F603_120.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
16.4	10508	2.4	106.4	4159	F603_106.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
16.5	10472	0.9	106.0	1598	F413_106.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
16.6	10380	1.5	105.1	2468	F513_105.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
17.8	9700	2.6	98.2	4159	F603_98.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	560...563
20.6	8384	1.1	84.9	1752	F413_84.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
21.0	8222	1.9	83.2	2468	F513_83.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
26.2	6568	1.4	66.5	1752	F413_66.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
26.5	6504	2.2	65.8	2468	F513_65.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
29.0	5951	1.5	60.2	1752	F413_60.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
33	5146	0.9	52.1	1215	F313_52.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
34	5086	1.7	51.5	1752	F413_51.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
36	4830	2.8	48.9	2468	F513_48.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	550...553
36	4836	1.8	47.9	1752	F412_47.9	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
37	4697	1.1	47.5	1339	F313_47.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
39	4505	1.1	44.6	1339	F312_44.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
43	4073	1.2	40.4	1339	F312_40.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
46	3853	2.3	38.2	1752	F412_38.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
46	3801	1.3	37.7	1339	F312_37.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
51	3467	1.4	34.4	1336	F312_34.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
54	3247	1.0	32.2	745	F252_32.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
58	3039	1.6	30.1	1310	F312_30.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
58	3039	3.0	30.1	1752	F412_30.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	540...543
58	3031	1.1	30.0	679	F252_30.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
64	2752	1.8	27.3	1287	F312_27.3	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
64	2745	1.2	27.2	679	F252_27.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
73	2397	1.4	23.8	677	F252_23.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
75	2360	2.1	23.4	1252	F312_23.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
80	2202	1.5	21.8	673	F252_21.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
83	2130	2.3	21.1	1227	F312_21.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
94	1878	1.8	18.6	662	F252_18.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
94	1865	2.6	18.5	1192	F312_18.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
97	1825	1.0	18.1	464	F202_18.1	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
104	1695	2.9	16.8	1168	F312_16.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
105	1677	2.0	16.6	654	F252_16.6	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
118	1493	1.1	14.8	451	F202_14.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
121	1460	2.3	14.5	642	F252_14.5	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
134	1310	2.5	13.0	632	F252_13.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533



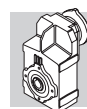
3 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
155	1134	1.3	11.2	425	F202_11.2	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
174	1012	1.3	10.0	412	F202_10.0	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
187	944	2.3	9.4	597	F252_9.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
200	881	1.4	8.7	404	F202_8.7	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
208	847	2.5	8.4	582	F252_8.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	530...533
223	791	1.5	7.8	396	F202_7.8	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513
272	647	1.6	6.4	379	F202_6.4	S3 + ME3LA4	P100 + BE100LA4	N180TC	510...513

4 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
1.8	129603	1.0	986.0	11450	F904_986.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
1.9	119634	1.0	910.2	11450	F904_910.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
2.2	101661	1.2	773.4	11450	F904_773.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
2.4	93841	1.3	714.0	11450	F904_714.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
2.8	82230	1.5	625.6	11450	F904_625.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
3.0	75905	1.6	577.5	11450	F904_577.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
3.1	74116	1.0	563.9	9378	F804_563.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
3.5	65138	1.9	495.6	11450	F904_495.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
3.5	64289	1.1	489.1	9378	F804_489.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
3.8	60127	2.1	457.5	11450	F904_457.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
3.8	59344	1.2	451.5	9378	F804_451.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
4.4	51524	2.4	392.0	11450	F904_392.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
4.5	50361	1.4	383.2	9378	F804_383.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
4.7	48957	0.9	372.5	7278	F704_372.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
4.8	47561	2.6	361.8	11450	F904_361.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	586...589
4.9	46487	1.5	353.7	9378	F804_353.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
5.7	40003	1.1	304.3	7278	F704_304.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
5.8	39000	1.8	296.7	9378	F804_296.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
6.2	36926	1.2	280.9	7278	F704_280.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
6.3	36000	2.0	273.9	9378	F804_273.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
7.4	30831	1.4	234.6	7278	F704_234.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
7.9	28718	2.5	218.5	9378	F804_218.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
8.0	28460	1.6	216.5	7278	F704_216.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
8.6	27352	0.9	201.4	4159	F603_201.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
8.7	27164	2.6	200.0	9378	F803_200.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
8.9	26624	1.7	196.0	7278	F703_196.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
9.3	25248	1.0	185.9	4159	F603_185.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
9.4	25075	2.8	184.6	9378	F803_184.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	578...581
9.6	24576	1.8	180.9	7278	F703_180.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
10.4	22637	2.0	166.7	7278	F703_166.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
10.7	22123	1.2	162.9	4159	F603_162.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
11.3	20895	2.1	153.8	7278	F703_153.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
11.5	20421	1.3	150.4	4159	F603_150.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
13.0	18058	2.5	133.0	7278	F703_133.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
13.3	17724	1.4	130.5	4159	F603_130.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
13.4	17645	0.9	129.9	2468	F513_129.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
14.1	16669	2.7	122.7	7278	F703_122.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
14.4	16360	1.6	120.5	4159	F603_120.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
15.8	14888	3.0	109.6	7278	F703_109.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	570...573
16.3	14449	1.8	106.4	4159	F603_106.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
16.5	14273	1.1	105.1	2468	F513_105.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
17.7	13337	1.9	98.2	4159	F603_98.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563

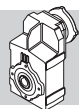
4 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
20.7	11411	2.2	84.0	4159	F603_84.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
20.8	11306	1.4	83.2	2468	F513_83.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
22.4	10534	2.4	77.6	4159	F603_77.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
25.4	9274	2.8	68.3	4159	F603_68.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
26.1	9031	1.0	66.5	1660	F413_66.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
26.4	8943	1.6	65.8	2468	F513_65.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
27.5	8560	3.0	63.0	4159	F603_63.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	560...563
28.8	8183	1.1	60.2	1752	F413_60.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
34	6994	1.3	51.5	1752	F413_51.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
35	6642	2.0	48.9	2468	F513_48.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
36	6649	1.3	47.9	1752	F412_47.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
45	5298	1.7	38.2	1752	F412_38.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
46	5227	0.9	37.7	1184	F312_37.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
47	5152	2.7	37.1	2427	F512_37.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	550...553
50	4768	1.0	34.4	1196	F312_34.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
58	4179	1.2	30.1	1188	F312_30.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
58	4179	2.2	30.1	1709	F412_30.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
64	3784	1.3	27.3	1178	F312_27.3	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
72	3346	2.7	24.1	1641	F412_24.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	540...543
73	3296	1.0	23.8	638	F252_23.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
74	3245	1.5	23.4	1157	F312_23.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
80	3027	1.1	21.8	576	F252_21.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
82	2929	1.7	21.1	1141	F312_21.1	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
93	2582	1.3	18.6	582	F252_18.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
94	2565	1.9	18.5	1118	F312_18.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
103	2331	2.1	16.8	1100	F312_16.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
104	2306	1.4	16.6	582	F252_16.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
120	2007	1.6	14.5	578	F252_14.5	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
124	1935	2.5	13.9	1061	F312_13.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
134	1801	1.8	13.0	574	F252_13.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
136	1766	2.8	12.7	1042	F312_12.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
154	1559	0.9	11.2	377	F202_11.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	510...513
163	1474	2.2	10.6	562	F252_10.6	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
173	1392	1.0	10.0	381	F202_10.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	510...513
185	1298	1.7	9.4	557	F252_9.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
192	1251	2.6	9.0	958	F312_9.0	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
199	1212	1.0	8.7	375	F202_8.7	S3 + ME3LB4	P100 + BE100LB4	N180TC	510...513
207	1165	1.8	8.4	547	F252_8.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
211	1142	2.8	8.2	937	F312_8.2	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
221	1087	1.1	7.8	369	F202_7.8	S3 + ME3LB4	P100 + BE100LB4	N180TC	510...513
253	953	2.2	6.9	527	F252_6.9	S3 + ME3LB4	P100 + BE100LB4	N180TC	530...533
271	890	1.2	6.4	357	F202_6.4	S3 + ME3LB4	P100 + BE100LB4	N180TC	510...513



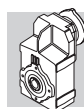
5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
2.2	123226	1.0	773.4	11450	F904_773.4	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
2.4	113747	1.1	714.0	11450	F904_714.0	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
2.8	99673	1.2	625.6	11450	F904_625.6	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
3.0	92006	1.3	577.5	11450	F904_577.5	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
3.5	78955	1.6	495.6	11450	F904_495.6	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
3.6	77926	0.9	489.1	9378	F804_489.1	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
3.8	72881	1.7	457.5	11450	F904_457.5	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589

5 hp

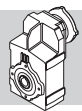
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
3.9	71932	1.0	451.5	9378	F804_451.5	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
4.4	62454	2.0	392.0	11450	F904_392.0	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
4.5	61044	1.2	383.2	9378	F804_383.2	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
4.8	57649	2.1	361.8	11450	F904_361.8	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
4.9	56348	1.3	353.7	9378	F804_353.7	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
5.7	48489	0.9	304.3	7278	F704_304.3	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
5.9	47273	1.5	296.7	9378	F804_296.7	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
6.0	46382	2.7	291.1	11450	F904_291.1	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
6.2	44759	1.0	280.9	7278	F704_280.9	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
6.4	43637	1.6	273.9	9378	F804_273.9	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
6.5	42814	2.9	268.7	11450	F904_268.7	S4 + ME4SA4	P112 + BE112M4	N180TC	586...589
7.4	37371	1.2	234.6	7278	F704_234.6	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
8.0	34810	2.0	218.5	9378	F804_218.5	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
8.0	34497	1.3	216.5	7278	F704_216.5	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
8.7	32926	2.2	200.0	9378	F803_200.0	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
8.9	32271	1.4	196.0	7278	F703_196.0	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
9.4	30393	2.3	184.6	9378	F803_184.6	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
9.6	29789	1.5	180.9	7278	F703_180.9	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
10.4	27438	1.6	166.7	7278	F703_166.7	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
10.7	26816	1.0	162.9	4159	F603_162.9	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
10.9	26378	2.7	160.2	9378	F803_160.2	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
11.3	25328	1.7	153.8	7278	F703_153.8	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
11.6	24753	1.0	150.4	4159	F603_150.4	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
11.8	24349	2.9	147.9	9378	F803_147.9	S4 + ME4SA4	P112 + BE112M4	N180TC	578...581
13.1	21888	2.0	133.0	7278	F703_133.0	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
13.3	21483	1.2	130.5	4159	F603_130.5	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
14.2	20205	2.2	122.7	7278	F703_122.7	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
14.4	19831	1.3	120.5	4159	F603_120.5	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
15.9	18046	2.5	109.6	7278	F703_109.6	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
16.4	17514	1.5	106.4	4159	F603_106.4	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
16.6	17300	0.9	105.1	2263	F513_105.1	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
17.2	16658	2.7	101.2	7278	F703_101.2	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
17.7	16166	1.6	98.2	4159	F603_98.2	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
18.8	15228	2.9	92.5	7278	F703_92.5	S4 + ME4SA4	P112 + BE112M4	N180TC	570...573
20.7	13832	1.9	84.0	4159	F603_84.0	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
20.9	13704	1.1	83.2	2468	F513_83.2	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
22.4	12768	2.0	77.6	4159	F603_77.6	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
25.5	11241	2.3	68.3	4159	F603_68.3	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
26.4	10840	1.3	65.8	2468	F513_65.8	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
27.6	10376	2.5	63.0	4159	F603_63.0	S4 + ME4SA4	P112 + BE112M4	N180TC	560...563
28.9	9918	0.9	60.2	1598	F413_60.2	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
34	8477	1.0	51.5	1680	F413_51.5	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
36	8050	1.7	48.9	2386	F513_48.9	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
36	8060	1.1	47.9	1680	F412_47.9	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
46	6421	1.4	38.2	1591	F412_38.2	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
47	6245	2.2	37.1	2304	F512_37.1	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
58	5066	1.0	30.1	1112	F312_30.1	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
58	5065	1.8	30.1	1569	F412_30.1	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
58	5052	2.7	30.0	2201	F512_30.0	S4 + ME4SA4	P112 + BE112M4	N180TC	550...553
64	4586	1.1	27.3	1091	F312_27.3	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
72	4056	2.2	24.1	1530	F412_24.1	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
74	3933	1.3	23.4	1038	F312_23.4	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
82	3550	1.4	21.1	1034	F312_21.1	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
92	3177	2.8	18.9	1474	F412_18.9	S4 + ME4SA4	P112 + BE112M4	N180TC	540...543
93	3130	1.1	18.6	514	F252_18.6		P112 + BE112M4	N180TC	530...533
94	3109	1.6	18.5	1026	F312_18.5	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
104	2825	1.7	16.8	1015	F312_16.8	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533



5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
105	2795	1.2	16.6	490	F252_16.6		P112 + BE112M4	N180TC	530...533
120	2433	1.4	14.5	498	F252_14.5		P112 + BE112M4	N180TC	530...533
125	2345	2.1	13.9	993	F312_13.9	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
134	2183	1.5	13.0	502	F252_13.0		P112 + BE112M4	N180TC	530...533
137	2140	2.3	12.7	978	F312_12.7	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
162	1807	2.7	10.7	951	F312_10.7	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
164	1787	1.8	10.6	504	F252_10.6		P112 + BE112M4	N180TC	530...533
186	1573	1.4	9.4	508	F252_9.4		P112 + BE112M4	N180TC	530...533
193	1516	2.1	9.0	910	F312_9.0	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
207	1412	1.5	8.4	504	F252_8.4		P112 + BE112M4	N180TC	530...533
211	1384	2.3	8.2	896	F312_8.2	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
250	1169	2.7	6.9	865	F312_6.9	S4 + ME4SA4	P112 + BE112M4	N180TC	530...533
253	1155	1.8	6.9	492	F252_6.9		P112 + BE112M4	N180TC	530...533
271	1078	1.0	6.4	330	F202_6.4		P112 + BE112M4	N180TC	510...513



7.5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
3.6	118432	1.0	495.6	11450	F904_495.6	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
3.8	109322	1.1	457.5	11450	F904_457.5	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
4.5	93680	1.3	392.0	11450	F904_392.0	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
4.9	86474	1.4	361.8	11450	F904_361.8	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
5.9	70910	1.0	296.7	9378	F804_296.7	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
6.0	69572	1.8	291.1	11450	F904_291.1	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
6.4	65455	1.1	273.9	9378	F804_273.9	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
6.5	64221	1.9	268.7	11450	F904_268.7	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
7.6	55298	2.2	231.4	11450	F904_231.4	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
8.1	52215	1.4	218.5	9378	F804_218.5	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
8.2	51044	2.4	213.6	11450	F904_213.6	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
8.8	49389	1.4	200.0	9378	F803_200.0	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
9.0	48407	0.9	196.0	6862	F703_196.0	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
9.1	47946	2.6	194.2	11450	F903_194.2	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
9.5	45590	1.6	184.6	9378	F803_184.6	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
9.7	44683	1.0	180.9	7278	F703_180.9	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
9.8	44258	2.8	179.2	11450	F903_179.2	S4 + ME4SB4	P132 + BE132S4	N210TC	586...589
10.6	41158	1.1	166.7	7278	F703_166.7	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
11.0	39568	1.8	160.2	9378	F803_160.2	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
11.4	37992	1.2	153.8	7278	F703_153.8	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
11.9	36524	1.9	147.9	9378	F803_147.9	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
13.2	32833	1.3	133.0	7278	F703_133.0	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
13.3	32768	2.2	132.7	9378	F803_132.7	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
14.3	30307	1.5	122.7	7278	F703_122.7	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
14.4	30247	2.3	122.5	9378	F803_122.5	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
15.5	28090	2.5	113.8	9378	F803_113.8	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
16.1	27069	1.6	109.6	7278	F703_109.6	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
16.5	26271	1.0	106.4	4159	F603_106.4	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
16.8	25929	2.7	105.0	9378	F803_105.0	S4 + ME4SB4	P132 + BE132S4	N210TC	578...581
17.4	24987	1.8	101.2	7278	F703_101.2	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
17.9	24250	1.1	98.2	4159	F603_98.2	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
19.0	22843	1.9	92.5	7278	F703_92.5	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
20.6	21085	2.1	85.4	7278	F703_85.4	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
20.9	20748	1.2	84.0	4159	F603_84.0	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
22.7	19152	1.3	77.6	4159	F603_77.6	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563

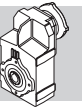


7.5 hp									
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
23.9	18165	2.4	73.6	7278	F703_73.6	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
25.8	16861	1.5	68.3	4159	F603_68.3	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
25.9	16768	2.6	67.9	7278	F703_67.9	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
27.9	15564	1.6	63.0	4159	F603_63.0	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
28.2	15434	2.9	62.5	7278	F703_62.5	S4 + ME4SB4	P132 + BE132S4	N210TC	570...573
34	12798	2.0	51.8	4159	F603_51.8	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
36	12076	1.1	48.9	2119	F513_48.9	S4 + ME4SB4	P132 + BE132S4	N210TC	550...553
37	11814	2.2	47.8	4159	F603_47.8	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
42	10393	2.5	42.1	4159	F603_42.1	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
45	9593	2.7	38.8	4159	F603_38.8	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
46	9632	0.9	38.2	1371	F412_38.2	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
47	9368	1.5	37.1	2119	F512_37.1	S4 + ME4SB4	P132 + BE132S4	N210TC	550...553
58	7598	1.2	30.1	1356	F412_30.1	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
59	7577	1.8	30.0	2047	F512_30.0	S4 + ME4SB4	P132 + BE132S4	N210TC	550...553
69	6277	2.5	25.4	4159	F603_25.4	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
73	6083	1.5	24.1	1356	F412_24.1	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
74	6002	2.2	23.8	1967	F512_23.8	S4 + ME4SB4	P132 + BE132S4	N210TC	550...553
75	5794	2.7	23.5	4159	F603_23.5	S4 + ME4SB4	P132 + BE132S4	N210TC	560...563
83	5326	0.9	21.1	900	F312_21.1	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
93	4765	1.9	18.9	1336	F412_18.9	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
94	4748	2.6	18.8	1874	F512_18.8	S4 + ME4SB4	P132 + BE132S4	N210TC	550...553
95	4664	1.1	18.5	923	F312_18.5	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
103	4318	2.0	17.1	1321	F412_17.1	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
105	4238	1.2	16.8	885	F312_16.8	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
120	3690	2.3	14.6	1295	F412_14.6	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
126	3518	1.4	13.9	861	F312_13.9	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
138	3211	1.5	12.7	820	F312_12.7	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
163	2717	2.7	10.8	1231	F412_10.8	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
164	2711	1.8	10.7	799	F312_10.7	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
193	2305	2.5	9.1	1198	F412_9.1	S4 + ME4SB4	P132 + BE132S4	N210TC	540...543
195	2274	1.4	9.0	793	F312_9.0	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
214	2076	1.5	8.2	772	F312_8.2	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533
253	1753	1.8	6.9	743	F312_6.9	S4 + ME4SB4	P132 + BE132S4	N210TC	530...533

10 hp									
n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
4.5	128030	1.0	392.0	11450	F904_392.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
4.9	118181	1.0	361.8	11450	F904_361.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
6.0	95082	1.3	291.1	11450	F904_291.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
6.5	87768	1.4	268.7	11450	F904_268.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
7.6	75574	1.6	231.4	11450	F904_231.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
8.1	71361	1.0	218.5	9378	F804_218.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
8.2	69760	1.8	213.6	11450	F904_213.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
8.8	67499	1.0	200.0	9378	F803_200.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
9.1	65526	1.9	194.2	11450	F903_194.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
9.5	62306	1.1	184.6	9378	F803_184.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
9.8	60485	2.0	179.2	11450	F903_179.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
10.8	54954	2.3	162.8	11450	F903_162.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
11.0	54076	1.3	160.2	9378	F803_160.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
11.7	50727	2.4	150.3	11450	F903_150.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
11.9	49916	1.4	147.9	9378	F803_147.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
12.8	46351	2.7	137.3	11450	F903_137.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589

10 hp

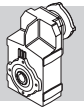
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
13.2	44871	1.0	133.0	7278	F703_133.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
13.3	44783	1.6	132.7	9378	F803_132.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
13.9	42786	2.9	126.8	11450	F903_126.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	586...589
14.3	41420	1.1	122.7	7278	F703_122.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
14.4	41338	1.7	122.5	9378	F803_122.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
15.5	38390	1.8	113.8	9378	F803_113.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
16.1	36994	1.2	109.6	7278	F703_109.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
16.8	35437	2.0	105.0	9378	F803_105.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
17.4	34149	1.3	101.2	7278	F703_101.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
19.0	31218	1.4	92.5	7278	F703_92.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
19.1	31153	2.3	92.3	9378	F803_92.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
20.6	28817	1.5	85.4	7278	F703_85.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
20.7	28757	2.5	85.2	9378	F803_85.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
20.9	28355	0.9	84.0	3951	F603_84.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
22.7	26174	1.0	77.6	4159	F603_77.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
23.1	25734	2.8	76.3	9378	F803_76.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
23.9	24825	1.8	73.6	7278	F703_73.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
25.0	23754	3.0	70.4	9315	F803_70.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	578...581
25.8	23044	1.1	68.3	4159	F603_68.3	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
25.9	22916	1.9	67.9	7278	F703_67.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
27.9	21271	1.2	63.0	4159	F603_63.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
28.2	21093	2.1	62.5	7278	F703_62.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
31	19471	2.3	57.7	7257	F703_57.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
34	17491	1.5	51.8	4159	F603_51.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
36	16523	2.5	49.0	7029	F703_49.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
37	16146	1.6	47.8	4159	F603_47.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
39	15252	2.7	45.2	6904	F703_45.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	570...573
42	14203	1.8	42.1	4159	F603_42.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
45	13111	2.0	38.8	4159	F603_38.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
47	12803	1.1	37.1	1870	F512_37.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
55	10828	2.3	32.1	4159	F603_32.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
59	10356	1.3	30.0	1853	F512_30.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
59	9995	2.4	29.6	4159	F603_29.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
69	8579	1.8	25.4	4159	F603_25.4	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
73	8314	1.1	24.1	1134	F412_24.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
74	8203	1.6	23.8	1812	F512_23.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
75	7919	2.0	23.5	4159	F603_23.5	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
85	6972	2.3	20.7	4159	F603_20.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
92	6436	2.4	19.1	4159	F603_19.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
93	6513	1.4	18.9	1161	F412_18.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
94	6489	1.9	18.8	1753	F512_18.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
103	5901	1.5	17.1	1165	F412_17.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
112	5292	3.0	15.7	4159	F603_15.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	560...563
120	5044	1.6	14.6	1161	F412_14.6	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
126	4819	2.4	14.0	1662	F512_14.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
126	4807	1.0	13.9	820	F312_13.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
138	4388	1.1	12.7	799	F312_12.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
158	3830	2.8	11.1	1584	F512_11.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
163	3714	2.0	10.8	1132	F412_10.8	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
164	3705	1.3	10.7	768	F312_10.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
193	3150	1.8	9.1	1115	F412_9.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543
194	3120	2.8	9.1	1500	F512_9.1	S4 + ME4LA4	P132 + BE132MA4	N210TC	550...553
195	3108	1.0	9.0	776	F312_9.0	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
214	2837	1.1	8.2	758	F312_8.2	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
253	2396	1.3	6.9	725	F312_6.9	S4 + ME4LA4	P132 + BE132MA4	N210TC	530...533
262	2319	2.3	6.7	1060	F412_6.7	S4 + ME4LA4	P132 + BE132MA4	N210TC	540...543



12.5 hp

n2 rpm	T2 lb·in	S	i	Rn2 lbs					
6.0	115954	1.1	291.1	11450	F904_291.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
6.5	107034	1.2	268.7	11450	F904_268.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
7.6	92163	1.3	231.4	11450	F904_231.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
8.2	85074	1.5	213.6	11450	F904_213.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
9.1	79910	1.6	194.2	11450	F903_194.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
9.5	75983	0.9	184.6	8753	F803_184.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
9.8	73763	1.7	179.2	11450	F903_179.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
10.8	67017	1.8	162.8	11450	F903_162.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
11.0	65946	1.1	160.2	9378	F803_160.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
11.7	61862	2.0	150.3	11450	F903_150.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
11.9	60873	1.2	147.9	9378	F803_147.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
12.8	56526	2.2	137.3	11450	F903_137.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
13.3	54613	1.3	132.7	9378	F803_132.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
13.9	52178	2.4	126.8	11450	F903_126.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
14.4	50412	1.4	122.5	9378	F803_122.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
15.5	46817	1.5	113.8	9378	F803_113.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
15.7	46074	2.7	111.9	11450	F903_111.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
16.1	45115	1.0	109.6	7278	F703_109.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
16.8	43216	1.6	105.0	9378	F803_105.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
17.0	42530	2.9	103.3	11450	F903_103.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	586...589
17.4	41645	1.1	101.2	7278	F703_101.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
19.0	38071	1.2	92.5	7278	F703_92.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
19.1	37992	1.9	92.3	9378	F803_92.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
20.6	35142	1.3	85.4	7278	F703_85.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
20.7	35069	2.0	85.2	9378	F803_85.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
23.1	31383	2.3	76.3	9190	F803_76.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
23.9	30275	1.5	73.6	7278	F703_73.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
25.0	28969	2.4	70.4	9107	F803_70.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
25.8	28102	0.9	68.3	3951	F603_68.3	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
25.9	27946	1.6	67.9	7195	F703_67.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
27.9	25941	1.0	63.0	4159	F603_63.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
28.2	25724	1.7	62.5	7112	F703_62.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
28.6	25295	2.8	61.5	8794	F803_61.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	578...581
31	23745	1.9	57.7	7008	F703_57.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
34	21331	1.2	51.8	4159	F603_51.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
36	20150	2.0	49.0	6821	F703_49.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
37	19690	1.3	47.8	4159	F603_47.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
39	18600	2.2	45.2	6717	F703_45.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	570...573
42	17321	1.5	42.1	4159	F603_42.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
45	15989	1.6	38.8	4159	F603_38.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
55	13205	1.9	32.1	4159	F603_32.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
59	12629	1.1	30.0	1689	F512_30.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
59	12189	2.0	29.6	4159	F603_29.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
69	10462	1.5	25.4	4159	F603_25.4	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
74	10004	1.3	23.8	1681	F512_23.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
75	9657	1.6	23.5	4159	F603_23.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
85	8502	1.9	20.7	4159	F603_20.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
92	7848	2.0	19.1	4159	F603_19.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
93	7942	1.1	18.9	1014	F412_18.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543
94	7913	1.6	18.8	1650	F512_18.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
103	7196	1.2	17.1	1031	F412_17.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543
112	6454	2.4	15.7	4159	F603_15.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
120	6151	1.4	14.6	1045	F412_14.6	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543
122	5957	2.6	14.5	4159	F603_14.5	S4 + ME4LB4	P132 + BE132MB4	N210TC	560...563
126	5877	2.0	14.0	1584	F512_14.0	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
138	5351	0.9	12.7	721	F312_12.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	530...533
158	4671	2.3	11.1	1522	F512_11.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553

12.5 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
163	4529	1.6	10.8	1047	F412_10.8	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543
164	4519	1.1	10.7	754	F312_10.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	530...533
193	3841	1.5	9.1	1047	F412_9.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543
194	3805	2.3	9.1	1448	F512_9.1	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
214	3460	0.9	8.2	690	F312_8.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	530...533
245	3025	2.6	7.2	1378	F512_7.2	S4 + ME4LB4	P132 + BE132MB4	N210TC	550...553
253	2922	1.1	6.9	710	F312_6.9	S4 + ME4LB4	P132 + BE132MB4	N210TC	530...533
262	2828	1.9	6.7	1008	F412_6.7	S4 + ME4LB4	P132 + BE132MB4	N210TC	540...543



15 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
6.6	128441	1.0	268.7	11450	F904_268.7	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
7.6	110596	1.1	231.4	11450	F904_231.4	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
8.3	102088	1.2	213.6	11450	F904_213.6	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
9.1	95892	1.3	194.2	11450	F903_194.2	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
9.8	88515	1.4	179.2	11450	F903_179.2	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
10.8	80421	1.5	162.8	11450	F903_162.8	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
11.7	74235	1.7	150.3	11450	F903_150.3	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
11.9	73048	1.0	147.9	8961	F803_147.9	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
12.9	67831	1.8	137.3	11450	F903_137.3	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
13.3	65536	1.1	132.7	9378	F803_132.7	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
13.9	62613	2.0	126.8	11450	F903_126.8	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
14.4	60495	1.2	122.5	9378	F803_122.5	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
15.5	56180	1.3	113.8	9378	F803_113.8	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
15.8	55289	2.2	111.9	11450	F903_111.9	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
16.8	51859	1.4	105.0	9253	F803_105.0	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
17.1	51036	2.4	103.3	11450	F903_103.3	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
18.4	47295	2.6	95.8	11450	F903_95.8	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
19.1	45685	1.0	92.5	6654	F703_92.5	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
19.1	45590	1.6	92.3	9190	F803_92.3	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
20.0	43657	2.8	88.4	11450	F903_88.4	S5 + ME5SA4	P160 + BE160M4	N250TC	586...589
20.7	42171	1.0	85.4	6904	F703_85.4	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
20.7	42083	1.7	85.2	9170	F803_85.2	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
23.1	37659	1.9	76.3	8919	F803_76.3	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
24.0	36330	1.2	73.6	6966	F703_73.6	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
25.1	34762	2.0	70.4	8857	F803_70.4	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
26.0	33535	1.3	67.9	6883	F703_67.9	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
28.2	30868	1.4	62.5	6842	F703_62.5	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
28.7	30354	2.3	61.5	8565	F803_61.5	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
31	28494	1.6	57.7	6758	F703_57.7	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
31	28019	2.5	56.7	8503	F803_56.7	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
34	25597	1.0	51.8	4159	F603_51.8	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
36	24254	2.9	49.1	8148	F803_49.1	S5 + ME5SA4	P160 + BE160M4	N250TC	578...581
36	24180	1.7	49.0	6613	F703_49.0		P160 + BE160M4	N250TC	570...573
37	23628	1.1	47.8	4159	F603_47.8		P160 + BE160M4	N250TC	560...563
39	22320	1.8	45.2	6509	F703_45.2		P160 + BE160M4	N250TC	570...573
42	20785	1.2	42.1	4159	F603_42.1		P160 + BE160M4	N250TC	560...563
45	19187	1.3	38.8	4159	F603_38.8	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
46	18962	2.2	38.4	6280	F703_38.4		P160 + BE160M4	N250TC	570...573
50	17503	2.3	35.4	6155	F703_35.4		P160 + BE160M4	N250TC	570...573
55	15846	1.6	32.1	4159	F603_32.1	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
59	15155	0.9	30.0	1561	F512_30.0	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553

15 hp

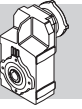
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
59	14817	2.8	30.0	6031	F703_30.0	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
60	14627	1.7	29.6	4159	F603_29.6		P160 + BE160M4	N250TC	560...563
64	13677	2.8	27.7	5885	F703_27.7		P160 + BE160M4	N250TC	570...573
69	12554	1.3	25.4	4159	F603_25.4		P160 + BE160M4	N250TC	560...563
72	12129	2.7	24.6	5781	F703_24.6	S5 + ME5SA4	P160 + BE160M4	N250TC	570...573
74	12005	1.1	23.8	1543	F512_23.8	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553
75	11589	1.4	23.5	4159	F603_23.5	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
85	10203	1.5	20.7	4159	F603_20.7	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
93	9418	1.7	19.1	4159	F603_19.1	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
94	9496	1.3	18.8	1541	F512_18.8	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553
113	7744	2.0	15.7	4159	F603_15.7	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
122	7149	2.2	14.5	4159	F603_14.5	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
126	7052	1.6	14.0	1504	F512_14.0	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553
139	6289	2.5	12.7	4034	F603_12.7	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
150	5805	2.7	11.8	3951	F603_11.8	S5 + ME5SA4	P160 + BE160M4	N250TC	560...563
159	5605	1.9	11.1	1458	F512_11.1	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553
195	4566	1.9	9.1	1393	F512_9.1	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553
245	3630	2.2	7.2	1335	F512_7.2	S5 + ME5SA4	P160 + BE160M4	N250TC	550...553

20 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs					
9.1	129454	1.0	194.2	11450	F903_194.2	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
9.9	119496	1.0	179.2	11450	F903_179.2	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
10.9	108568	1.1	162.8	11450	F903_162.8	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
11.8	100217	1.2	150.3	11450	F903_150.3	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
12.9	91572	1.4	137.3	11450	F903_137.3	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
14.0	84528	1.5	126.8	11450	F903_126.8	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
15.6	75843	0.9	113.8	8544	F803_113.8	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
15.8	74641	1.7	111.9	11450	F903_111.9	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
16.9	70009	1.0	105.0	8711	F803_105.0	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
17.1	68899	1.8	103.3	11450	F903_103.3	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
18.5	63848	1.9	95.8	11450	F903_95.8	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
19.2	61547	1.2	92.3	8607	F803_92.3	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
20.0	58937	2.1	88.4	11450	F903_88.4	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
20.8	56812	1.2	85.2	8503	F803_85.2	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
23.1	51107	2.4	76.7	11450	F903_76.7	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
23.2	50840	1.4	76.3	8440	F803_76.3	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
24.1	49045	0.9	73.6	6509	F703_73.6	S5 + ME5LA4	P160 + BE160L4	N250TC	570...573
25.0	47175	2.6	70.8	11450	F903_70.8	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
25.1	46929	1.5	70.4	8315	F803_70.4	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
26.1	45272	1.0	67.9	6634	F703_67.9	S5 + ME5LA4	P160 + BE160L4	N250TC	570...573
28.3	41672	1.1	62.5	6509	F703_62.5	S5 + ME5LA4	P160 + BE160L4	N250TC	570...573
28.5	41405	3.0	62.1	11450	F903_62.1	S5 + ME5LA4	P160 + BE160L4	N250TC	586...589
28.8	40978	1.7	61.5	8065	F803_61.5		P160 + BE160L4	N250TC	578...581
31	38467	1.2	57.7	6176	F703_57.7		P160 + BE160L4	N250TC	570...573
31	37826	1.9	56.7	8044	F803_56.7		P160 + BE160L4	N250TC	578...581
36	32742	2.2	49.1	7877	F803_49.1	S5 + ME5LA4	P160 + BE160L4	N250TC	578...581
36	32643	1.3	49.0	6114	F703_49.0		P160 + BE160L4	N250TC	570...573
39	30224	2.3	45.3	7752	F803_45.3		P160 + BE160L4	N250TC	578...581
39	30132	1.4	45.2	6051	F703_45.2		P160 + BE160L4	N250TC	570...573
42	28060	0.9	42.1	3951	F603_42.1	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
45	26003	2.5	39.0	7461	F803_39.0		P160 + BE160L4	N250TC	578...581

20 hp

n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
46	25902	1.0	38.8	4159	F603_38.8	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
46	25599	1.6	38.4	5947	F703_38.4		P160 + BE160L4	N250TC	570...573
49	24003	2.7	36.0	7336	F803_36.0		P160 + BE160L4	N250TC	578...581
50	23630	1.7	35.4	5864	F703_35.4		P160 + BE160L4	N250TC	570...573
55	21392	1.2	32.1	4159	F603_32.1	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
59	20003	2.1	30.0	5760	F703_30.0		P160 + BE160L4	N250TC	570...573
60	19746	1.2	29.6	4159	F603_29.6		P160 + BE160L4	N250TC	560...563
64	18464	2.1	27.7	5635	F703_27.7		P160 + BE160L4	N250TC	570...573
70	16948	0.9	25.4	3951	F603_25.4	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
72	16373	2.0	24.6	5511	F703_24.6		P160 + BE160L4	N250TC	570...573
75	15645	1.0	23.5	4159	F603_23.5		P160 + BE160L4	N250TC	560...563
78	15071	2.4	22.6	5448	F703_22.6		P160 + BE160L4	N250TC	570...573
85	13912	2.4	20.9	5344	F703_20.9	S5 + ME5LA4	P160 + BE160L4	N250TC	570...573
86	13774	1.1	20.7	4159	F603_20.7		P160 + BE160L4	N250TC	560...563
93	12714	1.2	19.1	4159	F603_19.1		P160 + BE160L4	N250TC	560...563
94	12819	1.0	18.8	1399	F512_18.8		P160 + BE160L4	N250TC	550...553
113	10455	1.5	15.7	4076	F603_15.7	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
122	9651	1.6	14.5	3993	F603_14.5		P160 + BE160L4	N250TC	560...563
127	9520	1.2	14.0	1327	F512_14.0		P160 + BE160L4	N250TC	550...553
139	8490	1.9	12.7	3909	F603_12.7		P160 + BE160L4	N250TC	560...563
151	7837	2.0	11.8	3826	F603_11.8	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
159	7567	1.4	11.1	1234	F512_11.1		P160 + BE160L4	N250TC	550...553
182	6472	2.4	9.7	3681	F603_9.7		P160 + BE160L4	N250TC	560...563
196	6165	1.4	9.1	1193	F512_9.1		P160 + BE160L4	N250TC	550...553
198	5974	2.6	9.0	3598	F603_9.0	S5 + ME5LA4	P160 + BE160L4	N250TC	560...563
246	4900	1.6	7.2	1160	F512_7.2		P160 + BE160L4	N250TC	550...553



25 hp

n ₂ rpm	T ₂ lb-in	S	i	Rn ₂ lbs					
10.8	134035	0.9	162.8	10929	F903_162.8		P180 + BE180M4	N280TC	586...589
11.7	123725	1.0	150.3	11450	F903_150.3		P180 + BE180M4	N280TC	586...589
12.9	113052	1.1	137.3	11450	F903_137.3		P180 + BE180M4	N280TC	586...589
13.9	104356	1.2	126.8	11450	F903_126.8		P180 + BE180M4	N280TC	586...589
15.8	92149	1.3	111.9	11450	F903_111.9		P180 + BE180M4	N280TC	586...589
17.1	85061	1.5	103.3	11450	F903_103.3		P180 + BE180M4	N280TC	586...589
18.4	78825	1.6	95.8	11450	F903_95.8		P180 + BE180M4	N280TC	586...589
19.1	75983	0.9	92.3	7877	F803_92.3		P180 + BE180M4	N280TC	578...581
20.0	72762	1.7	88.4	11450	F903_88.4		P180 + BE180M4	N280TC	586...589
20.7	70139	1.0	85.2	8023	F803_85.2		P180 + BE180M4	N280TC	578...581
23.0	63095	2.0	76.7	11450	F903_76.7		P180 + BE180M4	N280TC	586...589
23.1	62766	1.1	76.3	7940	F803_76.3		P180 + BE180M4	N280TC	578...581
24.9	58241	2.1	70.8	11450	F903_70.8		P180 + BE180M4	N280TC	586...589
25.1	57937	1.2	70.4	7836	F803_70.4		P180 + BE180M4	N280TC	578...581
28.4	51118	2.4	62.1	11450	F903_62.1		P180 + BE180M4	N280TC	586...589
28.7	50590	1.4	61.5	7794	F803_61.5		P180 + BE180M4	N280TC	578...581
31	47490	0.9	57.7	5968	F703_57.7		P180 + BE180M4	N280TC	570...573
31	47186	2.4	57.3	11450	F903_57.3		P180 + BE180M4	N280TC	586...589
31	46698	1.5	56.7	7669	F803_56.7		P180 + BE180M4	N280TC	578...581
35	41072	2.8	49.9	11450	F903_49.9		P180 + BE180M4	N280TC	586...589
36	40423	1.8	49.1	7461	F803_49.1		P180 + BE180M4	N280TC	578...581
36	40300	1.0	49.0	5698	F703_49.0		P180 + BE180M4	N280TC	570...573
39	37313	1.9	45.3	7440	F803_45.3		P180 + BE180M4	N280TC	578...581

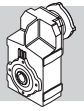
25 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
39	37200	1.1	45.2	5656	F703_45.2		P180 + BE180M4	N280TC	570...573
45	32103	2.0	39.0	7294	F803_39.0		P180 + BE180M4	N280TC	578...581
46	31603	1.3	38.4	5615	F703_38.4		P180 + BE180M4	N280TC	570...573
49	29634	2.2	36.0	7169	F803_36.0		P180 + BE180M4	N280TC	578...581
50	29172	1.4	35.4	5552	F703_35.4		P180 + BE180M4	N280TC	570...573
55	26410	0.9	32.1	3847	F603_32.1		P180 + BE180M4	N280TC	560...563
56	25724	2.6	31.3	6961	F803_31.3		P180 + BE180M4	N280TC	578...581
59	24695	1.7	30.0	5511	F703_30.0		P180 + BE180M4	N280TC	570...573
60	24378	1.0	29.6	3993	F603_29.6		P180 + BE180M4	N280TC	560...563
61	23745	2.8	28.8	6877	F803_28.8		P180 + BE180M4	N280TC	578...581
64	22795	1.7	27.7	5407	F703_27.7		P180 + BE180M4	N280TC	570...573
70	20765	2.5	25.2	6690	F803_25.2		P180 + BE180M4	N280TC	578...581
72	20214	1.6	24.6	5303	F703_24.6		P180 + BE180M4	N280TC	570...573
78	18607	1.9	22.6	5240	F703_22.6		P180 + BE180M4	N280TC	570...573
85	17175	1.9	20.9	5178	F703_20.9		P180 + BE180M4	N280TC	570...573
85	17005	0.9	20.7	3847	F603_20.7		P180 + BE180M4	N280TC	560...563
93	15697	1.0	19.1	3993	F603_19.1		P180 + BE180M4	N280TC	560...563
100	14575	2.4	17.7	5032	F703_17.7		P180 + BE180M4	N280TC	570...573
108	13454	2.4	16.3	4949	F703_16.3		P180 + BE180M4	N280TC	570...573
113	12907	1.2	15.7	3889	F603_15.7		P180 + BE180M4	N280TC	560...563
122	11914	1.3	14.5	3868	F603_14.5		P180 + BE180M4	N280TC	560...563
126	11753	1.0	14.0	1214	F512_14.0		P180 + BE180M4	N280TC	550...553
127	11430	2.8	13.9	4783	F703_13.9		P180 + BE180M4	N280TC	570...573
138	10551	2.8	12.8	4700	F703_12.8		P180 + BE180M4	N280TC	570...573
139	10481	1.5	12.7	3805	F603_12.7		P180 + BE180M4	N280TC	560...563
150	9675	1.6	11.8	3722	F603_11.8		P180 + BE180M4	N280TC	560...563
159	9342	1.1	11.1	1193	F512_11.1		P180 + BE180M4	N280TC	550...553
182	7990	2.0	9.7	3598	F603_9.7		P180 + BE180M4	N280TC	560...563
195	7611	1.2	9.1	1158	F512_9.1		P180 + BE180M4	N280TC	550...553
197	7375	2.1	9.0	3514	F603_9.0		P180 + BE180M4	N280TC	560...563
245	6049	1.3	7.2	1111	F512_7.2		P180 + BE180M4	N280TC	550...553

30 hp

n ₂ rpm	T ₂ lb·in	S	i	Rn ₂ lbs					
12.9	134532	0.9	137.3	10929	F903_137.3		P180 + BE180L4	N280TC	586...589
14.0	124183	1.0	126.8	11408	F903_126.8		P180 + BE180L4	N280TC	586...589
15.8	109657	1.1	111.9	11450	F903_111.9		P180 + BE180L4	N280TC	586...589
17.1	101222	1.2	103.3	11450	F903_103.3		P180 + BE180L4	N280TC	586...589
18.5	93802	1.3	95.8	11450	F903_95.8		P180 + BE180L4	N280TC	586...589
20.0	86587	1.4	88.4	11450	F903_88.4		P180 + BE180L4	N280TC	586...589
23.1	75083	1.7	76.7	11450	F903_76.7		P180 + BE180L4	N280TC	586...589
23.2	74691	0.9	76.3	7273	F803_76.3		P180 + BE180L4	N280TC	578...581
25.0	69307	1.8	70.8	11450	F903_70.8		P180 + BE180L4	N280TC	586...589
25.1	68946	1.0	70.4	7273	F803_70.4		P180 + BE180L4	N280TC	578...581
28.5	60830	2.0	62.1	11450	F903_62.1		P180 + BE180L4	N280TC	586...589
28.8	60202	1.2	61.5	7377	F803_61.5		P180 + BE180L4	N280TC	578...581
31	56151	2.1	57.3	11450	F903_57.3		P180 + BE180L4	N280TC	586...589
31	55571	1.3	56.7	7294	F803_56.7		P180 + BE180L4	N280TC	578...581
35	48876	2.4	49.9	11325	F903_49.9		P180 + BE180L4	N280TC	586...589
36	48103	1.5	49.1	7106	F803_49.1		P180 + BE180L4	N280TC	578...581
38	45116	2.5	46.1	11137	F903_46.1		P180 + BE180L4	N280TC	586...589
39	44403	1.6	45.3	7148	F803_45.3		P180 + BE180L4	N280TC	578...581
39	44268	0.9	45.2	5427	F703_45.2		P180 + BE180L4	N280TC	570...573

30 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
44	39672	2.9	40.5	10888	F903_40.5		P180 + BE180L4	N280TC	586...589
45	38203	1.7	39.0	6940	F803_39.0		P180 + BE180L4	N280TC	578...581
46	37608	1.1	38.4	5282	F703_38.4		P180 + BE180L4	N280TC	570...573
49	35264	1.9	36.0	6919	F803_36.0		P180 + BE180L4	N280TC	578...581
50	34715	1.2	35.4	5261	F703_35.4		P180 + BE180L4	N280TC	570...573
57	30611	2.1	31.3	6794	F803_31.3		P180 + BE180L4	N280TC	578...581
59	29387	1.4	30.0	5220	F703_30.0		P180 + BE180L4	N280TC	570...573
61	28256	2.3	28.8	6669	F803_28.8		P180 + BE180L4	N280TC	578...581
64	27126	1.4	27.7	5157	F703_27.7		P180 + BE180L4	N280TC	570...573
70	24710	2.1	25.2	6523	F803_25.2		P180 + BE180L4	N280TC	578...581
72	24055	1.4	24.6	5095	F703_24.6		P180 + BE180L4	N280TC	570...573
78	22142	1.6	22.6	5053	F703_22.6		P180 + BE180L4	N280TC	570...573
80	21576	2.6	22.0	6294	F803_22.0		P180 + BE180L4	N280TC	578...581
85	20439	1.6	20.9	4991	F703_20.9		P180 + BE180L4	N280TC	570...573
87	19917	2.6	20.3	6231	F803_20.3		P180 + BE180L4	N280TC	578...581
100	17345	2.1	17.7	4866	F703_17.7		P180 + BE180L4	N280TC	570...573
108	16010	2.0	16.3	4804	F703_16.3		P180 + BE180L4	N280TC	570...573
113	15359	1.0	15.7	3785	F603_15.7		P180 + BE180L4	N280TC	560...563
122	14178	1.1	14.5	3743	F603_14.5		P180 + BE180L4	N280TC	560...563
127	13602	2.4	13.9	4658	F703_13.9		P180 + BE180L4	N280TC	570...573
138	12555	2.4	12.8	4596	F703_12.8		P180 + BE180L4	N280TC	570...573
139	12472	1.3	12.7	3681	F603_12.7		P180 + BE180L4	N280TC	560...563
151	11513	1.4	11.8	3618	F603_11.8		P180 + BE180L4	N280TC	560...563
159	11117	1.0	11.1	1066	F512_11.1		P180 + BE180L4	N280TC	550...553
163	10628	2.7	10.9	4450	F703_10.9		P180 + BE180L4	N280TC	570...573
177	9811	2.7	10.0	4367	F703_10.0		P180 + BE180L4	N280TC	570...573
182	9508	1.7	9.7	3514	F603_9.7		P180 + BE180L4	N280TC	560...563
196	9057	1.0	9.1	1080	F512_9.1		P180 + BE180L4	N280TC	550...553
198	8777	1.8	9.0	3431	F603_9.0		P180 + BE180L4	N280TC	560...563
246	7199	1.1	7.2	1080	F512_7.2		P180 + BE180L4	N280TC	550...553



40 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
18.4	127697	1.0	95.8	10763	F903_95.8		P200 + IEC200L4	N320TC	586...589
19.9	117874	1.1	88.4	10867	F903_88.4		P200 + IEC200L4	N320TC	586...589
23.0	102214	1.2	76.7	10908	F903_76.7		P200 + IEC200L4	N320TC	586...589
24.9	94351	1.3	70.8	10846	F903_70.8		P200 + IEC200L4	N320TC	586...589
28.3	82811	1.5	62.1	10783	F903_62.1		P200 + IEC200L4	N320TC	586...589
31	76441	1.5	57.3	10700	F903_57.3		P200 + IEC200L4	N320TC	586...589
31	75651	0.9	56.7	6502	F803_56.7		P200 + IEC200L4	N320TC	578...581
35	66537	1.7	49.9	10575	F903_49.9		P200 + IEC200L4	N320TC	586...589
36	65485	1.1	49.1	6377	F803_49.1		P200 + IEC200L4	N320TC	578...581
38	61419	1.9	46.1	10450	F903_46.1		P200 + IEC200L4	N320TC	586...589
39	60448	1.2	45.3	6440	F803_45.3		P200 + IEC200L4	N320TC	578...581
43	54007	2.1	40.5	10284	F903_40.5		P200 + IEC200L4	N320TC	586...589
45	52007	1.3	39.0	6460	F803_39.0		P200 + IEC200L4	N320TC	578...581
47	49853	2.2	37.4	10138	F903_37.4		P200 + IEC200L4	N320TC	586...589
49	48006	1.4	36.0	6377	F803_36.0		P200 + IEC200L4	N320TC	578...581
56	41672	1.6	31.3	6231	F803_31.3		P200 + IEC200L4	N320TC	578...581
57	41333	2.6	31.0	9847	F903_31.0		P200 + IEC200L4	N320TC	586...589
59	40005	1.0	30.0	4637	F703_30.0		P200 + IEC200L4	N320TC	570...573
61	38467	1.7	28.8	6148	F803_28.8		P200 + IEC200L4	N320TC	578...581

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

40 hp

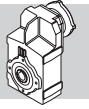
n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs				NEMA	
62	38154	2.6	28.6	9701	F903_28.6		P200 + IEC200L4	N320TC	586...589
64	36928	1.0	27.7	4616	F703_27.7		P200 + IEC200L4	N320TC	570...573
69	33853	2.9	25.4	9472	F903_25.4		P200 + IEC200L4	N320TC	586...589
70	33639	1.5	25.2	6148	F803_25.2		P200 + IEC200L4	N320TC	578...581
80	29373	1.9	22.0	6044	F803_22.0		P200 + IEC200L4	N320TC	578...581
87	27113	1.9	20.3	5939	F803_20.3		P200 + IEC200L4	N320TC	578...581
99	23612	1.5	17.7	4533	F703_17.7		P200 + IEC200L4	N320TC	570...573
100	23470	2.4	17.6	5814	F803_17.6		P200 + IEC200L4	N320TC	578...581
108	21796	1.5	16.3	4471	F703_16.3		P200 + IEC200L4	N320TC	570...573
108	21664	2.4	16.2	5710	F803_16.2		P200 + IEC200L4	N320TC	578...581
126	18639	3.0	14.0	5564	F803_14.0		P200 + IEC200L4	N320TC	578...581
127	18516	1.7	13.9	4388	F703_13.9		P200 + IEC200L4	N320TC	570...573
136	17205	3.0	12.9	5460	F803_12.9		P200 + IEC200L4	N320TC	578...581
137	17092	1.7	12.8	4346	F703_12.8		P200 + IEC200L4	N320TC	570...573
162	14469	2.0	10.9	4221	F703_10.9		P200 + IEC200L4	N320TC	570...573
176	13356	2.0	10.0	4159	F703_10.0		P200 + IEC200L4	N320TC	570...573

50 hp

n ₂ rpm	T ₂ lb·in	S	i	R _{n2} lbs				NEMA	
23.0	125874	1.0	76.7	10305	F903_76.7		P225 + IEC225S4	N320TC	586...589
24.9	116191	1.1	70.8	9909	F903_70.8		P225 + IEC225S4	N320TC	586...589
28.4	101980	1.2	62.1	10055	F903_62.1		P225 + IEC225S4	N320TC	586...589
31	94136	1.2	57.3	9930	F903_57.3		P225 + IEC225S4	N320TC	586...589
35	81939	1.4	49.9	9909	F903_49.9		P225 + IEC225S4	N320TC	586...589
38	75636	1.5	46.1	9826	F903_46.1		P225 + IEC225S4	N320TC	586...589
39	74440	0.9	45.3	5898	F803_45.3		P225 + IEC225S4	N320TC	578...581
44	66509	1.7	40.5	9743	F903_40.5		P225 + IEC225S4	N320TC	586...589
45	64046	1.0	39.0	5939	F803_39.0		P225 + IEC225S4	N320TC	578...581
47	61393	1.8	37.4	9638	F903_37.4		P225 + IEC225S4	N320TC	586...589
49	59119	1.1	36.0	5898	F803_36.0		P225 + IEC225S4	N320TC	578...581
56	51319	1.3	31.3	5919	F803_31.3		P225 + IEC225S4	N320TC	578...581
57	50901	2.1	31.0	9430	F903_31.0		P225 + IEC225S4	N320TC	586...589
61	47371	1.4	28.8	5856	F803_28.8		P225 + IEC225S4	N320TC	578...581
62	46986	2.1	28.6	9305	F903_28.6		P225 + IEC225S4	N320TC	586...589
70	41689	2.4	25.4	9139	F903_25.4		P225 + IEC225S4	N320TC	586...589
70	41426	1.2	25.2	5793	F803_25.2		P225 + IEC225S4	N320TC	578...581
79	36590	2.7	22.3	8951	F903_22.3		P225 + IEC225S4	N320TC	586...589
80	36172	1.5	22.0	5752	F803_22.0		P225 + IEC225S4	N320TC	578...581
86	33775	2.7	20.6	8806	F903_20.6		P225 + IEC225S4	N320TC	586...589
87	33390	1.5	20.3	5668	F803_20.3		P225 + IEC225S4	N320TC	578...581
100	28903	1.9	17.6	5585	F803_17.6		P225 + IEC225S4	N320TC	578...581
109	26679	1.9	16.2	5481	F803_16.2		P225 + IEC225S4	N320TC	578...581
126	22954	2.4	14.0	5377	F803_14.0		P225 + IEC225S4	N320TC	578...581
137	21188	2.4	12.9	5272	F803_12.9		P225 + IEC225S4	N320TC	578...581
158	18393	2.7	11.2	5106	F803_11.2		P225 + IEC225S4	N320TC	578...581
171	16978	2.7	10.3	5064	F803_10.3		P225 + IEC225S4	N320TC	578...581

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

60 hp									
n ₂ rpm	T ₂ lb-in	S	i	R _{n2} lbs					
28.5	123705	1.0	62.1	9430	F903_62.1		P225 + IEC225M4		586...589
31	114190	1.0	57.3	9201	F903_57.3		P225 + IEC225M4		586...589
35	99395	1.2	49.9	9305	F903_49.9		P225 + IEC225M4		586...589
38	91749	1.3	46.1	9139	F903_46.1		P225 + IEC225M4		586...589
44	80677	1.4	40.5	9139	F903_40.5		P225 + IEC225M4		586...589
47	74471	1.5	37.4	9076	F903_37.4		P225 + IEC225M4		586...589
49	71713	0.9	36.0	5314	F803_36.0		P225 + IEC225M4		578...581
57	62251	1.1	31.3	5439	F803_31.3		P225 + IEC225M4		578...581
57	61745	1.7	31.0	8972	F903_31.0		P225 + IEC225M4		586...589
61	57463	1.1	28.8	5418	F803_28.8		P225 + IEC225M4		578...581
62	56995	1.7	28.6	8868	F903_28.6		P225 + IEC225M4		586...589
70	50570	1.9	25.4	8743	F903_25.4		P225 + IEC225M4		586...589
70	50251	1.0	25.2	5418	F803_25.2		P225 + IEC225M4		578...581
79	44385	2.2	22.3	8618	F903_22.3		P225 + IEC225M4		586...589
80	43878	1.3	22.0	5418	F803_22.0		P225 + IEC225M4		578...581
86	40971	2.3	20.6	8494	F903_20.6		P225 + IEC225M4		586...589
87	40503	1.3	20.3	5356	F803_20.3		P225 + IEC225M4		578...581
99	35662	2.5	17.9	8306	F903_17.9		P225 + IEC225M4		586...589
101	35060	1.6	17.6	5314	F803_17.6		P225 + IEC225M4		578...581
107	32919	2.6	16.5	8181	F903_16.5		P225 + IEC225M4		586...589
109	32363	1.6	16.2	5252	F803_16.2		P225 + IEC225M4		578...581
122	28947	2.8	14.5	7994	F903_14.5		P225 + IEC225M4		586...589
127	27844	2.0	14.0	5168	F803_14.0		P225 + IEC225M4		578...581
132	26720	2.9	13.4	7869	F903_13.4		P225 + IEC225M4		586...589
137	25702	2.0	12.9	5022	F803_12.9		P225 + IEC225M4		578...581
158	22311	2.2	11.2	5002	F803_11.2		P225 + IEC225M4		578...581
171	20595	2.2	10.3	4897	F803_10.3		P225 + IEC225M4		578...581



75 hp									
n ₂ min-1	T ₂ lb-in	S	i	R _{n2} lbs					
35	121163	1.0	49.9	8473	F903_49.9		P250 + IEC250M4		586...589
38	111843	1.0	46.1	8265	F903_46.1		P250 + IEC250M4		586...589
44	98346	1.2	40.5	8389	F903_40.5		P250 + IEC250M4		586...589
47	90781	1.2	37.4	8369	F903_37.4		P250 + IEC250M4		586...589
57	75268	1.4	31.0	8389	F903_31.0		P250 + IEC250M4		586...589
62	69478	1.4	28.6	8348	F903_28.6		P250 + IEC250M4		586...589
70	61646	1.6	25.4	8265	F903_25.4		P250 + IEC250M4		586...589
79	54106	1.8	22.3	8202	F903_22.3		P250 + IEC250M4		586...589
86	49944	1.9	20.6	8098	F903_20.6		P250 + IEC250M4		586...589
99	43473	2.1	17.9	7973	F903_17.9		P250 + IEC250M4		586...589
107	40129	2.1	16.5	7869	F903_16.5		P250 + IEC250M4		586...589
122	35286	2.3	14.5	7723	F903_14.5		P250 + IEC250M4		586...589
132	32572	2.3	13.4	7619	F903_13.4		P250 + IEC250M4		586...589
159	27006	2.7	11.1	7369	F903_11.1		P250 + IEC250M4		586...589
172	24928	2.6	10.3	7244	F903_10.3		P250 + IEC250M4		586...589

The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 30 HP.

53 GEARBOX RATING CHARTS

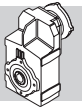
F 10

1240 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb-in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb-in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 10 2_7.4	7.4	243	617	2.5	266	340	162	708	1.9	295	387	506 507
F 10 2_8.6	8.6	209	666	2.3	260	354	140	764	1.8	295	404	
F 10 2_9.8	9.8	184	722	2.2	258	369	122	829	1.7	295	421	
F 10 2_11.5	11.5	157	779	2.0	252	387	104	894	1.6	295	442	
F 10 2_13.0	13.0	138	844	2.0	249	402	92	968	1.5	295	458	
F 10 2_14.6	14.6	123	966	2.0	268	414	82	1108	1.5	295	473	
F 10 2_17.0	17.0	106	1039	1.8	268	433	71	1192	1.4	295	494	
F 10 2_19.3	19.3	93	1104	1.7	268	451	62	1240	1.3	295	515	
F 10 2_22.8	22.8	79	1136	1.5	268	478	53	1240	1.1	295	546	
F 10 2_25.8	25.8	70	1136	1.3	268	503	47	1240	0.96	295	574	
F 10 2_29.6	29.6	61	1168	1.2	268	530	41	1240	0.84	295	605	
F 10 2_33.0	33.0	55	1213	1.1	268	553	36	1240	0.75	295	630	
F 10 2_35.3	35.3	51	1240	1.1	268	567	34	1240	0.70	295	630	
F 10 2_39.6	39.6	45	1240	0.94	268	580	30	1240	0.63	295	630	
F 10 2_44.7	44.7	40	1240	0.83	268	580	26.8	1240	0.56	295	630	
F 10 2_48.7	48.7	37	1240	0.76	268	580	24.6	1240	0.51	295	630	
F 10 2_56.7	56.7	32	1240	0.66	268	580	21.2	1240	0.44	295	630	
F 10 2_63.0	63.0	28.6	1240	0.59	268	589	19.0	1240	0.39	295	630	
F 10 2_71.1	71.1	25.3	1240	0.52	268	618	16.9	1240	0.35	295	630	
F 10 2_81.3	81.3	22.1	1240	0.46	268	630	14.8	1240	0.31	295	630	
F 10 2_91.5	91.5	19.7	1240	0.41	268	630	13.1	1240	0.27	295	630	
F 10 2_106.0	106.0	17.0	1240	0.35	268	630	11.3	1240	0.23	295	630	
F 10 2_127.1	127.1	14.2	1240	0.29	268	630	9.4	1240	0.20	295	630	

F 20

2200 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 20 2_6.4	6.4	281	1059	5.0	—	355	188	1208	3.8	—	408	
F 20 2_7.8	7.8	231	1173	4.5	—	375	154	1338	3.4	—	432	
F 20 2_8.7	8.7	207	1262	4.4	—	386	138	1441	3.3	—	444	
F 20 2_10.0	10.0	180	1344	4.0	—	402	120	1533	3.1	—	463	
F 20 2_11.2	11.2	161	1441	3.9	—	414	107	1645	2.9	—	477	
F 20 2_14.8	14.8	122	1653	3.4	210	456	81	1887	2.6	241	525	
F 20 2_18.1	18.1	99	1734	2.9	212	491	66	1980	2.2	244	565	
F 20 2_20.2	20.2	89	1816	2.7	222	507	59	2072	2.1	256	584	
F 20 2_23.1	23.1	78	1914	2.5	208	530	52	2184	1.9	239	610	
F 20 2_25.9	25.9	69	1954	2.3	228	552	46	2200	1.7	263	636	
F 20 2_30.4	30.4	59	2036	2.0	218	585	39	2200	1.5	251	674	
F 20 2_33.1	33.1	54	2036	1.8	233	606	36	2200	1.3	268	698	
F 20 2_37.9	37.9	47	2036	1.6	235	641	32	2200	1.2	270	738	
F 20 2_41.8	41.8	43	2036	1.5	253	668	28.7	2200	1.1	292	769	
F 20 2_44.8	44.8	40	2080	1.4	249	686	26.8	2200	0.99	287	791	
F 20 2_50.7	50.7	36	2107	1.2	274	722	23.7	2200	0.87	315	831	
F 20 2_56.7	56.7	32	2200	1.2	283	755	21.2	2200	0.78	325	869	
F 20 2_61.9	61.9	29.1	2200	1.1	285	781	19.4	2200	0.72	327	899	
F 20 2_69.1	69.1	26.0	2200	0.96	285	814	17.4	2200	0.64	327	899	
F 20 2_76.8	76.8	23.4	2200	0.87	287	825	15.6	2200	0.58	330	900	
F 20 2_90.4	90.4	19.9	2200	0.74	289	825	13.3	2200	0.49	332	900	
F 20 2_101.6	101.6	17.7	2200	0.65	289	825	11.8	2200	0.44	332	900	
F 20 2_114.3	114.3	15.7	2200	0.58	291	825	10.5	2200	0.39	335	900	
F 20 2_132.2	132.2	13.6	2200	0.50	291	875	9.1	2200	0.34	335	900	
F 20 3_156.3	156.3	11.5	2200	0.43	270	900	7.7	2200	0.29	295	900	
F 20 3_172.6	172.6	10.4	2200	0.39	270	900	7.0	2200	0.26	295	900	
F 20 3_184.9	184.9	9.7	2200	0.37	272	900	6.5	2200	0.24	295	900	
F 20 3_209.3	209.3	8.6	2200	0.32	279	900	5.7	2200	0.22	295	900	
F 20 3_234.0	234.0	7.7	2200	0.29	286	900	5.1	2200	0.19	295	900	
F 20 3_255.3	255.3	7.1	2200	0.27	288	900	4.7	2200	0.18	295	900	
F 20 3_285.2	285.2	6.3	2200	0.24	295	900	4.2	2200	0.16	295	900	
F 20 3_316.9	316.9	5.7	2200	0.21	295	900	3.8	2200	0.14	295	900	
F 20 3_372.9	372.9	4.8	2200	0.18	295	900	3.2	2200	0.12	295	900	
F 20 3_419.3	419.3	4.3	2200	0.16	295	900	2.9	2200	0.11	295	900	
F 20 3_471.7	471.7	3.8	2200	0.14	295	900	2.5	2200	0.10	295	900	
F 20 3_545.3	545.3	3.3	2200	0.12	295	900	2.2	2200	0.08	295	900	

516
517

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 25

3540 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 25 2_6.9	6.9	261	1609	7.0	—	477	174	1821	5.3	—	548	526 527
F 25 2_8.4	8.4	214	1774	6.3	—	504	143	2008	4.8	—	579	
F 25 2_9.4	9.4	191	1856	5.9	—	522	128	2101	4.5	—	600	
F 25 2_10.6	10.6	170	2516	7.1	—	477	113	2848	5.4	—	548	
F 25 2_13.0	13.0	138	2640	6.1	—	516	92	2988	4.6	—	593	
F 25 2_14.5	14.5	124	2722	5.6	—	537	83	3082	4.3	—	617	
F 25 2_16.6	16.6	108	2805	5.1	—	568	72	3175	3.8	—	652	
F 25 2_18.6	18.6	97	2887	4.7	—	590	65	3268	3.5	—	678	
F 25 2_21.8	21.8	83	2928	4.0	—	636	55	3315	3.0	60	730	
F 25 2_23.8	23.8	76	2970	3.7	62	658	50	3362	2.8	72	756	
F 25 2_27.2	27.2	66	3011	3.3	66	699	44	3408	2.5	76	803	
F 25 2_30.0	30.0	60	3052	3.1	85	728	40	3455	2.3	98	836	
F 25 2_32.2	32.2	56	3052	2.8	85	753	37	3455	2.1	98	865	
F 25 2_36.4	36.4	49	3052	2.5	125	798	33	3455	1.9	143	917	
F 25 2_40.7	40.7	44	3052	2.3	150	839	29.5	3319	1.6	172	964	
F 25 2_44.4	44.4	41	3052	2.1	162	874	27.0	3408	1.5	172	1004	
F 25 3_45.6	45.6	39	3300	2.2	380	829	26.3	3540	1.6	437	952	
F 25 3_50.8	50.8	35	3300	2.0	384	874	23.6	3540	1.4	442	1004	
F 25 3_58.3	58.3	31	3300	1.7	386	932	20.6	3540	1.2	444	1070	
F 25 3_65.3	65.3	27.6	3319	1.6	388	983	18.4	3540	1.1	447	1129	
F 25 3_76.6	76.6	23.5	3496	1.4	391	1057	15.7	3540	0.95	449	1214	
F 25 3_83.4	83.4	21.6	3540	1.3	391	1096	14.4	3540	0.87	449	1259	
F 25 3_95.5	95.5	18.8	3540	1.1	393	1164	12.6	3540	0.76	452	1337	
F 25 3_105.4	105.4	17.1	3540	1.0	393	1216	11.4	3540	0.69	452	1396	
F 25 3_113.0	113.0	15.9	3540	0.96	393	1253	10.6	3540	0.64	452	1439	
F 25 3_127.8	127.8	14.1	3540	0.85	395	1323	9.4	3540	0.57	454	1465	
F 25 3_143.0	143.0	12.6	3540	0.76	397	1337	8.4	3540	0.51	456	1465	
F 25 3_155.9	155.9	11.5	3540	0.70	397	1337	7.7	3540	0.46	456	1465	
F 25 3_174.2	174.2	10.3	3540	0.62	397	1337	6.9	3540	0.42	456	1465	
F 25 3_193.6	193.6	9.3	3540	0.56	397	1337	6.2	3540	0.37	456	1465	
F 25 3_227.8	227.8	7.9	3540	0.48	399	1376	5.3	3540	0.32	459	1465	
F 25 3_256.1	256.1	7.0	3540	0.42	399	1446	4.7	3540	0.28	459	1465	
F 25 3_288.1	288.1	6.2	3540	0.38	399	1465	4.2	3540	0.25	459	1465	
F 25 3_333.1	333.1	5.4	3540	0.33	401	1465	3.6	3540	0.22	461	1465	
F 25 4_393.9	393.9	4.6	3540	0.29	286	1465	3.0	3540	0.19	295	1465	
F 25 4_434.9	434.9	4.1	3540	0.26	290	1465	2.8	3540	0.17	295	1465	
F 25 4_466.0	466.0	3.9	3540	0.24	295	1465	2.6	3540	0.16	295	1465	
F 25 4_527.3	527.3	3.4	3540	0.21	295	1465	2.3	3540	0.14	295	1465	
F 25 4_589.7	589.7	3.1	3540	0.19	295	1465	2.0	3540	0.13	295	1465	
F 25 4_643.3	643.3	2.8	3540	0.17	295	1465	1.9	3540	0.12	295	1465	
F 25 4_718.7	718.7	2.5	3540	0.16	295	1465	1.7	3540	0.10	295	1465	
F 25 4_798.5	798.5	2.3	3540	0.14	295	1465	1.5	3540	0.09	295	1465	
F 25 4_939.8	939.8	1.9	3540	0.12	295	1465	1.3	3540	0.08	295	1465	
F 25 4_1057	1057	1.7	3540	0.11	295	1465	1.1	3540	0.07	295	1465	
F 25 4_1189	1189	1.5	3540	0.09	295	1465	1.0	3540	0.06	295	1465	
F 25 4_1374	1374	1.3	3540	0.08	295	1465	0.9	3540	0.05	295	1465	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 31

5310 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 31 2_6.9	6.9	261	2951	12.9	—	713	174	3343	9.7	—	821	536 537
F 31 2_8.2	8.2	220	3074	11.3	—	760	146	3452	8.4	—	875	
F 31 2_9.0	9.0	200	3156	10.5	—	785	133	3452	7.7	94	904	
F 31 2_10.7	10.7	168	4303	12.1	102	756	112	4875	9.1	120	870	
F 31 2_12.7	12.7	142	4549	10.8	100	799	94	5153	8.1	118	920	
F 31 2_13.9	13.9	129	4672	10.1	133	826	86	5292	7.6	157	951	
F 31 2_16.8	16.8	107	4877	8.7	139	888	71	5310	6.3	164	1022	
F 31 2_18.5	18.5	97	4918	8.0	186	929	65	5310	5.8	219	1070	
F 31 2_21.1	21.1	85	4918	7.0	211	993	57	5310	5.0	248	1143	
F 31 2_23.4	23.4	77	4918	6.3	260	1042	51	5310	4.5	306	1200	
F 31 2_27.3	27.3	66	4918	5.4	283	1122	44	5310	3.9	333	1293	
F 31 2_30.1	30.1	60	4918	4.9	326	1176	40	5310	3.5	383	1354	
F 31 2_34.4	34.4	52	4918	4.3	340	1250	35	5310	3.1	400	1440	
F 31 2_37.7	37.7	48	4918	3.9	369	1304	32	5310	2.8	434	1465	
F 31 2_40.4	40.4	45	4918	3.7	369	1339	29.7	5310	2.6	434	1465	
F 31 2_44.6	44.6	40	4918	3.3	395	1339	26.9	5310	2.4	465	1465	
F 31 3_47.5	47.5	38	4754	3.1	474	1339	25.3	5310	2.3	495	1465	
F 31 3_52.1	52.1	35	4918	2.9	477	1339	23.0	5310	2.1	495	1465	
F 31 3_62.8	62.8	28.7	4918	2.4	477	1358	19.1	5310	1.7	495	1465	
F 31 3_69.1	69.1	26.0	4918	2.2	479	1405	17.4	5310	1.6	495	1465	
F 31 3_78.9	78.9	22.8	4918	1.9	477	1465	15.2	5310	1.4	495	1465	
F 31 3_87.4	87.4	20.6	5045	1.8	479	1465	13.7	5310	1.2	495	1465	
F 31 3_101.9	101.9	17.7	5266	1.6	479	1465	11.8	5310	1.1	495	1465	
F 31 3_112.5	112.5	16.0	5310	1.4	479	1465	10.7	5310	0.97	495	1465	
F 31 3_128.4	128.4	14.0	5310	1.3	481	1465	9.3	5310	0.85	495	1465	
F 31 3_140.7	140.7	12.8	5310	1.2	481	1465	8.5	5310	0.77	495	1465	
F 31 3_150.8	150.8	11.9	5310	1.1	481	1465	8.0	5310	0.72	495	1465	
F 31 3_166.8	166.8	10.8	5310	0.98	483	1465	7.2	5310	0.65	495	1465	
F 31 3_185.4	185.4	9.7	5310	0.88	486	1465	6.5	5310	0.59	495	1465	
F 31 3_202.3	202.3	8.9	5310	0.81	486	1465	5.9	5310	0.54	495	1465	
F 31 3_228.2	228.2	7.9	5310	0.71	486	1465	5.3	5310	0.48	495	1465	
F 31 3_253.6	253.6	7.1	5310	0.64	486	1465	4.7	5310	0.43	495	1465	
F 31 3_293.8	293.8	6.1	5310	0.55	488	1465	4.1	5310	0.37	495	1465	
F 31 3_332.8	332.8	5.4	5310	0.49	488	1465	3.6	5310	0.33	495	1465	
F 31 3_374.4	374.4	4.8	5310	0.44	488	1465	3.2	5310	0.29	495	1465	
F 31 4_418.9	418.9	4.3	5310	0.40	277	1465	2.9	5310	0.27	295	1465	
F 31 4_462.6	462.6	3.9	5310	0.36	281	1465	2.6	5310	0.24	295	1465	
F 31 4_527.8	527.8	3.4	5310	0.32	286	1465	2.3	5310	0.21	295	1465	
F 31 4_578.6	578.6	3.1	5310	0.29	290	1465	2.1	5310	0.19	295	1465	
F 31 4_619.9	619.9	2.9	5310	0.27	295	1465	1.9	5310	0.18	295	1465	
F 31 4_685.6	685.6	2.6	5310	0.25	295	1465	1.8	5310	0.16	295	1465	
F 31 4_762.3	762.3	2.4	5310	0.22	295	1465	1.6	5310	0.15	295	1465	
F 31 4_831.6	831.6	2.2	5310	0.20	295	1465	1.4	5310	0.14	295	1465	
F 31 4_938.2	938.2	1.9	5310	0.18	295	1465	1.3	5310	0.12	295	1465	
F 31 4_1042	1042	1.7	5310	0.16	295	1465	1.2	5310	0.11	295	1465	
F 31 4_1208	1208	1.5	5310	0.14	295	1465	0.99	5310	0.09	295	1465	
F 31 4_1368	1368	1.3	5310	0.12	295	1465	0.88	5310	0.08	295	1465	
F 31 4_1539	1539	1.2	5310	0.11	295	1465	0.78	5310	0.07	295	1465	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 41

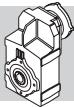
9735 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 41 2_6.7	6.7	269	4754	21.3	—	884	179	5375	16.1	—	1018	546 557
F 41 2_9.1	9.1	198	5327	17.6	—	975	132	6024	13.3	—	1123	
F 41 2_10.8	10.8	167	7377	20.5	—	860	111	8340	15.5	—	990	
F 41 2_14.6	14.6	123	8319	17.1	—	940	82	9406	12.9	—	1083	
F 41 2_17.1	17.1	105	8647	15.2	—	1000	70	9777	11.5	—	1151	
F 41 2_18.9	18.9	95	8893	14.1	104	1037	63	9735	10.3	119	1194	
F 41 2_24.1	24.1	75	9016	11.2	174	1181	50	9735	8.1	201	1360	
F 41 2_30.1	30.1	60	9016	9.0	262	1334	40	9735	6.5	301	1536	
F 41 2_38.2	38.2	47	9016	7.1	332	1511	31	9735	5.1	382	1740	
F 41 2_47.9	47.9	38	8770	5.5	440	1715	25.1	9471	4.0	507	1915	
F 41 3_51.5	51.5	35	8893	5.3	727	1752	23.3	9735	3.9	790	1915	
F 41 3_60.2	60.2	29.9	9016	4.6	727	1752	19.9	9735	3.3	790	1915	
F 41 3_66.5	66.5	27.1	9016	4.2	727	1752	18.0	9735	3.0	790	1915	
F 41 3_84.9	84.9	21.2	9426	3.4	727	1774	14.1	9735	2.3	790	1915	
F 41 3_106.0	106.0	17.0	9735	2.8	727	1915	11.3	9735	1.9	790	1915	
F 41 3_134.4	134.4	13.4	9735	2.2	727	1915	8.9	9735	1.5	790	1915	
F 41 3_168.7	168.7	10.7	9735	1.8	727	1915	7.1	9735	1.2	790	1915	
F 41 3_180.7	180.7	10.0	9735	1.7	727	1915	6.6	9735	1.1	790	1915	
F 41 3_198.9	198.9	9.0	9735	1.5	727	1915	6.0	9735	1.0	790	1915	
F 41 3_220.1	220.1	8.2	9735	1.4	727	1915	5.5	9735	0.91	790	1915	
F 41 3_240.1	240.1	7.5	9735	1.2	727	1915	5.0	9735	0.83	790	1915	
F 41 3_266.9	266.9	6.7	9735	1.1	727	1915	4.5	9735	0.75	790	1915	
F 41 3_296.6	296.6	6.1	9735	1.0	727	1915	4.0	9735	0.67	790	1915	
F 41 3_344.8	344.8	5.2	9735	0.87	727	1915	3.5	9735	0.58	790	1915	
F 41 4_433.7	433.7	4.2	9735	0.71	397	1915	2.8	9735	0.47	456	1915	
F 41 4_549.8	549.8	3.3	9735	0.56	403	1915	2.2	9735	0.37	464	1915	
F 41 4_690.1	690.1	2.6	9735	0.45	409	1915	1.7	9735	0.30	471	1915	
F 41 4_739.4	739.4	2.4	9735	0.42	411	1915	1.6	9735	0.28	473	1915	
F 41 4_813.8	813.8	2.2	9735	0.38	413	1915	1.5	9735	0.25	476	1915	
F 41 4_900.5	900.5	2.0	9735	0.34	415	1915	1.3	9735	0.23	478	1915	
F 41 4_982.4	982.4	1.8	9735	0.31	415	1915	1.2	9735	0.21	478	1915	
F 41 4_1092	1092	1.6	9735	0.28	418	1915	1.1	9735	0.19	480	1915	
F 41 4_1213	1213	1.5	9735	0.25	420	1915	0.99	9735	0.17	483	1915	
F 41 4_1411	1411	1.3	9735	0.22	420	1915	0.85	9735	0.15	483	1915	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 51

15930 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 51 2_7.2	7.2	250	7870	33	294	1082	167	8975	25	342	1255	 566 567
F 51 2_9.1	9.1	198	8879	29	269	1142	132	9736	21	314	1324	
F 51 2_11.1	11.1	162	10736	29	410	1172	108	12243	22	478	1360	
F 51 2_14.0	14.0	129	11463	25	438	1275	86	13071	18.7	511	1479	
F 51 2_18.8	18.8	96	12472	20	457	1419	64	14222	15.2	532	1646	
F 51 2_23.8	23.8	76	13319	16.8	467	1547	50	15047	12.7	544	1794	
F 51 2_30.0	30.0	60	13723	13.7	475	1716	40	15047	10.0	554	1989	
F 51 2_37.1	37.1	49	13723	11.1	491	1905	32	15047	8.1	573	2209	
F 51 3_48.9	48.9	37	13321	8.4	675	2078	24.5	15930	6.7	790	2409	
F 51 3_65.8	65.8	27.4	14604	6.8	689	2386	18.2	15930	5.0	790	2700	
F 51 3_83.2	83.2	21.6	15666	5.8	701	2468	14.4	15930	3.9	790	2700	
F 51 3_105.1	105.1	17.1	15930	4.7	706	2468	11.4	15930	3.1	790	2700	
F 51 3_129.9	129.9	13.9	15930	3.8	712	2608	9.2	15930	2.5	790	2700	
F 51 3_165.6	165.6	10.9	15930	3.0	714	2700	7.2	15930	2.0	790	2700	
F 51 3_202.4	202.4	8.9	15930	2.4	714	2700	5.9	15930	1.6	790	2700	
F 51 3_216.9	216.9	8.3	15930	2.3	714	2700	5.5	15930	1.5	790	2700	
F 51 3_239.8	239.8	7.5	15930	2.0	714	2700	5.0	15930	1.4	790	2700	
F 51 3_262.1	262.1	6.9	15930	1.9	714	2700	4.6	15930	1.2	790	2700	
F 51 3_285.9	285.9	6.3	15930	1.7	714	2700	4.2	15930	1.1	790	2700	
F 51 3_317.3	317.3	5.7	15930	1.5	714	2700	3.8	15930	1.0	790	2700	
F 51 3_352.5	352.5	5.1	15930	1.4	714	2700	3.4	15930	0.92	790	2700	
F 51 4_429.1	429.1	4.2	15930	1.2	449	2700	2.8	15930	0.79	495	2700	
F 51 4_530.5	530.5	3.4	15930	0.95	449	2700	2.3	15930	0.64	495	2700	
F 51 4_676.3	676.3	2.7	15930	0.75	454	2700	1.8	15930	0.50	495	2700	
F 51 4_826.4	826.4	2.2	15930	0.61	459	2700	1.5	15930	0.41	495	2700	
F 51 4_885.5	885.5	2.0	15930	0.57	461	2700	1.4	15930	0.38	495	2700	
F 51 4_979.4	979.4	1.8	15930	0.52	463	2700	1.2	15930	0.34	495	2700	
F 51 4_1070	1070	1.7	15930	0.47	465	2700	1.1	15930	0.31	495	2700	
F 51 4_1168	1168	1.5	15930	0.43	468	2700	1.0	15930	0.29	495	2700	
F 51 4_1296	1296	1.4	15930	0.39	470	2700	0.93	15930	0.26	495	2700	
F 51 4_1439	1439	1.3	15930	0.35	472	2700	0.83	15930	0.23	495	2700	

F 60

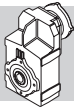
25670 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 60 3_9.0	9.0	200	9610	32.8	—	3431	133	10842	24.7	—	3873	566 567
F 60 3_9.7	9.7	186	10356	32.8	—	3473	124	11683	24.6	—	3920	
F 60 3_11.8	11.8	153	10770	28.0	—	3701	102	12151	21.1	—	4178	
F 60 3_12.7	12.7	142	11599	28.0	—	3743	94	13086	21.1	—	4225	
F 60 3_14.5	14.5	124	11599	24.6	—	3951	83	13086	18.5	—	4459	
F 60 3_15.7	15.7	115	12427	24.3	—	3993	76	14020	18.3	—	4500	
F 60 3_19.1	19.1	94	12427	20.0	—	4159	63	14020	15.0	—	4500	
F 60 3_20.7	20.7	87	13587	20.1	—	4159	58	15329	15.2	—	4500	
F 60 3_23.5	23.5	77	13173	17.2	—	4159	51	14861	12.9	—	4500	
F 60 3_25.4	25.4	71	14250	17.2	—	4159	47	16076	13.0	—	4500	
F 60 3_29.6	29.6	61	24341	25.2	546	4159	41	25670	17.7	628	4500	
F 60 3_32.1	32.1	56	24783	23.7	677	4159	37	25670	16.4	779	4500	
F 60 3_38.8	38.8	46	25670	20.3	723	4159	31	25670	13.5	832	4500	
F 60 3_42.1	42.1	43	25670	18.7	773	4159	28.5	25670	12.5	889	4500	
F 60 3_47.8	47.8	38	25670	16.5	775	4294	25.1	25670	11.0	891	4500	
F 60 3_51.8	51.8	35	25670	15.2	796	4384	23.2	25670	10.1	915	4500	
F 60 3_63.0	63.0	28.6	25670	12.5	800	4500	19.0	25670	8.3	920	4500	
F 60 3_68.3	68.3	26.4	25670	11.5	818	4500	17.6	25670	7.7	942	4500	
F 60 3_77.6	77.6	23.2	25670	10.2	814	4500	15.5	25670	6.8	937	4500	
F 60 3_84.0	84.0	21.4	25670	9.4	833	4500	14.3	25670	6.3	958	4500	
F 60 3_98.2	98.2	18.3	25670	8.0	827	4500	12.2	25670	5.3	951	4500	
F 60 3_106.4	106.4	16.9	25670	7.4	845	4500	11.3	25670	4.9	973	4500	
F 60 3_120.5	120.5	14.9	25670	6.5	837	4500	10.0	25670	4.4	963	4500	
F 60 3_130.5	130.5	13.8	25670	6.0	854	4500	9.2	25670	4.0	982	4500	
F 60 3_150.4	150.4	12.0	25670	5.2	843	4500	8.0	25670	3.5	970	4500	
F 60 3_162.9	162.9	11.0	25670	4.8	860	4500	7.4	25670	3.2	989	4500	
F 60 3_185.9	185.9	9.7	25670	4.2	852	4500	6.5	25670	2.8	980	4500	
F 60 3_201.4	201.4	8.9	25670	3.9	868	4500	6.0	25670	2.6	999	4500	
F 60 3_217.6	217.6	8.3	25670	3.6	856	4500	5.5	25670	2.4	985	4500	
F 60 3_235.8	235.8	7.6	25670	3.3	870	4500	5.1	25670	2.2	1001	4500	
F 60 3_259.1	259.1	6.9	25670	3.0	858	4500	4.6	25670	2.0	987	4500	
F 60 3_280.7	280.7	6.4	25670	2.8	872	4500	4.3	25670	1.9	1004	4500	
F 60 4_315.4	315.4	5.7	25670	2.6	790	4500	3.8	25670	1.7	790	4500	
F 60 4_341.7	341.7	5.3	25670	2.4	790	4500	3.5	25670	1.6	790	4500	
F 60 4_399.3	399.3	4.5	25670	2.0	790	4500	3.0	25670	1.4	790	4500	
F 60 4_432.6	432.6	4.2	25670	1.9	790	4500	2.8	25670	1.3	790	4500	
F 60 4_489.8	489.8	3.7	25670	1.7	790	4500	2.4	25670	1.1	790	4500	
F 60 4_530.7	530.7	3.4	25670	1.5	790	4500	2.3	25670	1.0	790	4500	
F 60 4_611.4	611.4	2.9	25670	1.3	790	4500	2.0	25670	0.89	790	4500	
F 60 4_662.4	662.4	2.7	25670	1.2	790	4500	1.8	25670	0.82	790	4500	
F 60 4_756.0	756.0	2.4	25670	1.1	790	4500	1.6	25670	0.72	790	4500	
F 60 4_819.0	819.0	2.2	25670	0.99	790	4500	1.5	25670	0.66	790	4500	
F 60 4_885.1	885.1	2.0	25670	0.92	790	4500	1.4	25670	0.61	790	4500	
F 60 4_958.9	958.9	1.9	25670	0.85	790	4500	1.3	25670	0.57	790	4500	
F 60 4_1054	1054	1.7	25670	0.77	790	4500	1.1	25670	0.51	790	4500	
F 60 4_1141	1141	1.6	25670	0.71	790	4500	1.1	25670	0.48	790	4500	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 70

44250 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 70 3_10.0	10.0	180	26256	81	361	3785	120	28324	58	412	4284	
F 70 3_10.9	10.9	165	28307	80	379	3764	110	30536	57	433	4260	
F 70 3_12.8	12.8	141	29538	71	193	4013	94	33394	53	207	4543	
F 70 3_13.9	13.9	129	31999	71	182	3972	86	36176	53	207	4496	
F 70 3_16.3	16.3	110	32820	62	146	4263	74	35404	44	167	4825	
F 70 3_17.7	17.7	102	35692	62	130	4201	68	38502	45	148	4755	
F 70 3_20.9	20.9	86	32820	48	431	4720	57	35404	35	492	5343	
F 70 3_22.6	22.6	80	35692	48	414	4679	53	38502	35	473	5296	
F 70 3_24.6	24.6	73	32820	41	517	5032	49	35404	29	591	5696	
F 70 3_27.7	27.7	65	38153	42	1321	5012	43	43133	32	1509	5673	
F 70 3_30.0	30.0	60	41025	42	1323	4970	40	44250	30	1511	5625	
F 70 3_35.4	35.4	51	41025	36	1328	5386	34	44250	26	1516	6096	
F 70 3_38.4	38.4	47	41025	33	1348	5511	31	44250	24	1539	6237	
F 70 3_45.2	45.2	40	41025	28	1359	5968	26.5	44250	20	1551	6755	
F 70 3_49.0	49.0	37	41025	26	1377	6093	24.5	44250	18.5	1572	6897	
F 70 3_57.7	57.7	31	44250	24	1377	6571	20.8	44250	15.7	1572	7438	
F 70 3_62.5	62.5	28.8	44250	22	1394	6717	19.2	44250	14.5	1574	7603	
F 70 3_67.9	67.9	26.5	44250	20	1383	6987	17.7	44250	13.3	1574	7870	
F 70 3_73.6	73.6	24.5	44250	18.5	1400	7153	16.3	44250	12.3	1574	7870	
F 70 3_85.4	85.4	21.1	44250	15.9	1398	7278	14.1	44250	10.6	1574	7870	
F 70 3_92.5	92.5	19.5	44250	14.7	1414	7278	13.0	44250	9.8	1574	7870	
F 70 3_101.2	101.2	17.8	44250	13.4	1406	7278	11.9	44250	8.9	1574	7870	
F 70 3_109.6	109.6	16.4	44250	12.4	1420	7278	10.9	44250	8.3	1574	7870	
F 70 3_122.7	122.7	14.7	44250	11.1	1412	7278	9.8	44250	7.4	1574	7870	
F 70 3_133.0	133.0	13.5	44250	10.2	1427	7441	9.0	44250	6.8	1574	7870	
F 70 3_153.8	153.8	11.7	44250	8.8	1418	7870	7.8	44250	5.9	1574	7870	
F 70 3_166.7	166.7	10.8	44250	8.1	1433	7870	7.2	44250	5.4	1574	7870	
F 70 3_180.9	180.9	10.0	44250	7.5	1425	7870	6.6	44250	5.0	1574	7870	
F 70 3_196.0	196.0	9.2	44250	6.9	1437	7870	6.1	44250	4.6	1574	7870	
F 70 4_216.5	216.5	8.3	44250	6.5	590	7870	5.5	44250	4.3	673	7870	
F 70 4_234.6	234.6	7.7	44250	6.0	590	7870	5.1	44250	4.0	673	7870	
F 70 4_280.9	280.9	6.4	44250	5.0	606	7870	4.3	44250	3.3	692	7870	
F 70 4_304.3	304.3	5.9	44250	4.6	606	7870	3.9	44250	3.1	692	7870	
F 70 4_372.5	372.5	4.8	44250	3.8	618	7870	3.2	44250	2.5	706	7870	
F 70 4_403.5	403.5	4.5	44250	3.5	618	7870	3.0	44250	2.3	706	7870	
F 70 4_471.2	471.2	3.8	44250	3.0	627	7870	2.5	44250	2.0	716	7870	
F 70 4_510.4	510.4	3.5	44250	2.8	627	7870	2.4	44250	1.8	716	7870	
F 70 4_606.8	606.8	3.0	44250	2.3	633	7870	2.0	44250	1.5	723	7870	
F 70 4_657.4	657.4	2.7	44250	2.1	633	7870	1.8	44250	1.4	723	7870	
F 70 4_759.0	759.0	2.4	44250	1.8	637	7870	1.6	44250	1.2	727	7870	
F 70 4_822.2	822.2	2.2	44250	1.7	637	7870	1.5	44250	1.1	727	7870	
F 70 4_899.4	899.4	2.0	44250	1.6	641	7870	1.3	44250	1.0	732	7870	
F 70 4_974.4	974.4	1.8	44250	1.4	641	7870	1.2	44250	0.96	732	7870	
F 70 4_1091	1091	1.6	44250	1.3	643	7870	1.1	44250	0.86	734	7870	
F 70 4_1182	1182	1.5	44250	1.2	643	7870	1.0	44250	0.79	734	7870	
F 70 4_1368	1368	1.3	44250	1.0	645	7870	0.88	44250	0.68	737	7870	
F 70 4_1481	1481	1.2	44250	0.95	645	7870	0.81	44250	0.63	737	7870	
F 70 4_1585	1585	1.1	44250	0.89	647	7870	0.76	44250	0.59	739	7870	
F 70 4_1717	1717	1.0	44250	0.82	647	7870	0.70	44250	0.55	739	7870	
F 70 4_2019	2019	0.89	44250	0.70	649	7870	0.59	44250	0.46	741	7870	
F 70 4_2188	2188	0.82	44250	0.64	649	7870	0.55	44250	0.43	741	7870	

574
575

F 80

70800 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 80 3_10.3	10.3	175	33640	100	137	4543	117	37959	75	—	5131	582 583
F 80 3_11.2	11.2	161	36430	100	139	4522	107	41107	75	—	5108	
F 80 3_12.9	12.9	140	36758	87	151	4814	93	41477	66	—	5437	
F 80 3_14.0	14.0	129	39876	87	157	4793	86	44995	66	—	5414	
F 80 3_16.2	16.2	111	38892	74	171	5168	74	43884	55	—	5837	
F 80 3_17.6	17.6	102	42174	74	164	5147	68	47588	55	—	5814	
F 80 3_20.3	20.3	89	42010	64	175	5523	59	47402	48	—	6237	
F 80 3_22.0	22.0	82	45456	63	175	5502	55	51291	48	—	6214	
F 80 3_25.2	25.2	71	43733	53	157	5939	48	49347	40	—	6708	
F 80 3_28.8	28.8	63	65640	70	1175	5293	42	70800	50	1421	5979	
F 80 3_31.3	31.3	58	65640	64	1204	5418	38	70800	46	1457	6120	
F 80 3_36.0	36.0	50	65640	56	1218	5856	33	70800	40	1474	6614	
F 80 3_39.0	39.0	46	65640	52	1244	6002	31	70800	37	1505	6779	
F 80 3_45.3	45.3	40	69924	47	1244	6481	26	70800	32	1505	7320	
F 80 3_49.1	49.1	37	70800	44	1268	6648	24	70800	30	1534	7508	
F 80 3_56.7	56.7	32	70800	38	1274	7148	21	70800	26	1541	8073	
F 80 3_61.5	61.5	29	70800	35	1296	7315	19.5	70800	24	1568	8262	
F 80 3_70.4	70.4	26	70800	31	1288	7815	17.0	70800	21	1558	8827	
F 80 3_76.3	76.3	24	70800	28	1308	8003	15.7	70800	19.0	1574	9038	
F 80 3_85.2	85.2	21	70800	26	1306	8440	14.1	70800	17.0	1574	9533	
F 80 3_92.3	92.3	19.5	70800	24	1324	8649	13.0	70800	15.7	1574	9768	
F 80 3_105.0	105.0	17.1	70800	21	1318	9170	11.4	70800	13.8	1574	10120	
F 80 3_113.8	113.8	15.8	70800	19.1	1336	9378	10.5	70800	12.7	1574	10120	
F 80 3_122.5	122.5	14.7	70800	17.7	1322	9378	9.8	70800	11.8	1574	10120	
F 80 3_132.7	132.7	13.6	70800	16.4	1340	9378	9.0	70800	10.9	1574	10120	
F 80 3_147.9	147.9	12.2	70800	14.7	1328	9378	8.1	70800	9.8	1574	10120	
F 80 3_160.2	160.2	11.2	70800	13.6	1346	9378	7.5	70800	9.0	1574	10120	
F 80 3_184.6	184.6	9.8	70800	11.8	1336	9397	6.5	70800	7.8	1574	10120	
F 80 3_200.0	200.0	9.0	70800	10.9	1352	9622	6.0	70800	7.2	1574	10120	
F 80 4_218.5	218.5	8.2	70800	10.3	479	10120	5.5	70800	6.9	579	10120	
F 80 4_273.9	273.9	6.6	70800	8.2	534	10120	4.4	70800	5.5	646	10120	
F 80 4_296.7	296.7	6.1	70800	7.6	534	10120	4.0	70800	5.0	646	10120	
F 80 4_353.7	353.7	5.1	70800	6.4	552	10120	3.4	70800	4.2	668	10120	
F 80 4_383.2	383.2	4.7	70800	5.9	552	10120	3.1	70800	3.9	668	10120	
F 80 4_451.5	451.5	4.0	70800	5.0	562	10120	2.7	70800	3.3	680	10120	
F 80 4_489.1	489.1	3.7	70800	4.6	562	10120	2.5	70800	3.1	680	10120	
F 80 4_563.9	563.9	3.2	70800	4.0	570	10120	2.1	70800	2.7	690	10120	
F 80 4_610.9	610.9	2.9	70800	3.7	570	10120	2.0	70800	2.5	690	10120	
F 80 4_714.9	714.9	2.5	70800	3.1	576	10120	1.7	70800	2.1	697	10120	
F 80 4_774.4	774.4	2.3	70800	2.9	576	10120	1.5	70800	1.9	697	10120	
F 80 4_897.3	897.3	2.0	70800	2.5	584	10120	1.3	70800	1.7	707	10120	
F 80 4_972.0	972.0	1.85	70800	2.3	584	10120	1.2	70800	1.5	707	10120	
F 80 4_1058	1058	1.70	70800	2.1	588	10120	1.1	70800	1.4	712	10120	
F 80 4_1146	1146	1.57	70800	2.0	588	10120	1.0	70800	1.3	712	10120	
F 80 4_1277	1277	1.41	70800	1.8	590	10120	0.94	70800	1.2	714	10120	
F 80 4_1384	1384	1.30	70800	1.6	590	10120	0.87	70800	1.1	714	10120	
F 80 4_1578	1578	1.14	70800	1.4	592	10120	0.76	70800	0.95	716	10120	
F 80 4_1709	1709	1.05	70800	1.3	592	10120	0.70	70800	0.88	716	10120	
F 80 4_1834	1834	0.98	70800	1.2	594	10120	0.65	70800	0.82	719	10120	
F 80 4_1987	1987	0.91	70800	1.1	594	10120	0.60	70800	0.75	719	10120	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

F 90

123900 lb·in

	i	n ₁ = 1800 rpm					n ₁ = 1200 rpm					
		n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	n ₂ rpm	T _{n2} lb·in	P _{n1} hp	R _{n1} lbs	R _{n2} lbs	
F 90 3 10.3	10.3	175	65711	196	1543	6100	117	74066	147	1977	6890	590 591
F 90 3 11.1	11.1	162	72282	200	1499	5975	108	81473	150	1920	6749	
F 90 3 13.4	13.4	134	76389	175	1404	6391	90	86102	131	1799	7219	
F 90 3 14.5	14.5	124	82138	174	1427	6308	83	92583	131	1828	7125	
F 90 3 16.5	16.5	109	84603	157	1342	6662	73	95360	118	1720	7525	
F 90 3 17.9	17.9	101	90352	155	1385	6599	67	101841	116	1774	7454	
F 90 3 20.6	20.6	87	92816	138	1207	7015	58	104619	104	1547	7925	
F 90 3 22.3	22.3	81	98566	136	1271	6953	54	111099	102	1628	7854	
F 90 3 25.4	25.4	71	98566	119	1217	7494	47	106213	86	1559	8465	
F 90 3 28.6	28.6	63	98566	106	2392	7911	42	111099	79	3064	8936	
F 90 3 31.0	31.0	58	106780	106	2392	7765	39	120358	79	3064	8771	
F 90 3 37.4	37.4	48	110887	91	2392	8410	32	123900	68	3064	9500	
F 90 3 40.5	40.5	44	114994	87	2411	8452	30	123900	63	3088	9547	
F 90 3 46.1	46.1	39	114994	77	2430	9076	26.0	123900	55	3113	10253	
F 90 3 49.9	49.9	36	115507	71	2450	9305	24.0	123900	51	3138	10511	
F 90 3 57.3	57.3	31	115507	62	2450	10013	20.9	123900	44	3138	11311	
F 90 3 62.1	62.1	29.0	123900	61	2469	10263	19.3	123900	41	3162	11593	
F 90 3 70.8	70.8	25.4	123900	54	2469	10971	16.9	123900	36	3162	12365	
F 90 3 76.7	76.7	23.5	123900	50	2508	11241	15.6	123900	33	3212	12365	
F 90 3 88.4	88.4	20.4	123900	43	2488	11450	13.6	123900	29	3187	12365	
F 90 3 95.8	95.8	18.8	123900	40	2527	11450	12.5	123900	26	3237	12365	
F 90 3 103.3	103.3	17.4	123900	37	2508	11450	11.6	123900	25	3212	12365	
F 90 3 111.9	111.9	16.1	123900	34	2527	11450	10.7	123900	23	3237	12365	
F 90 3 126.8	126.8	14.2	123900	30	2508	11450	9.5	123900	20	3212	12365	
F 90 3 137.3	137.3	13.1	123900	28	2527	11578	8.7	123900	18.5	3237	12365	
F 90 3 150.3	150.3	12.0	123900	25	2527	12140	8.0	123900	16.9	3237	12365	
F 90 3 162.8	162.8	11.1	123900	23	2546	12365	7.4	123900	15.6	3261	12365	
F 90 3 179.2	179.2	10.0	123900	21	2527	12365	6.7	123900	14.2	3237	12365	
F 90 3 194.2	194.2	9.3	123900	19.6	2546	12365	6.2	123900	13.1	3261	12365	
F 90 4 213.6	213.6	8.4	123900	18.4	—	12365	5.6	123900	12.3	—	12365	
F 90 4 231.4	231.4	7.8	123900	17.0	—	12365	5.2	123900	11.3	—	12365	
F 90 4 268.7	268.7	6.7	123900	14.6	—	12365	4.5	123900	9.8	104	12365	
F 90 4 291.1	291.1	6.2	123900	13.5	—	12365	4.1	123900	9.0	104	12365	
F 90 4 361.8	361.8	5.0	123900	10.9	—	12365	3.3	123900	7.2	245	12365	
F 90 4 392.0	392.0	4.6	123900	10.0	—	12365	3.1	123900	6.7	245	12365	
F 90 4 457.5	457.5	3.9	123900	8.6	—	12365	2.6	123900	5.7	343	12365	
F 90 4 495.6	495.6	3.6	123900	7.9	—	12365	2.4	123900	5.3	343	12365	
F 90 4 577.5	577.5	3.1	123900	6.8	309	12365	2.1	123900	4.5	395	12365	
F 90 4 625.6	625.6	2.9	123900	6.3	309	12365	1.9	123900	4.2	395	12365	
F 90 4 714.0	714.0	2.5	123900	5.5	347	12365	1.7	123900	3.7	445	12365	
F 90 4 773.4	773.4	2.3	123900	5.1	347	12365	1.6	123900	3.4	445	12365	
F 90 4 910.2	910.2	2.0	123900	4.3	390	12365	1.3	123900	2.9	499	12365	
F 90 4 986.0	986.0	1.8	123900	4.0	390	12365	1.2	123900	2.7	499	12365	
F 90 4 1112	1112	1.6	123900	3.5	407	12365	1.1	123900	2.4	521	12365	
F 90 4 1205	1205	1.5	123900	3.3	407	12365	1.0	123900	2.2	521	12365	
F 90 4 1318	1318	1.4	123900	3.0	428	12365	0.91	123900	2.0	548	12365	
F 90 4 1428	1428	1.3	123900	2.8	428	12365	0.84	123900	1.8	548	12365	
F 90 4 1571	1571	1.1	123900	2.5	436	12365	0.76	123900	1.7	558	12365	
F 90 4 1702	1702	1.1	123900	2.3	436	12365	0.71	123900	1.5	558	12365	
F 90 4 1937	1937	0.93	123900	2.0	444	12365	0.62	123900	1.4	568	12365	
F 90 4 2099	2099	0.86	123900	1.9	444	12365	0.57	123900	1.2	568	12365	

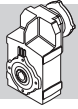
(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

54 MOTOR AVAILABILITY

Please be aware that motor-gearbox combinations resulting from following charts are purely based on geometrical compatibility.

When selecting a gearmotor, refer to procedure specified at paragraph 12 and observe particularly the condition $S \geq f_s$.

(D 57)



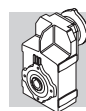
		IEC_   (IM B5)								
		P63 P71	P80 P90	P100 P112	P132	P160	P180	P200	P225	P250
F 10 2	i =	7.4_127.1	7.4_91.5	7.4_91.5						
F 20 2		8.7_132.2 ● (14.8_18.1)	6.4_114.3	6.4_114.3						
F 20 3		156.3_545.3	156.3_545.3	156.3_545.3						
F 25 2		9.4_44.4 ● (10.6_13.0)	6.9_44.4	6.9_44.4						
F 25 3		50.8_333.1	45.6_288.1	45.6_288.1						
F 25 4		393.9_1374	393.9_1374	393.9_1374						
F 31 2		18.5_44.6	6.9_44.6	6.9_44.6	6.9_37.7					
F 31 3		69.1_374.4	47.5_374.4	47.5_374.4	47.5_140.7					
F 31 4		418.9_1539	418.9_1539	418.9_1539						
F 41 2		24.1_47.9	6.7_47.9	6.7_47.9	6.7_47.9					
F 41 3		84.9_344.8	51.5_344.8	51.5_344.8	51.5_168.7					
F 41 4		433.7_1411	433.7_1411	433.7_1411						
F 51 2		30.0_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1			
F 51 3		105.1_352.5	48.9_352.5	48.9_352.5	48.9_202.4	48.9_202.4	48.9_202.4			
F 51 4		429.1_1439	429.1_1439	429.1_1439	429.1_826.4					
F 60 3		98.2_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	9.0_201.4	9.0_201.4	9.0_201.4			
F 60 4		315.4_1141	315.4_1141	315.4_1141						
F 70 3			85.4_196.0	85.4_196.0	16.3_196.0 ● (27.7_38.4)	10.0_196.0	10.0_196.0	10.0_49.0 ● (20.9_24.6)		
F 70 4		372.5_2188	216.5_2188	216.5_2188	216.5_822.2					
F 80 3			105.0_200.0	105.0_200.0	20.3_200.0 ● (28.8_49.1)	12.9_200.0 ● (28.8_31.3)	10.3_200.0	10.3_132.7	10.3_132.7	
F 80 4	451.5_1987	218.5_1987	218.5_1987	218.5_972.0						
F 90 3		126.8_194.2	126.8_194.2	25.4_194.2 ● (28.6_62.1)	20.6_194.2 ● (28.6_49.9)	10.3_194.2	10.3_162.8	10.3_162.8	10.3_162.8	
F 90 4	577.5_2099	213.6_2099	213.6_2099	213.6_1205	213.6_1205	213.6_1205				

(D 58)

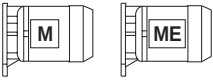


NEMA Motor frame

		N56C	N140TC	N180TC	N210TC	N250TC	N280TC	N320TC
	HP	0.16 ... 1	1.5 ... 2	3 ... 5	7.5 ... 10	15 ... 20	25 ... 30	40 ... 50
F 10 2		7.4_127.1	7.4_91.5	7.4_91.5				
F 20 2		8.7_132.2 ● (14.8_18.1)	6.4_114.3	6.4_114.3				
F 20 3		156.3_545.3	156.3_545.3	156.3_545.3				
F 25 2		9.4_44.4 ● (10.6_13.0)	6.9_44.4	6.9_44.4				
F 25 3		50.8_333.1	45.6_288.1	45.6_288.1				
F 25 4		393.9_1374	393.9_1374	393.9_1374				
F 31 2		18.5_44.6	6.9_44.6	6.9_44.6	6.9_37.7			
F 31 3		69.1_374.4	47.5_374.4	47.5_374.4	47.5_140.7			
F 31 4		418.9_1539	418.9_1539	418.9_1539				
F 41 2		24.1_47.9	6.7_47.9	6.7_47.9	6.7_47.9			
F 41 3		84.9_344.8	51.5_344.8	51.5_344.8	51.5_168.7			
F 41 4	i =	433.7_1411	433.7_1411	433.7_1411				
F 51 2		30.0_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1	
F 51 3		105.1_352.5	48.9_352.5	48.9_352.5	48.9_202.4	48.9_202.4	48.9_202.4	
F 51 4		429.1_1439	429.1_1439	429.1_1439	429.1_826.4			
F 60 3		98.2_280.7	11.8_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	9.0_201.4	9.0_201.4	9.0_201.4	
F 60 4		315.4_1141	315.4_1141	315.4_1141				
F 70 3			85.4_196.0	85.4_196.0	16.3_196.0 ● (27.7_38.4)	10.0_196.0	10.0_196.0	
F 70 4		372.5_2188	216.5_2188	216.5_2188	216.5_822.2			
F 80 3			105.0_200.0	105.0_200.0	20.3_200.0 ● (28.8_49.1)	12.9_200.0 ● (28.8_31.3)	10.3_200.0	10.3_132.7
F 80 4		451.5_1987	218.5_1987	218.5_1987	218.5_972.0			
F 90 3			126.8_194.2	126.8_194.2	25.4_194.2 ● (28.6_62.1)	20.6_194.2 ● (28.6_49.9)	10.3_194.2	10.3_162.8
F 90 4		577.5_2099	213.6_2099	213.6_2099	213.6_1205	213.6_1205	213.6_1205	



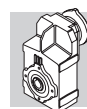
(D 59)

							
		M05	M1	M2 - ME2	ME3	ME4	ME5
F 10 2		7.4_127.1	7.4_71.1	7.4_91.5	7.4_91.5		
F 20 2		8.7_132.2 ⊖ (14.8_18.1)	8.7_90.4 ⊖ (14.8_18.1)	6.4_114.3	6.4_114.3		
F 20 3		156.3_545.3	156.3_545.3	156.3_545.3	156.3_545.3		
F 25 2		9.4_44.4 ⊖ (10.6_13.0)	9.4_44.4 ⊖ (10.6_13.0)	6.9_44.4	6.9_44.4		
F 25 3		50.8_333.1	50.8_227.8	45.6_288.1	45.6_288.1		
F 25 4		393.9_1374	393.9_1374	393.9_1374	393.9_1374		
F 31 2			18.5_44.6	6.9_44.6	6.9_44.6	6.9_37.7	
F 31 3			69.1_293.8	47.5_374.4	47.5_374.4	47.5_140.7	
F 31 4		418.9_1539	418.9_1539	418.9_1539	418.9_1539		
F 41 2			24.1_47.9	6.7_47.9	6.7_47.9	6.7_47.9	
F 41 3			84.9_344.8	51.5_344.8	51.5_344.8	51.5_168.7	
F 41 4	i =	433.7_1411	433.7_1411	433.7_1411	433.7_1411		
F 51 2			30.0_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1
F 51 3			105.1_352.5	48.9_352.5	48.9_352.5	48.9_202.4	48.9_202.4
F 51 4			429.1_1439	429.1_1439	429.1_1439	429.1_826.4	
F 60 3				11.8_280.7 ⊖ (29.6_32.1)	11.8_280.7 ⊖ (29.6_32.1)	9_201.4	9_201.4
F 60 4			315.4_1141	315.4_1141	315.4_1141		
F 70 3				85.4_196.0	85.4_196.0	16.3_196.0 ⊖ (27.7_38.4)	16.3_196.0 ⊖ (27.7_38.4)
F 70 4			372.5_2188	216.5_2188	216.5_2188	216.5_822.2	
F 80 3					105.0_200.0	20.3_200.0 ⊖ (28.8_49.1)	20.3_200.0 ⊖ (28.8_49.1)
F 80 4			451.5_1987	218.5_1987	218.5_1987	218.5_972.0	
F 90 3					126.8_194.2	25.4_194.2 ⊖ (28.6_62.1)	25.4_194.2 ⊖ (28.6_62.1)
F 90 4				213.6_2099	213.6_2099	213.6_1205	

Motor adapters matching the most popular brands of servomotors are available for units size F 10 ... F 60. Dimensions of servomotor inputs are provided within the drawing section for each frame size. The code **SK** applies for inputs featuring a conventional keyway, while through the specification of the **SC** code the input shaft will feature a clamping device instead.

(D 60)

		SERVO INPUT							
		SK60A	SK60B	SK80A	SK80B	SK80C	SK95A	SK95B	SK95C
		SC60A	SC60B	SC80A	SC80B	SC80C	SC95A	SC95B	SC95C
F 10 2	i =	7.4_127.1	7.4_71.1	7.4_71.1		7.4_91.5	7.4_71.1	7.4_91.5	7.4_91.5
F 20 2		8.7_132.2 ● (14.8_18.1)	8.7_90.4 ● (14.8_18.1)	8.7_90.4 ● (14.8_18.1)		6.4_114.3	8.7_90.4 ● (14.8_18.1)	6.4_114.3	6.4_114.3
F 20 3		156.3_545.3	156.3_545.3	156.3_545.3		156.3_545.3	156.3_545.3	156.3_545.3	156.3_545.3
F 25 2		9.4_44.4 ● (10.6_13.0)	9.4_44.4 ● (10.6_13.0)	9.4_44.4 ● (10.6_13.0)		6.9_44.4	9.4_44.4 ● (10.6_13.0)	6.9_44.4	6.9_44.4
F 25 3		45.6_333.1	45.6_227.8	45.6_227.8		45.6_288.1	45.6_227.8	45.6_288.1	45.6_288.1
F 25 4		393.9_1374	393.9_1374	393.9_1374		393.9_1374	393.9_1374	393.9_1374	393.9_1374
F 31 2		18.5_44.6	18.5_44.6	18.5_44.6		6.9_44.6	18.5_44.6	6.9_44.6	6.9_44.6
F 31 3		69.1_374.4	69.1_293.8	69.1_293.8		47.5_374.4	69.1_293.8	47.5_374.4	47.5_374.4
F 31 4		418.9_1539	418.9_1539	418.9_1539		418.9_1539	418.9_1539	418.9_1539	418.9_1539
F 41 2					24.1_47.9	6.7_47.9	24.1_47.9	6.7_47.9	6.7_47.9
F 41 3					84.9_344.8	51.5_344.8	84.9_344.8	51.5_344.8	51.5_344.8
F 41 4		433.7_1411	433.7_1411	433.7_1411		433.7_1411	433.7_1411	433.7_1411	433.7_1411
F 51 2					30.0_37.1	7.2_37.1	30.0_37.1	7.2_37.1	7.2_37.1
F 51 3					105.1_352.5	48.9_352.5	105.1_352.5	48.9_352.5	48.9_352.5
F 51 4						429.1_1439	429.1_1439	429.1_1439	429.1_1439
F 60 3						11.8_280.7 ● (29.6_32.1)	106.4_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)
F 60 4					315.4_1141	315.4_1141	315.4_1141	315.4_1141	315.4_1141

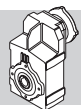


(D 61)

		SERVO INPUT					
		SK110A	SK110B	SK130A	SK130B	SK180A	SK180B
		SC110A	SC110B	SC130A	SC130B	SC180A	SC180B
F 10 2	i =	7.4_91.5	7.4_91.5				
F 20 2		6.4_114.3	6.4_114.3				
F 20 3		156.3_545.3	156.3_545.3				
F 25 2		6.9_44.4	6.9_44.4				
F 25 3		45.6_288.1	45.6_288.1				
F 25 4		393.9_1374	393.9_1374				
F 31 2		6.9_44.6	6.9_44.6	6.9_44.6			
F 31 3		47.5_374.4	47.5_374.4	47.5_374.4			
F 31 4		418.9_1539	418.9_1539				
F 41 2		6.7_47.9	6.7_47.9	6.7_47.9	6.7_47.9	6.7_47.9	6.7_47.9
F 41 3		51.5_344.8	51.5_344.8	51.5_344.8	51.5_168.7	51.5_168.7	51.5_168.7
F 41 4		433.7_1411	433.7_1411				
F 51 2		7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1	7.2_37.1
F 51 3		48.9_352.5	48.9_352.5	48.9_352.5	48.9_202.4	48.9_202.4	48.9_202.4
F 51 4		429.1_1439	429.1_1439	429.1_1439			
F 60 3		11.8_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	11.8_280.7 ● (29.6_32.1)	9.0_201.4	9.0_201.4	9.0_201.4
F 60 4		315.4_1141	315.4_1141	315.4_1141			

55 MOMENT OF INERTIA

The following charts indicate moment of inertia values J_r [lb·ft²] referred to the gear unit high speed shaft. A key to the symbols used follows:



Values under this icon refer to compact gear units, without motor. To obtain the overall moment of inertia for the gearmotor just add the value of the inertia for the specific compact motor, given in the relevant rating chart.



NEMA

Values under this symbol refer to gearboxes with NEMA motor adaptor (NEMA size...).



This symbol refers to gearbox values.



IEC

Values under this symbol refer to gearboxes with IEC motor adaptor (IEC size...).



SERVO

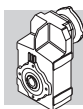
Values under this symbol refer to gear unit with servomotor input adapter.

F 10

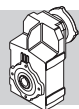
	i	J (•10-4) [lb·ft ²]							
			IEC						
			63	71	80	90	100	112	
F 10 2_7.4	7.4	24	43	43	90	88	116	116	40
F 10 2_8.6	8.6	18	36	36	85	83	112	112	36
F 10 2_9.8	9.8	15	33	33	81	78	107	107	31
F 10 2_11.5	11.5	11	28	28	78	76	104	104	28
F 10 2_13.0	13.0	9.0	26	26	76	74	102	102	26
F 10 2_14.6	14.6	14	33	33	81	78	107	107	31
F 10 2_17.0	17.0	11	31	28	78	76	104	104	28
F 10 2_19.3	19.3	9.7	28	28	76	74	102	102	26
F 10 2_22.8	22.8	7.6	26	26	74	71	100	100	24
F 10 2_25.8	25.8	5.9	24	24	74	69	97	97	22
F 10 2_29.6	29.6	4.5	24	23	71	69	97	97	21
F 10 2_33.0	33.0	3.8	22	22	71	66	97	97	20
F 10 2_35.3	35.3	3.3	22	21	71	66	95	95	20
F 10 2_39.6	39.6	2.8	21	21	69	66	95	95	19
F 10 2_44.7	44.7	2.4	21	20	69	66	95	95	19
F 10 2_48.7	48.7	2.1	20	20	69	66	95	95	18
F 10 2_56.7	56.7	1.7	20	20	69	64	95	95	18
F 10 2_63.0	63.0	1.4	20	19	69	64	93	93	18
F 10 2_71.1	71.1	1.2	19	19	66	64	93	93	17
F 10 2_81.3	81.3	0.95	19	18	66	64	93	93	16
F 10 2_91.5	91.5	0.71	19	18	66	64	93	93	16
F 10 2_106.0	106.0	0.71	18	18	—	—	—	—	16
F 10 2_127.1	127.1	0.47	18	18	—	—	—	—	15

F 10

	i	J (•10 ⁻⁴) [lb•ft ²]				
			N56C	 NEMA N140TC	N180TC	
F 10 2_7.4	7.4	24	43	43	90	40
F 10 2_8.6	8.6	18	36	36	85	36
F 10 2_9.8	9.8	15	33	33	81	31
F 10 2_11.5	11.5	11	28	28	78	28
F 10 2_13.0	13.0	9.0	26	26	76	26
F 10 2_14.6	14.6	14	33	33	81	31
F 10 2_17.0	17.0	11	31	31	78	28
F 10 2_19.3	19.3	9,7	28	28	76	26
F 10 2_22.8	22.8	7,6	26	26	74	24
F 10 2_25.8	25.8	5,9	24	24	74	22
F 10 2_29.6	29.6	4,5	24	24	71	21
F 10 2_33.0	33.0	3,8	22	22	71	20
F 10 2_35.3	35.3	3,3	22	22	71	20
F 10 2_39.6	39.6	2,8	21	21	69	19
F 10 2_44.7	44.7	2,4	21	21	69	19
F 10 2_48.7	48.7	2,1	20	20	69	18
F 10 2_56.7	56.7	1,7	20	20	69	18
F 10 2_63.0	63.0	1,4	20	20	69	18
F 10 2_71.1	71.1	1,2	19	19	66	17
F 10 2_81.3	81.3	0,95	19	19	66	16
F 10 2_91.5	91.5	0,71	19	19	66	16
F 10 2_106.0	106.0	0,71	18	18	—	16
F 10 2_127.1	127.1	0,47	18	18	—	15



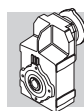
F 10



	i	J (•10-4) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 10 2_7.4	7.4	31	36	31	40	90	102	90	102	88	112
F 10 2_8.6	8.6	24	31	26	36	85	95	85	97	83	107
F 10 2_9.8	9.8	22	28	22	33	83	93	81	93	78	102
F 10 2_11.5	11.5	18	24	18	28	78	88	78	90	76	100
F 10 2_13.0	13.0	15	22	16	26	76	85	76	88	74	97
F 10 2_14.6	14.6	21	26	22	31	81	93	81	93	78	102
F 10 2_17.0	17.0	18	24	18	28	78	88	78	90	76	100
F 10 2_19.3	19.3	16	22	17	26	76	88	76	88	74	97
F 10 2_22.8	22.8	14	20	14	24	74	85	74	85	71	95
F 10 2_25.8	25.8	12	19	13	23	74	83	74	85	69	93
F 10 2_29.6	29.6	11	17	11	22	71	81	71	83	69	93
F 10 2_33.0	33.0	10	16	11	21	71	81	71	83	66	90
F 10 2_35.3	35.3	9,7	16	10	21	71	81	71	83	66	90
F 10 2_39.6	39.6	9,3	15	9,7	20	69	78	69	81	66	90
F 10 2_44.7	44.7	8,8	15	9,3	20	69	81	69	81	66	90
F 10 2_48.7	48.7	8,5	15	9,0	19	69	78	69	81	66	90
F 10 2_56.7	56.7	8,1	14	8,5	19	69	78	69	81	64	88
F 10 2_63.0	63.0	7,8	14	8,3	19	69	78	69	81	64	88
F 10 2_71.1	71.1	7,6	14	8,1	19	69	78	66	78	64	88
F 10 2_81.3	81.3	7,4	14	—	—	—	—	66	78	64	88
F 10 2_91.5	91.5	7,1	13	—	—	—	—	66	78	64	88
F 10 2_106.0	106.0	7,1	13	—	—	—	—	—	—	—	—
F 10 2_127.1	127.1	6,9	13	—	—	—	—	—	—	—	—

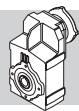
F 20

	i	J (•10-4) [lb•ft ²]							
			 IEC						
			63	71	80	90	100	112	
F 20 2_6.4	6.4	52	—	—	119	114	142	142	93
F 20 2_7.8	7.8	36	—	—	102	100	128	128	78
F 20 2_8.7	8.7	31	47	47	97	93	123	123	71
F 20 2_10.0	10.0	24	43	40	90	88	116	116	64
F 20 2_11.2	11.2	21	38	38	85	83	112	112	62
F 20 2_14.8	14.8	28	—	—	95	93	121	121	69
F 20 2_18.1	18.1	21	—	—	88	83	112	112	62
F 20 2_20.2	20.2	19	36	36	83	81	109	109	59
F 20 2_23.1	23.1	15	33	31	81	78	107	107	57
F 20 2_25.9	25.9	14	31	31	78	76	104	104	55
F 20 2_30.4	30.4	9.7	26	26	76	71	102	102	50
F 20 2_33.1	33.1	8.5	26	26	74	71	100	100	50
F 20 2_37.9	37.9	7.1	24	24	74	69	97	97	47
F 20 2_41.8	41.8	6.4	24	24	71	69	97	97	47
F 20 2_44.8	44.8	5.7	24	24	71	69	97	97	47
F 20 2_50.7	50.7	5.0	22	22	71	66	97	97	45
F 20 2_56.7	56.7	4.3	22	21	69	66	95	95	45
F 20 2_61.9	61.9	3.8	21	21	69	66	95	95	45
F 20 2_69.1	69.1	3.3	21	20	69	66	95	95	43
F 20 2_76.8	76.8	2.8	20	20	69	66	95	95	43
F 20 2_90.4	90.4	2.4	20	19	69	64	93	93	43
F 20 2_101.6	101.6	2.1	19	19	66	64	93	93	43
F 20 2_114.3	114.3	1.9	19	18	66	64	93	93	43
F 20 2_132.2	132.2	0.71	19	18	—	—	—	—	43
F 20 3_156.3	156.3	0.95	19	19	66	64	93	93	17
F 20 3_172.6	172.6	0.95	19	19	66	64	93	93	17
F 20 3_184.9	184.9	0.95	19	19	66	64	93	93	17
F 20 3_209.3	209.3	0.71	19	19	66	64	93	93	17
F 20 3_234.0	234.0	0.71	19	19	66	64	93	93	17
F 20 3_255.3	255.3	0.71	19	19	66	64	93	93	17
F 20 3_285.2	285.2	0.71	19	19	66	64	93	93	17
F 20 3_316.9	316.9	0.71	19	19	66	64	93	93	17
F 20 3_372.9	372.9	0.71	19	19	66	64	93	93	17
F 20 3_419.3	419.3	0.71	19	19	66	64	93	93	16
F 20 3_471.7	471.7	0.71	19	19	66	64	93	93	16
F 20 3_545.3	545.3	0.71	19	19	66	64	93	93	16



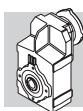
F 20

	i	J (•10 ⁻⁴) [lb•ft ²]				
			N56C	N140TC	N180TC	
F 20 2_6.4	6.4	52	—	—	119	93
F 20 2_7.8	7.8	36	—	—	102	78
F 20 2_8.7	8.7	31	47	47	97	71
F 20 2_10.0	10.0	24	43	43	90	64
F 20 2_11.2	11.2	21	38	38	85	62
F 20 2_14.8	14.8	28	—	—	95	69
F 20 2_18.1	18.1	21	—	—	88	62
F 20 2_20.2	20.2	19	36	36	83	59
F 20 2_23.1	23.1	15	33	33	81	57
F 20 2_25.9	25.9	14	31	31	78	55
F 20 2_30.4	30.4	9,7	26	26	76	50
F 20 2_33.1	33.1	8,5	26	26	74	50
F 20 2_37.9	37.9	7,1	24	24	74	47
F 20 2_41.8	41.8	6,4	24	24	71	47
F 20 2_44.8	44.8	5,7	24	24	71	47
F 20 2_50.7	50.7	5,0	22	22	71	45
F 20 2_56.7	56.7	4,3	22	22	69	45
F 20 2_61.9	61.9	3,8	21	21	69	45
F 20 2_69.1	69.1	3,3	21	21	69	43
F 20 2_76.8	76.8	2,8	20	20	69	43
F 20 2_90.4	90.4	2,4	20	20	69	43
F 20 2_101.6	101.6	2,1	19	19	66	43
F 20 2_114.3	114.3	1,9	19	19	66	43
F 20 2_132.2	132.2	0,71	19	19	—	43
F 20 3_156.3	156.3	0,95	19	19	66	17
F 20 3_172.6	172.6	0,95	19	19	66	17
F 20 3_184.9	184.9	0,95	19	19	66	17
F 20 3_209.3	209.3	0,71	19	19	66	17
F 20 3_234.0	234.0	0,71	19	19	66	17
F 20 3_255.3	255.3	0,71	19	19	66	17
F 20 3_285.2	285.2	0,71	19	19	66	17
F 20 3_316.9	316.9	0,71	19	19	66	17
F 20 3_372.9	372.9	0,71	19	19	66	17
F 20 3_419.3	419.3	0,71	19	19	66	16
F 20 3_471.7	471.7	0,71	19	19	66	16
F 20 3_545.3	545.3	0,71	19	19	66	16



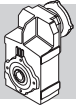
F 20

	i	J (•10 ⁻⁴) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 20 2_6.4	6.4	—	—	—	—	—	—	119	131	114	138
F 20 2_7.8	7.8	—	—	—	—	—	—	102	114	100	123
F 20 2_8.7	8.7	38	43	38	47	97	109	97	109	93	116
F 20 2_10.0	10.0	31	36	31	40	90	102	90	102	88	112
F 20 2_11.2	11.2	28	33	28	38	88	97	85	97	83	107
F 20 2_14.8	14.8	—	—	—	—	—	—	95	107	93	116
F 20 2_18.1	18.1	—	—	—	—	—	—	88	100	83	107
F 20 2_20.2	20.2	26	31	26	36	85	95	83	95	81	104
F 20 2_23.1	23.1	22	28	22	33	83	93	81	93	78	102
F 20 2_25.9	25.9	20	26	20	31	81	90	78	90	76	100
F 20 2_30.4	30.4	16	22	17	26	76	88	76	88	71	95
F 20 2_33.1	33.1	15	21	15	26	76	85	74	85	71	95
F 20 2_37.9	37.9	11	20	14	24	74	85	74	85	69	93
F 20 2_41.8	41.8	10	19	13	24	74	83	71	83	69	93
F 20 2_44.8	44.8	9,7	18	13	23	74	83	71	83	69	93
F 20 2_50.7	50.7	11	18	12	22	71	83	71	83	66	90
F 20 2_56.7	56.7	11	17	11	22	71	81	69	81	66	90
F 20 2_61.9	61.9	10	16	11	21	71	81	69	81	66	90
F 20 2_69.1	69.1	9,7	16	10	21	71	81	69	81	66	90
F 20 2_76.8	76.8	9,3	15	9,7	20	69	81	69	81	66	90
F 20 2_90.4	90.4	8,8	15	9,3	20	69	81	69	81	64	88
F 20 2_101.6	101.6	8,5	15	—	—	—	—	66	78	64	88
F 20 2_114.3	114.3	8,3	14	—	—	—	—	66	78	64	88
F 20 2_132.2	132.2	7,1	13	—	—	—	—	—	—	—	—
F 20 3_156.3	156.3	7,4	14	7,8	18	69	78	66	78	64	88
F 20 3_172.6	172.6	7,4	14	7,8	18	69	78	66	78	64	88
F 20 3_184.9	184.9	7,4	14	7,8	18	69	78	66	78	64	88
F 20 3_209.3	209.3	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_234.0	234.0	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_255.3	255.3	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_285.2	285.2	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_316.9	316.9	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_372.9	372.9	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_419.3	419.3	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_471.7	471.7	7,1	13	7,6	18	69	78	66	78	64	88
F 20 3_545.3	545.3	7,1	13	7,6	18	69	78	66	78	64	88



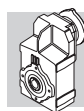
F 25

	i	J (•10-4) [lb•ft ²]							
									
			63	71	80	90	100	112	
F 25 2_6.9	6.9	64	—	—	128	126	154	154	104
F 25 2_8.4	8.4	45	—	—	109	107	135	135	85
F 25 2_9.4	9.4	38	55	55	102	100	128	128	78
F 25 2_10.6	10.6	45	—	—	109	107	135	135	85
F 25 2_13.0	13.0	31	—	—	97	95	123	123	71
F 25 2_14.5	14.5	26	43	43	93	90	119	119	66
F 25 2_16.6	16.6	21	38	38	88	83	112	112	62
F 25 2_18.6	18.6	18	36	36	83	81	109	109	59
F 25 2_21.8	21.8	14	31	31	78	76	104	104	55
F 25 2_23.8	23.8	11	28	28	76	74	102	102	52
F 25 2_27.2	27.2	9.5	26	26	76	71	100	100	50
F 25 2_30.0	30.0	8.3	26	26	74	71	100	100	50
F 25 2_32.2	32.2	7.4	24	24	74	69	100	100	47
F 25 2_36.4	36.4	6.2	24	24	71	69	97	97	47
F 25 2_40.7	40.7	5.2	24	22	71	69	97	97	45
F 25 2_44.4	44.4	4.7	22	22	71	66	95	95	45
F 25 3_45.6	45.6	19	—	—	85	81	109	109	59
F 25 3_50.8	50.8	17	33	33	83	78	107	107	57
F 25 3_58.3	58.3	14	31	31	78	76	104	104	55
F 25 3_65.3	65.3	12	28	28	78	74	104	104	52
F 25 3_76.6	76.6	9.0	26	26	74	71	100	100	50
F 25 3_83.4	83.4	7.6	24	24	74	71	100	100	47
F 25 3_95.5	95.5	6.6	24	24	71	69	97	97	47
F 25 3_105.4	105.4	5.9	24	24	71	69	97	97	47
F 25 3_113.0	113.0	5.5	23	22	71	69	97	97	45
F 25 3_127.8	127.8	4.7	22	22	71	66	95	95	45
F 25 3_143.0	143.0	4.0	21	21	69	66	95	95	45
F 25 3_155.9	155.9	3.6	21	21	69	66	95	95	45
F 25 3_174.2	174.2	3.1	21	20	69	66	95	95	43
F 25 3_193.6	193.6	2.8	20	20	69	64	95	95	43
F 25 3_227.8	227.8	2.4	20	19	69	64	93	93	43
F 25 3_256.1	256.1	2.1	19	19	66	64	93	93	43
F 25 3_288.1	288.1	1.9	19	18	66	64	93	93	43
F 25 3_333.1	333.1	0.71	19	18	—	—	—	—	43
F 25 4_393.9	393.9	0.47	19	19	66	64	93	93	17
F 25 4_434.9	434.9	0.47	19	19	66	64	93	93	17
F 25 4_466.0	466.0	0.47	19	19	66	64	93	93	17
F 25 4_527.3	527.3	0.47	19	19	66	64	93	93	17
F 25 4_589.7	589.7	0.47	19	19	66	64	93	93	17
F 25 4_643.3	643.3	0.47	19	19	66	64	93	93	17
F 25 4_718.7	718.7	0.47	19	19	66	64	93	93	17
F 25 4_798.5	798.5	0.24	19	18	66	64	93	93	17
F 25 4_939.8	939.8	0.24	19	18	66	64	93	93	16
F 25 4_1057	1057	0.24	19	18	66	64	93	93	15
F 25 4_1189	1189	0.24	19	18	66	64	93	93	15
F 25 4_1374	1374	0.24	19	18	66	64	93	93	15

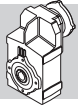


F 25

	i	J (•10-4) [lb•ft ²]			
					
		N56C	N140TC	N180TC	
F 25 2_6.9	6.9	64	—	128	104
F 25 2_8.4	8.4	45	—	109	85
F 25 2_9.4	9.4	38	55	102	78
F 25 2_10.6	10.6	45	—	109	85
F 25 2_13.0	13.0	31	—	97	71
F 25 2_14.5	14.5	26	43	93	66
F 25 2_16.6	16.6	21	38	88	62
F 25 2_18.6	18.6	18	36	83	59
F 25 2_21.8	21.8	14	31	78	55
F 25 2_23.8	23.8	11	28	76	52
F 25 2_27.2	27.2	9,5	26	76	50
F 25 2_30.0	30.0	8,3	26	74	50
F 25 2_32.2	32.2	7,4	24	74	47
F 25 2_36.4	36.4	6,2	24	71	47
F 25 2_40.7	40.7	5,2	24	71	45
F 25 2_44.4	44.4	4,7	22	71	45
F 25 3_45.6	45.6	19	—	85	59
F 25 3_50.8	50.8	17	33	83	57
F 25 3_58.3	58.3	14	31	78	55
F 25 3_65.3	65.3	12	28	78	52
F 25 3_76.6	76.6	9,0	26	74	50
F 25 3_83.4	83.4	7,6	24	74	47
F 25 3_95.5	95.5	6,6	24	71	47
F 25 3_105.4	105.4	5,9	24	71	47
F 25 3_113.0	113.0	5,5	23	71	45
F 25 3_127.8	127.8	4,7	22	71	45
F 25 3_143.0	143.0	4,0	21	69	45
F 25 3_155.9	155.9	3,6	21	69	45
F 25 3_174.2	174.2	3,1	21	69	43
F 25 3_193.6	193.6	2,8	20	69	43
F 25 3_227.8	227.8	2,4	20	69	43
F 25 3_256.1	256.1	2,1	19	66	43
F 25 3_288.1	288.1	1,9	19	66	43
F 25 3_333.1	333.1	0,71	19	—	43
F 25 4_393.9	393.9	0,47	19	66	17
F 25 4_434.9	434.9	0,47	19	66	17
F 25 4_466.0	466.0	0,47	19	66	17
F 25 4_527.3	527.3	0,47	19	66	17
F 25 4_589.7	589.7	0,47	19	66	17
F 25 4_643.3	643.3	0,47	19	66	17
F 25 4_718.7	718.7	0,47	19	66	17
F 25 4_798.5	798.5	0,24	19	66	17
F 25 4_939.8	939.8	0,24	19	66	16
F 25 4_1057	1057	0,24	19	66	15
F 25 4_1189	1189	0,24	19	66	15
F 25 4_1374	1374	0,24	19	66	15



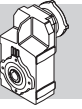
F 25



	i	J (•10-4) [lb•ft ²]									
		 SERVO									
		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 25 2_6.9	6.9	—	—	—	—	—	—	128	140	126	150
F 25 2_8.4	8.4	—	—	—	—	—	—	109	121	107	131
F 25 2_9.4	9.4	45	50	45	55	104	116	102	114	100	123
F 25 2_10.6	10.6	—	—	—	—	—	—	109	121	107	131
F 25 2_13.0	13.0	—	—	—	—	—	—	97	109	95	119
F 25 2_14.5	14.5	33	38	33	43	93	104	93	104	90	114
F 25 2_16.6	16.6	28	33	28	38	88	100	88	100	83	107
F 25 2_18.6	18.6	24	31	26	36	85	95	83	95	81	104
F 25 2_21.8	21.8	20	26	20	31	81	90	78	90	76	100
F 25 2_23.8	23.8	18	24	18	28	78	88	76	88	74	97
F 25 2_27.2	27.2	16	22	16	26	76	88	76	88	71	95
F 25 2_30.0	30.0	15	21	15	26	76	85	74	85	71	95
F 25 2_32.2	32.2	14	20	33	43	74	85	74	85	69	93
F 25 2_36.4	36.4	13	19	13	23	74	83	71	83	69	93
F 25 2_40.7	40.7	12	18	12	23	71	83	71	83	69	93
F 25 2_44.4	44.4	11	17	12	22	71	83	71	83	66	90
F 25 3_45.6	45.6	26	31	26	36	85	95	85	97	81	104
F 25 3_50.8	50.8	23	28	23	33	83	95	83	95	78	102
F 25 3_58.3	58.3	20	26	21	31	81	90	78	90	76	100
F 25 3_65.3	65.3	19	26	20	28	78	90	78	90	74	97
F 25 3_76.6	76.6	15	22	16	26	76	85	74	85	71	95
F 25 3_83.4	83.4	14	20	14	24	74	85	74	85	71	95
F 25 3_95.5	95.5	13	19	14	24	74	83	71	83	69	93
F 25 3_105.4	105.4	12	19	13	23	74	83	71	83	69	93
F 25 3_113.0	113.0	12	18	12	23	74	83	71	83	69	93
F 25 3_127.8	127.8	11	17	12	22	71	83	71	83	66	90
F 25 3_143.0	143.0	10	17	11	21	71	81	69	81	66	90
F 25 3_155.9	155.9	10	16	10	21	71	81	69	81	66	90
F 25 3_174.2	174.2	9,5	16	10	20	71	81	69	81	66	90
F 25 3_193.6	193.6	9,3	15	9,7	20	69	81	69	81	64	88
F 25 3_227.8	227.8	8,8	15	9,3	20	69	81	69	81	64	88
F 25 3_256.1	256.1	8,5	15	—	—	—	—	66	78	64	88
F 25 3_288.1	288.1	8,3	14	—	—	—	—	66	78	64	88
F 25 3_333.1	333.1	7,1	13	—	—	—	—	—	—	—	—
F 25 4_393.9	393.9	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_434.9	434.9	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_466.0	466.0	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_527.3	527.3	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_589.7	589.7	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_643.3	643.3	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_718.7	718.7	6,9	13	7,4	18	66	78	66	78	64	88
F 25 4_798.5	798.5	6,6	13	7,1	18	66	78	66	78	64	88
F 25 4_939.8	939.8	6,6	13	7,1	18	66	78	66	78	64	88
F 25 4_1057	1057	6,6	13	7,1	18	66	78	66	78	64	88
F 25 4_1189	1189	6,6	13	7,1	18	66	78	66	78	64	88
F 25 4_1374	1374	6,6	13	7,1	18	66	78	66	78	64	88

F 31

	i	J (•10 ⁻⁴) [lb•ft ²]								
			63	71	80	90	100	112	132	
F 31 2 6.9	6.9	119	—	—	185	180	211	211	522	168
F 31 2 8.2	8.2	88	—	—	154	150	178	178	475	138
F 31 2 9.0	9.0	76	—	—	142	138	166	166	475	126
F 31 2 10.7	10.7	83	—	—	150	147	176	176	475	133
F 31 2 12.7	12.7	62	—	—	128	126	154	154	451	112
F 31 2 13.9	13.9	55	—	—	121	116	147	147	451	104
F 31 2 16.8	16.8	43	—	—	109	104	133	133	427	93
F 31 2 18.5	18.5	36	52	52	100	97	126	126	427	83
F 31 2 21.1	21.1	26	43	43	93	88	119	119	427	76
F 31 2 23.4	23.4	24	40	40	88	85	114	114	427	71
F 31 2 27.3	27.3	19	36	36	83	81	109	109	403	66
F 31 2 30.1	30.1	15	33	33	81	78	107	107	403	64
F 31 2 34.4	34.4	13	31	28	78	76	104	104	403	62
F 31 2 37.7	37.7	11	28	28	76	74	102	102	403	59
F 31 2 40.4	40.4	10	26	26	76	71	102	102	—	59
F 31 2 44.6	44.6	8.8	26	26	74	71	100	100	—	57
F 31 3 47.5	47.5	38	—	—	102	100	128	128	427	85
F 31 3 52.1	52.1	33	—	—	100	95	126	126	427	83
F 31 3 62.8	62.8	28	—	—	93	90	119	119	427	76
F 31 3 69.1	69.1	24	40	40	88	85	114	114	427	71
F 31 3 78.9	78.9	17	33	33	83	81	109	109	403	66
F 31 3 87.4	87.4	16	33	33	81	78	107	107	403	64
F 31 3 101.9	101.9	13	31	28	78	76	104	104	403	62
F 31 3 112.5	112.5	11	28	28	76	74	102	102	403	59
F 31 3 128.4	128.4	9.0	26	26	74	71	100	100	403	57
F 31 3 140.7	140.7	8.3	26	26	74	71	100	100	403	57
F 31 3 150.8	150.8	7.4	24	24	74	69	100	100	—	57
F 31 3 166.8	166.8	6.6	24	24	71	69	97	97	—	55
F 31 3 185.4	185.4	5.7	24	24	71	69	97	97	—	55
F 31 3 202.3	202.3	5.0	22	22	71	66	97	97	—	55
F 31 3 228.2	228.2	4.3	22	21	69	66	95	95	—	52
F 31 3 253.6	253.6	3.8	21	21	69	66	95	95	—	52
F 31 3 293.8	293.8	3.1	20	20	69	66	95	95	—	52
F 31 3 332.8	332.8	2.6	19	19	69	64	95	95	—	52
F 31 3 374.4	374.4	2.4	19	19	69	64	93	93	—	52
F 31 4 418.9	418.9	2.1	20	20	69	66	93	93	—	18
F 31 4 462.6	462.6	1.9	20	20	69	64	93	93	—	18
F 31 4 527.8	527.8	1.9	20	20	69	64	93	93	—	18
F 31 4 578.6	578.6	1.9	20	20	69	64	93	93	—	18
F 31 4 619.9	619.9	1.7	20	20	69	64	93	93	—	18
F 31 4 685.6	685.6	1.7	20	20	69	64	93	93	—	18
F 31 4 762.3	762.3	1.7	20	20	69	64	93	93	—	18
F 31 4 831.6	831.6	1.7	20	20	69	64	93	93	—	18
F 31 4 938.2	938.2	1.7	20	20	69	64	93	93	—	18
F 31 4 1042	1042	1.7	20	20	69	64	93	93	—	18
F 31 4 1208	1208	1.4	20	19	69	64	93	93	—	18
F 31 4 1368	1368	1.4	20	19	69	64	93	93	—	18
F 31 4 1539	1539	1.4	20	19	69	64	93	93	—	18

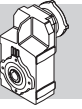


F 31

	i	J (•10-4) [lb•ft ²]					
			 NEMA				
			N56C	N140TC	N180TC		
F 31 2_6.9	6.9	119	—	—	185	522	168
F 31 2_8.2	8.2	88	—	—	154	475	138
F 31 2_9.0	9.0	76	—	—	142	475	126
F 31 2_10.7	10.7	83	—	—	150	475	133
F 31 2_12.7	12.7	62	—	—	128	451	112
F 31 2_13.9	13.9	55	—	—	121	451	104
F 31 2_16.8	16.8	43	—	—	109	427	93
F 31 2_18.5	18.5	36	52	52	100	427	83
F 31 2_21.1	21.1	26	43	43	93	427	76
F 31 2_23.4	23.4	24	40	40	88	427	71
F 31 2_27.3	27.3	19	36	36	83	403	66
F 31 2_30.1	30.1	15	33	33	81	403	64
F 31 2_34.4	34.4	13	31	31	78	403	62
F 31 2_37.7	37.7	11	28	28	76	403	59
F 31 2_40.4	40.4	10	26	26	76	—	59
F 31 2_44.6	44.6	8,8	26	26	74	—	57
F 31 3_47.5	47.5	38	—	—	102	427	85
F 31 3_52.1	52.1	33	—	—	100	427	83
F 31 3_62.8	62.8	28	—	—	93	427	76
F 31 3_69.1	69.1	24	40	40	88	427	71
F 31 3_78.9	78.9	17	33	33	83	403	66
F 31 3_87.4	87.4	16	33	33	81	403	64
F 31 3_101.9	101.9	13	31	31	78	403	62
F 31 3_112.5	112.5	11	28	28	76	403	59
F 31 3_128.4	128.4	9,0	26	26	74	403	57
F 31 3_140.7	140.7	8,3	26	26	74	403	57
F 31 3_150.8	150.8	7,4	24	24	74	—	57
F 31 3_166.8	166.8	6,6	24	24	71	—	55
F 31 3_185.4	185.4	5,7	24	24	71	—	55
F 31 3_202.3	202.3	5,0	22	22	71	—	55
F 31 3_228.2	228.2	4,3	22	22	69	—	52
F 31 3_253.6	253.6	3,8	21	21	69	—	52
F 31 3_293.8	293.8	3,1	20	20	69	—	52
F 31 3_332.8	332.8	2,6	19	19	69	—	52
F 31 3_374.4	374.4	2,4	19	19	69	—	52
F 31 4_418.9	418.9	2,1	20	20	69	—	18
F 31 4_462.6	462.6	1,9	20	20	69	—	18
F 31 4_527.8	527.8	1,9	20	20	69	—	18
F 31 4_578.6	578.6	1,9	20	20	69	—	18
F 31 4_619.9	619.9	1,7	20	20	69	—	18
F 31 4_685.6	685.6	1,7	20	20	69	—	18
F 31 4_762.3	762.3	1,7	20	20	69	—	18
F 31 4_831.6	831.6	1,7	20	20	69	—	18
F 31 4_938.2	938.2	1,7	20	20	69	—	18
F 31 4_1042	1042	1,7	20	20	69	—	18
F 31 4_1208	1208	1,4	20	20	69	—	18
F 31 4_1368	1368	1,4	20	20	69	—	18
F 31 4_1539	1539	1,4	20	20	69	—	18

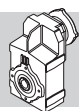
F 31

	i	J (•10 ⁻⁴) [lb•ft ²]											
		 SERVO											
		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 31 2 6.9	6.9	—	—	—	—	—	—	185	197	180	204	180	204
F 31 2 8.2	8.2	—	—	—	—	—	—	154	166	150	173	150	173
F 31 2 9.0	9.0	—	—	—	—	—	—	142	154	138	161	138	161
F 31 2 10.7	10.7	—	—	—	—	—	—	150	161	147	171	147	171
F 31 2 12.7	12.7	—	—	—	—	—	—	128	140	126	150	126	150
F 31 2 13.9	13.9	—	—	—	—	—	—	121	133	116	140	116	140
F 31 2 16.8	16.8	—	—	—	—	—	—	109	121	104	128	104	128
F 31 2 18.5	18.5	43	47	43	52	102	114	100	112	97	121	97	121
F 31 2 21.1	21.1	33	38	33	43	93	102	93	104	88	112	88	112
F 31 2 23.4	23.4	31	36	31	40	90	102	88	100	85	109	85	109
F 31 2 27.3	27.3	26	31	26	36	85	95	83	95	81	104	81	104
F 31 2 30.1	30.1	22	28	22	33	83	93	81	93	78	102	78	102
F 31 2 34.4	34.4	19	26	19	31	81	90	78	90	76	100	76	100
F 31 2 37.7	37.7	18	24	18	28	78	88	76	88	74	97	74	97
F 31 2 40.4	40.4	16	23	17	26	76	88	76	88	71	95	71	95
F 31 2 44.6	44.6	15	21	16	26	76	85	74	85	71	95	71	95
F 31 3 47.5	47.5	—	—	—	—	—	—	102	114	100	123	100	123
F 31 3 52.1	52.1	—	—	—	—	—	—	100	112	95	119	95	119
F 31 3 62.8	62.8	—	—	—	—	—	—	93	104	90	114	90	114
F 31 3 69.1	69.1	31	36	31	40	90	102	88	100	85	109	85	109
F 31 3 78.9	78.9	23	31	24	33	83	95	83	95	81	104	81	104
F 31 3 87.4	87.4	22	28	23	33	83	93	81	93	78	102	78	102
F 31 3 101.9	101.9	19	26	20	31	81	90	78	90	76	100	76	100
F 31 3 112.5	112.5	17	23	18	28	78	88	76	88	74	97	74	97
F 31 3 128.4	128.4	15	22	16	26	76	85	74	85	71	95	71	95
F 31 3 140.7	140.7	15	21	15	26	76	85	74	85	71	95	71	95
F 31 3 150.8	150.8	14	20	14	24	74	85	74	85	69	93	69	93
F 31 3 166.8	166.8	13	19	14	24	74	83	71	83	69	93	69	93
F 31 3 185.4	185.4	12	18	13	23	74	83	71	83	69	93	69	93
F 31 3 202.3	202.3	11	18	12	22	71	83	71	83	66	90	66	90
F 31 3 228.2	228.2	11	17	11	22	71	81	69	81	66	90	66	90
F 31 3 253.6	253.6	10	16	11	21	71	81	69	81	66	90	66	90
F 31 3 293.8	293.8	9,5	16	10	20	71	81	69	81	66	90	66	90
F 31 3 332.8	332.8	9,0	15	—	—	—	—	69	81	64	88	64	88
F 31 3 374.4	374.4	8,8	15	—	—	—	—	69	81	64	88	64	88
F 31 4 418.9	418.9	8,5	15	9,0	19	69	78	69	81	66	90	—	—
F 31 4 462.6	462.6	8,3	14	8,8	19	69	78	69	81	64	88	—	—
F 31 4 527.8	527.8	8,3	14	8,8	19	69	78	69	81	64	88	—	—
F 31 4 578.6	578.6	8,3	14	8,8	19	69	78	69	81	64	88	—	—
F 31 4 619.9	619.9	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 685.6	685.6	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 762.3	762.3	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 831.6	831.6	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 938.2	938.2	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 1042	1042	8,1	14	8,5	19	69	78	69	81	64	88	—	—
F 31 4 1208	1208	7,8	14	8,3	19	69	78	69	81	64	88	—	—
F 31 4 1368	1368	7,8	14	8,3	19	69	78	69	81	64	88	—	—
F 31 4 1539	1539	20	14	8,3	19	69	78	69	81	64	88	—	—



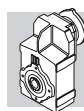
F 41

	i	J (•10-4) [lb•ft2]								
			 IEC							
			63	71	80	90	100	112	132	
F 41 2_6.7	6.7	285	—	—	356	356	427	427	688	498
F 41 2_9.1	9.1	171	—	—	237	233	308	308	570	380
F 41 2_10.8	10.8	190	—	—	261	261	308	308	593	403
F 41 2_14.6	14.6	119	—	—	183	180	237	237	498	332
F 41 2_17.1	17.1	83	—	—	150	147	211	211	475	285
F 41 2_18.9	18.9	74	—	—	138	135	202	202	475	285
F 41 2_24.1	24.1	50	66	66	116	114	178	178	451	261
F 41 2_30.1	30.1	36	52	52	102	100	164	164	427	237
F 41 2_38.2	38.2	23	40	40	88	85	150	150	403	230
F 41 2_47.9	47.9	16	33	33	81	78	142	142	403	225
F 41 3_51.5	51.5	71	—	—	135	133	199	199	451	285
F 41 3_60.2	60.2	50	—	—	116	112	178	178	451	261
F 41 3_66.5	66.5	45	—	—	112	107	173	173	427	261
F 41 3_84.9	84.9	33	50	50	100	95	161	161	427	237
F 41 3_106.0	106.0	26	43	40	90	88	152	152	427	233
F 41 3_134.4	134.4	16	33	33	81	78	142	142	403	223
F 41 3_168.7	168.7	12	28	28	76	74	140	140	403	221
F 41 3_180.7	180.7	10	26	26	76	74	138	138	—	218
F 41 3_198.9	198.9	9.3	26	26	74	71	138	138	—	218
F 41 3_220.1	220.1	8.5	26	26	74	71	135	135	—	216
F 41 3_240.1	240.1	7.4	24	24	74	69	135	135	—	216
F 41 3_266.9	266.9	6.6	24	24	71	69	135	135	—	216
F 41 3_296.6	296.6	5.5	24	24	71	69	133	133	—	214
F 41 3_344.8	344.8	4.5	22	22	69	66	133	133	—	214
F 41 4_433.7	433.7	5.0	22	22	71	66	97	97	—	45
F 41 4_549.8	549.8	4.5	22	21	69	66	95	95	—	45
F 41 4_690.1	690.1	4.3	22	21	69	66	95	95	—	45
F 41 4_739.4	739.4	4.0	21	21	69	66	95	95	—	45
F 41 4_813.8	813.8	4.0	21	21	69	66	95	95	—	45
F 41 4_900.5	900.5	4.0	21	21	69	66	95	95	—	45
F 41 4_982.4	982.4	4.0	21	21	69	66	95	95	—	45
F 41 4_1092	1092	3.8	21	21	69	66	95	95	—	45
F 41 4_1213	1213	3.8	21	21	69	66	95	95	—	45
F 41 4_1411	1411	3.8	21	21	69	66	95	95	—	45

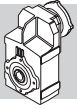


F 41

	i	J (•10-4) [lb•ft ²]					
			 NEMA				
			N56C	N140TC	N180TC	N210TC	
F 41 2_6.7	6.7	285	—	—	356	688	498
F 41 2_9.1	9.1	171	—	—	237	570	380
F 41 2_10.8	10.8	190	—	—	261	593	403
F 41 2_14.6	14.6	119	—	—	183	498	332
F 41 2_17.1	17.1	83	—	—	150	475	285
F 41 2_18.9	18.9	74	—	—	138	475	285
F 41 2_24.1	24.1	50	66	66	116	451	261
F 41 2_30.1	30.1	36	52	52	102	427	237
F 41 2_38.2	38.2	23	40	40	88	403	230
F 41 2_47.9	47.9	16	33	33	81	403	225
F 41 3_51.5	51.5	71	—	—	135	451	285
F 41 3_60.2	60.2	50	—	—	116	451	261
F 41 3_66.5	66.5	45	—	—	112	427	261
F 41 3_84.9	84.9	33	50	50	100	427	237
F 41 3_106.0	106.0	26	43	43	90	427	233
F 41 3_134.4	134.4	16	33	33	81	403	223
F 41 3_168.7	168.7	12	28	28	76	403	221
F 41 3_180.7	180.7	10	26	26	76	—	218
F 41 3_198.9	198.9	9,3	26	26	74	—	218
F 41 3_220.1	220.1	8,5	26	26	74	—	216
F 41 3_240.1	240.1	7,4	24	24	74	—	216
F 41 3_266.9	266.9	6,6	24	24	71	—	216
F 41 3_296.6	296.6	5,5	24	24	71	—	214
F 41 3_344.8	344.8	4,5	22	22	69	—	214
F 41 4_433.7	433.7	5,0	22	22	71	—	45
F 41 4_549.8	549.8	4,5	22	22	69	—	45
F 41 4_690.1	690.1	4,3	22	22	69	—	45
F 41 4_739.4	739.4	4,0	21	21	69	—	45
F 41 4_813.8	813.8	4,0	21	21	69	—	45
F 41 4_900.5	900.5	4,0	21	21	69	—	45
F 41 4_982.4	982.4	4,0	21	21	69	—	45
F 41 4_1092	1092	3,8	21	21	69	—	45
F 41 4_1213	1213	3,8	21	21	69	—	45
F 41 4_1411	1411	3,8	21	21	69	—	45



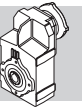
F 41



		J (•10-4) [lb•ft ²]																	
	i	 SERVO																	
		60A		60B 80A		80B		95A		80C 95B 110A		95C 110B		130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 41 2_6.7	6.7	—	—	—	—	—	—	—	—	356	380	356	380	356	380	688	736	688	807
F 41 2_9.1	9.1	—	—	—	—	—	—	—	—	237	261	233	261	233	261	570	641	570	688
F 41 2_10.8	10.8	—	—	—	—	—	—	—	—	261	285	261	285	261	285	593	641	593	712
F 41 2_14.6	14.6	—	—	—	—	—	—	—	—	183	195	180	204	180	204	522	570	498	617
F 41 2_17.1	17.1	—	—	—	—	—	—	—	—	150	161	147	171	147	171	475	546	475	593
F 41 2_18.9	18.9	—	—	—	—	—	—	—	—	138	150	135	159	135	159	475	546	475	593
F 41 2_24.1	24.1	—	—	—	—	116	128	116	128	116	128	114	138	114	138	451	522	451	570
F 41 2_30.1	30.1	—	—	—	—	102	114	102	114	102	114	100	123	100	123	427	498	427	546
F 41 2_38.2	38.2	—	—	—	—	90	100	90	100	88	100	85	109	85	109	427	475	403	522
F 41 2_47.9	47.9	—	—	—	—	83	93	83	93	81	93	78	102	78	102	427	475	403	522
F 41 3_51.5	51.5	—	—	—	—	—	—	—	—	135	147	133	157	133	157	475	522	451	570
F 41 3_60.2	60.2	—	—	—	—	—	—	—	—	116	128	112	135	112	135	451	522	451	570
F 41 3_66.5	66.5	—	—	—	—	—	—	—	—	112	123	107	131	107	131	451	498	427	546
F 41 3_84.9	84.9	—	—	—	—	100	112	100	112	100	112	95	119	95	119	427	498	427	546
F 41 3_106.0	106.0	—	—	—	—	93	104	93	104	90	102	88	112	88	112	427	498	427	546
F 41 3_134.4	134.4	—	—	—	—	83	93	83	93	81	93	78	102	78	102	427	475	403	522
F 41 3_168.7	168.7	—	—	—	—	78	88	78	88	76	88	74	97	74	97	403	475	403	522
F 41 3_180.7	180.7	—	—	—	—	78	88	78	88	76	88	74	97	74	97	—	—	—	—
F 41 3_198.9	198.9	—	—	—	—	76	85	76	85	74	85	71	95	71	95	—	—	—	—
F 41 3_220.1	220.1	—	—	—	—	76	85	76	85	74	85	71	95	71	95	—	—	—	—
F 41 3_240.1	240.1	—	—	—	—	74	85	74	85	74	85	69	93	69	93	—	—	—	—
F 41 3_266.9	266.9	—	—	—	—	74	83	74	83	71	83	69	93	69	93	—	—	—	—
F 41 3_296.6	296.6	—	—	—	—	74	83	74	83	71	83	69	93	69	93	—	—	—	—
F 41 3_344.8	344.8	—	—	—	—	71	81	71	81	69	81	66	90	66	90	—	—	—	—
F 41 4_433.7	433.7	11	18	12	22	—	—	71	83	71	83	66	90	—	—	—	—	—	—
F 41 4_549.8	549.8	11	17	11	22	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_690.1	690.1	11	17	11	22	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_739.4	739.4	10	17	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_813.8	813.8	10	17	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_900.5	900.5	10	17	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_982.4	982.4	10	17	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_1092	1092	10	16	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_1213	1213	10	16	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—
F 41 4_1411	1411	10	16	11	21	—	—	71	81	69	81	66	90	—	—	—	—	—	—

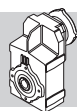
F 51

	i	J (•10-4) [lb•ft ²]										
			 IEC									
			63	71	80	90	100	112	132	160	180	
F 51 2_7.2	7.2	593	—	—	664	664	712	712	997	2397	2444	807
F 51 2_9.1	9.1	403	—	—	475	451	522	522	783	2183	2231	617
F 51 2_11.1	11.1	380	—	—	451	451	522	522	783	2183	2231	593
F 51 2_14.0	14.0	261	—	—	332	332	403	403	664	2065	2112	475
F 51 2_18.8	18.8	166	—	—	233	228	285	285	570	1970	2017	380
F 51 2_23.8	23.8	107	—	—	173	171	235	235	498	1898	1946	308
F 51 2_30.0	30.0	74	90	90	140	138	202	202	475	1875	1922	285
F 51 2_37.1	37.1	52	71	71	119	116	180	180	451	1851	1898	261
F 51 3_48.9	48.9	147	—	—	211	209	285	285	546	1946	1993	356
F 51 3_65.8	65.8	100	—	—	164	161	228	228	498	1898	1946	308
F 51 3_83.2	83.2	64	—	—	131	128	192	192	451	1851	1898	285
F 51 3_105.1	105.1	47	64	64	114	109	176	176	451	1851	1898	261
F 51 3_129.9	129.9	36	52	52	102	97	164	164	427	1827	1875	237
F 51 3_165.6	165.6	23	40	40	88	85	150	150	403	1804	1851	230
F 51 3_202.4	202.4	17	33	33	83	78	145	145	403	1804	1851	225
F 51 3_216.9	216.9	15	33	31	81	78	142	142	—	—	—	223
F 51 3_239.8	239.8	14	31	31	81	76	142	142	—	—	—	223
F 51 3_262.1	262.1	13	31	31	78	76	140	140	—	—	—	221
F 51 3_285.9	285.9	11	28	28	76	74	138	138	—	—	—	218
F 51 3_317.3	317.3	9.3	26	26	76	71	138	138	—	—	—	218
F 51 3_352.5	352.5	6.6	26	26	74	71	135	135	—	—	—	216
F 51 4_429.1	429.1	8.5	26	26	74	71	135	135	427	—	—	57
F 51 4_530.5	530.5	7.8	26	24	74	71	135	135	427	—	—	57
F 51 4_676.3	676.3	7.1	24	24	74	69	135	135	427	—	—	57
F 51 4_826.4	826.4	6.6	24	24	71	69	135	135	427	—	—	55
F 51 4_885.5	885.5	6.6	24	24	71	69	135	135	—	—	—	55
F 51 4_979.4	979.4	6.6	24	24	71	69	135	135	—	—	—	55
F 51 4_1070	1070	6.4	24	24	71	69	133	133	—	—	—	55
F 51 4_1168	1168	6.4	24	24	71	69	133	133	—	—	—	55
F 51 4_1296	1296	6.2	24	24	71	69	133	133	—	—	—	55
F 51 4_1439	1439	6.2	24	24	71	69	133	133	—	—	—	55



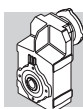
F 51

	i	J (•10-4) [lb•ft ²]							
			 NEMA						
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
F 51 2_7.2	7.2	593	—	—	664	997	2397	2444	807
F 51 2_9.1	9.1	403	—	—	475	783	2183	2231	617
F 51 2_11.1	11.1	380	—	—	451	783	2183	2231	593
F 51 2_14.0	14.0	261	—	—	332	664	2065	2112	475
F 51 2_18.8	18.8	166	—	—	233	570	1970	2017	380
F 51 2_23.8	23.8	107	—	—	173	498	1898	1946	308
F 51 2_30.0	30.0	74	90	90	140	475	1875	1922	285
F 51 2_37.1	37.1	52	71	71	119	451	1851	1898	261
F 51 3_48.9	48.9	147	—	—	211	546	1946	1993	356
F 51 3_65.8	65.8	100	—	—	164	498	1898	1946	308
F 51 3_83.2	83.2	64	—	—	131	451	1851	1898	285
F 51 3_105.1	105.1	47	64	64	114	451	1851	1898	261
F 51 3_129.9	129.9	36	52	52	102	427	1827	1875	237
F 51 3_165.6	165.6	23	40	40	88	403	1804	1851	230
F 51 3_202.4	202.4	17	33	33	83	403	1804	1851	225
F 51 3_216.9	216.9	15	33	33	81	—	—	—	223
F 51 3_239.8	239.8	14	31	31	81	—	—	—	223
F 51 3_262.1	262.1	13	31	31	78	—	—	—	221
F 51 3_285.9	285.9	11	28	28	76	—	—	—	218
F 51 3_317.3	317.3	9,3	26	26	76	—	—	—	218
F 51 3_352.5	352.5	6,6	26	26	74	—	—	—	216
F 51 4_429.1	429.1	8,5	26	26	74	427	—	—	57
F 51 4_530.5	530.5	7,8	26	26	74	427	—	—	57
F 51 4_676.3	676.3	7,1	24	24	74	427	—	—	57
F 51 4_826.4	826.4	6,6	24	24	71	427	—	—	55
F 51 4_885.5	885.5	6,6	24	24	71	—	—	—	55
F 51 4_979.4	979.4	6,6	24	24	71	—	—	—	55
F 51 4_1070	1070	6,4	24	24	71	—	—	—	55
F 51 4_1168	1168	6,4	24	24	71	—	—	—	55
F 51 4_1296	1296	6,2	24	24	71	—	—	—	55
F 51 4_1439	1439	6,2	24	24	71	—	—	—	55



F 51

	i	J (•10 ⁻⁴) [lb•ft ²]											
		 SERVO											
		80B		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 51 2_7.2	7.2	—	—	—	—	664	688	664	546	997	1044	997	1115
F 51 2_9.1	9.1	—	—	—	—	475	498	451	475	807	854	783	902
F 51 2_11.1	11.1	—	—	—	—	451	475	451	475	783	831	783	902
F 51 2_14.0	14.0	—	—	—	—	332	356	332	356	664	712	664	783
F 51 2_18.8	18.8	—	—	—	—	233	237	228	261	570	617	570	688
F 51 2_23.8	23.8	—	—	—	—	173	185	171	195	498	570	498	617
F 51 2_30.0	30.0	140	152	140	152	140	152	138	161	475	546	475	593
F 51 2_37.1	37.1	119	131	119	131	119	131	116	140	451	522	451	570
F 51 3_48.9	48.9	—	—	—	—	211	223	209	233	546	617	546	664
F 51 3_65.8	65.8	—	—	—	—	164	176	161	185	498	570	498	617
F 51 3_83.2	83.2	—	—	—	—	131	142	128	152	475	522	451	570
F 51 3_105.1	105.1	114	126	114	126	114	126	109	133	451	498	451	570
F 51 3_129.9	129.9	102	114	102	114	102	114	97	121	427	498	427	546
F 51 3_165.6	165.6	90	100	90	100	88	100	85	109	427	475	403	522
F 51 3_202.4	202.4	83	95	83	95	83	95	78	102	427	475	403	522
F 51 3_216.9	216.9	83	93	83	93	81	93	78	102	—	—	—	—
F 51 3_239.8	239.8	81	93	81	93	81	93	76	100	—	—	—	—
F 51 3_262.1	262.1	81	90	81	90	78	90	76	100	—	—	—	—
F 51 3_285.9	285.9	78	88	78	88	76	88	74	97	—	—	—	—
F 51 3_317.3	317.3	76	85	76	85	76	88	71	95	—	—	—	—
F 51 3_352.5	352.5	74	83	74	83	74	85	71	95	—	—	—	—
F 51 4_429.1	429.1	—	—	76	85	74	85	71	95	—	—	—	—
F 51 4_530.5	530.5	—	—	76	85	74	85	71	95	—	—	—	—
F 51 4_676.3	676.3	—	—	74	85	74	85	69	93	—	—	—	—
F 51 4_826.4	826.4	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_885.5	885.5	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_979.4	979.4	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_1070	1070	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_1168	1168	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_1296	1296	—	—	74	83	71	83	69	93	—	—	—	—
F 51 4_1439	1439	—	—	74	83	71	83	69	93	—	—	—	—



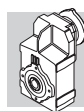
F 60

	i	J (•10 ⁻⁴) [lb•ft ²]										
			 IEC									
			63	71	80	90	100	112	132	160	180	
F 60 3_9.0	9.0	949	—	—	—	—	—	—	1400	2800	2753	1448
F 60 3_9.7	9.7	902	—	—	—	—	—	—	1353	2753	2705	1400
F 60 3_11.8	11.8	593	—	—	664	664	688	688	1044	2444	2397	1092
F 60 3_12.7	12.7	570	—	—	641	641	664	664	1020	2420	2373	1068
F 60 3_14.5	14.5	427	—	—	498	475	522	522	878	2278	2231	925
F 60 3_15.7	15.7	403	—	—	475	475	498	498	854	2254	2207	902
F 60 3_19.1	19.1	237	—	—	308	308	332	332	688	2112	2041	736
F 60 3_20.7	20.7	235	—	—	308	308	332	332	688	2088	2041	736
F 60 3_23.5	23.5	173	—	—	237	237	261	261	617	2041	1970	664
F 60 3_25.4	25.4	168	—	—	235	235	261	261	617	2017	1970	664
F 60 3_29.6	29.6	356	—	—	—	—	—	—	807	2207	2159	854
F 60 3_32.1	32.1	356	—	—	—	—	—	—	807	2207	2159	854
F 60 3_38.8	38.8	261	—	—	332	308	356	356	712	2112	2065	759
F 60 3_42.1	42.1	261	—	—	308	308	356	356	688	2112	2065	736
F 60 3_47.8	47.8	195	—	—	261	261	285	285	641	2041	1993	688
F 60 3_51.8	51.8	192	—	—	261	261	285	285	641	2041	1993	688
F 60 3_63.0	63.0	116	—	—	183	180	211	211	570	1970	1922	617
F 60 3_68.3	68.3	114	—	—	183	180	211	211	570	1970	1922	617
F 60 3_77.6	77.6	88	—	—	157	154	185	185	546	1946	1898	593
F 60 3_84.0	84.0	88	—	—	154	154	185	185	546	1946	1898	593
F 60 3_98.2	98.2	64	100	100	133	131	161	161	522	1922	1875	570
F 60 3_106.4	106.4	64	100	100	131	128	161	161	522	1922	1875	570
F 60 3_120.5	120.5	43	76	76	109	109	140	140	498	1898	1851	546
F 60 3_130.5	130.5	43	76	76	109	109	138	138	498	1898	1851	546
F 60 3_150.4	150.4	31	64	64	97	97	128	128	475	1898	1827	522
F 60 3_162.9	162.9	31	64	64	97	97	128	128	475	1898	1827	522
F 60 3_185.9	185.9	21	57	57	90	88	119	119	475	1875	1827	522
F 60 3_201.4	201.4	21	57	57	90	88	119	119	475	1875	1827	522
F 60 3_217.6	217.6	17	52	52	85	83	114	114	—	—	—	522
F 60 3_235.8	235.8	17	52	52	85	83	114	114	—	—	—	522
F 60 3_259.1	259.1	12	47	47	81	78	109	109	—	—	—	522
F 60 3_280.7	280.7	12	47	47	81	78	109	109	—	—	—	522

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

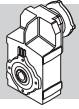
F 60

	i	J (•10-4) [lb•ft ²]							
			N56C	N140TC	N180TC	N210TC	N250TC	N280TC	
F 60 3_9.0	9.0	949	—	—	—	1400	2800	2753	1448
F 60 3_9.7	9.7	902	—	—	—	1353	2753	2705	1400
F 60 3_11.8	11.8	593	—	—	664	1044	2444	2397	1092
F 60 3_12.7	12.7	570	—	—	641	1020	2420	2373	1068
F 60 3_14.5	14.5	427	—	—	498	878	2278	2231	925
F 60 3_15.7	15.7	403	—	—	475	854	2254	2207	902
F 60 3_19.1	19.1	237	—	—	308	688	2112	2041	736
F 60 3_20.7	20.7	235	—	—	308	688	2088	2041	736
F 60 3_23.5	23.5	173	—	—	237	617	2041	1970	664
F 60 3_25.4	25.4	168	—	—	235	617	2017	1970	664
F 60 3_29.6	29.6	356	—	—	—	807	2207	2159	854
F 60 3_32.1	32.1	356	—	—	—	807	2207	2159	854
F 60 3_38.8	38.8	261	—	—	332	712	2112	2065	759
F 60 3_42.1	42.1	261	—	—	308	688	2112	2065	736
F 60 3_47.8	47.8	195	—	—	261	641	2041	1993	688
F 60 3_51.8	51.8	192	—	—	261	641	2041	1993	688
F 60 3_63.0	63.0	116	—	—	183	570	1970	1922	617
F 60 3_68.3	68.3	114	—	—	183	570	1970	1922	617
F 60 3_77.6	77.6	88	—	—	157	546	1946	1898	593
F 60 3_84.0	84.0	88	—	—	154	546	1946	1898	593
F 60 3_98.2	98.2	64	100	100	133	522	1922	1875	570
F 60 3_106.4	106.4	64	100	100	131	522	1922	1875	570
F 60 3_120.5	120.5	43	76	76	109	498	1898	1851	546
F 60 3_130.5	130.5	43	76	76	109	498	1898	1851	546
F 60 3_150.4	150.4	31	64	64	97	475	1898	1827	522
F 60 3_162.9	162.9	31	64	64	97	475	1898	1827	522
F 60 3_185.9	185.9	21	57	57	90	475	1875	1827	522
F 60 3_201.4	201.4	21	57	57	90	475	1875	1827	522
F 60 3_217.6	217.6	17	52	52	85	—	—	—	522
F 60 3_235.8	235.8	17	52	52	85	—	—	—	522
F 60 3_259.1	259.1	12	47	47	81	—	—	—	522
F 60 3_280.7	280.7	12	47	47	81	—	—	—	522



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

F 60

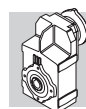


		J (•10-4) [lb•ft ²]									
		SERVO									
	i	95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
F 60 3_9.0	9.0	—	—	—	—	—	—	1353	1400	1400	1519
F 60 3_9.7	9.7	—	—	—	—	—	—	1305	1353	1353	1471
F 60 3_11.8	11.8	—	—	664	688	664	688	997	1044	1044	1163
F 60 3_12.7	12.7	—	—	641	664	641	664	973	1020	1020	1139
F 60 3_14.5	14.5	—	—	498	522	475	498	831	878	878	997
F 60 3_15.7	15.7	—	—	475	498	475	498	807	854	854	973
F 60 3_19.1	19.1	—	—	308	332	308	332	641	688	688	807
F 60 3_20.7	20.7	—	—	308	332	308	332	641	688	688	807
F 60 3_23.5	23.5	—	—	237	261	237	261	570	641	617	736
F 60 3_25.4	25.4	—	—	235	237	235	261	570	641	617	736
F 60 3_29.6	29.6	—	—	—	—	—	—	759	807	807	925
F 60 3_32.1	32.1	—	—	—	—	—	—	759	807	807	925
F 60 3_38.8	38.8	—	—	332	356	308	332	664	712	712	831
F 60 3_42.1	42.1	—	—	308	332	308	332	664	712	688	807
F 60 3_47.8	47.8	—	—	261	285	261	285	593	664	641	759
F 60 3_51.8	51.8	—	—	261	285	261	285	593	664	641	759
F 60 3_63.0	63.0	—	—	183	195	180	204	522	570	570	688
F 60 3_68.3	68.3	—	—	183	195	180	204	522	570	570	688
F 60 3_77.6	77.6	—	—	157	168	154	178	498	546	546	664
F 60 3_84.0	84.0	—	—	154	166	154	178	498	546	546	664
F 60 3_98.2	98.2	—	—	133	145	131	154	475	522	522	641
F 60 3_106.4	106.4	131	142	131	142	128	152	475	522	522	641
F 60 3_120.5	120.5	52	64	109	121	109	133	451	498	498	617
F 60 3_130.5	130.5	52	64	109	121	109	133	451	498	498	617
F 60 3_150.4	150.4	97	109	97	109	97	121	427	498	475	593
F 60 3_162.9	162.9	97	109	97	109	97	121	427	498	475	593
F 60 3_185.9	185.9	88	100	90	102	88	112	427	475	475	593
F 60 3_201.4	201.4	88	100	90	102	88	112	427	475	475	593
F 60 3_217.6	217.6	83	95	85	97	83	107	—	—	—	—
F 60 3_235.8	235.8	83	95	85	97	83	107	—	—	—	—
F 60 3_259.1	259.1	78	90	81	93	78	102	—	—	—	—
F 60 3_280.7	280.7	78	90	81	93	78	102	—	—	—	—

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

F 70

	i	J (•10 ⁻⁴) [lb•ft ²]									
			 IEC								
			80	90	100	112	132	160	180	200	
F 70 3_10.0	10.0	—	—	—	—	—	—	4010	3963	4177	3156
F 70 3_10.9	10.9	—	—	—	—	—	—	3939	3868	4105	3061
F 70 3_12.8	12.8	—	—	—	—	—	—	3299	3251	3465	2420
F 70 3_13.9	13.9	—	—	—	—	—	—	3251	3204	3417	2373
F 70 3_16.3	16.3	925	—	—	—	—	1376	2776	2729	2943	1898
F 70 3_17.7	17.7	878	—	—	—	—	1329	2753	2682	2919	1875
F 70 3_20.9	20.9	617	—	—	—	—	1068	2492	2420	—	1614
F 70 3_22.6	22.6	617	—	—	—	—	1044	2468	2420	—	1590
F 70 3_24.6	24.6	498	—	—	—	—	949	2349	2302	—	1471
F 70 3_27.7	27.7	—	—	—	—	—	—	3037	2990	3204	1732
F 70 3_30.0	30.0	—	—	—	—	—	—	3014	2966	3180	1732
F 70 3_35.4	35.4	—	—	—	—	—	—	2705	2658	2871	1827
F 70 3_38.4	38.4	—	—	—	—	—	—	2705	2634	2871	1827
F 70 3_45.2	45.2	546	—	—	—	—	997	2397	2349	2563	1542
F 70 3_49.0	49.0	546	—	—	—	—	997	2397	2349	2563	1542
F 70 3_57.7	57.7	403	—	—	—	—	854	2254	2207	—	1376
F 70 3_62.5	62.5	403	—	—	—	—	854	2254	2207	—	1376
F 70 3_67.9	67.9	332	—	—	—	—	783	2183	2136	—	1305
F 70 3_73.6	73.6	332	—	—	—	—	783	2183	2136	—	1305
F 70 3_85.4	85.4	214	261	261	308	308	664	2065	2017	—	1187
F 70 3_92.5	92.5	214	261	261	308	308	664	2065	2017	—	1187
F 70 3_101.2	101.2	150	211	209	237	237	593	2017	1946	—	1115
F 70 3_109.6	109.6	150	211	209	237	237	593	2017	1946	—	1115
F 70 3_122.7	122.7	121	187	185	216	216	570	1970	1922	—	1092
F 70 3_133.0	133.0	121	187	185	216	216	570	1970	1922	—	1092
F 70 3_153.8	153.8	76	142	142	173	173	522	1922	1875	—	1044
F 70 3_166.7	166.7	76	142	142	173	173	522	1922	1875	—	1044
F 70 3_180.9	180.9	55	121	121	150	150	498	1922	1851	—	1020
F 70 3_196.0	196.0	55	121	119	150	150	498	1922	1851	—	1020



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

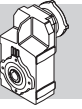
F 70

	i	J (•10 ⁻⁴) [lb•ft ²]				
			 NEMA			
			N210TC	N250TC	N280TC	
F 70 3_10.0	10.0	—	—	4010	3963	3156
F 70 3_10.9	10.9	—	—	3939	3868	3061
F 70 3_12.8	12.8	—	—	3299	3251	2420
F 70 3_13.9	13.9	—	—	3251	3204	2373
F 70 3_16.3	16.3	925	1376	2776	2729	1898
F 70 3_17.7	17.7	878	1329	2753	2682	1875
F 70 3_20.9	20.9	617	1068	2492	2420	1614
F 70 3_22.6	22.6	617	1044	2468	2420	1590
F 70 3_24.6	24.6	498	949	2349	2302	1471
F 70 3_27.7	27.7	—	—	3037	2990	1732
F 70 3_30.0	30.0	—	—	3014	2966	1732
F 70 3_35.4	35.4	—	—	2705	2658	1827
F 70 3_38.4	38.4	—	—	2705	2634	1827
F 70 3_45.2	45.2	546	997	2397	2349	1542
F 70 3_49.0	49.0	546	997	2397	2349	1542
F 70 3_57.7	57.7	403	854	2254	2207	1376
F 70 3_62.5	62.5	403	854	2254	2207	1376
F 70 3_67.9	67.9	332	783	2183	2136	1305
F 70 3_73.6	73.6	332	783	2183	2136	1305
F 70 3_85.4	85.4	214	664	2065	2017	1187
F 70 3_92.5	92.5	214	664	2065	2017	1187
F 70 3_101.2	101.2	150	593	2017	1946	1115
F 70 3_109.6	109.6	150	593	2017	1946	1115
F 70 3_122.7	122.7	121	570	1970	1922	1092
F 70 3_133.0	133.0	121	570	1970	1922	1092
F 70 3_153.8	153.8	76	522	1922	1875	1044
F 70 3_166.7	166.7	76	522	1922	1875	1044
F 70 3_180.9	180.9	55	498	1922	1851	1020
F 70 3_196.0	196.0	55	498	1922	1851	1020

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

F 80

	i	J (•10 ⁻⁴) [lb•ft ²]										
			 IEC									
			80	90	100	112	132	160	180	200	225	
F 80 3_10.3	10.3	—	—	—	—	—	—	—	6787	7119	13716	5980
F 80 3_11.2	11.2	—	—	—	—	—	—	—	6573	6906	13503	5790
F 80 3_12.9	12.9	—	—	—	—	—	—	5149	5173	5482	12079	4366
F 80 3_14.0	14.0	—	—	—	—	—	—	5031	5031	5363	11960	4224
F 80 3_16.2	16.2	—	—	—	—	—	—	4105	4058	4271	11011	3227
F 80 3_17.6	17.6	—	—	—	—	—	—	4034	3963	4200	10940	3156
F 80 3_20.3	20.3	1424	—	—	—	—	1875	3299	3227	3465	10228	2420
F 80 3_22.0	22.0	1376	—	—	—	—	1827	3227	3180	3393	10180	2373
F 80 3_25.2	25.2	1020	—	—	—	—	1471	2871	2824	3560	9801	1993
F 80 3_28.8	28.8	—	—	—	—	—	—	—	4485	4817	11391	3678
F 80 3_31.3	31.3	—	—	—	—	—	—	—	4461	4770	11367	3654
F 80 3_36.0	36.0	—	—	—	—	—	—	3678	3678	4010	10607	2871
F 80 3_39.0	39.0	—	—	—	—	—	—	3654	3654	3987	10584	2871
F 80 3_45.3	45.3	—	—	—	—	—	—	3156	3132	3346	10085	2302
F 80 3_49.1	49.1	—	—	—	—	—	—	3156	3109	3322	10085	2302
F 80 3_56.7	56.7	831	—	—	—	—	1281	2682	2634	2848	9635	1827
F 80 3_61.5	61.5	831	—	—	—	—	1281	2682	2634	2848	9635	1804
F 80 3_70.4	70.4	641	—	—	—	—	1092	2492	2444	3156	9421	1614
F 80 3_76.3	76.3	641	—	—	—	—	1068	2492	2444	3156	9397	1614
F 80 3_85.2	85.2	475	—	—	—	—	925	2349	2278	2990	9231	1471
F 80 3_92.3	92.3	475	—	—	—	—	925	2349	2278	2990	9231	1448
F 80 3_105.0	105.0	332	380	380	403	403	759	2183	2136	2824	9089	1305
F 80 3_113.8	113.8	332	380	380	403	403	759	2183	2136	2824	9065	1305
F 80 3_122.5	122.5	308	356	356	403	403	759	2159	2112	2800	9041	1281
F 80 3_132.7	132.7	308	356	356	380	380	736	2159	2112	2800	9041	1281
F 80 3_147.9	147.9	202	261	261	308	308	641	2065	2017	2705	8946	1187
F 80 3_160.2	160.2	202	261	261	308	308	641	2065	1993	—	—	1187
F 80 3_184.6	184.6	121	187	185	216	216	570	1970	1922	—	—	1092
F 80 3_200.0	200.0	119	187	185	216	216	570	1970	1922	—	—	1092



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

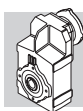
F 80

	i	J (•10 ⁻⁴) [lb•ft ²]					
				NEMA			
			N210TC	N250TC	N280TC	N320TC	
F 80 3_10.3	10.3	—	—	—	6787	13716	5980
F 80 3_11.2	11.2	—	—	—	6573	13503	5790
F 80 3_12.9	12.9	—	—	5149	5173	12079	4366
F 80 3_14.0	14.0	—	—	5031	5031	11960	4224
F 80 3_16.2	16.2	—	—	4105	4058	11011	3227
F 80 3_17.6	17.6	—	—	4034	3963	10940	3156
F 80 3_20.3	20.3	1424	1875	3299	3227	10228	2420
F 80 3_22.0	22.0	1376	1827	3227	3180	10180	2373
F 80 3_25.2	25.2	1020	1471	2871	2824	9801	1993
F 80 3_28.8	28.8	—	—	—	4485	11391	3678
F 80 3_31.3	31.3	—	—	—	4461	11367	3654
F 80 3_36.0	36.0	—	—	3678	3678	10607	2871
F 80 3_39.0	39.0	—	—	3654	3654	10584	2871
F 80 3_45.3	45.3	—	—	3156	3132	10085	2302
F 80 3_49.1	49.1	—	—	3156	3109	10085	2302
F 80 3_56.7	56.7	831	1281	2682	2634	9635	1827
F 80 3_61.5	61.5	831	1281	2682	2634	9635	1804
F 80 3_70.4	70.4	641	1092	2492	2444	9421	1614
F 80 3_76.3	76.3	641	1068	2492	2444	9397	1614
F 80 3_85.2	85.2	475	925	2349	2278	9231	1471
F 80 3_92.3	92.3	475	925	2349	2278	9231	1448
F 80 3_105.0	105.0	332	759	2183	2136	9089	1305
F 80 3_113.8	113.8	332	759	2183	2136	9065	1305
F 80 3_122.5	122.5	308	759	2159	2112	9041	1281
F 80 3_132.7	132.7	308	736	2159	2112	9041	1281
F 80 3_147.9	147.9	202	641	2065	2017	8946	1187
F 80 3_160.2	160.2	202	641	2065	1993	—	1187
F 80 3_184.6	184.6	121	570	1970	1922	—	1092
F 80 3_200.0	200.0	119	570	1970	1922	—	1092

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

F 90

	i	J (•10 ⁻⁴) [lb•ft ²]											
			 IEC										
			80	90	100	112	132	160	180	200	225	250	
F 90 3_10.3	10.3	—	—	—	—	—	—	—	13028	13265	20005	20645	20171
F 90 3_11.1	11.1	—	—	—	—	—	—	—	12553	12791	19530	20171	19696
F 90 3_13.4	13.4	—	—	—	—	—	—	—	8851	9089	15828	16469	15994
F 90 3_14.5	14.5	—	—	—	—	—	—	—	8567	8804	15543	16184	15709
F 90 3_16.5	16.5	—	—	—	—	—	—	—	6787	7024	13764	14404	13930
F 90 3_17.9	17.9	—	—	—	—	—	—	—	6597	6834	13574	14214	13740
F 90 3_20.6	20.6	—	—	—	—	—	—	5316	5268	5505	12245	12862	12174
F 90 3_22.3	22.3	—	—	—	—	—	—	5221	5149	5387	12126	12743	12055
F 90 3_25.4	25.4	2444	—	—	—	—	2895	4295	4248	4461	11248	11865	11177
F 90 3_28.6	28.6	—	—	—	—	—	—	—	6906	7143	13882	14547	14072
F 90 3_31.0	31.0	—	—	—	—	—	—	—	6858	7095	13835	14476	14001
F 90 3_37.4	37.4	—	—	—	—	—	—	—	5268	5505	12245	12886	12411
F 90 3_40.5	40.5	—	—	—	—	—	—	—	5221	5458	12197	12838	12364
F 90 3_46.1	46.1	—	—	—	—	—	—	—	4414	4651	11391	12031	11557
F 90 3_49.9	49.9	—	—	—	—	—	—	—	4390	4627	11367	12008	11533
F 90 3_57.3	57.3	—	—	—	—	—	—	3821	3749	3987	10726	11367	10679
F 90 3_62.1	62.1	—	—	—	—	—	—	3797	3749	3963	10702	11343	10655
F 90 3_70.8	70.8	1448	—	—	—	—	1898	3299	3251	3465	10252	10869	10180
F 90 3_76.7	76.7	1424	—	—	—	—	1875	3299	3227	3465	10228	10869	10180
F 90 3_88.4	88.4	1044	—	—	—	—	1495	2919	2848	3583	9824	10465	9777
F 90 3_95.8	95.8	1044	—	—	—	—	1495	2895	2848	3583	9824	10465	9777
F 90 3_103.3	103.3	973	—	—	—	—	1400	2824	2776	3465	9729	10346	9682
F 90 3_111.9	111.9	949	—	—	—	—	1400	2824	2753	3465	9706	10346	9658
F 90 3_126.8	126.8	617	688	688	712	712	1068	2492	2420	3132	9373	10014	9326
F 90 3_137.3	137.3	617	688	688	712	712	1068	2468	2420	3132	9373	10014	9326
F 90 3_150.3	150.3	498	570	570	593	593	949	2373	2302	3014	9255	9896	9207
F 90 3_162.8	162.8	498	570	570	593	593	949	2373	2302	3014	9255	9896	9207
F 90 3_179.2	179.2	332	380	380	427	427	783	2183	2136	—	—	—	9041
F 90 3_194.2	194.2	332	380	380	403	403	783	2183	2136	—	—	—	9041



For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

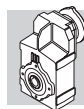
F 90

	i	J (•10 ⁻⁴) [lb•ft ²]					
							
			N210TC	N250TC	N280TC	N320TC	
F 90 3_10.3	10.3	—	—	—	13028	20005	20171
F 90 3_11.1	11.1	—	—	—	12553	19530	19696
F 90 3_13.4	13.4	—	—	—	8851	15828	15994
F 90 3_14.5	14.5	—	—	—	8567	15543	15709
F 90 3_16.5	16.5	—	—	—	6787	13764	13930
F 90 3_17.9	17.9	—	—	—	6597	13574	13740
F 90 3_20.6	20.6	—	—	5316	5268	12245	12174
F 90 3_22.3	22.3	—	—	5221	5149	12126	12055
F 90 3_25.4	25.4	2444	2895	4295	4248	11248	11177
F 90 3_28.6	28.6	—	—	—	6906	13882	14072
F 90 3_31.0	31.0	—	—	—	6858	13835	14001
F 90 3_37.4	37.4	—	—	—	5268	12245	12411
F 90 3_40.5	40.5	—	—	—	5221	12197	12364
F 90 3_46.1	46.1	—	—	—	4414	11391	11557
F 90 3_49.9	49.9	—	—	—	4390	11367	11533
F 90 3_57.3	57.3	—	—	3821	3749	10726	10679
F 90 3_62.1	62.1	—	—	3797	3749	10702	10655
F 90 3_70.8	70.8	1448	1898	3299	3251	10252	10180
F 90 3_76.7	76.7	1424	1875	3299	3227	10228	10180
F 90 3_88.4	88.4	1044	1495	2919	2848	9824	9777
F 90 3_95.8	95.8	1044	1495	2895	2848	9824	9777
F 90 3_103.3	103.3	973	1400	2824	2776	9729	9682
F 90 3_111.9	111.9	949	1400	2824	2753	9706	9658
F 90 3_126.8	126.8	617	1068	2492	2420	9373	9326
F 90 3_137.3	137.3	617	1068	2468	2420	9373	9326
F 90 3_150.3	150.3	498	949	2373	2302	9255	9207
F 90 3_162.8	162.8	498	949	2373	2302	9255	9207
F 90 3_179.2	179.2	332	783	2183	2136	—	9041
F 90 3_194.2	194.2	332	783	2183	2136	—	9041

For the values of the moment of inertia of 4-stage gearboxes, please contact our Technical Service department.

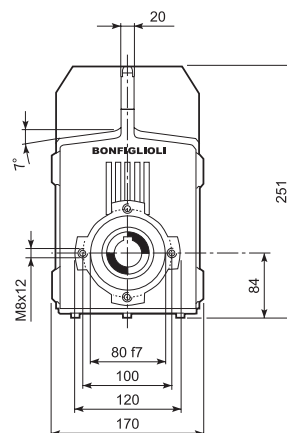
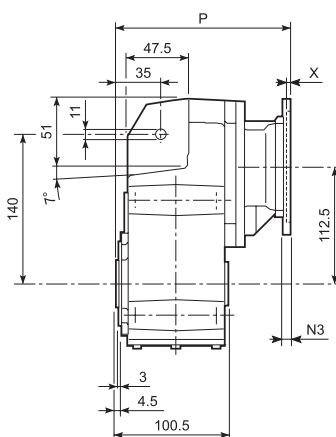
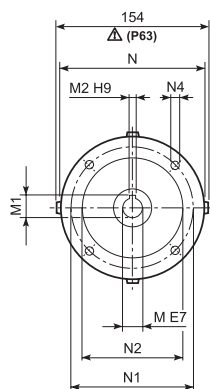
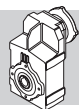
56 EXACT RATIOS

iN	F 10	F 20	F 25	F 31	F 41	F 51	F 60	F 70	F 80	F 90
6.3		6.41210								
7.1	7.40443		6.86957	6.94907	6.72727	7.19408				
8.0		7.83478	8.39375	8.22917						
9.0	8.58204	8.73227	9.35526	9.01630	9.13580	9.05114	8.96000			
10.0	9.76974	10.03069	10.62451	10.74747			9.70667	10.01538	10.33846	10.26577
11.2	11.53759	11.23370			10.77273	11.11005	11.75320	10.85000	11.20000	11.12125
12.5	13.02632		12.98182	12.72727		13.97796	12.73263	12.81731	12.90240	13.41346
14.0	14.64777	14.79842	14.46890	13.94466	14.62963		14.47385	13.88542	13.97760	14.53125
16.0	16.97738		16.62032	16.80000	17.11667		15.68000	16.34455	16.24615	16.52538
18.0		18.08182	18.61364	18.48804	18.89130	18.82155	19.06872	17.70660	17.60000	17.90250
20.0	19.32692	20.15311	21.81818	21.11230			20.65778	20.86538	20.33231	20.56731
22.4	22.82418	23.14973	23.75758	23.38636		23.79447	23.46381	22.60417	22.02667	22.28125
25.0	25.76923	25.92614	27.20455	27.27273	24.11579		25.41913	24.55695	25.22585	25.38622
28.0	29.63462	30.38961	30.03636	30.12121	30.11875	30.03828	29.61538	27.69231	28.84615	28.61169
31.5	32.98462	33.09091	32.18182	34.36364			32.08333	30.00000	31.25000	30.99600
35.5	35.34066	37.89205	36.41958	37.67273	38.18333	37.13636	38.84771	35.43956	36.00000	37.38462
40.0	39.64497	41.83636	40.72727	40.36364			42.08502	38.39286	39.00000	40.50000
45.0	44.66667	44.82468	45.56607	44.64336	47.92667		47.84024	45.19231	45.32967	46.05785
50.0	48.72727	50.72727	50.78571	47.54630	51.49270	48.89965	51.82692	48.95833	49.10714	49.89600
56.0	56.69231	56.72727	58.33718	52.09420	60.24646		63.02761	57.69231	56.73077	57.32308
63.0	62.99145	61.88430	65.33371	62.76111	66.49275	65.84416	68.27991	62.50000	61.45833	62.10000
71.0	71.12308	69.13636	76.58163	69.06725			77.55467	73.55769	70.38462	70.75385
80.0	81.31624	76.81818	83.38889	78.87092	84.88166	83.24111	84.01756	85.38462	76.25000	76.65000
90.0	91.48077	90.40909	95.48772	87.36632			98.19838	92.50000	92.30769	88.39385
100.0	106.02198	101.63636	105.42738	101.88492	106.01061	105.08407	106.38158	101.18343	105.00000	103.33491
112.2		114.34091	112.95791	112.52623			120.45488	109.61538	113.75000	111.94615
125.5	127.12821	132.19481	127.83242	128.37500	134.39596	129.91558	130.49279	122.72727	122.48521	126.77538
140.0		156.30469	142.95238	140.73704			150.35503	132.95455	132.69231	150.30533
160.0		172.57500	155.94805	166.77778	168.69010	165.62338	162.88462	166.66667	160.22727	162.83077
180.0		184.90179	174.22321	185.43056	180.73939	202.39481	185.89349	180.94406	184.61538	179.21958
200.0		209.25000	193.58135	202.28788	198.92028	216.85158	201.38462	196.02273	200.00000	194.15455
225.0		234.00000	227.83036	228.22222	220.13131	239.84416	217.64679	216.52422	218.49174	213.59178
250.0		255.27273	256.12302	253.58025	240.14325	262.11039	259.08284	234.56790	273.89277	231.39109
280.0		285.18750	288.13839	293.83611	266.93818	285.93861	280.67308	280.93645	296.71717	268.72770
315.0		316.87500	333.13010	332.82407	296.59798	317.26753	315.38899	304.34783	353.67893	291.12168
355.0		372.93750		374.42708	344.79515	352.51948	341.67140	372.46964	383.15217	361.84615
400.0		419.25000	393.88686	418.86023		429.09330	399.34008	403.50877	451.49061	392.00000
450.0		471.65625	434.88795	462.60785	433.67975		432.61842	471.15385	489.11483	457.45099
500.0			465.95137	527.76389			489.84985	510.41667	563.87675	495.57191
560.0		545.30357	527.30872	578.58560	549.80165	530.48864	530.67067	606.83761	610.86648	577.48888
630.0			589.67857	619.91314	690.09587	676.29545	611.44379	657.40741	714.86014	625.61296
710.0			643.28571	685.64198	739.38843	826.44545	755.96686	758.97436	774.43182	713.95030
800.0			718.67076	762.32562	813.76478	885.47727	818.96410	822.22222	897.27273	773.44615
900.0			798.52307	831.62795	900.53719	979.36364	885.09695	899.40828	972.04545	910.18225
1000.0			939.80022	938.24691	982.40421	1070.28409	958.85503	974.35897	1058.06885	986.03077
1125.0			1056.50744	1042.49657	1092.01983	1167.58264	1053.60355	1090.90909	1146.24126	1112.25941
1250.0			1188.57087	1207.99290	1213.35537	1295.50909	1141.40385	1181.81818	1277.33630	1204.94769
1400.0			1374.16167	1368.27675	1410.52562	1439.45455		1367.52137	1383.78099	1427.90059
1600.0				1539.31134				1584.61538	1577.62238	1571.37386
1800.0								1716.66667	1709.09091	1702.32168
2000.0								2019.23077	1833.98601	1937.26864
2250.0								2187.50000	1986.81818	2098.70769



57 DIMENSIONS

F 10...P(IEC)

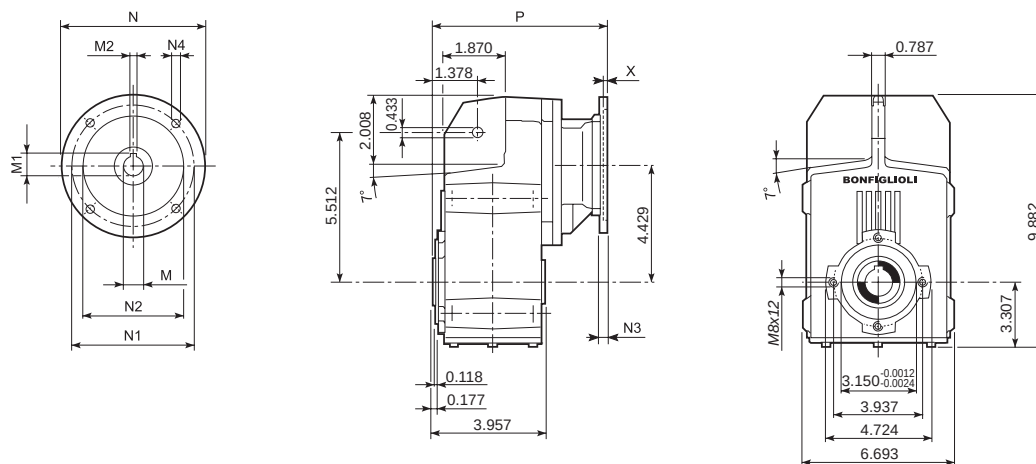


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 10 2	P63	11	12.8	4	140	115	95	—	M8x19	4	185.5	8
F 10 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	185.5	8
F 10 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	205	9
F 10 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	205	9
F 10 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	215	13
F 10 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	215	13

Metric output versions available also in combination with NEMA motor adaptor

F 10...N(NEMA Input)

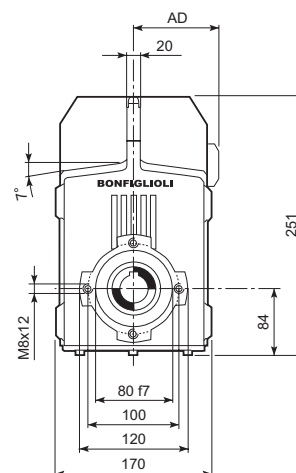
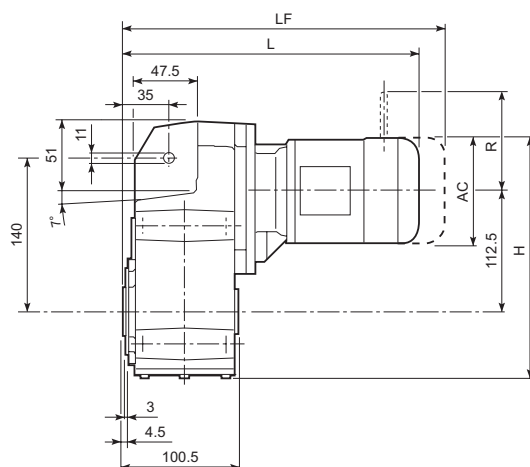
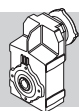


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 10 2	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	8.091	18
F 10 2	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	8.091	20
F 10 2	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	8.917	29

Imperial output versions available also in combination with IEC motor adaptor

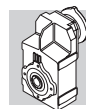
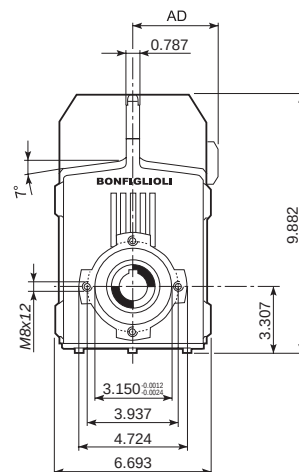
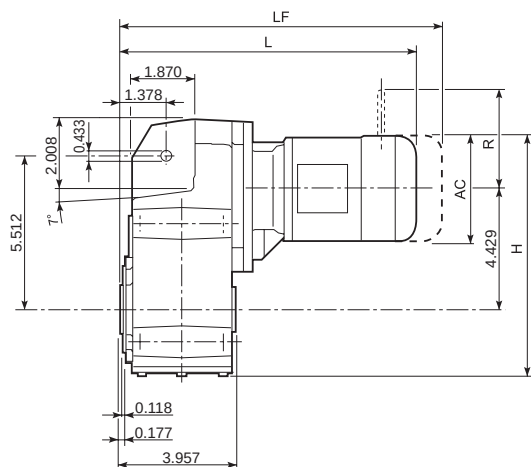
F 10...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 10 2	S05	M05	121	220.5	311.5	95	12	377.5	13	96	122	116	95
F 10 2	S1	M1	138	265.5	340.5	108	14	401.5	17	103	135	124	108
F 10 2	S2	ME2S	156	274.5	369.5	119	18	—	—	—	—	—	—
F 10 2	S3	ME3S	195	294	412.5	142	22	—	—	—	—	—	—
F 10 2	S3	ME3L	195	294	444.5	142	24	—	—	—	—	—	—

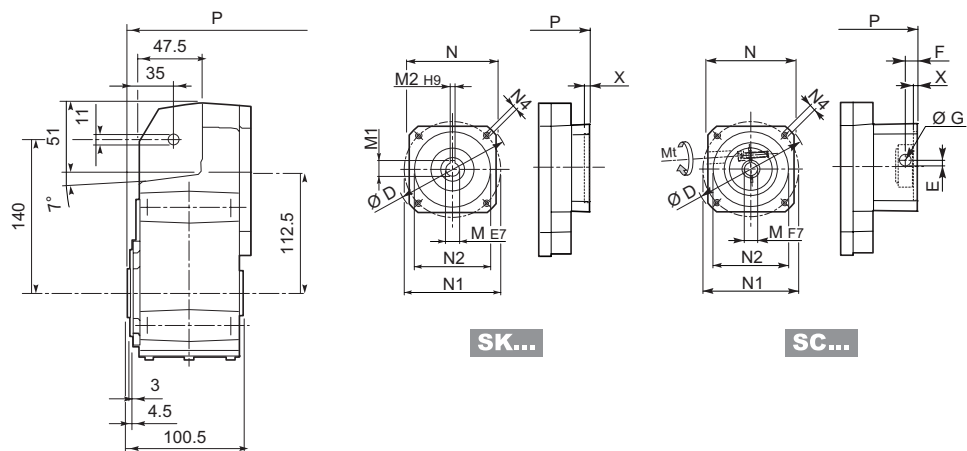
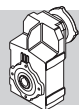
F 10...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
F 10 2	S05	M05	4.764	8.681	12.264	3.740	26	14.862	29	3.780	4.803	4.567	3.740
F 10 2	S1	M1	5.433	10.453	13.406	4.252	31	15.807	37	4.055	5.315	4.882	4.252
F 10 2	S2	ME2S	6.142	10.807	14.547	4.685	40	—	—	—	—	—	—
F 10 2	S3	ME3S	7.677	11.575	16.240	5.591	49	—	—	—	—	—	—
F 10 2	S3	ME3L	7.677	11.575	17.500	5.591	53	—	—	—	—	—	—

F 10...SK / SC



SK...

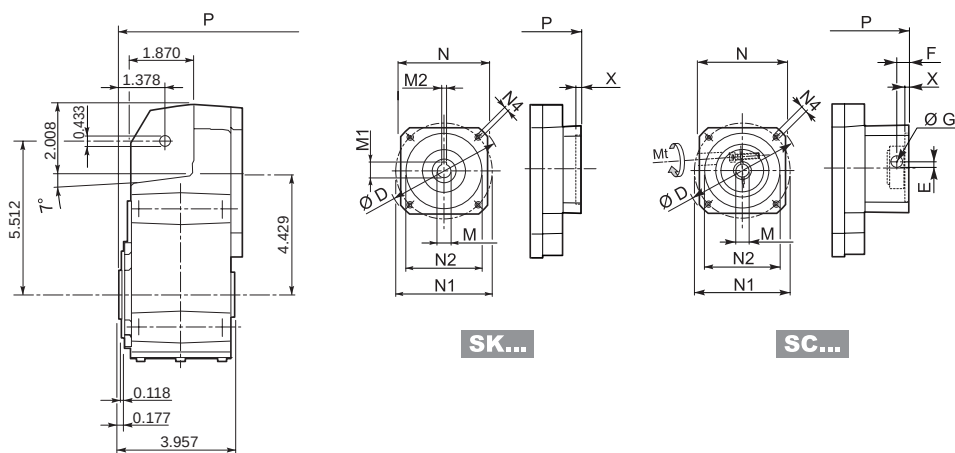
SC...

Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	P	Kg
F 10 2	SK 60A	102	11	12.8	4	82	75	60	M5x10	3.5	157	8
F 10 2	SK 60B	102	14	16.3	5	82	75	60	M5x10	4	164	8
F 10 2	SK 80A	115	14	16.3	5	90	100	80	M6x12	4	164	8
F 10 2	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	205	9
F 10 2	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	205	9
F 10 2	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	205	9
F 10 2	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	205	9
F 10 2	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	205	9
F 10 2	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	205	9

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	Kg
F 10 2	SC 60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	184	8
F 10 2	SC 60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	184	9
F 10 2	SC 80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	184	9
F 10 2	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	228.5	10
F 10 2	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	228.5	10
F 10 2	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	228.5	10
F 10 2	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	228.5	10
F 10 2	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	228.5	11
F 10 2	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	228.5	11

F 10...SK / SC

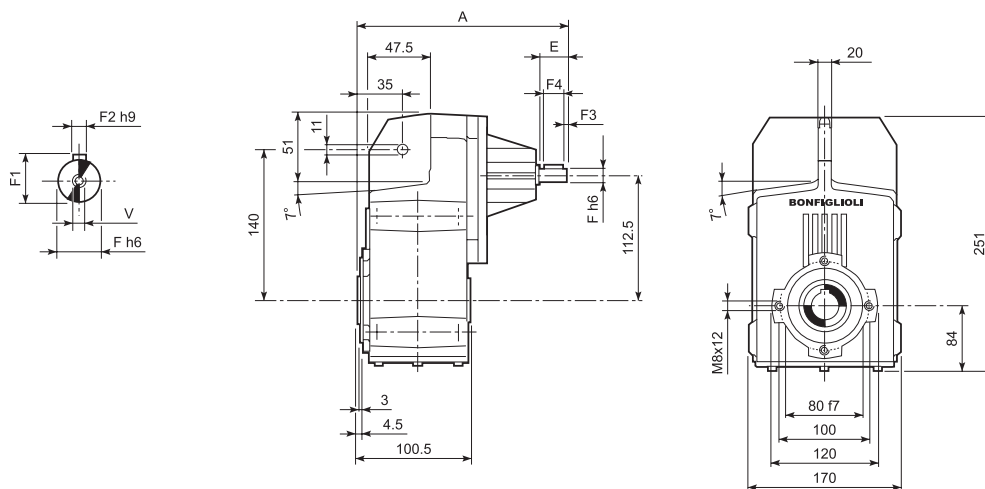


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	P	lbs
F 10 2	SK 60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	<i>M5x10</i>	0.138	6.181	18
F 10 2	SK 60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	<i>M5x10</i>	0.157	6.457	18
F 10 2	SK 80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	<i>M6x12</i>	0.157	6.457	18
F 10 2	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	<i>M6x12</i>	0.157	8.071	20
F 10 2	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	<i>M8x12</i>	0.157	8.071	20
F 10 2	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	<i>M8x12</i>	0.157	8.071	20
F 10 2	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	<i>M8x12</i>	0.157	8.071	20
F 10 2	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	<i>M8x12</i>	0.197	8.071	20
F 10 2	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	<i>M8x12</i>	0.197	8.071	20

			Mt [lb • in]	D	E	F	G	M	N	N1	N2	N4	X	P	lbs
F 10 2	SC 60A	<i>M6</i>	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	<i>M5x10</i>	0.157	7.244	18
F 10 2	SC 60B	<i>M6</i>	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	<i>M5x10</i>	0.157	7.244	20
F 10 2	SC 80A	<i>M6</i>	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	<i>M6x12</i>	0.157	7.244	20
F 10 2	SC 80C	<i>M6</i>	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	<i>M6x12</i>	0.157	8.996	22
F 10 2	SC 95A	<i>M6</i>	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	<i>M8x16</i>	0.157	8.996	22
F 10 2	SC 95B	<i>M6</i>	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	<i>M8x16</i>	0.157	8.996	22
F 10 2	SC 95C	<i>M6</i>	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	<i>M8x16</i>	0.157	8.996	22
F 10 2	SC 110A	<i>M6</i>	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	<i>M8x16</i>	0.197	8.996	24
F 10 2	SC 110B	<i>M6</i>	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	<i>M8x16</i>	0.197	8.996	24

F 10...HS

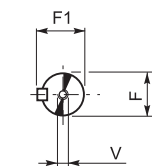


Dimensions are in mm

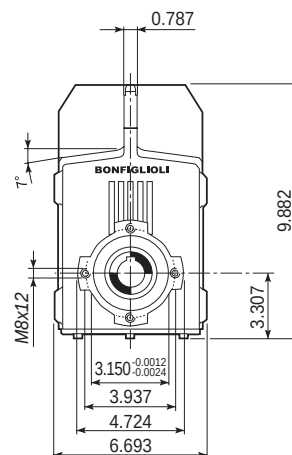
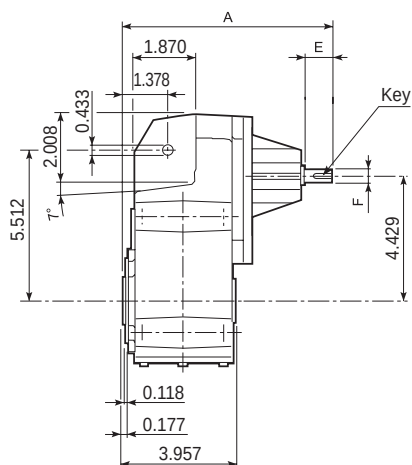
		A	E	F	F1	F2	F3	F4	V	Kg
F 10 2	HS	192	40	16	18	5	2.5	35	M6x16	7.5

Metric output versions available also in combination with NHS input

F 10...NHS



INPUT
(Inch Series)



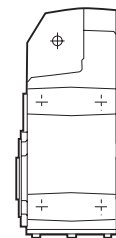
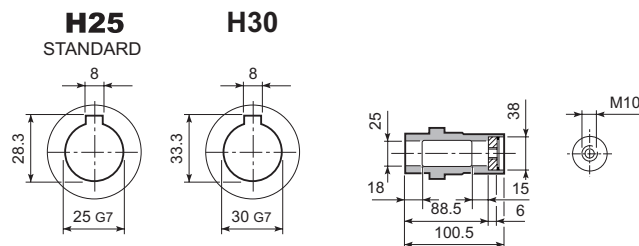
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	
F 10 2	NHS	7.559	1.575	0.625 ⁺⁰ / _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	17

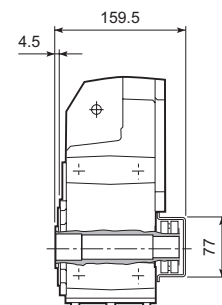
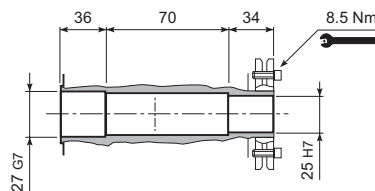
Imperial output versions available also in combination with HS input

F 10

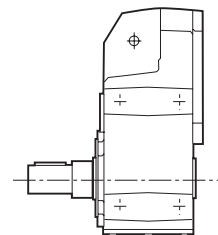
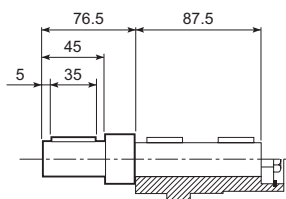
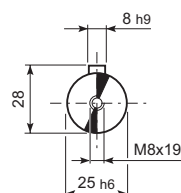
F 10...H



F 10...S

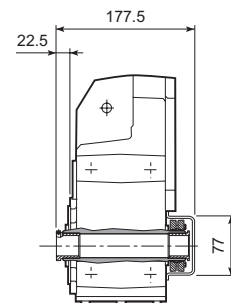
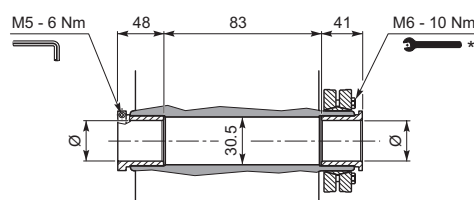


F 10...R

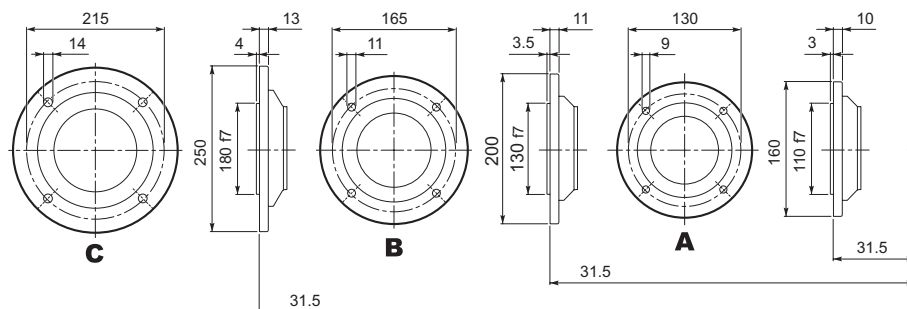


F 10...QF

	Ø
QF25	25
QF30	30



F 10...F...

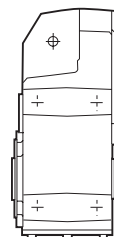
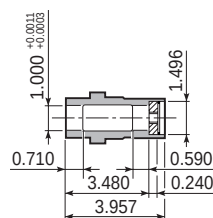
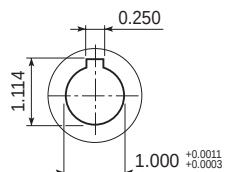


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

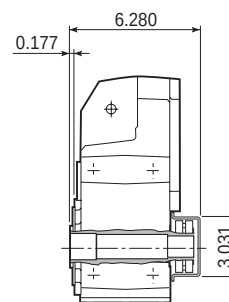
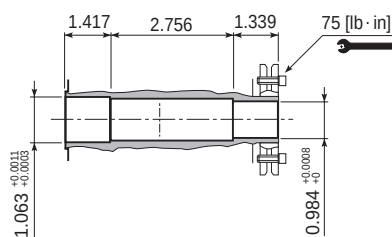
F 10

F 10...NH

OUTPUT
(Inch Series)

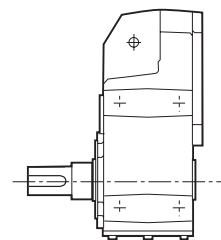
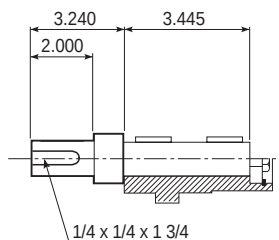
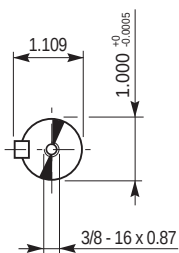


F 10...S



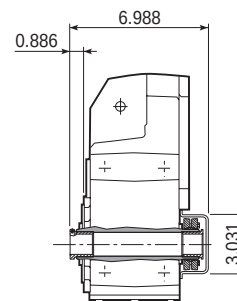
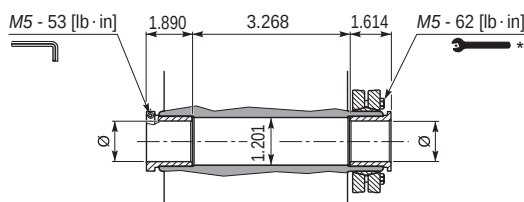
F 10...NR

OUTPUT
(Inch Series)

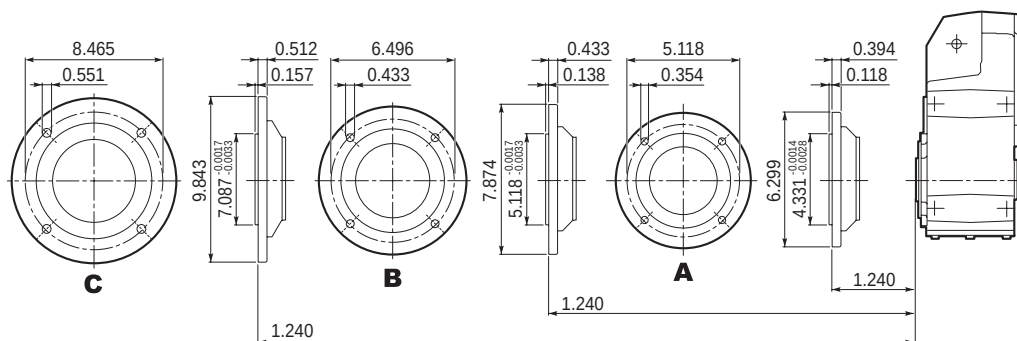


F 10...NQF

	Ø
NQF1	1.000
NQF1-3/16	1.188

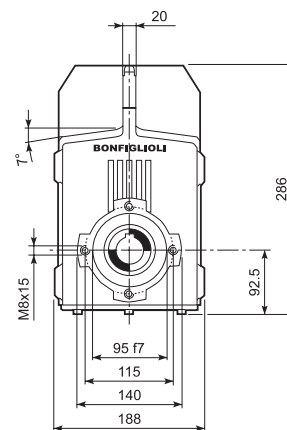
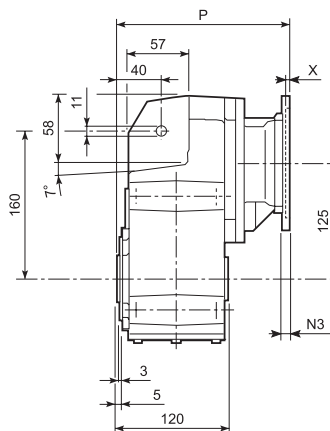
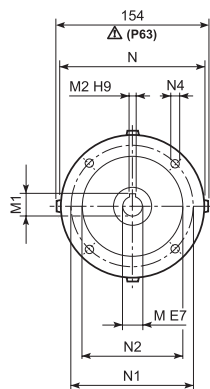
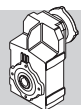


F 10...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 20...P(IEC)

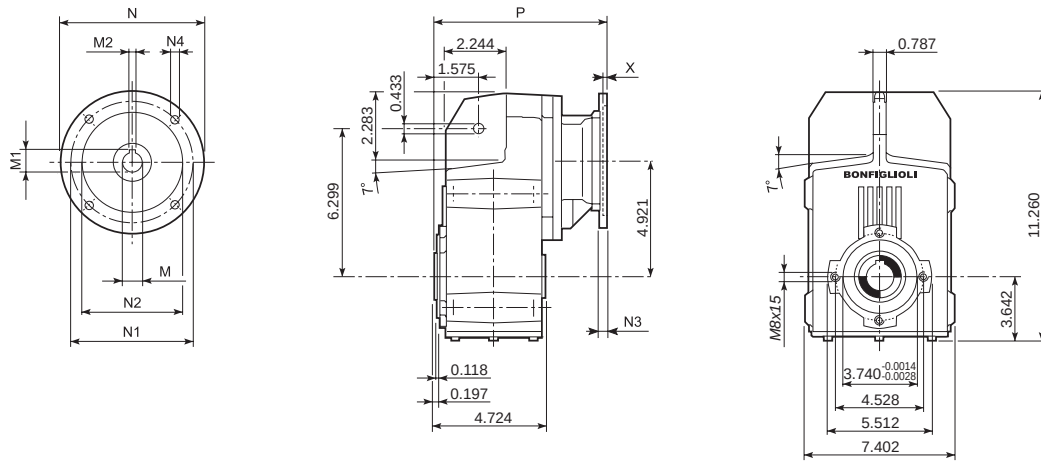


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 20 2	P63	11	12.8	4	140	115	95	—	M8x19	4	197.5	12
F 20 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	197.5	12
F 20 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	217	13
F 20 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	217	12
F 20 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	227	16
F 20 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	227	16
F 20 3	P63	11	12.8	4	140	115	95	—	M8x19	4	253	13
F 20 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	253	13
F 20 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	272.5	14
F 20 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	272.5	14
F 20 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	282.5	18
F 20 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	282.5	18

Metric output versions available also in combination with NEMA motor adaptor

F 20...N(NEMA Input)

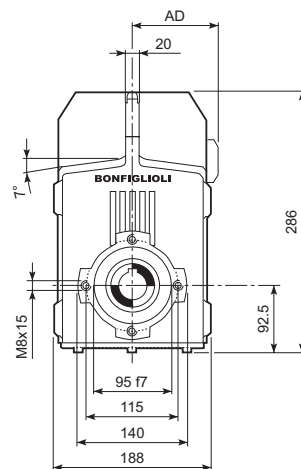
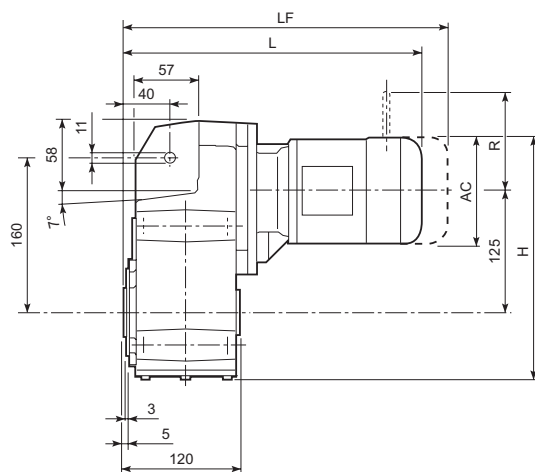
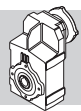


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 20 2	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	8.563	26
F 20 2	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	8.563	29
F 20 2	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	9.390	35
F 20 3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	10.748	29
F 20 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	10.748	31
F 20 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	11.575	40

Imperial output versions available also in combination with IEC motor adaptor

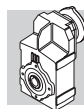
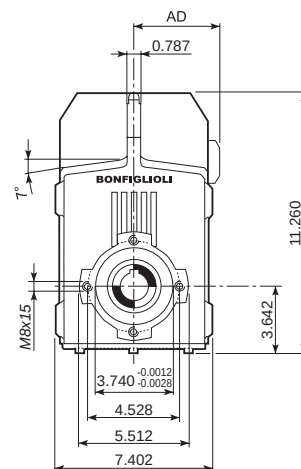
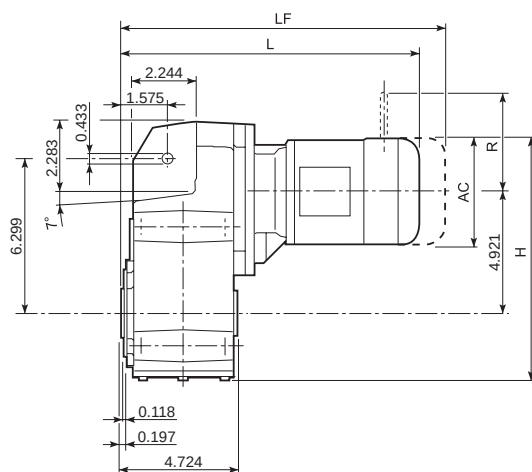
F 20...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 20 2	S05	M05	121	278.2	323.5	95	15	389.5	17	96	122	116	95
F 20 2	S1	M1	138	286.7	352.5	108	17	413.5	20	103	135	124	108
F 20 2	S2	ME2S	156	295.7	381.5	119	21	—	—	—	—	—	—
F 20 2	S3	ME3S	195	315.2	424.5	142	26	—	—	—	—	—	—
F 20 2	S3	ME3L	195	315.2	456.5	142	33	—	—	—	—	—	—
F 20 3	S05	M05	121	278.2	379	95	17	445	18	96	122	116	95
F 20 3	S1	M1	138	286.7	408	108	19	469	21	103	135	124	108
F 20 3	S2	ME2S	156	295.7	437	119	22	—	—	—	—	—	—
F 20 3	S3	ME3S	195	315.2	480	142	27	—	—	—	—	—	—
F 20 3	S3	ME3L	195	315.2	512	142	34	—	—	—	—	—	—

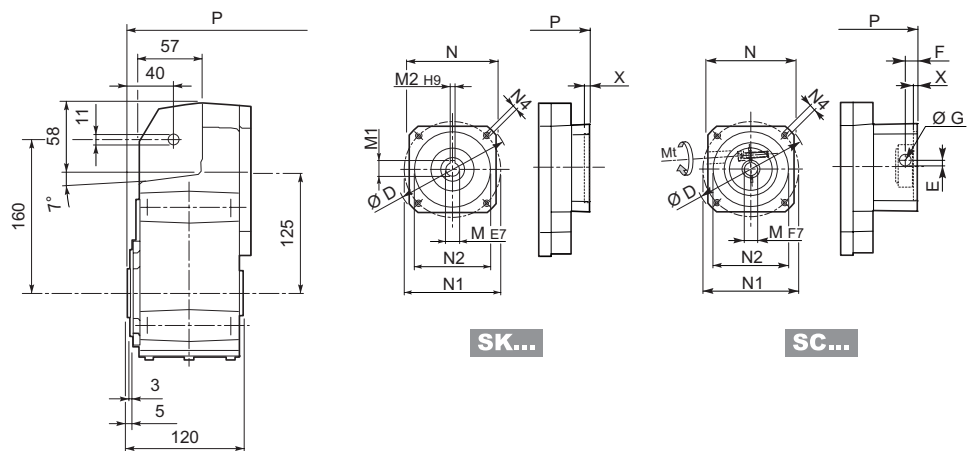
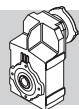
F 20...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	lbs	LF	lbs	R	AD	R	AD
F 20 2	S05	M05	4.764	10.953	12.736	3.740	33	15.335	37	3.780	4.803	4.567	3.740
F 20 2	S1	M1	5.433	11.287	13.878	4.252	37	16.280	44	4.055	5.315	4.882	4.252
F 20 2	S2	ME2S	6.142	11.642	15.020	4.685	46	—	—	—	—	—	—
F 20 2	S3	ME3S	7.677	12.409	16.713	5.591	57	—	—	—	—	—	—
F 20 2	S3	ME3L	7.677	12.409	17.972	5.591	73	—	—	—	—	—	—
F 20 3	S05	M05	4.764	10.953	14.921	3.740	37	17.520	40	3.780	4.803	4.567	3.740
F 20 3	S1	M1	5.433	11.287	16.063	4.252	42	18.465	46	4.055	5.315	4.882	4.252
F 20 3	S2	ME2S	6.142	11.642	17.205	4.685	49	—	—	—	—	—	—
F 20 3	S3	ME3S	7.677	12.409	18.898	5.591	60	—	—	—	—	—	—
F 20 3	S3	ME3L	7.677	12.409	20.157	5.591	75	—	—	—	—	—	—

F 20...SK / SC

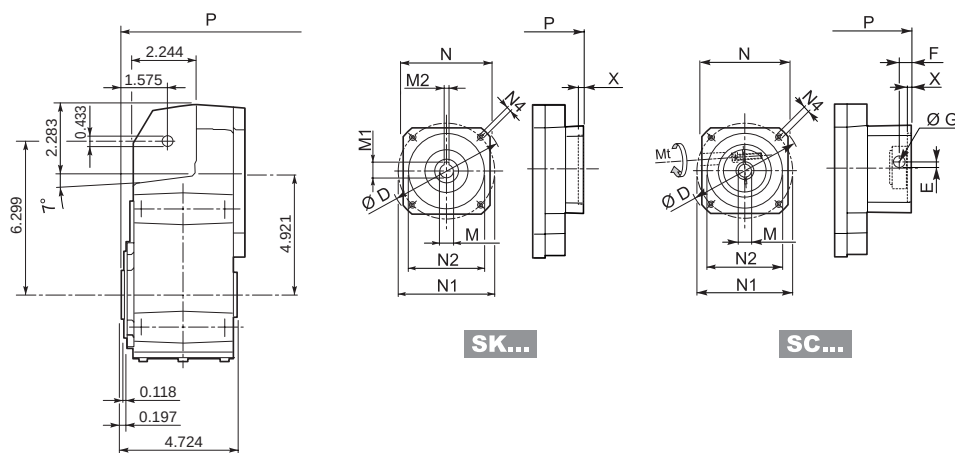


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2x 		3x 	
F 20 2/3	SK 60A	102	11	12.8	4	82	75	60	M5x10	3.5	169	11	224.5	12
F 20 2/3	SK 60B	102	14	16.3	5	82	75	60	M5x10	4	176	12	231.5	13
F 20 2/3	SK 80A	115	14	16.3	5	90	100	80	M6x12	4	217	12	231.5	13
F 20 2/3	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	217	13	272.5	14
F 20 2/3	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	217	13	272.5	14
F 20 2/3	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	217	13	272.5	14
F 20 2/3	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	217	13	272.5	14
F 20 2/3	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	217	13	272.5	14
F 20 2/3	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	217	13	272.5	14

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2x 		3x 	
F 20 2/3	SC 60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	196	12	251.5	13
F 20 2/3	SC 60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	196	13	251.5	14
F 20 2/3	SC 80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	196	13	251.5	14
F 20 2/3	SC 80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	240.5	14	296	15
F 20 2/3	SC 95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	240.5	14	296	15
F 20 2/3	SC 95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	240.5	14	296	15
F 20 2/3	SC 95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	240.5	14	296	15
F 20 2/3	SC 110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	240.5	15	296	16
F 20 2/3	SC 110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	240.5	15	296	16

F 20...SK / SC

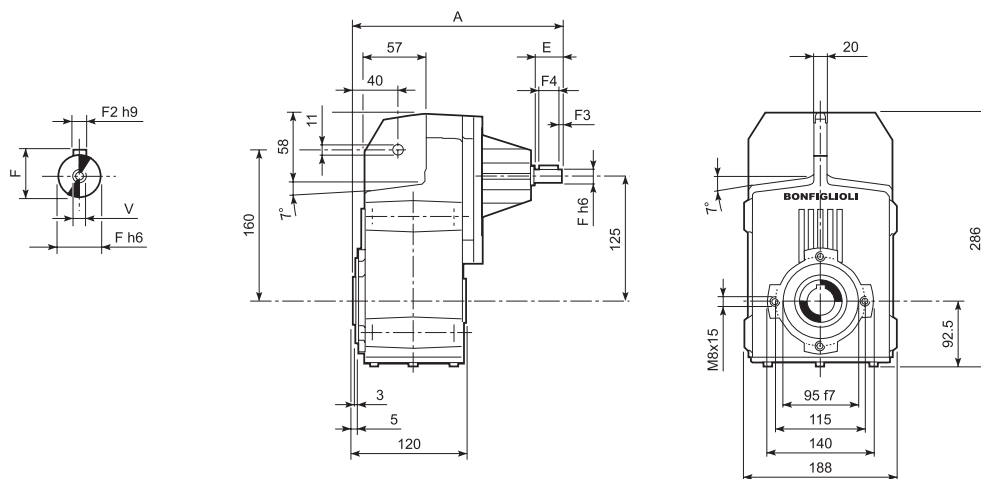


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2x 		3x 	
											P		P	
F 20 2/3	SK 60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	6.654	24	8.839	26
F 20 2/3	SK 60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	6.929	26	9.114	29
F 20 2/3	SK 80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	8.543	26	9.114	29
F 20 2/3	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	8.543	29	10.728	31
F 20 2/3	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	8.543	29	10.728	31
F 20 2/3	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	8.543	29	10.728	31
F 20 2/3	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	8.543	29	10.728	31
F 20 2/3	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	8.543	29	10.728	31
F 20 2/3	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	8.543	29	10.728	31

			Mt [lb • in]	D	E	F	G	M	N	N1	N2	N4	X	2x 		3x 	
														P		P	
F 20 2/3	SC 60A	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	7.717	26	9.902	29
F 20 2/3	SC 60B	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	7.717	29	9.902	31
F 20 2/3	SC 80A	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	7.717	29	9.902	31
F 20 2/3	SC 80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	9.469	31	11.654	33
F 20 2/3	SC 95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	9.469	31	11.654	33
F 20 2/3	SC 95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	9.469	31	11.654	33
F 20 2/3	SC 95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	9.469	31	11.654	33
F 20 2/3	SC 110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	9.469	33	11.654	35
F 20 2/3	SC 110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	9.469	33	11.654	35

F 20...HS

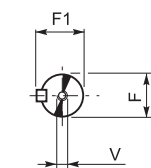


Dimensions are in mm

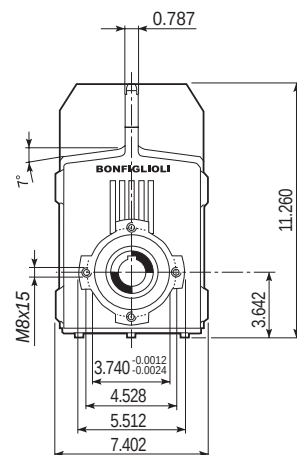
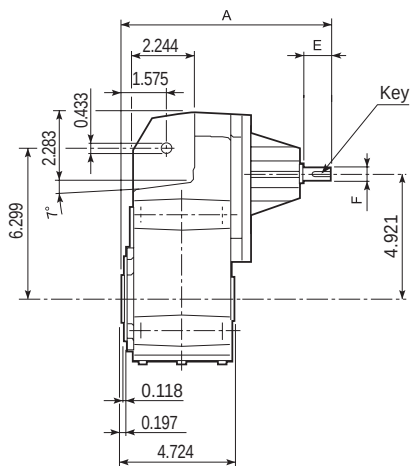
		A	E	F	F1	F2	F3	F4	V	kg
F 20 2	HS	247.5	40	19	21.5	6	2.5	35	M6x16	11.5
F 20 3		260	40	16	18	5	2.5	35	M6x16	12.4

Metric output versions available also in combination with NHS input

F 20...NHS



INPUT
(Inch Series)



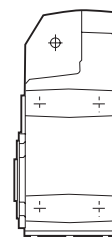
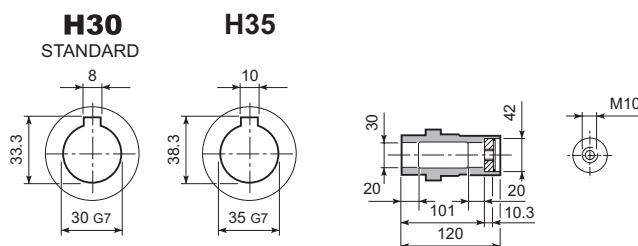
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	lbs
F 20 2	NHS	9.744	1.575	0.750 ⁺⁰ / _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	25
F 20 3		10.236	1.575	0.625 ⁺⁰ / _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	27

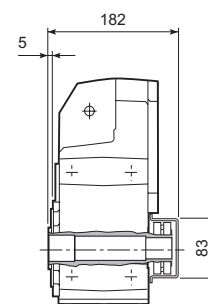
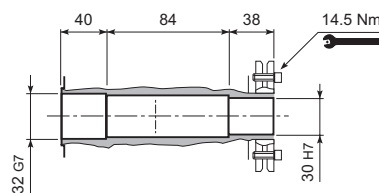
Imperial output versions available also in combination with HS input

F 20

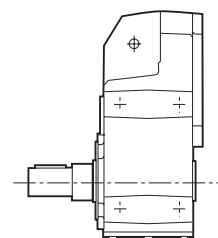
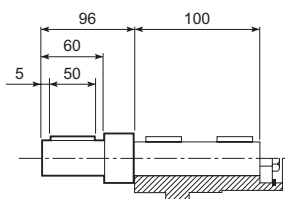
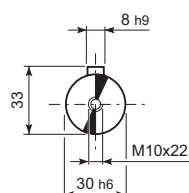
F 20...H



F 20...S

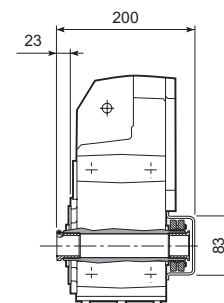
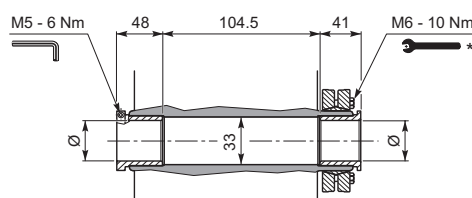


F 20...R

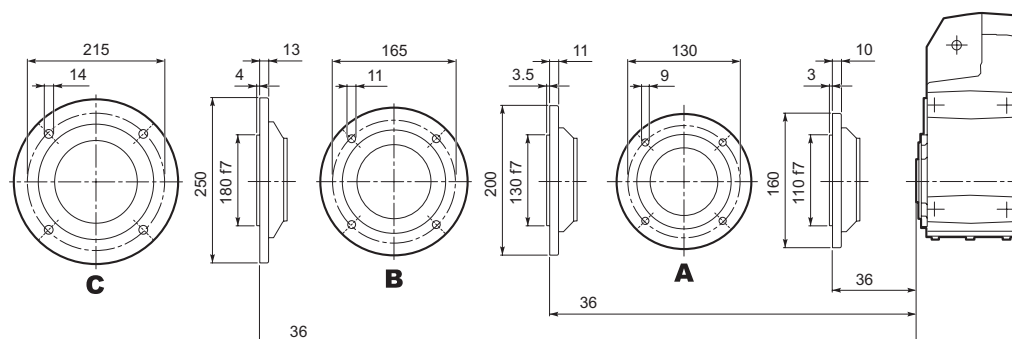


F 20...QF

	Ø
QF25	25
QF30	30



F 20...F...

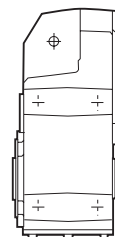
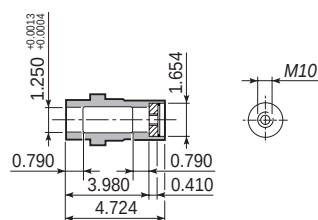
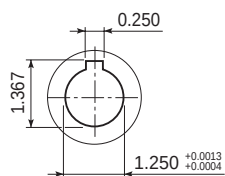


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox. supplied with the gearbox.

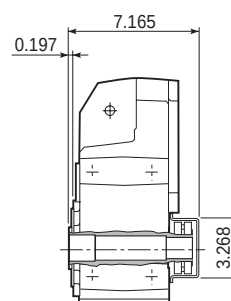
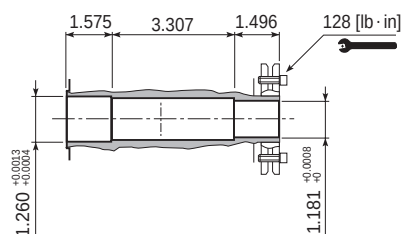
F 20

F 20...NH

OUTPUT
(Inch Series)

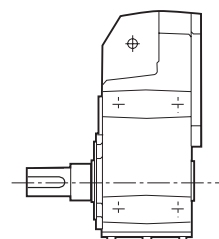
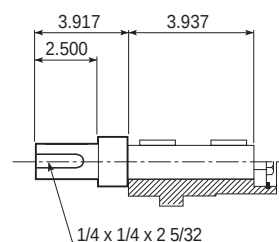
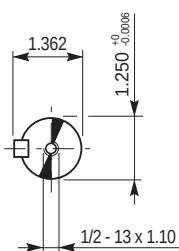


F 20...S



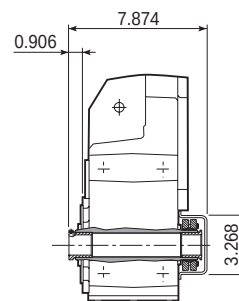
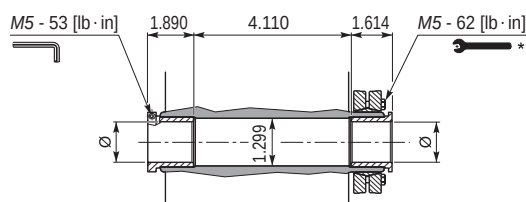
F 20...NR

OUTPUT
(Inch Series)

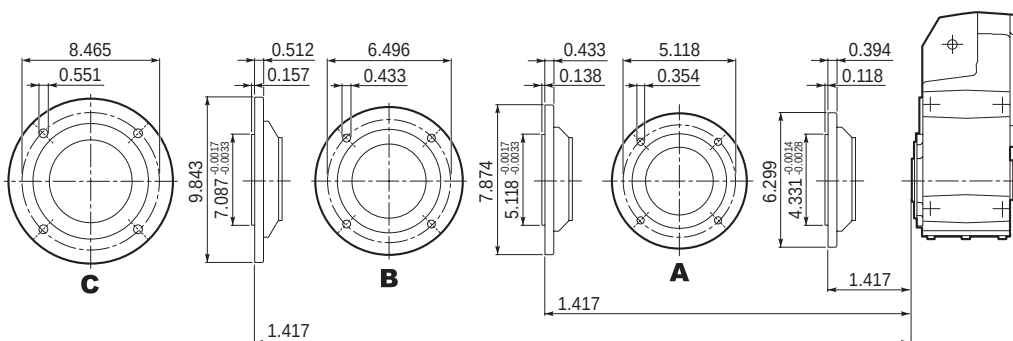


F 20...NQF

	Ø
NQF1	1.000
NQF1-3/16	1.188

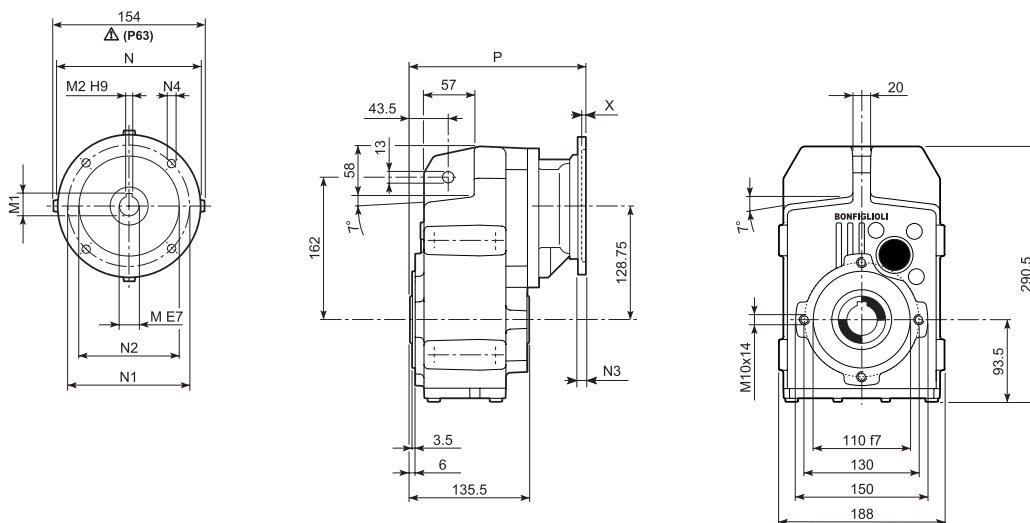


F 20...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 25...P(IEC)

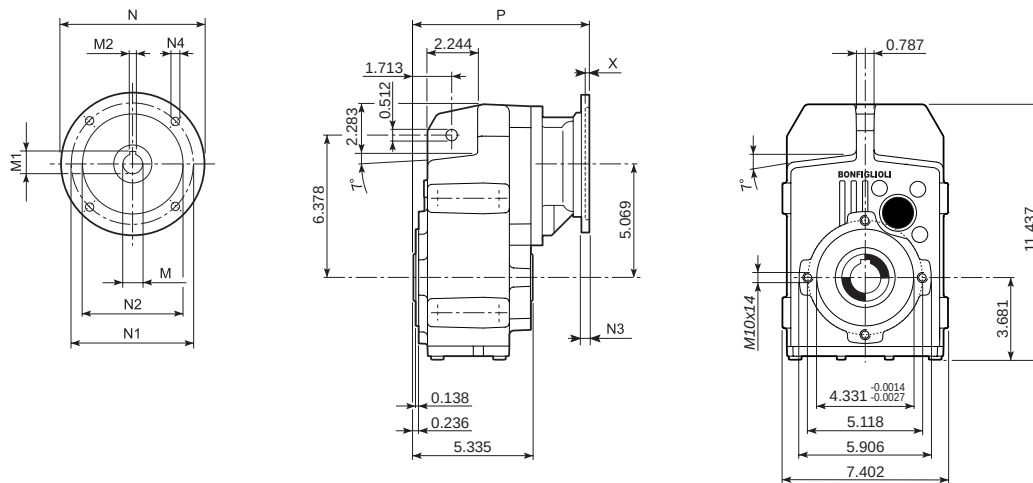


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 25 2/3	P63	11	12.8	4	140	115	95	—	M8x19	4	213	12
F 25 2/3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	213	12
F 25 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	232.5	13
F 25 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	232.5	13
F 25 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	242.5	16
F 25 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	242.5	16
F 25 4	P63	11	12.8	4	140	115	95	—	M8x19	4	268.5	13
F 25 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	268.5	13
F 25 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	288	14
F 25 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	288	14
F 25 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	298	18
F 25 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	298	18

Metric output versions available also in combination with NEMA motor adaptor

F 25...N(NEMA Input)

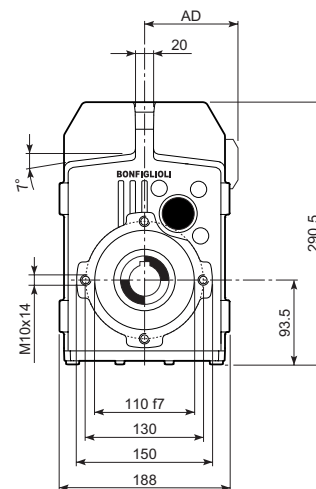
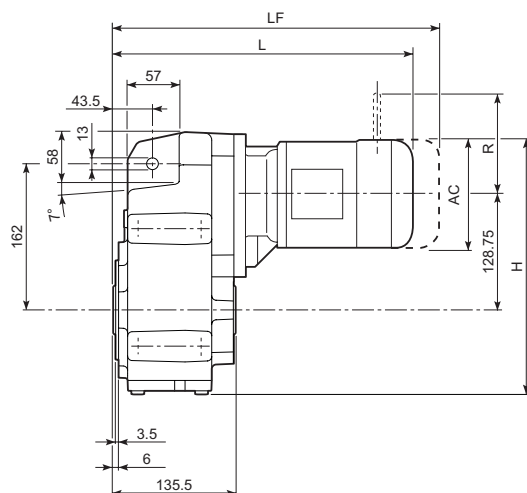
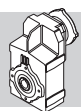


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	
F 25 2/3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	9.173	26
F 25 2/3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	9.173	29
F 25 2/3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	10.000	35
F 25 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.358	29
F 25 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.358	31
F 25 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	12.185	40

Imperial output versions available also in combination with IEC motor adaptor

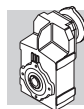
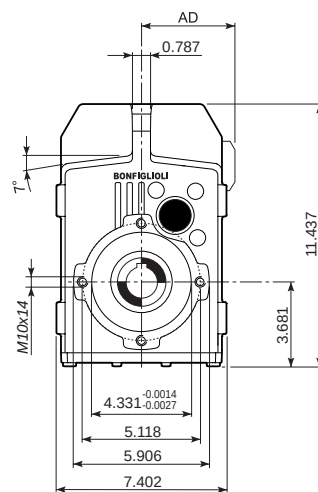
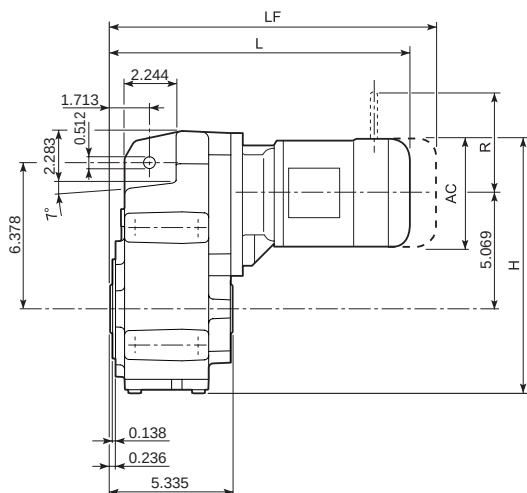
F 25...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 25 2/3	S05	M05	121	283	339	95	15	405	17	96	122	116	95
F 25 2/3	S1	M1	138	291.5	368	108	17	429	20	103	135	124	108
F 25 2/3	S2	ME2S	156	300.5	397	119	21	—	—	—	—	—	—
F 25 2/3	S3	ME3S	195	320	440	142	26	—	—	—	—	—	—
F 25 2/3	S3	ME3L	195	320	472	142	33	—	—	—	—	—	—
F 25 4	S05	M05	121	283	394.5	95	17	460.5	18	96	122	116	95
F 25 4	S1	M1	138	291.5	423.5	108	19	484.5	21	103	135	124	108
F 25 4	S2	ME2S	156	300.5	452.5	119	22	—	—	—	—	—	—
F 25 4	S3	ME3S	195	320	495.5	142	27	—	—	—	—	—	—
F 25 4	S3	ME3L	195	320	527.5	142	34	—	—	—	—	—	—

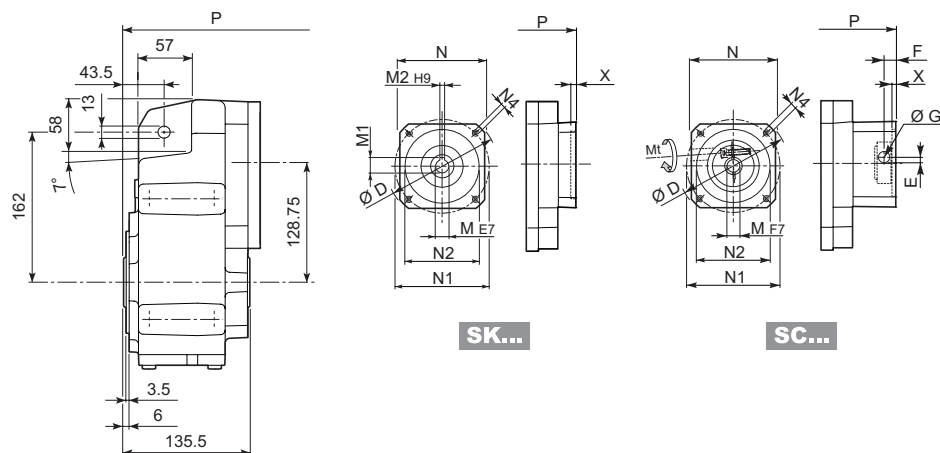
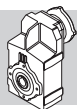
F 25...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	lbs	LF	lbs	R	AD	R	AD
F 25 2/3	S05	M05	4.764	11.142	13.346	3.740	33	15.945	37	3.780	4.803	4.567	3.740
F 25 2/3	S1	M1	5.433	11.476	14.488	4.252	37	16.890	44	4.055	5.315	4.882	4.252
F 25 2/3	S2	ME2S	6.142	11.831	15.630	4.685	46	—	—	—	—	—	—
F 25 2/3	S3	ME3S	7.677	12.598	17.323	5.591	57	—	—	—	—	—	—
F 25 2/3	S3	ME3L	7.677	12.598	18.583	5.591	73	—	—	—	—	—	—
F 25 4	S05	M05	4.764	11.142	15.531	3.740	37	18.130	40	3.780	4.803	4.567	3.740
F 25 4	S1	M1	5.433	11.476	16.673	4.252	42	19.075	46	4.055	5.315	4.882	4.252
F 25 4	S2	ME2S	6.142	11.831	17.815	4.685	49	—	—	—	—	—	—
F 25 4	S3	ME3S	7.677	12.598	19.508	5.591	60	—	—	—	—	—	—
F 25 4	S3	ME3L	7.677	12.598	20.768	5.591	75	—	—	—	—	—	—

F 25...SK / SC

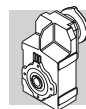
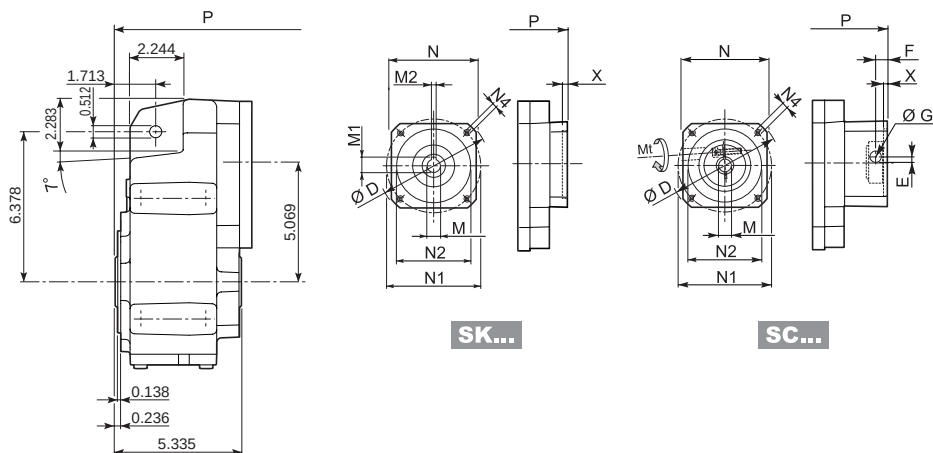


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
											Kg	Kg
F 25 2/3/4	SK 60A	102	11	12.8	4	82	75	60	M5x10	3.5	184.5	11
F 25 2/3/4	SK 60B	102	14	16.3	5	82	75	60	M5x10	4	191.5	12
F 25 2/3/4	SK 80A	115	14	16.3	5	90	100	80	M6x12	4	191.5	12
F 25 2/3/4	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	232.5	13
F 25 2/3/4	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	232.5	13
F 25 2/3/4	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	232.5	13
F 25 2/3/4	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	232.5	13
F 25 2/3/4	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	232.5	13
F 25 2/3/4	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	232.5	13

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
													Kg	Kg
F 25 2/3/4	SC 60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	211.5	12
F 25 2/3/4	SC 60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	211.5	13
F 25 2/3/4	SC 80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	211.5	13
F 25 2/3/4	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	256	14
F 25 2/3/4	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	256	14
F 25 2/3/4	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	256	14
F 25 2/3/4	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	256	14
F 25 2/3/4	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	256	15
F 25 2/3/4	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	256	15

F 25...SK / SC

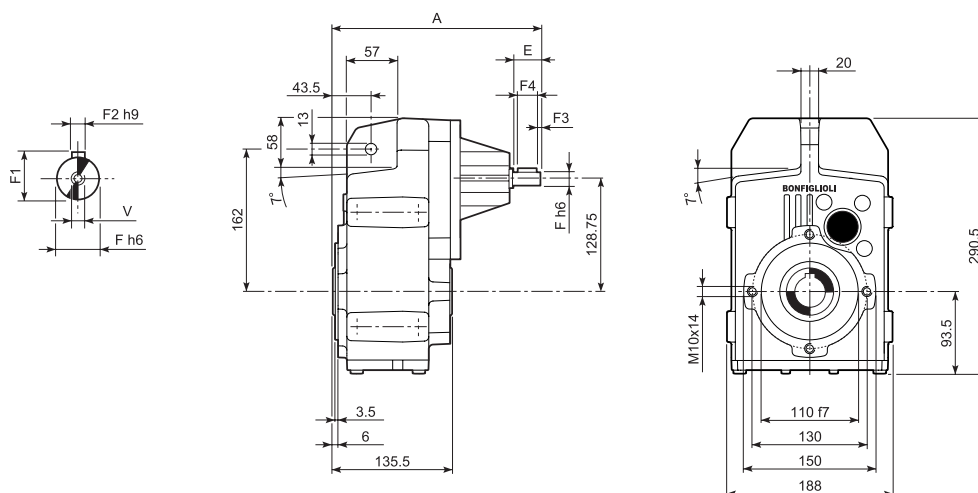


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2/3x 		4x 	
											P	 lbs	P	 lbs
														
F 25 2/3/4	SK 60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	7.264	24	9.449	26
F 25 2/3/4	SK 60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	7.539	26	9.724	29
F 25 2/3/4	SK 80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	7.539	26	9.724	29
F 25 2/3/4	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	9.154	29	11.339	31
F 25 2/3/4	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.154	29	11.339	31
F 25 2/3/4	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.154	29	11.339	31
F 25 2/3/4	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.154	29	11.339	31
F 25 2/3/4	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	9.154	29	11.339	31
F 25 2/3/4	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	9.154	29	11.339	31

			Mt [lb · in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x 		4x 	
														P	 lbs	P	 lbs
																	
F 25 2/3/4	SC 60A	M6	133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	8.327	26	10.512	29
F 25 2/3/4	SC 60B	M6	133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	8.327	29	10.512	31
F 25 2/3/4	SC 80A	M6	133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	8.327	29	10.512	31
F 25 2/3/4	SC 80C	M6	133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	10.079	31	12.264	33
F 25 2/3/4	SC 95A	M6	133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	10.079	31	12.264	33
F 25 2/3/4	SC 95B	M6	133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	10.079	31	12.264	33
F 25 2/3/4	SC 95C	M6	133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	10.079	31	12.264	33
F 25 2/3/4	SC 110A	M6	133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	10.079	33	12.264	35
F 25 2/3/4	SC 110B	M6	133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	10.079	33	12.264	35

F 25...HS

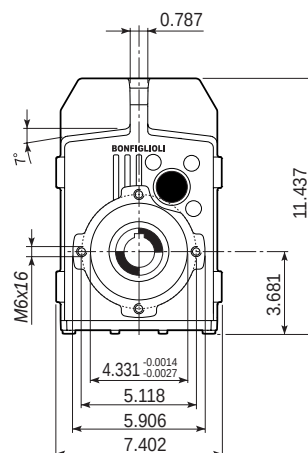
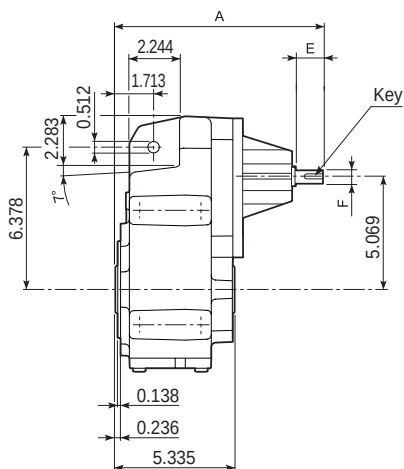
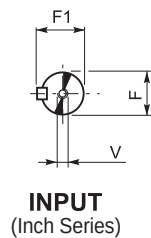


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
F 25 2	HS	263	40	19	21.5	6	2.5	35	M6x16	11.5
F 25 3		263	40	19	21.5	6	2.5	35	M6x16	11.5
F 25 4		275.5	40	16	18	5	2.5	35	M6x16	12.5

Metric output versions available also in combination with NHS input

F 25...NHS



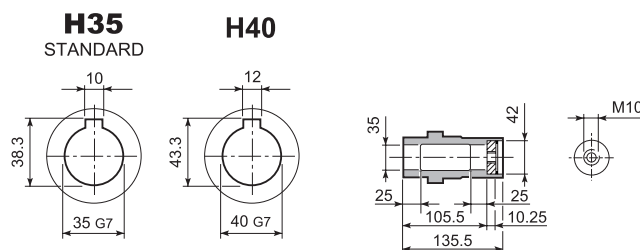
Dimensions are in Inch except when shown in *italics* [mm]

		A	E	F	F1	V	Key	lbs
F 25 2	NHS	10.354	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	25
F 25 3		10.354	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	25
F 25 4		10.846	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	28

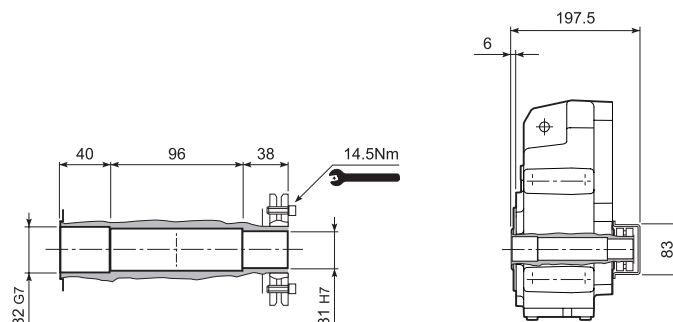
Imperial output versions available also in combination with HS input

F 25

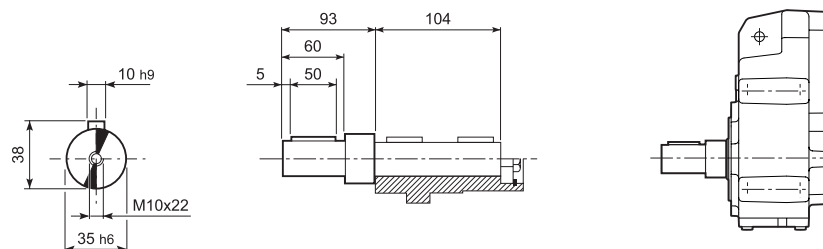
F 25...H



F 25...S



F 25...R

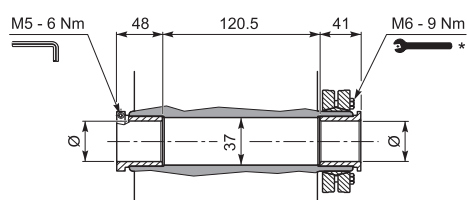


F 25...QF

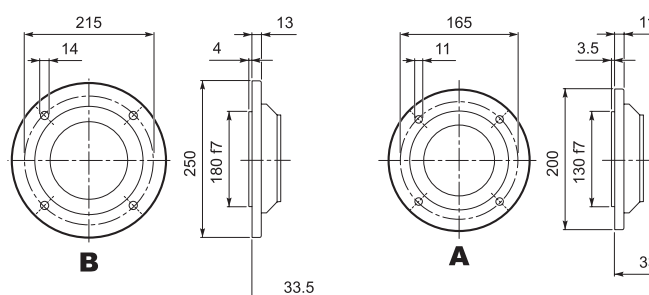
	Ø
QF30	30
QF32	32



T _{n2} max [lb · in]	
F 25 QF30	3100



F 25...F...

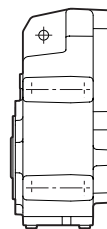
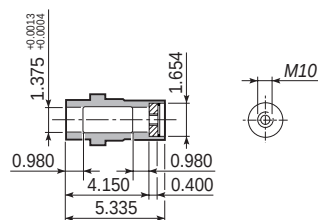
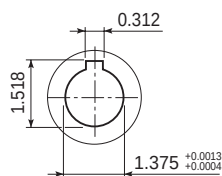


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox. supplied with the gearbox.

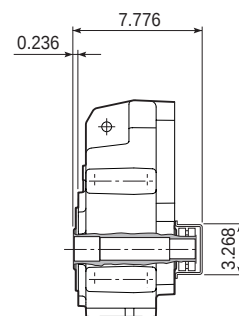
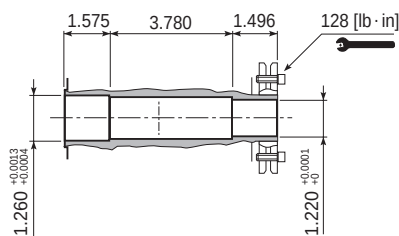
F 25

F 25...NH

OUTPUT
(Inch Series)

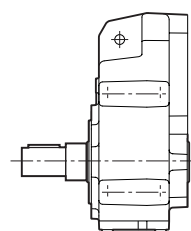
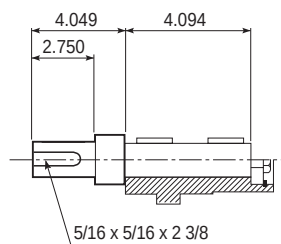
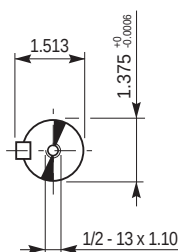


F 25...S



F 25...NR

OUTPUT
(Inch Series)

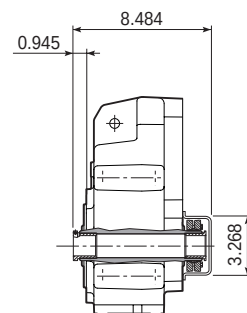
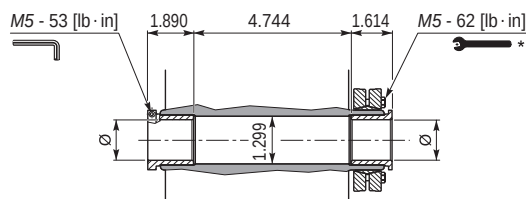


F 25...NQF

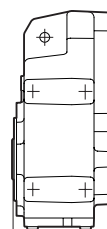
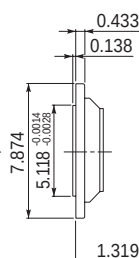
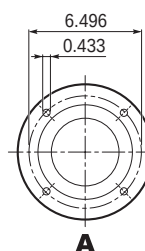
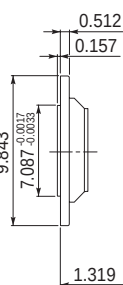
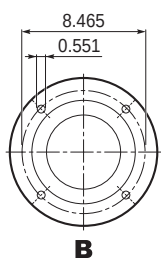
	Ø
NQF1-3/16	1.188
NQF1-1/4	1.250



T _{n2 max} [lb · in]	
F 25 NQF1-3/16	3100

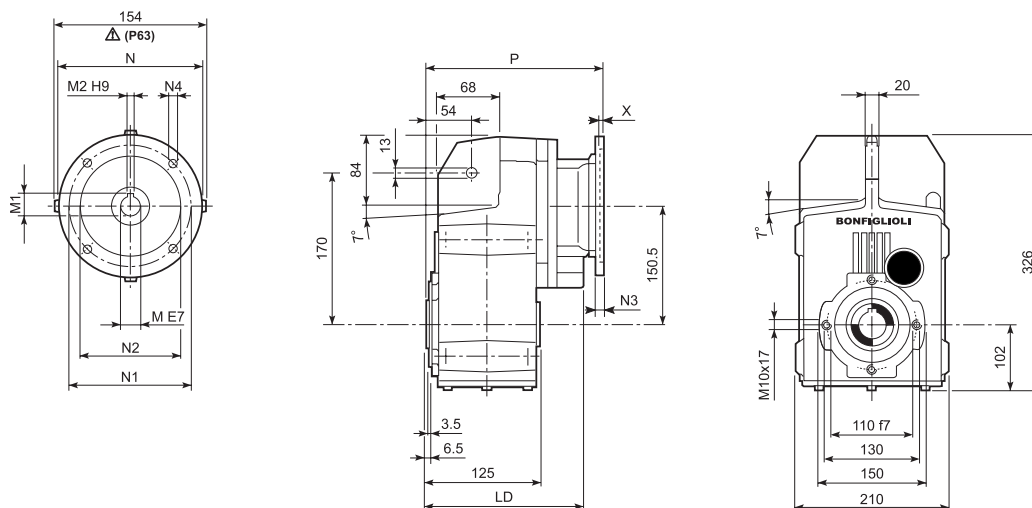


F 25...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 31...P(IEC)

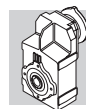
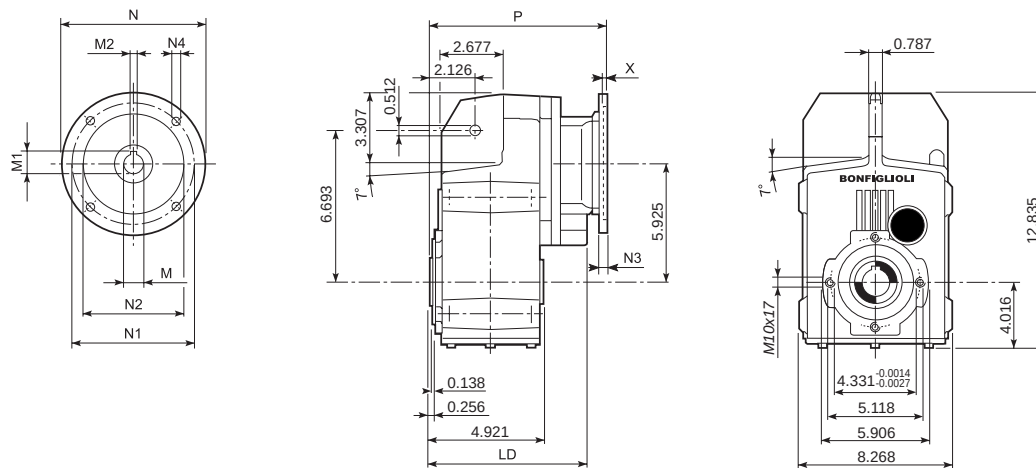


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 31 2/3	P63	195.5	11	12.8	4	140	115	95	—	M8x19	4	225.5	17
F 31 2/3	P71	195.5	14	16.3	5	160	130	110	—	M8x16	4.5	225.5	17
F 31 2/3	P80	205.5	19	21.8	6	200	165	130	—	M10x14.5	4	245	18
F 31 2/3	P90	205.5	24	27.3	8	200	165	130	—	M10x14.5	4	245	17
F 31 2/3	P100	205.5	28	31.3	8	250	215	180	—	M12x16	4.5	255	21
F 31 2/3	P112	205.5	28	31.3	8	250	215	180	—	M12x16	4.5	255	21
F 31 2/3	P132	—	38	41.3	10	300	265	230	—	14	5	291.5	24
F 31 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	283	17
F 31 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	283	17
F 31 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	302.5	18
F 31 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	302.5	18
F 31 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	312.5	22
F 31 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	312.5	22

Metric output versions available also in combination with NEMA motor adaptor

F 31...N(NEMA Input)

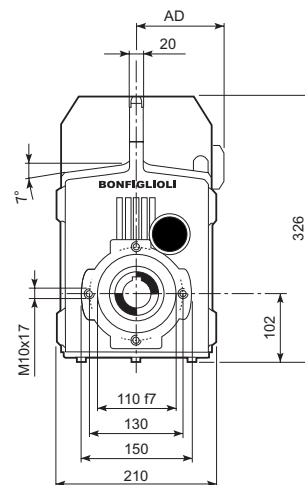
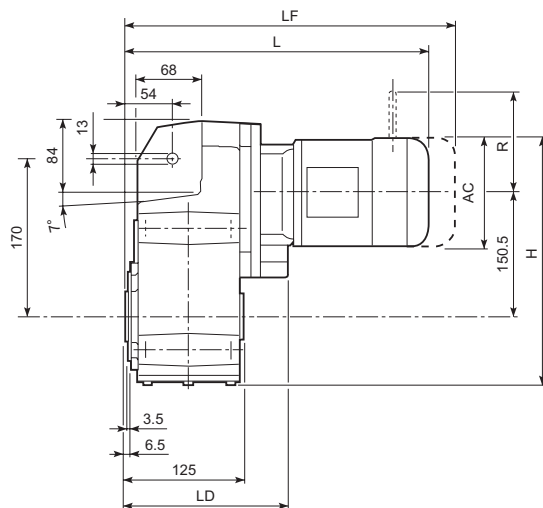
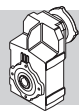


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 31 2/3	N56C	7.697	0.625 ^{+0.0020/-0.0013}	0.710	0.188 ^{+0/-0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	9.665	37
F 31 2/3	N140TC	7.697	0.875 ^{+0.0024/-0.0016}	0.964	0.188 ^{+0/-0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	9.665	40
F 31 2/3	N180TC	8.091	1.125 ^{+0.0024/-0.0016}	1.241	0.250 ^{+0/-0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	10.492	46
F 31 2/3	N210TC	—	1.375 ^{+0.0030/-0.0020}	1.518	0.312 ^{+0/-0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	11.654	53
F 31 4	N56C	—	0.625 ^{+0.0020/-0.0013}	0.710	0.188 ^{+0/-0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.929	37
F 31 4	N140TC	—	0.875 ^{+0.0024/-0.0016}	0.964	0.188 ^{+0/-0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.929	40
F 31 4	N180TC	—	1.125 ^{+0.0024/-0.0016}	1.241	0.250 ^{+0/-0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	12.756	49

Imperial output versions available also in combination with IEC motor adaptor

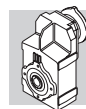
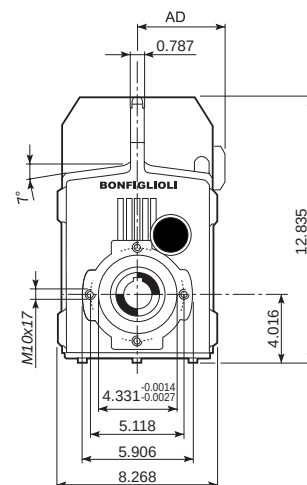
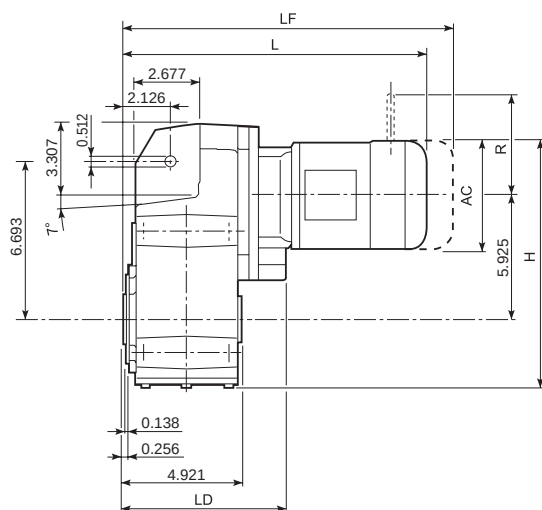
F 31...M/ME



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD			LF		R	AD	R	AD
F 31 2/3	S1	M1	138	321.3	380.5	183.5	108	22		441.5	25	103	135	124	108
F 31 2/3	S2	ME2S	156	330.3	409.5	195.5	119	26	—	—	—	—	—	—	—
F 31 2/3	S3	ME3S	195	349.8	452.5	205.5	142	31	—	—	—	—	—	—	—
F 31 2/3	S3	ME3L	195	349.8	484.5	205.5	142	40	—	—	—	—	—	—	—
F 31 2/3	S4	ME4	258	381.3	592.5	—	193	72	—	—	—	—	—	—	—
F 31 2/3	S4	ME4LA	258	381.3	592.5	—	193	78	—	—	—	—	—	—	—
F 31 4	S05	M05	121	312.8	409	—	95	20	475	22	96	122	116	95	
F 31 4	S1	M1	138	321.3	438	—	108	22	499	25	103	135	124	108	
F 31 4	S2	ME2S	156	330.3	467	—	119	26	—	—	—	—	—	—	—
F 31 4	S3	ME3S	195	349.8	510	—	142	31	—	—	—	—	—	—	—
F 31 4	S3	ME3L	195	349.8	542	—	142	41	—	—	—	—	—	—	—

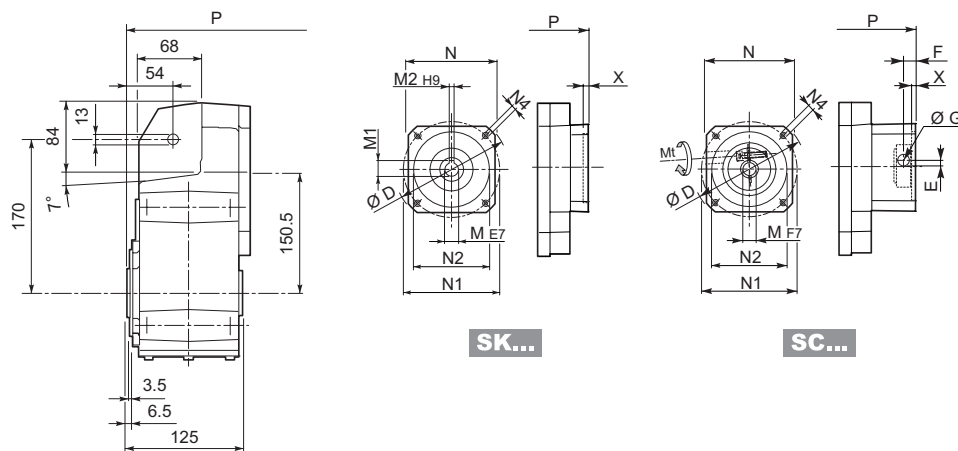
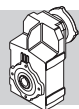
F 31...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD		LF		R	AD	R	AD
F 31 2/3	S1	M1	5.433	12.650	14.980	7.224	4.252	49	17.382	55	4.055	5.315	4.882	4.252
F 31 2/3	S2	ME2S	6.142	13.004	16.122	7.697	4.685	57	—	—	—	—	—	—
F 31 2/3	S3	ME3S	7.677	13.772	17.815	8.091	5.591	68	—	—	—	—	—	—
F 31 2/3	S3	ME3L	7.677	13.772	19.075	8.091	5.591	88	—	—	—	—	—	—
F 31 2/3	S4	ME4	10.157	15.012	23.327	—	7.598	159	—	—	—	—	—	—
F 31 2/3	S4	ME4LA	10.157	15.012	23.327	—	7.598	172	—	—	—	—	—	—
F 31 4	S05	M05	4.764	12.315	16.102	—	3.740	44	18.701	49	3.780	4.803	4.567	3.740
F 31 4	S1	M1	5.433	12.650	17.244	—	4.252	49	19.646	55	4.055	5.315	4.882	4.252
F 31 4	S2	ME2S	6.142	13.004	18.386	—	4.685	57	—	—	—	—	—	—
F 31 4	S3	ME3S	7.677	13.772	20.079	—	5.591	68	—	—	—	—	—	—
F 31 4	S3	ME3L	7.677	13.772	21.339	—	5.591	90	—	—	—	—	—	—

F 31...SK / SC



SK...

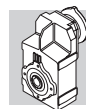
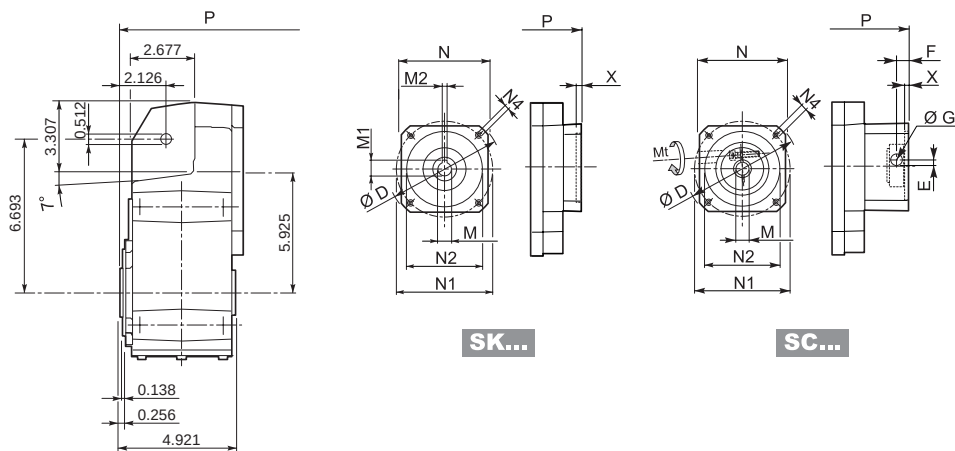
SC...

Dimensions are in mm

											2/3x		4x	
		D	M	M1	M2	N	N1	N2	N4	X	P		P	
F 31 2/3/4	SK 60A	102	11	12.8	4	82	75	60	M5x10	3.5	197	16	254.5	16
F 31 2/3/4	SK 60B	102	14	16.3	5	82	75	60	M5x10	4	204	17	261.5	17
F 31 2/3/4	SK 80A	115	14	16.3	5	90	100	80	M6x12	4	204	17	261.5	17
F 31 2/3/4	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	245	18	302.5	18
F 31 2/3/4	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	245	18	302.5	18
F 31 2/3/4	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	245	18	302.5	18
F 31 2/3/4	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	245	18	302.5	18
F 31 2/3/4	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	245	18	302.5	18
F 31 2/3/4	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	245	18	302.5	18
F 31 2/3	SK 130A	188	24	27.3	8	142	165	130	M10x20	5	245	18	—	—

														 2/3x		 4x	
		 Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	 Kg	P	 Kg	
F 31 2/3/4	SC 60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	224	17	281.5	17	
F 31 2/3/4	SC 60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	224	18	281.5	18	
F 31 2/3/4	SC 80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	224	18	281.5	18	
F 31 2/3/4	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	268.5	19	326	19	
F 31 2/3/4	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	268.5	19	326	19	
F 31 2/3/4	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	268.5	19	326	19	
F 31 2/3/4	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	268.5	19	326	19	
F 31 2/3/4	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	268.5	20	326	20	
F 31 2/3/4	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	268.5	20	326	20	
F 31 2/3	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	268.5	21	—	—	

F 31...SK / SC

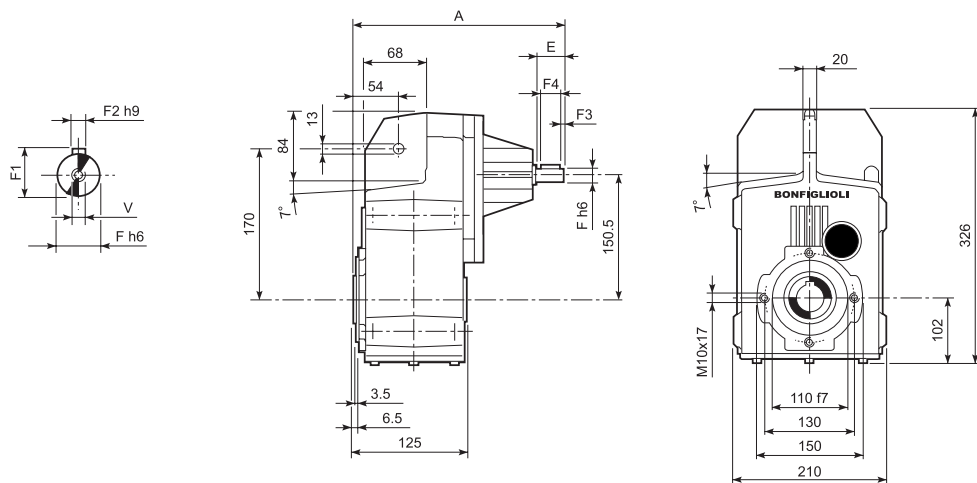


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
F 31 2/3/4	SK 60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	7.756	35
F 31 2/3/4	SK 60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	8.031	37
F 31 2/3/4	SK 80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	8.031	37
F 31 2/3/4	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	9.646	40
F 31 2/3/4	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.646	40
F 31 2/3/4	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.646	40
F 31 2/3/4	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	9.646	40
F 31 2/3/4	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	9.646	40
F 31 2/3/4	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	9.646	40
F 31 2/3	SK 130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	9.646	40

		Mt	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
		[lb · in]											P	P
F 31 2/3/4	SC 60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	8.819	37
F 31 2/3/4	SC 60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	8.819	40
F 31 2/3/4	SC 80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	8.819	40
F 31 2/3/4	SC 80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	10.571	42
F 31 2/3/4	SC 95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	10.571	42
F 31 2/3/4	SC 95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	10.571	42
F 31 2/3/4	SC 95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	10.571	42
F 31 2/3/4	SC 110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	10.571	44
F 31 2/3/4	SC 110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	10.571	44
F 31 2/3	SC 130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	10.571	46

F 31...HS

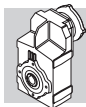
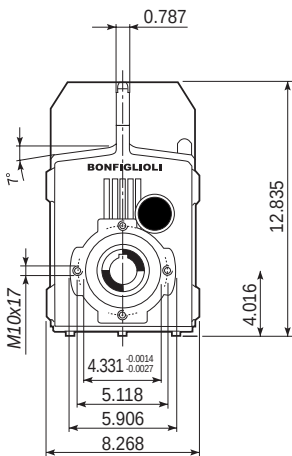
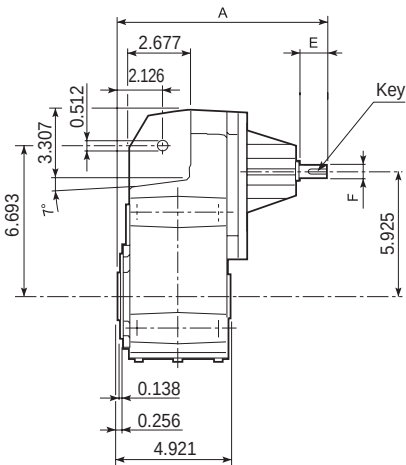
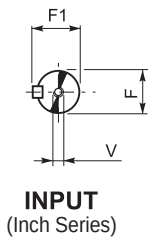


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
		275.5	40	19	21.5	6	2.5	35	M6x16	16.7
F 31 3		275.5	40	19	21.5	6	2.5	35	M6x16	16.7
F 31 4		290	40	16	18	5	2.5	35	M6x16	16.5

Imperial output versions available also in combination with HS input

F 31...NHS



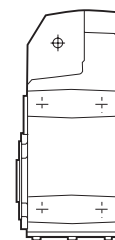
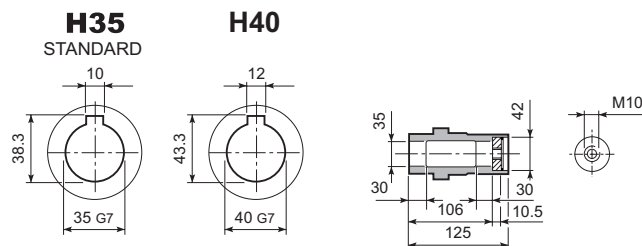
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	
F 31 2	NHS	10.846	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	37
F 31 3		10.846	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	37
F 31 4		11.417	1.575	0.625 ⁺⁰ _{-0.0004}	0.705	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	36

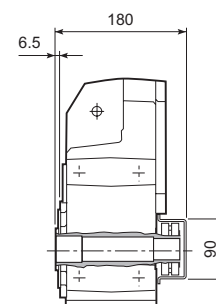
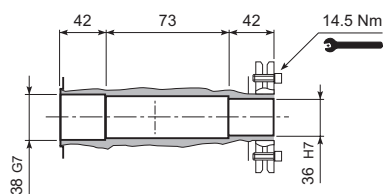
Imperial output versions available also in combination with HS input

F 31

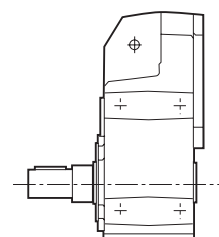
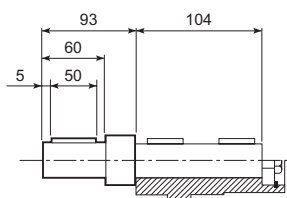
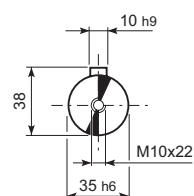
F 31...H



F 31...S

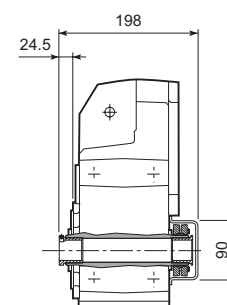
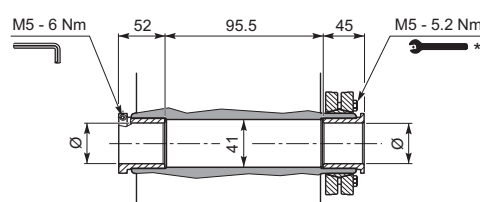


F 31...R

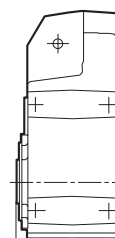
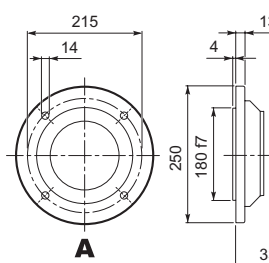
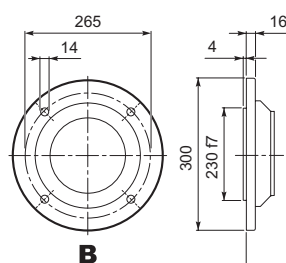


F 31...QF

	Ø
QF35	35
QF40	40



F 31...F...

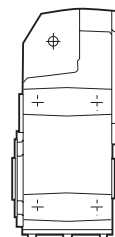
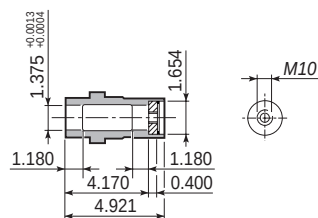
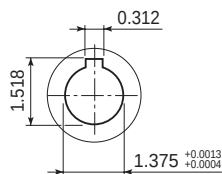


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

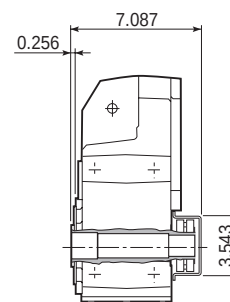
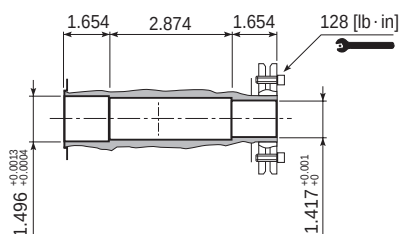
F 31

F 31...NH

OUTPUT
(Inch Series)

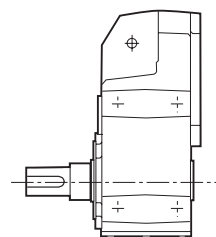
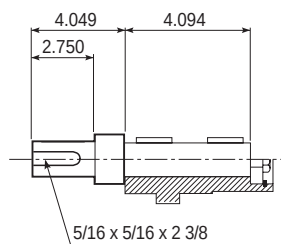
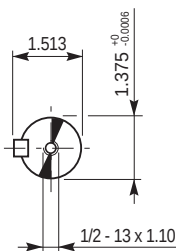


F 31...S



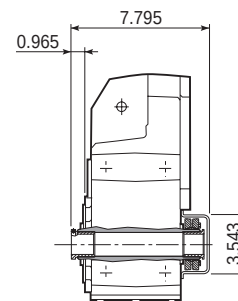
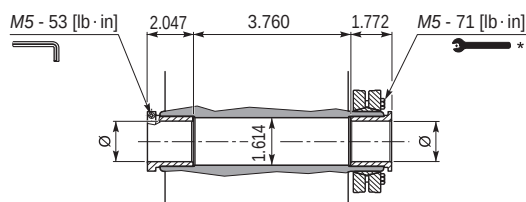
F 31...NR

OUTPUT
(Inch Series)

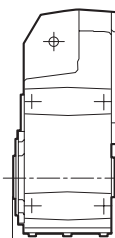
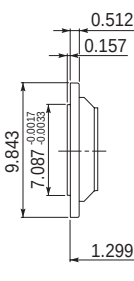
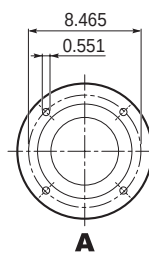
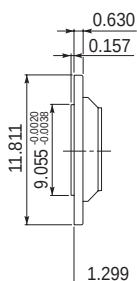
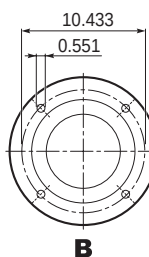


F 31...NQF

	Ø
NQF1-3/8	1.375
NQF1-7/16	1.438

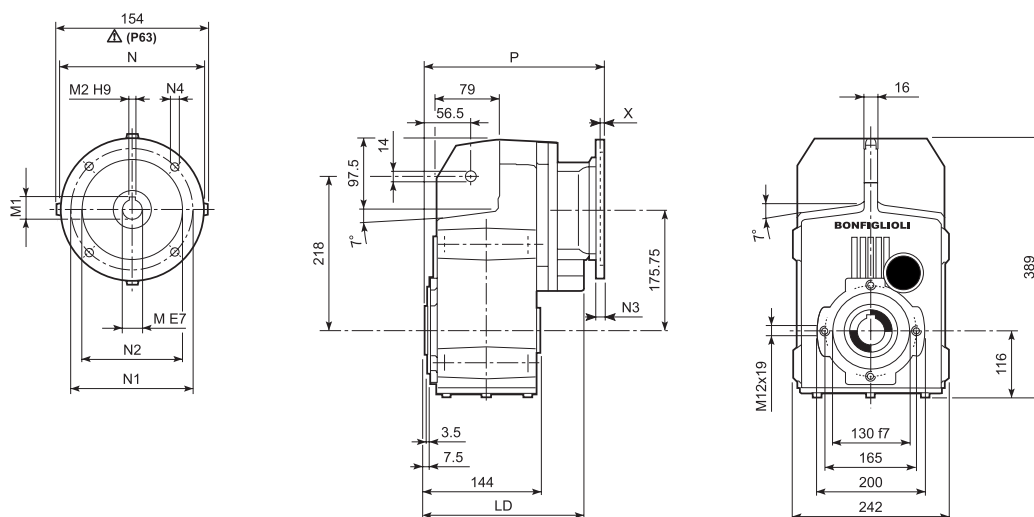


F 31...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 41...P(IEC)

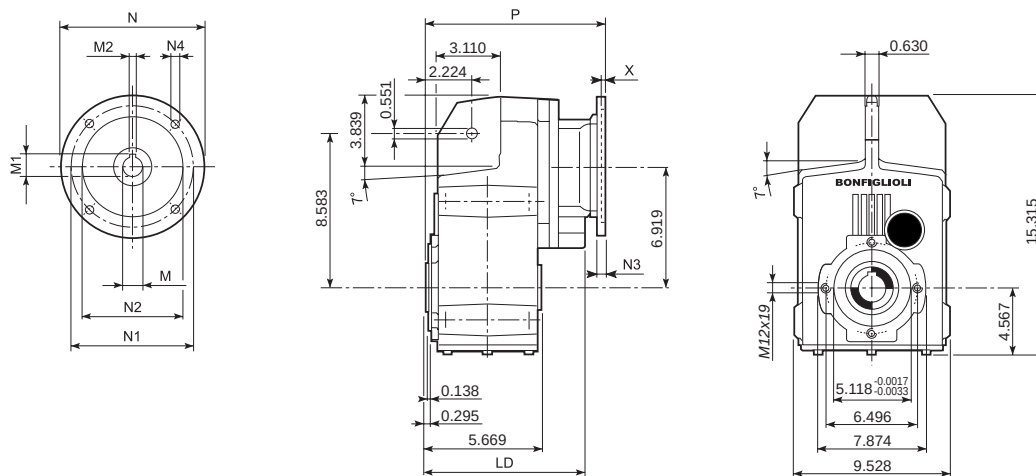


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 41 2/3	P63	215	11	12.8	4	140	115	95	—	M8x19	4	246	42
F 41 2/3	P71	215	14	16.3	5	160	130	110	—	M8x16	4.5	246	42
F 41 2/3	P80	231	19	21.8	6	200	165	130	—	M10x14.5	4	265.5	43
F 41 2/3	P90	231	24	27.3	8	200	165	130	—	M10x14.5	4	265.5	43
F 41 2/3	P100	231	28	31.3	8	250	215	180	—	M12x16	4.5	275.5	47
F 41 2/3	P112	231	28	31.3	8	250	215	180	—	M12x16	4.5	275.5	47
F 41 2/3	P132	—	38	41.3	10	300	265	230	16	14	5	312	50
F 41 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	307.5	44
F 41 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	307.5	44
F 41 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	327	45
F 41 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	327	45
F 41 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	337	49
F 41 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	337	49

Metric output versions available also in combination with NEMA motor adaptor

F 41...N(NEMA Input)

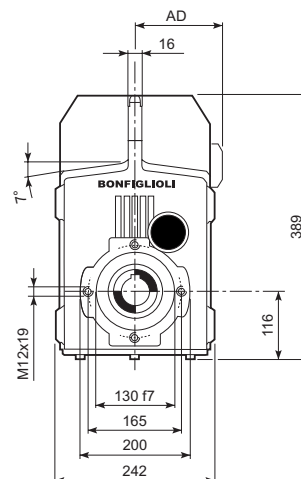
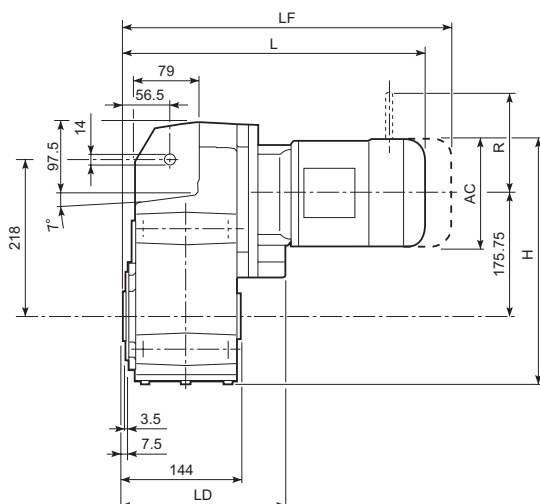
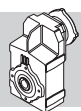


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
F 41 2/3	N56C	8.465	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	10.472	93
F 41 2/3	N140TC	8.465	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	10.472	95
F 41 2/3	N180TC	9.094	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	11.220	104
F 41 2/3	N210TC	—	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	12.461	110
F 41 4	N56C	—	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	12.894	97
F 41 4	N140TC	—	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	12.894	99
F 41 4	N180TC	—	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	13.720	108

Imperial output versions available also in combination with IEC motor adaptor

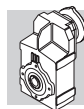
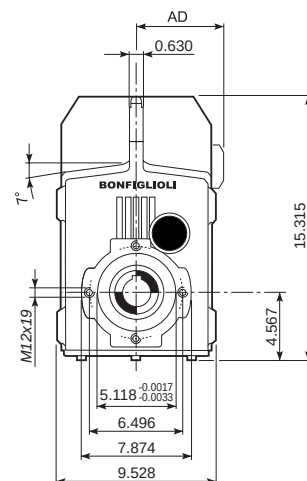
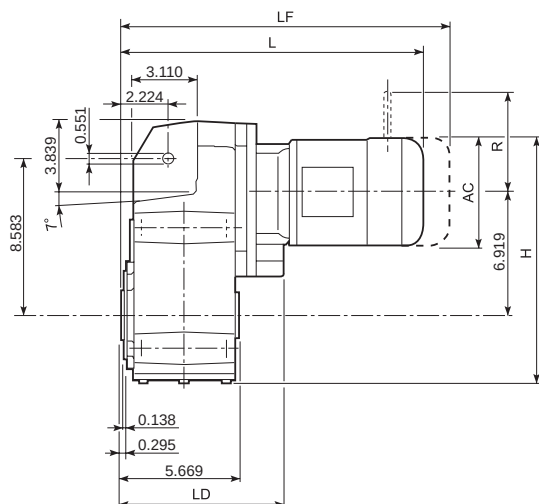
F 41...M/ME



Dimensions are in mm

										M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD	Kg		LF	Kg	R	AD	R	AD
F 41 2/3	S1	M1	138	360.8	401	199.5	108	46		462	48	103	135	124	108
F 41 2/3	S2	ME2S	156	369.8	430	215	119	49	—	—	—	—	—	—	—
F 41 2/3	S3	ME3S	195	389.3	473	231	142	54	—	—	—	—	—	—	—
F 41 2/3	S3	ME3L	195	389.3	505	231	142	64	—	—	—	—	—	—	—
F 41 2/3	S4	ME4	258	420.8	613	—	193	96	—	—	—	—	—	—	—
F 41 2/3	S4	ME4LB	258	420.8	648	—	193	104	—	—	—	—	—	—	—
F 41 4	S05	M05	231	352.3	433.5	—	95	45	499.5	46	96	122	116	95	
F 41 4	S1	M1	138	360.8	462.5	—	108	47	523.5	49	103	135	124	108	
F 41 4	S2	ME2S	156	369.8	491.5	—	119	50	—	—	—	—	—	—	—
F 41 4	S3	ME3S	195	389.3	534.5	—	142	55	—	—	—	—	—	—	—
F 41 4	S3	ME3L	195	389.3	566.5	—	142	65	—	—	—	—	—	—	—

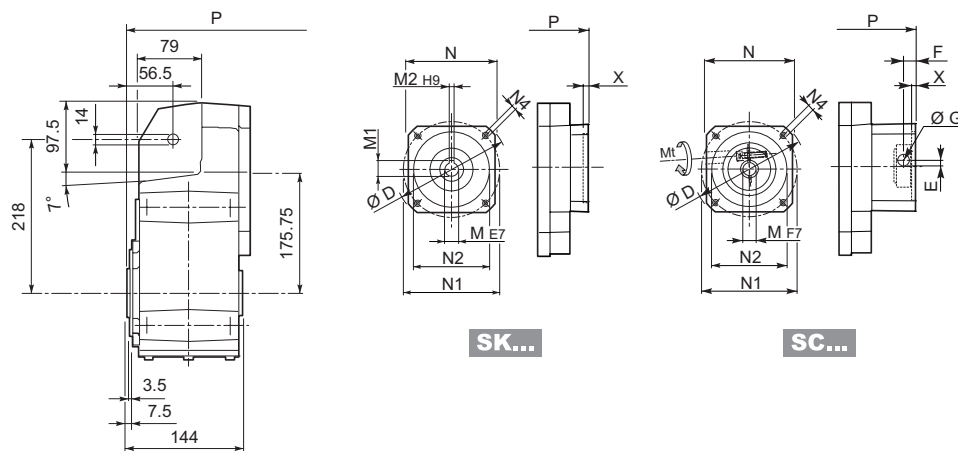
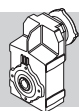
F 41...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD		LF		R	AD	R	AD
F 41 2/3	S1	M1	5.433	14.205	15.787	7.854	4.252	101	18.189	106	4.055	5.315	4.882	4.252
F 41 2/3	S2	ME2S	6.142	14.559	16.929	8.465	4.685	108	—	—	—	—	—	—
F 41 2/3	S3	ME3S	7.677	15.327	18.622	9.094	5.591	119	—	—	—	—	—	—
F 41 2/3	S3	ME3L	7.677	15.327	19.882	9.094	5.591	141	—	—	—	—	—	—
F 41 2/3	S4	ME4	10.157	16.567	24.134	—	7.598	212	—	—	—	—	—	—
F 41 2/3	S4	ME4LB	10.157	16.567	25.512	—	7.598	229	—	—	—	—	—	—
F 41 4	S05	M05	9.094	13.870	17.067	—	3.740	99	19.665	101	3.780	4.803	4.567	3.740
F 41 4	S1	M1	5.433	14.205	18.209	—	4.252	104	20.610	108	4.055	5.315	4.882	4.252
F 41 4	S2	ME2S	6.142	14.559	19.350	—	4.685	110	—	—	—	—	—	—
F 41 4	S3	ME3S	7.677	15.327	21.043	—	5.591	121	—	—	—	—	—	—
F 41 4	S3	ME3L	7.677	15.327	22.303	—	5.591	143	—	—	—	—	—	—

F 41...SK / SC



SK...

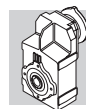
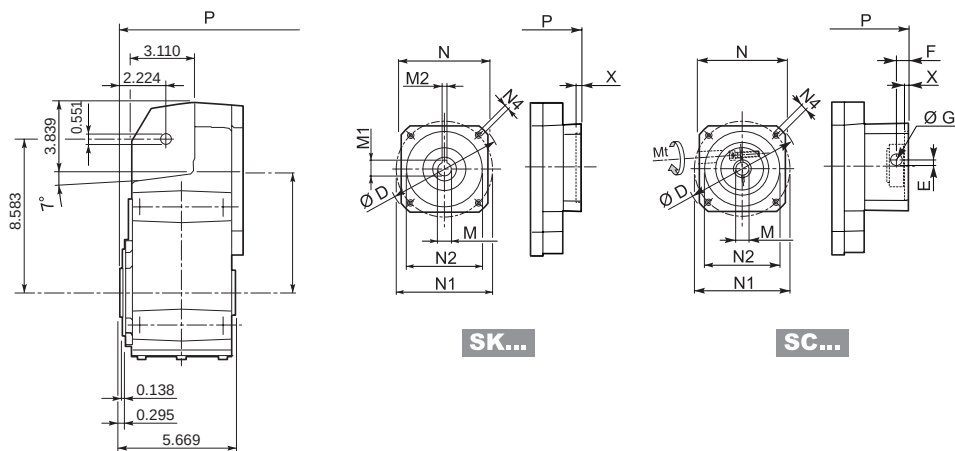
SC...

Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
F 41 4	SK 60A	102	11	12.8	4	82	75	60	M5x10	3.5	—	—
F 41 4	SK 60B	102	14	16.3	5	82	75	60	M5x10	4	—	—
F 41 4	SK 80A	115	14	16.3	5	90	100	80	M6x12	4	—	—
F 41 2/3	SK 80B	120	14	16.3	5	96	100	80	M6x12	4	265.5	43
F 41 2/3/4	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	265.5	43
F 41 2/3/4	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	265.5	43
F 41 2/3/4	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	265.5	43
F 41 2/3/4	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	265.5	43
F 41 2/3/4	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	265.5	43
F 41 2/3/4	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	265.5	43
F 41 2/3	SK 130A	188	24	27.3	8	142	165	130	M10x20	5	265.5	45
F 41 2/3	SK 130B	189	32	35.3	10	160	165	130	M10x20	5	312	47
F 41 2/3	SK 180A	240	32	35.3	10	192	215	180	M12x19	5	312	47
F 41 2/3	SK 180B	240	38	41.3	10	192	215	180	M12x19	5	312	47

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
F 41 4	SC 60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	—	—
F 41 4	SC 60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	—	—
F 41 4	SC 80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	—	—
F 41 2/3	SC 80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	289	44
F 41 2/3/4	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	289	44
F 41 2/3/4	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	289	44
F 41 2/3/4	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	289	44
F 41 2/3/4	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	289	44
F 41 2/3/4	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	289	45
F 41 2/3/4	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	289	45
F 41 2/3	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	289	46
F 41 2/3	SC 130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	335	50
F 41 2/3	SC 180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	339	50
F 41 2/3	SC 180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	339	50

F 41...SK / SC

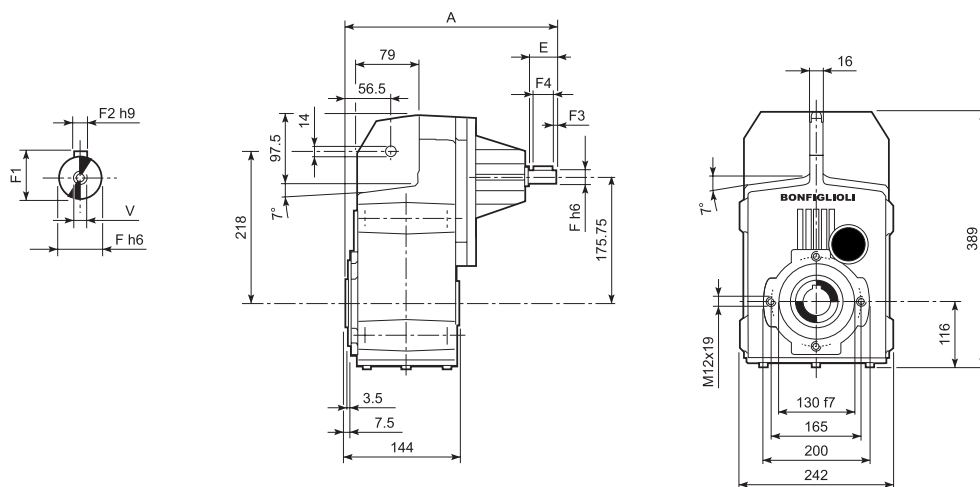


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
											lbs	lbs
F 41 4	SK 60A	4.016	0.433 ^{+0.0020} / _{+0.0013}	0.504	0.157 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.138	—	10.984
F 41 4	SK 60B	4.016	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.228	2.953	2.362	M5x10	0.157	—	11.260
F 41 4	SK 80A	4.528	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.543	3.937	3.150	M6x12	0.157	—	11.260
F 41 2/3	SK 80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	10.453	95
F 41 2/3/4	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	10.453	95
F 41 2/3/4	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.453	95
F 41 2/3/4	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.453	95
F 41 2/3/4	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	10.453	95
F 41 2/3/4	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	10.453	95
F 41 2/3/4	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	10.453	95
F 41 2/3	SK 130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	10.453	99
F 41 2/3	SK 130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	12.283	104
F 41 2/3	SK 180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	12.283	104
F 41 2/3	SK 180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	12.283	104

		Mt [lb • in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
													lbs	lbs
F 41 4	SC 60A	M6 133	4.016	0.276	0.492	0.492	0.433 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	12.047
F 41 4	SC 60B	M6 133	4.016	0.276	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.228	2.953	2.362	M5x10	0.157	—	12.047
F 41 4	SC 80A	M6 133	4.528	0.236	0.492	0.492	0.551 ^{+0.0013} / _{+0.0006}	3.543	3.937	3.150	M6x12	0.157	—	12.047
F 41 2/3	SC 80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	11.378	97
F 41 2/3/4	SC 80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	11.378	97
F 41 2/3/4	SC 95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	11.378	97
F 41 2/3/4	SC 95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	11.378	97
F 41 2/3/4	SC 95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	11.378	97
F 41 2/3/4	SC 110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	11.378	99
F 41 2/3/4	SC 110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	11.378	99
F 41 2/3	SC 130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	11.378	101
F 41 2/3	SC 130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	13.189	110
F 41 2/3	SC 180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	13.346	110
F 41 2/3	SC 180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	13.346	110

F 41...HS

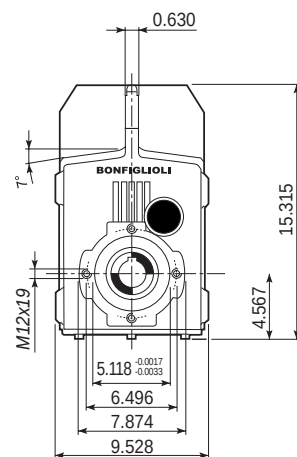
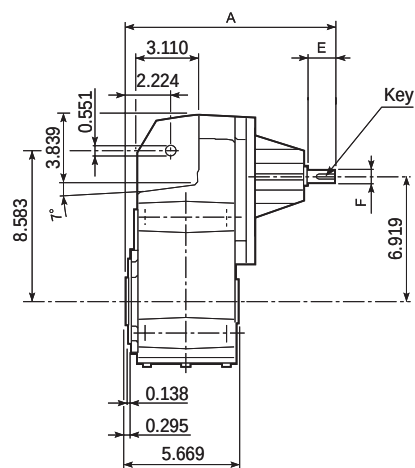
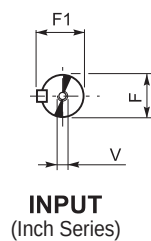


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
F 41 2	HS	335.5	50	24	27	8	2.5	45	M8x19	44.9
F 41 3		335.5	50	24	27	8	2.5	45	M8x19	46.4
F 41 4		357.5	40	19	21.5	6	2.5	35	M6x16	43.5

Metric output versions available also in combination with NHS input

F 41...NHS



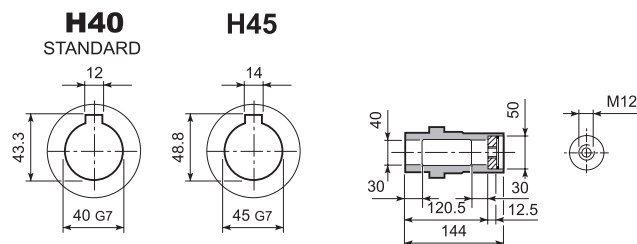
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	lbs
F 41 2	NHS	13.209	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	99
F 41 3		13.209	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	102
F 41 4		14.075	1.575	0.750 ⁺⁰ _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	96

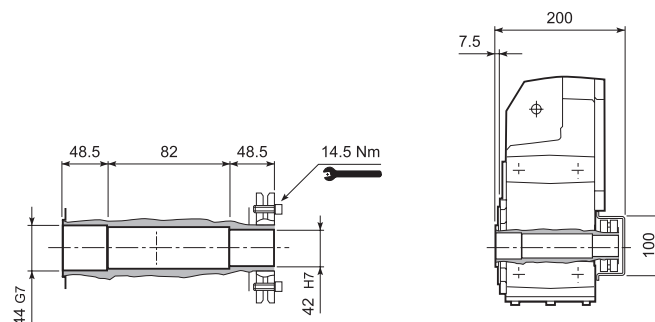
Imperial output versions available also in combination with HS input

F 41

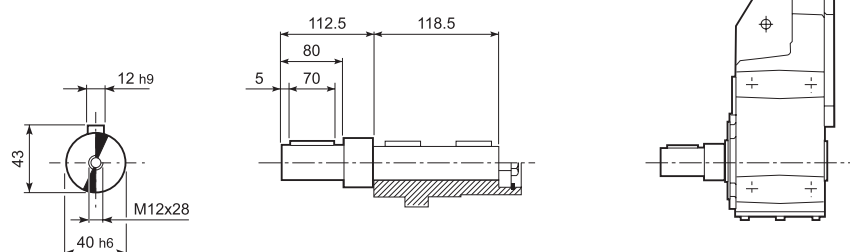
F 41...H



F 41...S



F 41...R

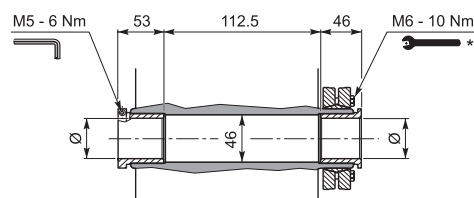


F 41...QF

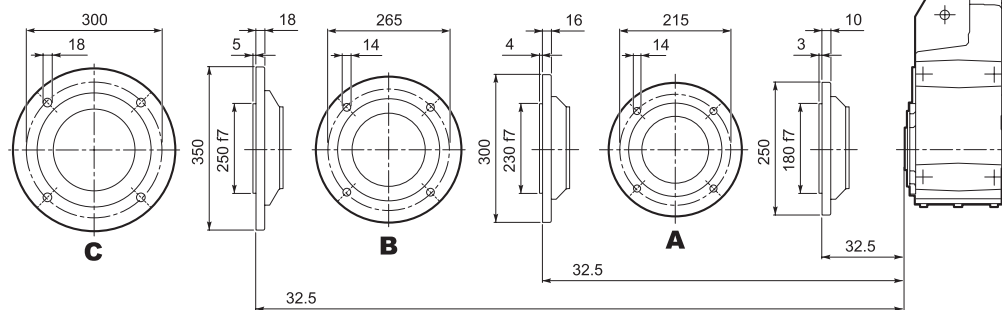
	Ø
QF42	42
QF45	45



	T _{n2 max} [lb · in]
F 41 QF42	7529
F 41 QF45	8857



F 41...F...

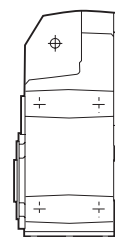
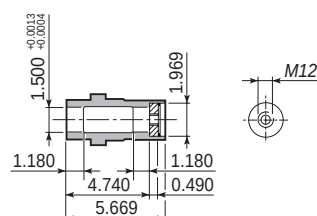
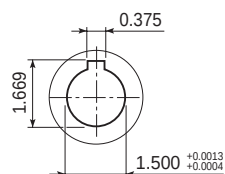


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox. supplied with the gearbox.

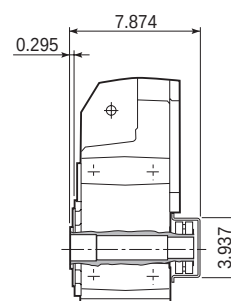
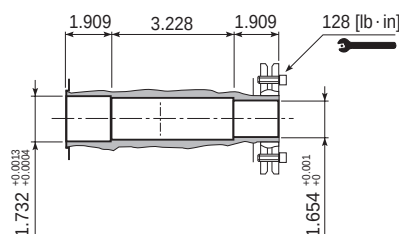
F 41

F 41...NH

OUTPUT
(Inch Series)

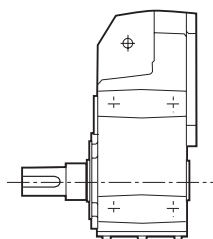
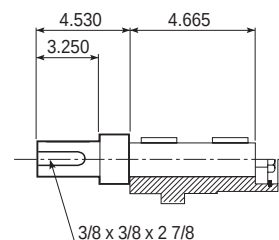
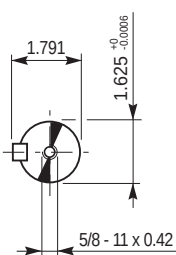


F 41...S



F 41...NR

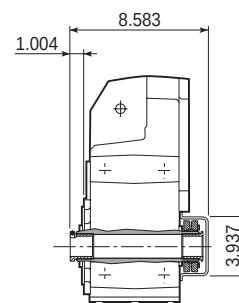
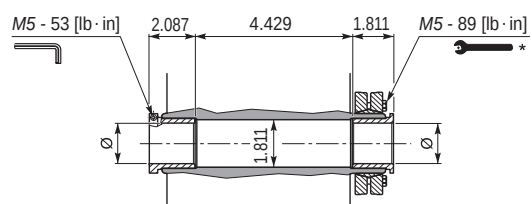
OUTPUT
(Inch Series)



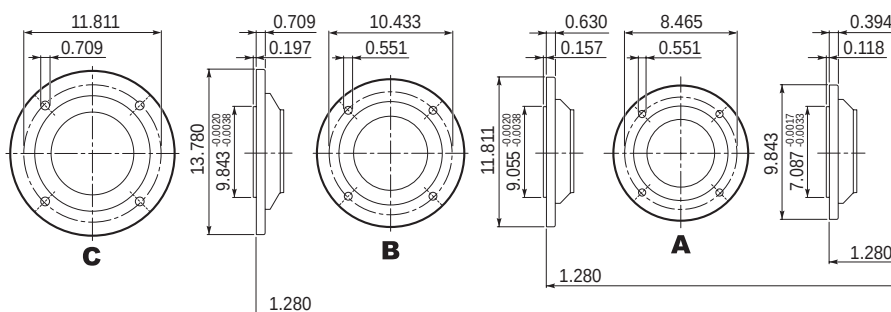
F 41...NQF

	Ø
NQF1-5/8	1.625
NQF1-3/4	1.750

	T _{n2 max} [lb · in]
F 41 NQF1-5/8	7529
F 41 NQF1-3/4	8857

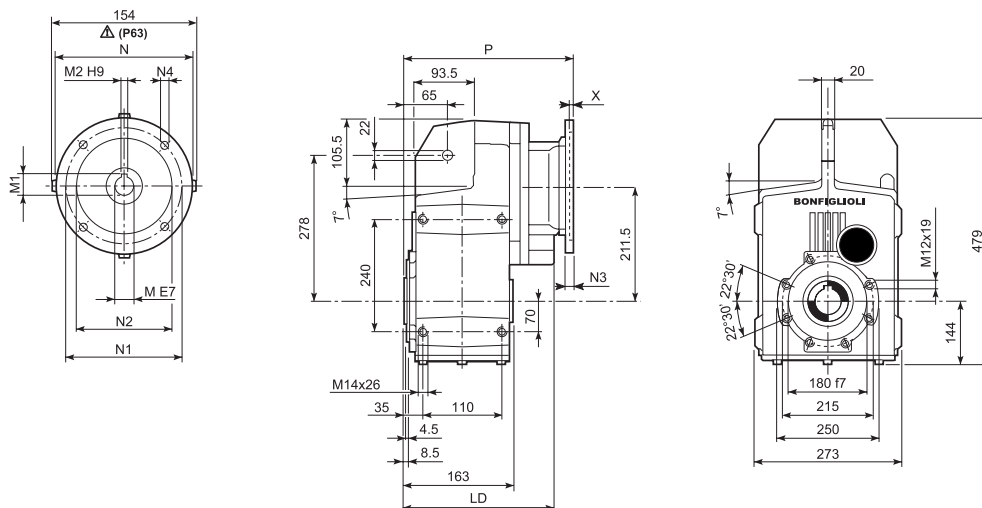


F 41...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 51...P(IEC)

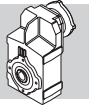
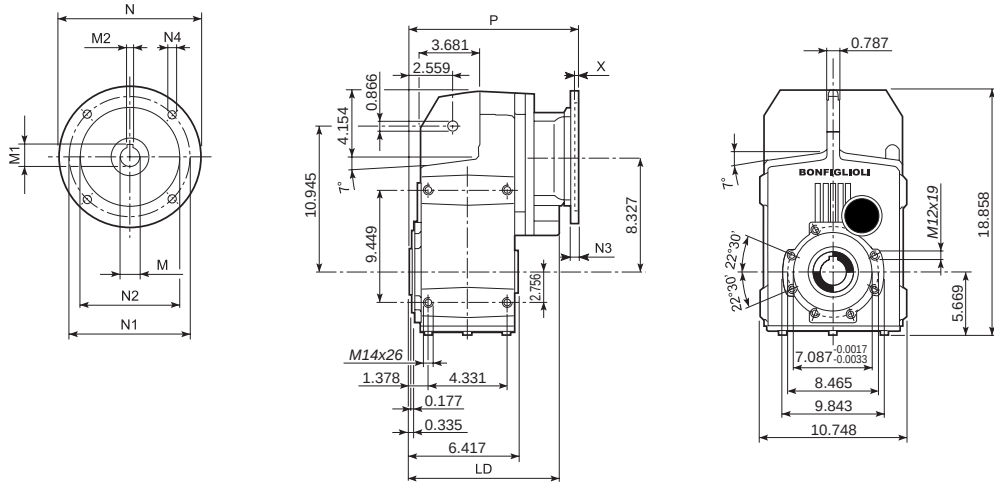


Dimensions are in mm

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 51 2/3	P63	238	11	12.8	4	140	115	95	—	M8x19	4	268	65
F 51 2/3	P71	238	14	16.3	5	160	130	110	—	M8x16	4.5	268	65
F 51 2/3	P80	253	19	21.8	6	200	165	130	—	M10x14.5	4	287.5	67
F 51 2/3	P90	253	24	27.3	8	200	165	130	—	M10x14.5	4	287.5	67
F 51 2/3	P100	238	28	31.3	8	250	215	180	—	M12x16	4.5	297.5	71
F 51 2/3	P112	238	28	31.3	8	250	215	180	—	M12x16	4.5	297.5	71
F 51 2/3	P132	238	38	41.3	10	300	265	230	16	14	5	334	74
F 51 2/3	P160	—	42	45.3	12	350	300	250	23	18	5.5	384.5	78
F 51 2/3	P180	—	48	51.8	14	350	300	250	23	18	5.5	384.5	78
F 51 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	339.5	70
F 51 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	339.5	70
F 51 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	359	71
F 51 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	359	71
F 51 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	369	75
F 51 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	369	75
F 51 4	P132	—	38	41.3	10	300	265	230	16	14	5	405.5	78

Metric output versions available also in combination with NEMA motor adaptor

F 51...N(NEMA Input)

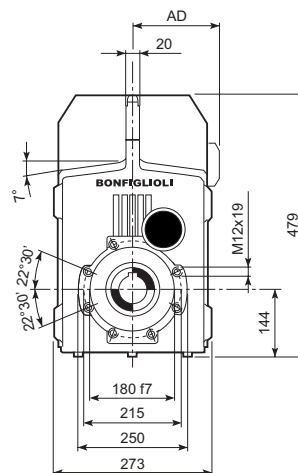
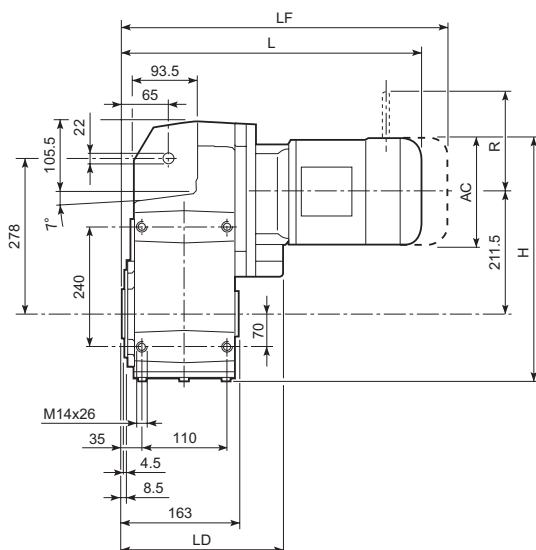
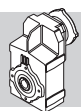


Dimensions are in Inch except when shown in *italic* [mm]

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 51 2/3	N56C	9.370	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.339	143
F 51 2/3	N140TC	9.370	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	11.339	148
F 51 2/3	N180TC	9.961	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	12.087	157
F 51 2/3	N210TC	9.370	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	13.327	163
F 51 2/3	N250TC	—	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ⁺⁰ / _{+0.0014}	13.780	7.250	8.500	—	0.551	0.217	16.122	202
F 51 2/3	N280TC	—	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ⁺⁰ / _{+0.0017}	13.740	10.500	9.000	—	0.551	0.217	16.319	205
F 51 4	N56C	—	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	14.154	154
F 51 4	N140TC	—	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	14.154	157
F 51 4	N180TC	—	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	14.980	165
F 51 4	N210TC	—	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	16.142	172

Imperial output versions available also in combination with IEC motor adaptor

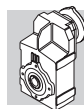
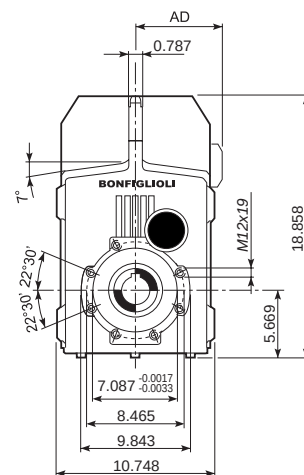
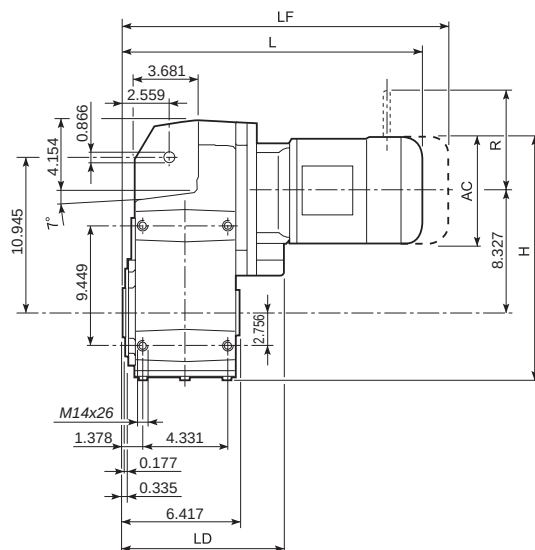
F 51...M/ME



Dimensions are in mm

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD		LF		R	AD	R	AD
F 51 2/3	S1	M1	138	424	423	—	108	73	484	76	103	135	124	108
F 51 2/3	S2	ME2S	156	433	452	238	119	73	—	—	—	—	—	—
F 51 2/3	S3	ME3S	195	452.5	495	253	142	77	—	—	—	—	—	—
F 51 2/3	S3	ME3L	195	452.5	527	253	142	87	—	—	—	—	—	—
F 51 2/3	S4	ME4	258	484	635	238	193	119	—	—	—	—	—	—
F 51 2/3	S4	ME4LB	258	484	670	238	193	127	—	—	—	—	—	—
F 51 2/3	S5	ME5S	310	510	721.5	—	245	153	—	—	—	—	—	—
F 51 2/3	S5	ME5L	310	510	765.5	—	245	169	—	—	—	—	—	—
F 51 4	S1	M1	138	424	494.5	—	108	75	555.5	78	103	135	124	108
F 51 4	S2	ME2S	156	433	523.5	—	119	79	—	—	—	—	—	—
F 51 4	S3	ME3S	195	452.5	566.5	—	142	84	—	—	—	—	—	—
F 51 4	S3	ME3L	195	452.5	598.5	—	142	93	—	—	—	—	—	—

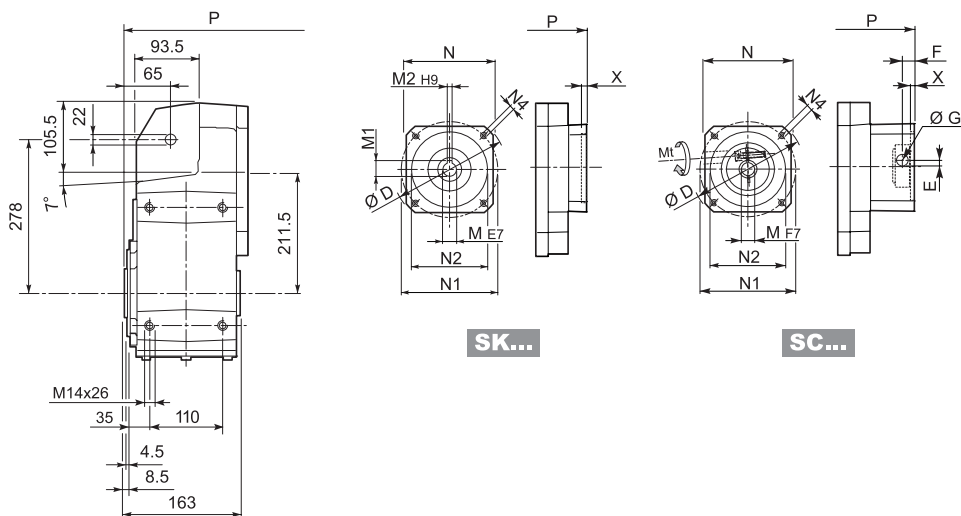
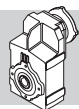
F 51...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

									M...FD M...FA		M...FD		M...FA	
			AC	H	L	LD	AD		LF		R	AD	R	AD
F 51 2/3	S1	M1	5.433	16.693	16.654	—	4.252	161	19.055	168	4.055	5.315	4.882	4.252
F 51 2/3	S2	ME2S	6.142	17.047	17.795	9.370	4.685	161	—	—	—	—	—	—
F 51 2/3	S3	ME3S	7.677	17.815	19.488	9.961	5.591	170	—	—	—	—	—	—
F 51 2/3	S3	ME3L	7.677	17.815	20.748	9.961	5.591	192	—	—	—	—	—	—
F 51 2/3	S4	ME4	10.157	19.055	25.000	9.370	7.598	262	—	—	—	—	—	—
F 51 2/3	S4	ME4LB	10.157	19.055	26.378	9.370	7.598	280	—	—	—	—	—	—
F 51 2/3	S5	ME5S	12.205	20.079	28.406	—	9.646	337	—	—	—	—	—	—
F 51 2/3	S5	ME5L	12.205	20.079	30.138	—	9.646	373	—	—	—	—	—	—
F 51 4	S1	M1	5.433	16.693	19.469	—	4.252	165	21.870	172	4.055	5.315	4.882	4.252
F 51 4	S2	ME2S	6.142	17.047	20.610	—	4.685	174	—	—	—	—	—	—
F 51 4	S3	ME3S	7.677	17.815	22.303	—	5.591	185	—	—	—	—	—	—
F 51 4	S3	ME3L	7.677	17.815	23.563	—	5.591	205	—	—	—	—	—	—

F 51...SK / SC

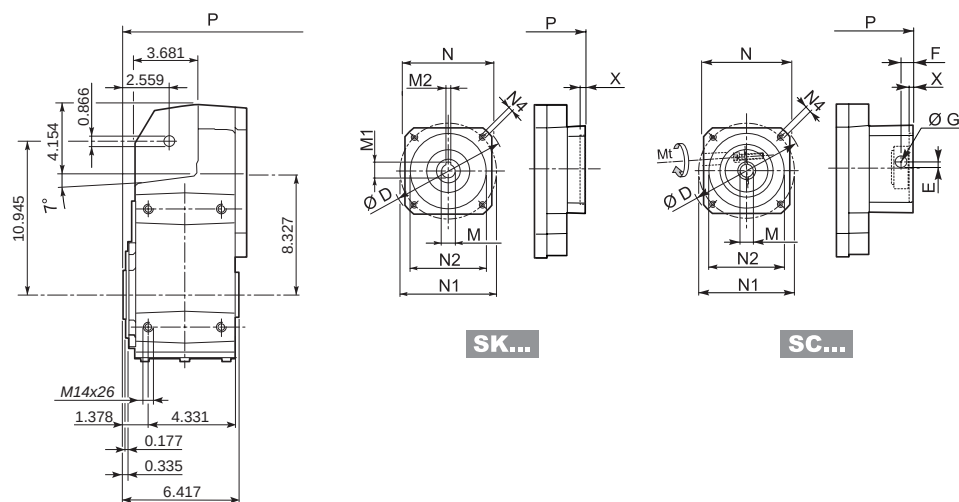


Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
											Kg	Kg
F 51 2/3	SK 80B	120	14	16.3	5	96	100	80	M6x12	4	287.5	67
F 51 2/3/4	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	287.5	67
F 51 2/3/4	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	287.5	67
F 51 2/3/4	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	287.5	67
F 51 2/3/4	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	287.5	67
F 51 2/3/4	SK 110A	150	19	21.8	6	120	130	110	M8x12	5	287.5	67
F 51 2/3/4	SK 110B	150	24	27.3	8	120	130	110	M8x12	5	287.5	67
F 51 2/3/4	SK 130A	188	24	27.3	8	142	165	130	M10x20	5	287.5	69
F 51 2/3	SK 130B	189	32	35.3	10	160	165	130	M10x20	5	334	75
F 51 2/3	SK 180A	240	32	35.3	10	192	215	180	M12x19	5	334	75
F 51 2/3	SK 180B	240	38	41.3	10	192	215	180	M12x19	5	334	75

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
													Kg	Kg
F 51 2/3	SC 80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	311	70
F 51 2/3/4	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	311	70
F 51 2/3/4	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	311	70
F 51 2/3/4	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	311	70
F 51 2/3/4	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	311	70
F 51 2/3/4	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	311	71
F 51 2/3/4	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	311	71
F 51 2/3/4	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	311	72
F 51 2/3	SC 130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	357	75
F 51 2/3	SC 180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	361	75
F 51 2/3	SC 180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	361	75

F 51...SK / SC

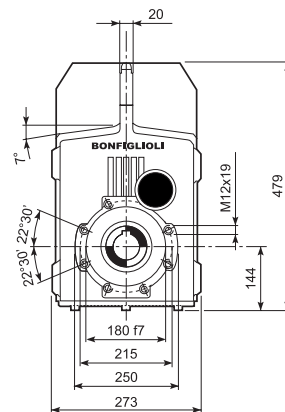
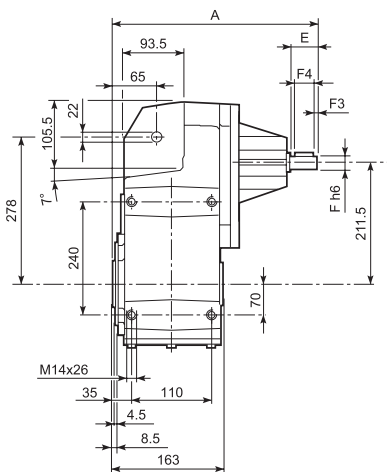
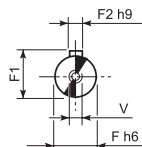


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2/3x 		4x 	
											P	 lbs	P	 lbs
F 51 2/3	SK 80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	11.319	148	—	—
F 51 2/3/4	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	11.319	148	14.134	157
F 51 2/3/4	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.319	148	14.134	157
F 51 2/3/4	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.319	148	14.134	157
F 51 2/3/4	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	11.319	148	14.134	157
F 51 2/3/4	SK 110A	5.906	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	11.319	148	14.134	157
F 51 2/3/4	SK 110B	5.906	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	11.319	148	14.134	157
F 51 2/3/4	SK 130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	11.319	152	14.134	161
F 51 2/3	SK 130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	13.150	165	—	—
F 51 2/3	SK 180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	13.150	165	—	—
F 51 2/3	SK 180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	13.150	165	—	—

		 Mt [lb • in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x 		4x 	
													P	 lbs	P	 lbs
F 51 2/3	SC 80B	M6 133	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	12.244	154	—	—
F 51 2/3/4	SC 80C	M6 133	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	12.244	154	15.059	163
F 51 2/3/4	SC 95A	M6 133	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	12.244	154	15.059	163
F 51 2/3/4	SC 95B	M6 133	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.244	154	15.059	163
F 51 2/3/4	SC 95C	M6 133	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	12.244	154	15.059	163
F 51 2/3/4	SC 110A	M6 133	5.906	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.244	157	15.059	165
F 51 2/3/4	SC 110B	M6 133	5.906	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	12.244	157	15.059	165
F 51 2/3/4	SC 130A	M6 133	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	12.244	159	15.059	168
F 51 2/3	SC 130B	M8 319	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	14.055	165	—	—
F 51 2/3	SC 180A	M8 319	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	14.213	165	—	—
F 51 2/3	SC 180B	M8 319	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	14.213	165	—	—

F 51...HS

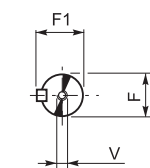


Dimensions are in mm

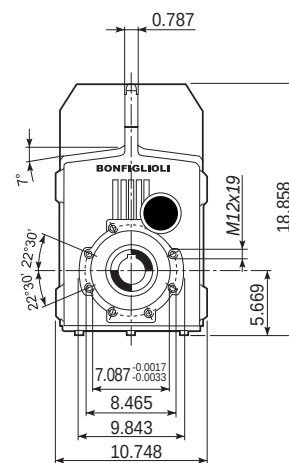
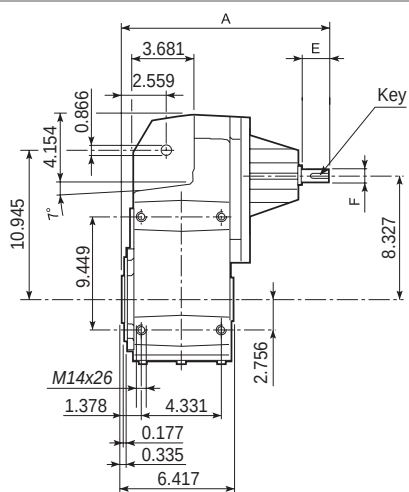
		A	E	F	F1	F2	F3	F4	V	Kg
F 51 2	HS	357.5	50	24	27	8	2.5	45	M8x19	65
F 51 3		357.5	50	24	27	8	2.5	45	M8x19	68
F 51 4		389.5	40	19	21.5	6	2.5	35	M6x16	70

Metric output versions available also in combination with NHS input

F 51...NHS



INPUT
(Inch Series)



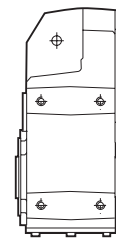
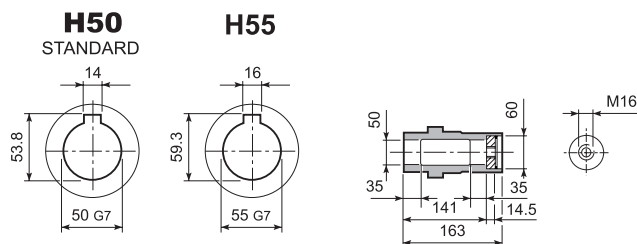
Dimensions are in Inch except when shown in *italic [mm]*

		A	E	F	F1	V	Key	lbs
F 51 2	NHS	14.075	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	143
F 51 3		14.075	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	150
F 51 4		15.335	1.575	0.750 ⁺⁰ / _{-0.0005}	0.832	1/4 - 20 UNC	3/16 x 3/16 x 1 3/8	154

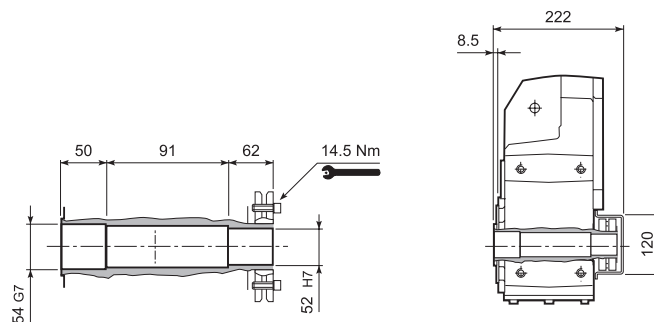
Imperial output versions available also in combination with HS input

F 51

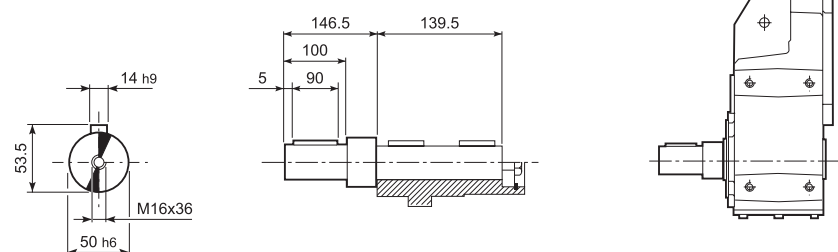
F 51...H



F 51...S



F 51...R

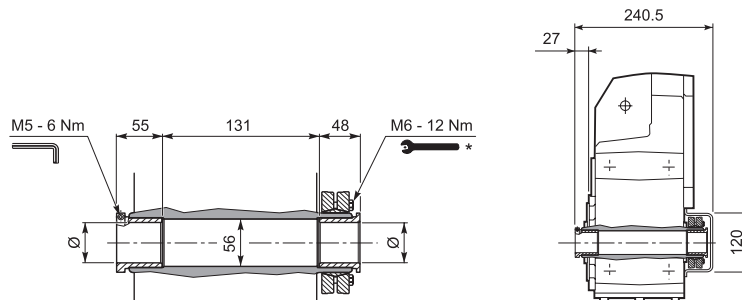


F 51...QF

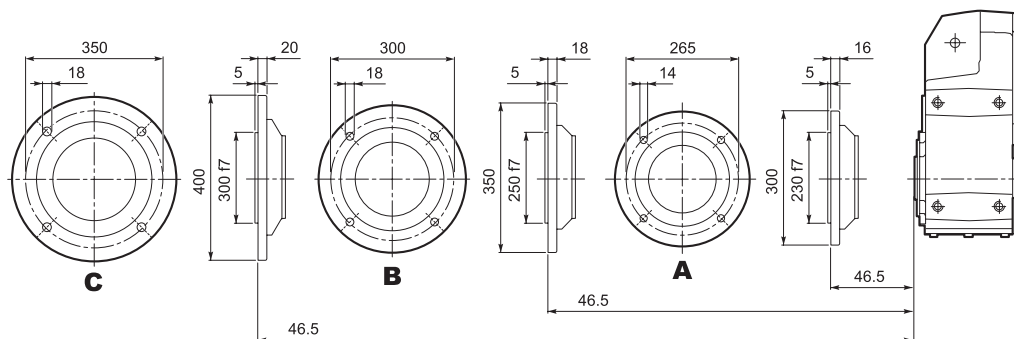
	Ø
QF50	50
QF55	55



T _{n2} max [lb · in]	
F 51 QF50	15500



F 51...F...

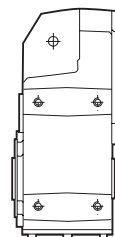
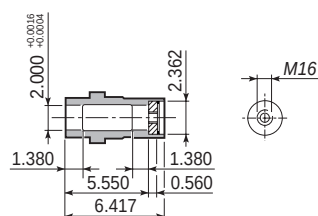
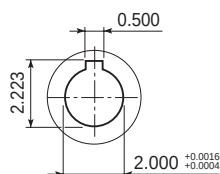


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox. supplied with the gearbox.

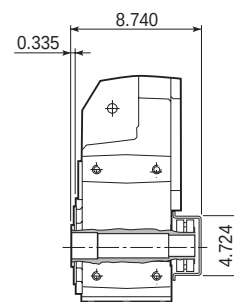
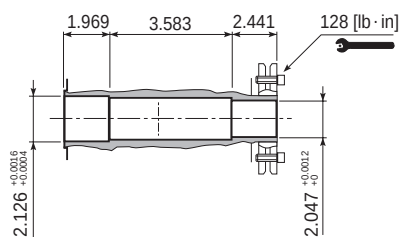
F 51

F 51...NH

OUTPUT
(Inch Series)

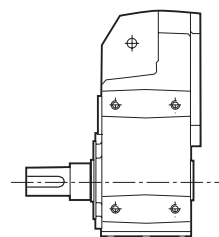
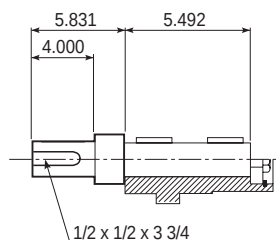
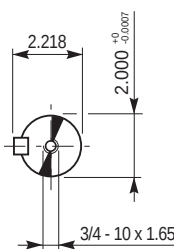


F 51...S



F 51...NR

OUTPUT
(Inch Series)

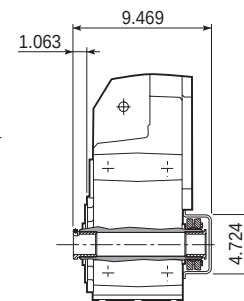
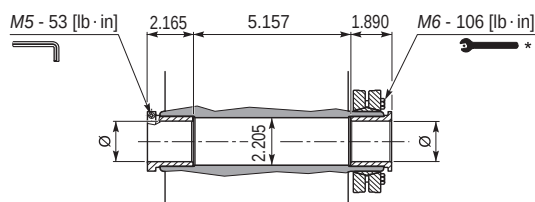


F 51...NQF

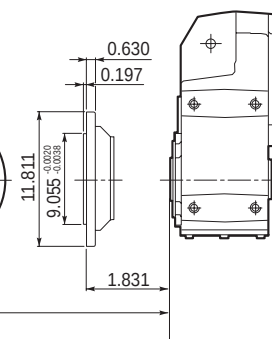
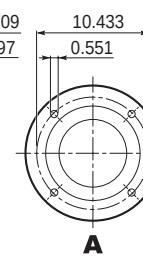
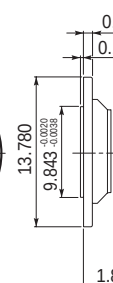
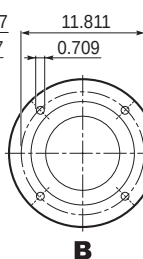
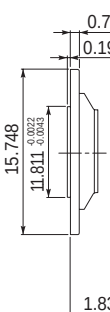
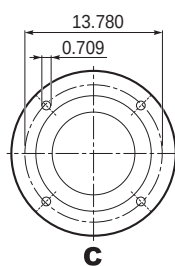
	Ø
NQF1-15/16	1.938
NQF2	2.000



T _{n2 max} [lb · in]	
F 51 NQF1-15/16	15500
F 51 NQF2	

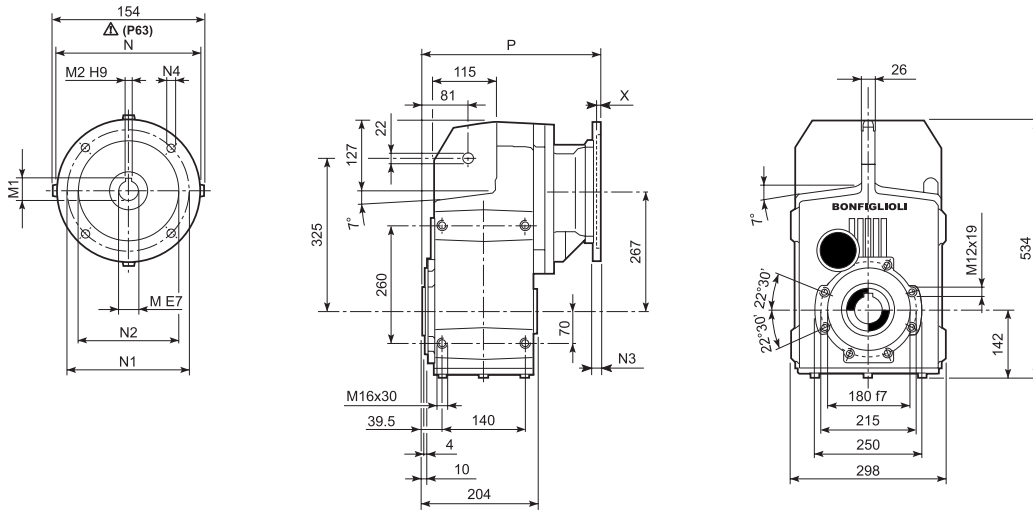


F 51...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 60...P(IEC)

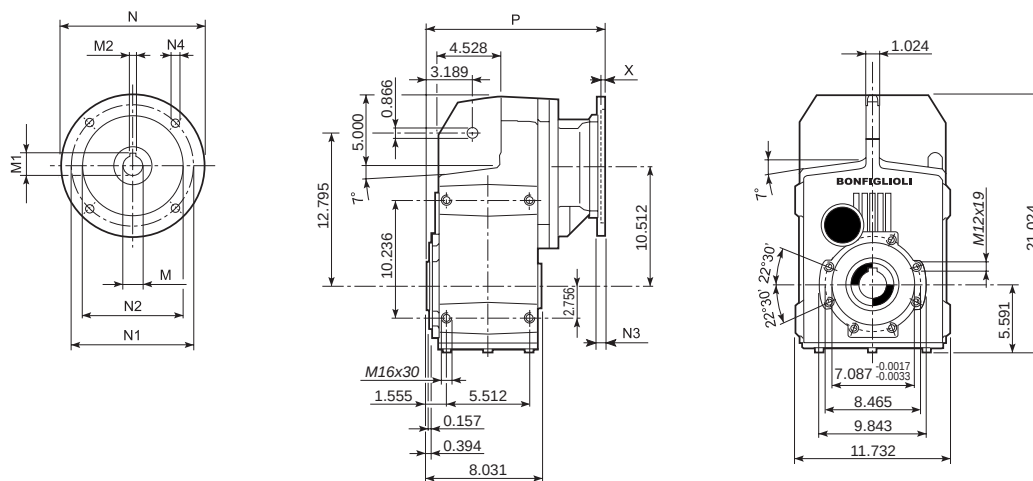


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 60 3	P63	11	12.8	4	140	115	95	—	M8x19	4	302.5	103
F 60 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	302.5	103
F 60 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	322	104
F 60 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	322	104
F 60 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	331	108
F 60 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	331	108
F 60 3	P132	38	41.3	10	300	265	230	16	14	5	367.5	111
F 60 3	P160	42	45.3	12	350	300	250	23	18	5.5	419	116
F 60 3	P180	48	51.8	14	350	300	250	23	18	5.5	419	116
F 60 4	P63	11	12.8	4	140	115	95	—	M8x19	4	373	108
F 60 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	373	108
F 60 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	392.5	110
F 60 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	392.5	110
F 60 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	402.5	114
F 60 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	402.5	114

Metric output versions available also in combination with NEMA motor adaptor

F 60...N(NEMA Input)

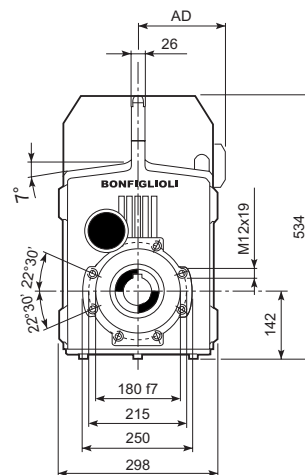
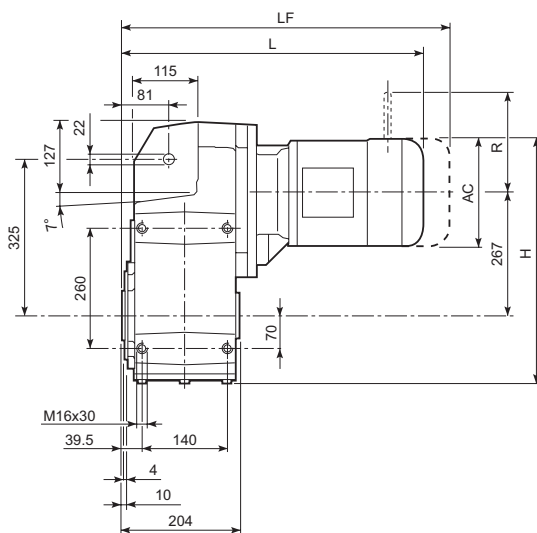
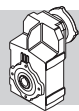


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 60 3	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	12.697	227
F 60 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	12.697	229
F 60 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	13.445	238
F 60 3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	14.646	245
F 60 3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ⁺⁰ / _{+0.0014}	13.780	7.250	8.500	—	0.551	0.217	17.480	285
F 60 3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ⁺⁰ / _{+0.0017}	13.740	10.500	9.000	—	0.551	0.217	17.677	289
F 60 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	15.472	238
F 60 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	15.472	243
F 60 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	16.299	251

Imperial output versions available also in combination with IEC motor adaptor

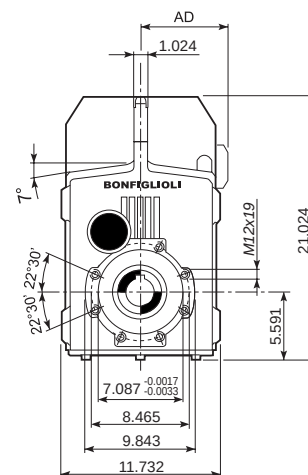
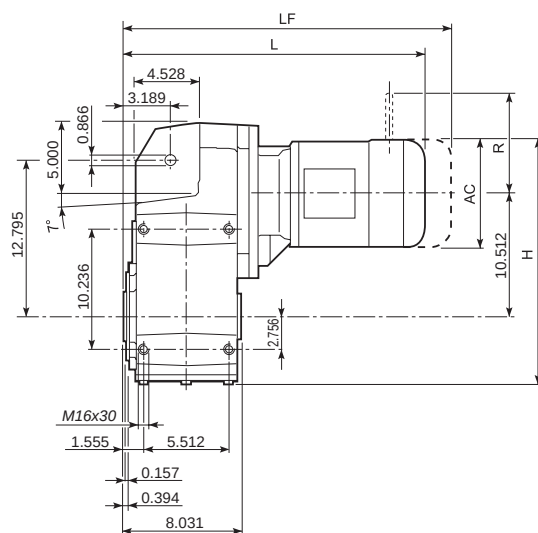
F 60...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 60 3	S2	ME2S	156	487	486.5	119	114	—	—	—	—	—	—
F 60 3	S3	ME3S	195	506.5	529.5	142	114	—	—	—	—	—	—
F 60 3	S3	ME3L	195	506.5	561.5	142	124	—	—	—	—	—	—
F 60 3	S4	ME4	258	538	669.5	193	156	—	—	—	—	—	—
F 60 3	S4	ME4LB	258	538	704.5	193	164	—	—	—	—	—	—
F 60 3	S5	ME5S	310	564	756	245	184	—	—	—	—	—	—
F 60 3	S5	ME5L	310	564	800	245	200	—	—	—	—	—	—
F 60 4	S1	M1	138	478	528	108	113	589	116	103	135	124	108
F 60 4	S2	ME2S	156	487	557	119	117	—	—	—	—	—	—
F 60 4	S3	ME3S	195	506.5	600	142	122	—	—	—	—	—	—
F 60 4	S3	ME3L	195	506.5	632	142	131	—	—	—	—	—	—
F 60 4	S4	ME4	258	538	740	193	156	—	—	—	—	—	—
F 60 4	S4	ME4LB	258	538	775	193	164	—	—	—	—	—	—

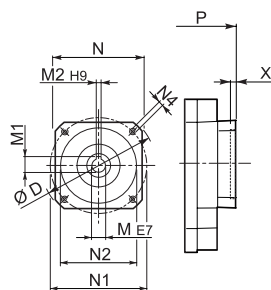
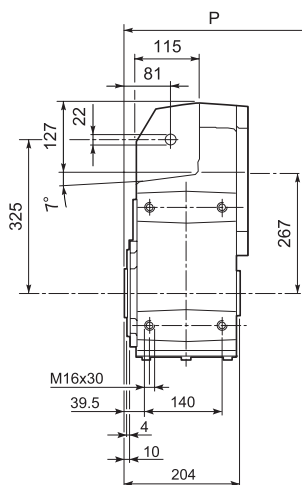
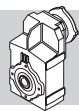
F 60...M/ME



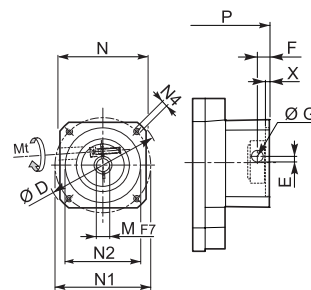
Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
F 60 3	S2	ME2S	6.142	19.173	19.154	4.685	251	—	—	—	—	—	—
F 60 3	S3	ME3S	7.677	19.941	20.846	5.591	251	—	—	—	—	—	—
F 60 3	S3	ME3L	7.677	19.941	22.106	5.591	273	—	—	—	—	—	—
F 60 3	S4	ME4	10.157	21.181	26.358	7.598	344	—	—	—	—	—	—
F 60 3	S4	ME4LB	10.157	21.181	27.736	7.598	362	—	—	—	—	—	—
F 60 3	S5	ME5S	12.205	22.205	29.764	9.646	406	—	—	—	—	—	—
F 60 3	S5	ME5L	12.205	22.205	31.496	9.646	441	—	—	—	—	—	—
F 60 4	S1	M1	5.433	18.819	20.787	4.252	249	23.189	256	4.055	5.315	4.882	4.252
F 60 4	S2	ME2S	6.142	19.173	21.929	4.685	258	—	—	—	—	—	—
F 60 4	S3	ME3S	7.677	19.941	23.622	5.591	269	—	—	—	—	—	—
F 60 4	S3	ME3L	7.677	19.941	24.882	5.591	289	—	—	—	—	—	—
F 60 4	S4	ME4	10.157	21.181	29.134	7.598	344	—	—	—	—	—	—
F 60 4	S4	ME4LB	258	538	775	193	164	—	—	—	—	—	—

F 60...SK / SC



SK...



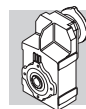
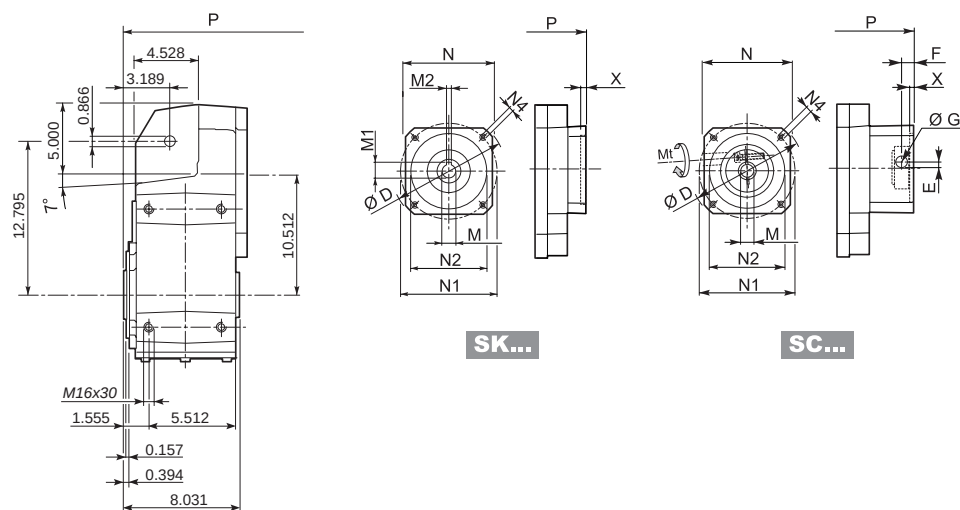
SC...

Dimensions are in mm

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
											Kg	Kg
F 60 4	SK 80B	120	14	16.3	5	96	100	80	M6x12	4	—	—
F 60 3/4	SK 80C	120	19	21.8	6	96	100	80	M6x12	4	322	106
F 60 3/4	SK 95A	130	14	16.3	5	102	115	95	M8x12	4	322	106
F 60 3/4	SK 95B	130	19	21.8	6	102	115	95	M8x12	4	322	106
F 60 3/4	SK 95C	130	24	27.3	8	102	115	95	M8x12	4	322	106
F 60 3/4	SK 110A	140	19	21.8	6	120	130	110	M8x12	5	322	106
F 60 3/4	SK 110B	140	24	27.3	8	120	130	110	M8x12	5	322	106
F 60 3/4	SK 130A	188	24	27.3	8	142	165	130	M10x20	5	322	108
F 60 3	SK 130B	189	32	35.3	10	160	165	130	M10x20	5	368.5	109
F 60 3	SK 180A	240	32	35.3	10	192	215	180	M12x19	5	368.5	109
F 60 3	SK 180B	240	38	41.3	10	192	215	180	M12x19	5	368.5	109

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
													Kg	Kg
F 60 4	SC 80B	M6 15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	—	—
F 60 3/4	SC 80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	345.5	107
F 60 3/4	SC 95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	345.5	107
F 60 3/4	SC 95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	345.5	107
F 60 3/4	SC 95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	345.5	107
F 60 3/4	SC 110A	M6 15	140	16.5	16	17.75	19	120	130	110	M8x16	5	345.5	108
F 60 3/4	SC 110B	M6 15	140	16.5	16	17.75	24	120	130	110	M8x16	5	345.5	108
F 60 3/4	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	345.5	109
F 60 3	SC 130B	M8 36	189	20	17	17.75	32	160	165	130	M10x20	5	390.5	112
F 60 3	SC 180A	M8 36	240	20	17.5	17.75	32	192	215	180	M12x24	5	394.5	112
F 60 3	SC 180B	M8 36	240	20	17.5	17.75	38	192	215	180	M12x24	5	394.5	112

F 60...SK / SC

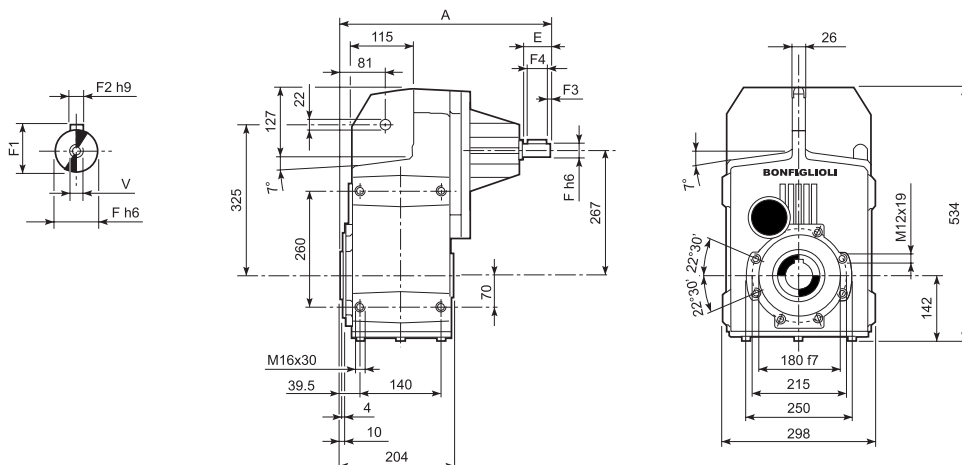
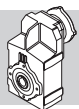


Dimensions are in Inch except when shown in *italic* [mm]

		D	M	M1	M2	N	N1	N2	N4	X	2/3x	4x
											P	P
F 60 4	SK 80B	4.724	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	—	15.453
F 60 3/4	SK 80C	4.724	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	3.780	3.937	3.150	M6x12	0.157	12.677	234
F 60 3/4	SK 95A	5.118	0.551 ^{+0.0020} / _{+0.0013}	0.642	0.197 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.677	234
F 60 3/4	SK 95B	5.118	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.677	234
F 60 3/4	SK 95C	5.118	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.016	4.528	3.740	M8x12	0.157	12.677	234
F 60 3/4	SK 110A	5.512	0.748 ^{+0.0024} / _{+0.0016}	0.858	0.236 ^{+0.0012} / ₊₀	4.724	5.118	4.331	M8x12	0.197	12.677	234
F 60 3/4	SK 110B	5.512	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	4.724	5.118	4.331	M8x12	0.197	12.677	234
F 60 3/4	SK 130A	7.402	0.945 ^{+0.0024} / _{+0.0016}	1.075	0.315 ^{+0.0014} / ₊₀	5.591	6.496	5.118	M10x20	0.197	12.677	238
F 60 3	SK 130B	7.441	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	6.299	6.496	5.118	M10x20	0.197	14.508	240
F 60 3	SK 180A	9.449	1.260 ^{+0.0030} / _{+0.0020}	1.390	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	14.508	240
F 60 3	SK 180B	9.449	1.496 ^{+0.0030} / _{+0.0020}	1.626	0.394 ^{+0.0014} / ₊₀	7.559	8.465	7.087	M12x19	0.197	14.508	240

		Mt [lb · in]	D	E	F	G	M	N	N1	N2	N4	X	2/3x	4x
													P	P
F 60 4	SC 80B	M6 15	4.724	0.610	0.571	0.699	0.551 ^{+0.0013} / _{+0.0006}	3.780	3.937	3.150	M6x12	0.157	—	16.378
F 60 3/4	SC 80C	M6 15	4.724	0.610	0.571	0.699	0.748 ^{+0.0016} / _{+0.0008}	3.780	3.937	3.150	M6x12	0.157	13.602	236
F 60 3/4	SC 95A	M6 15	5.118	0.650	0.591	0.699	0.551 ^{+0.0013} / _{+0.0006}	4.016	4.528	3.740	M8x16	0.157	13.602	236
F 60 3/4	SC 95B	M6 15	5.118	0.650	0.591	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	13.602	236
F 60 3/4	SC 95C	M6 15	5.118	0.650	0.591	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.016	4.528	3.740	M8x16	0.157	13.602	236
F 60 3/4	SC 110A	M6 15	5.512	0.650	0.630	0.699	0.748 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	13.602	238
F 60 3/4	SC 110B	M6 15	5.512	0.650	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	4.724	5.118	4.331	M8x16	0.197	13.602	238
F 60 3/4	SC 130A	M6 15	7.402	0.748	0.630	0.699	0.945 ^{+0.0016} / _{+0.0008}	5.591	6.496	5.118	M10x20	0.197	13.602	240
F 60 3	SC 130B	M8 36	7.441	0.787	0.669	0.699	1.260 ^{+0.0020} / _{+0.0010}	6.299	6.496	5.118	M10x20	0.197	15.374	247
F 60 3	SC 180A	M8 36	9.449	0.787	0.689	0.699	1.260 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	15.531	247
F 60 3	SC 180B	M8 36	9.449	0.787	0.689	0.699	1.496 ^{+0.0020} / _{+0.0010}	7.559	8.465	7.087	M12x24	0.197	15.531	247

F 60...HS

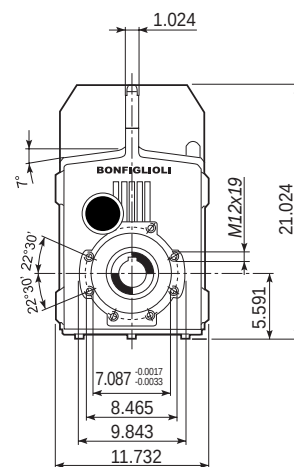
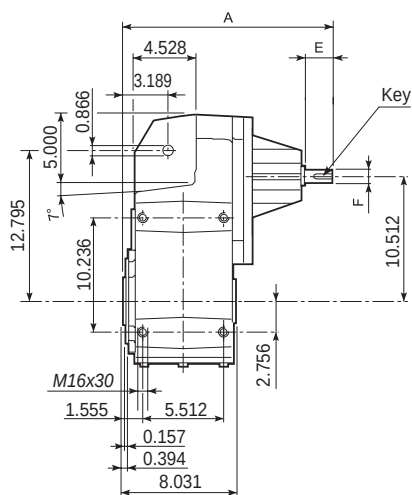
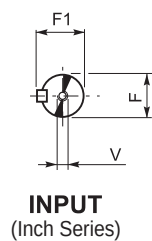


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
F 60 3	HS	419	60	28	31	8	5.0	50	M10x22	108
F 60 4		462.5	50	24	27	8	2.5	45	M8x19	105

Metric output versions available also in combination with NHS input

F 60...NHS



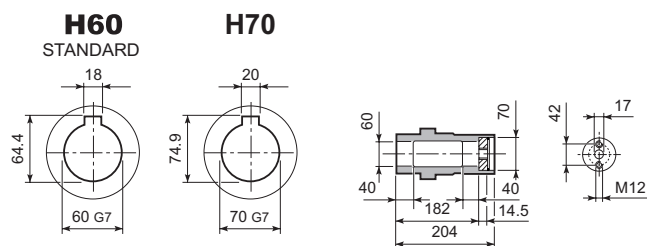
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	
F 60 3	NHS	16.496	2.362	1.125 ⁺⁰ _{-0.0005}	1.236	3/8 - 16 UNC	1/4 x 1/4 x 2 5/32	238
F 60 4		18.209	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	231

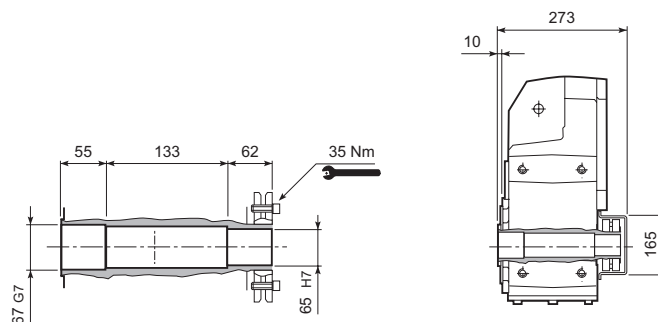
Imperial output versions available also in combination with HS input

F 60

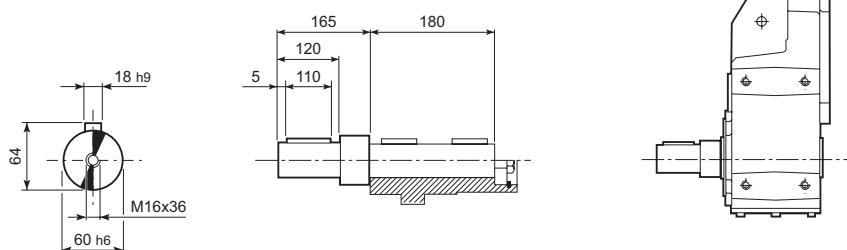
F 60...H



F 60...S

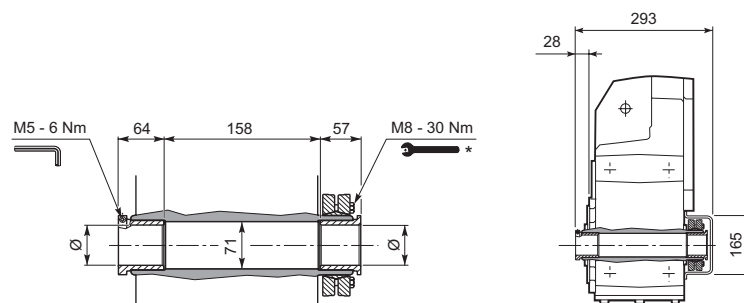


F 60...R

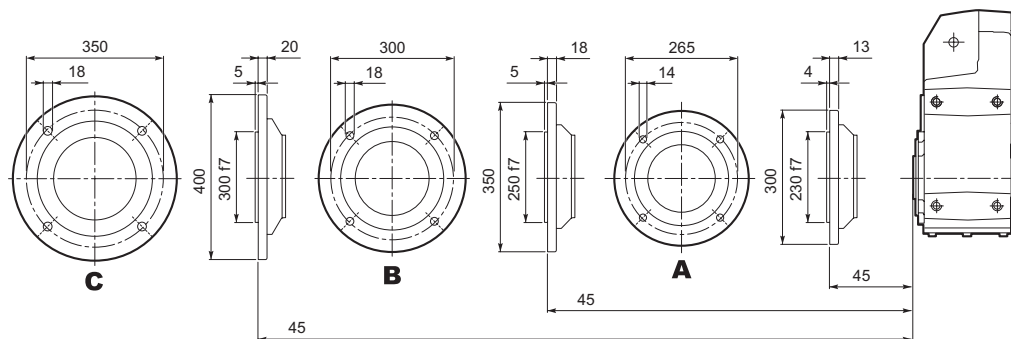


F 60...QF

	Ø
QF60	60
QF65	65
QF70	70



F 60...F...

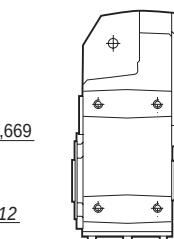
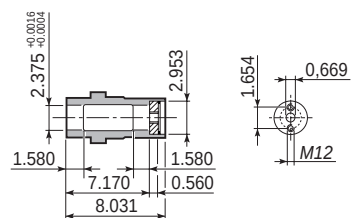
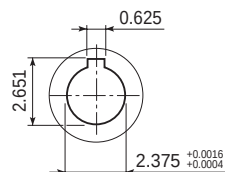


* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox. supplied with the gearbox.

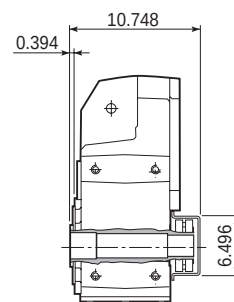
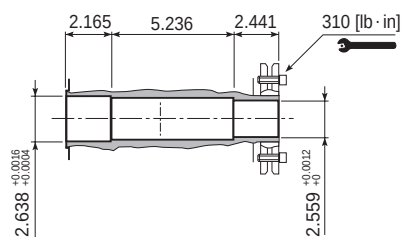
F 60

F 60...NH

OUTPUT
(Inch Series)

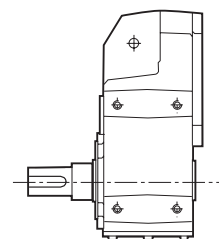
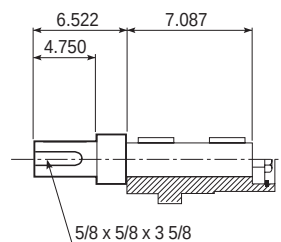
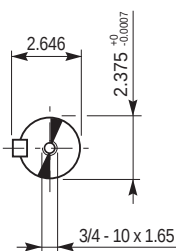


F 60...S



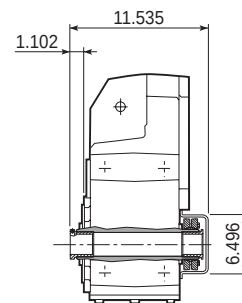
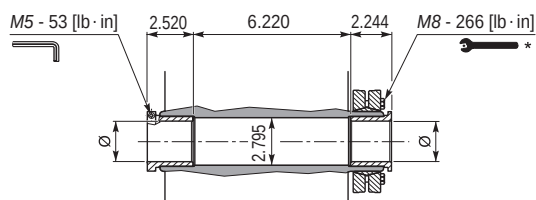
F 60...NR

OUTPUT
(Inch Series)

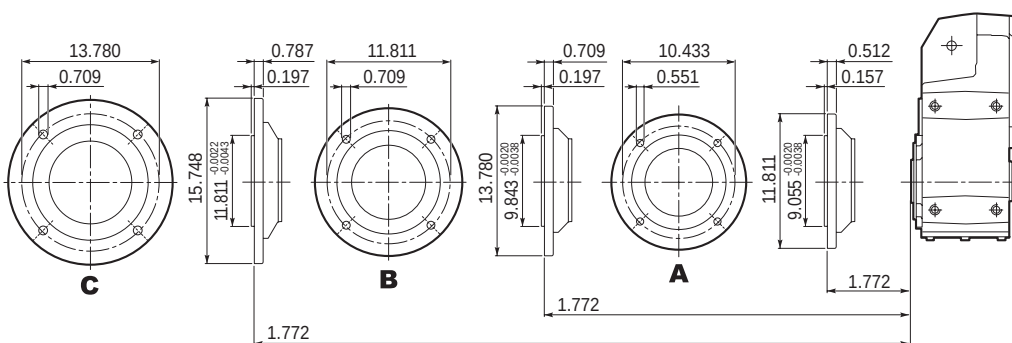


F 60...NQF

	Ø
NQF2-3/8	2.375
NQF2-7/16	2.438
NQF2-3/4	2.750

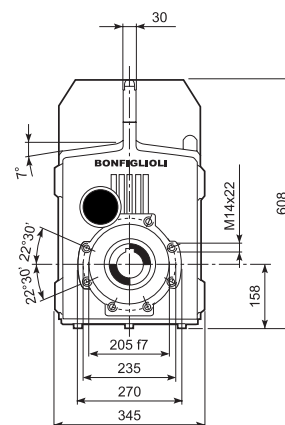
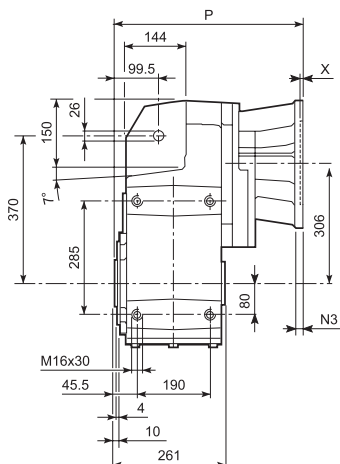
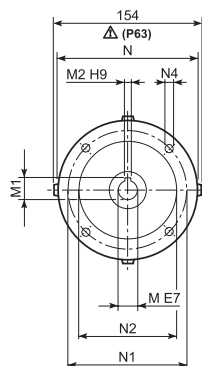
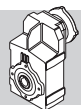


F 60...F...



* Follow the MOUNTING INSTRUCTIONS supplied with the gearbox.

F 70...P(IEC)

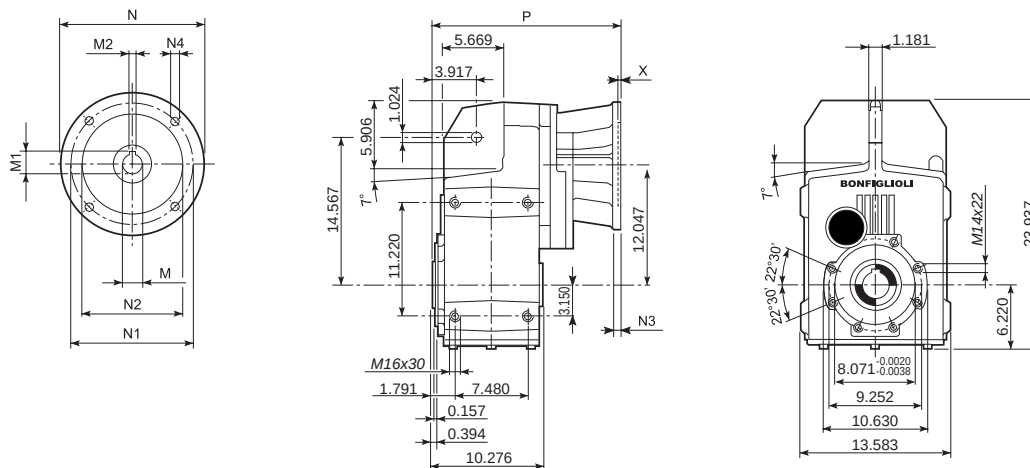


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 70 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	387.5	167
F 70 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	387.5	167
F 70 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	397.5	171
F 70 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	397.5	171
F 70 3	P132	38	41.3	10	300	265	230	16	14	5	434	173
F 70 3	P160	42	45.3	12	350	300	250	23	18	6	489.5	185
F 70 3	P180	48	51.8	14	350	300	250	23	18	6	489.5	185
F 70 3	P200	55	59.3	16	400	350	300	—	M16x25	7	514.5	206
F 70 4	P63	11	12.8	4	140	115	95	—	M8x19	4	419	168
F 70 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	419	168
F 70 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	438.5	170
F 70 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	438.5	170
F 70 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	446.5	174
F 70 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	446.5	174
F 70 4	P132	38	41.3	10	300	265	230	16	14	5	482	176

Metric output versions available also in combination with NEMA motor adaptor

F 70...N(NEMA Input)

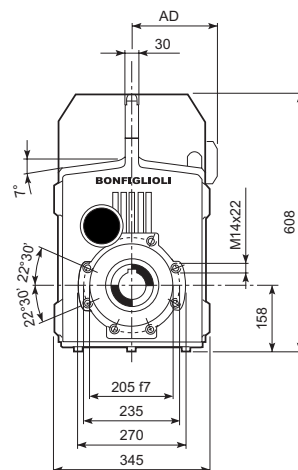
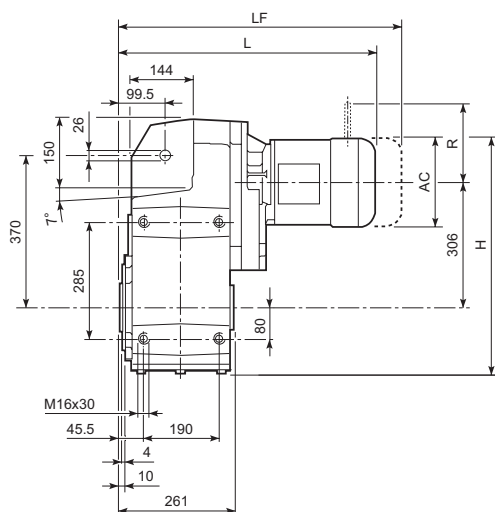
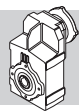


Dimensions are in Inch except when shown in *italic [mm]*

		M	M1	M2	N	N1	N2	N3	N4	X	P	
F 70 3	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	15.453	368
F 70 3	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	16.024	377
F 70 3	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	17.264	381
F 70 3	N250TC	1.625 ^{+0.0030} / _{+0.0020}	1.796	0.375 ⁺⁰ / _{+0.0014}	13.780	7.250	8.500	—	0.551	0.217	20.256	438
F 70 3	N280TC	1.875 ^{+0.0030} / _{+0.0020}	2.102	0.500 ⁺⁰ / _{+0.0017}	13.740	10.500	9.000	—	0.551	0.217	20.453	441
F 70 4	N56C	0.625 ^{+0.0020} / _{+0.0013}	0.710	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	17.283	370
F 70 4	N140TC	0.875 ^{+0.0024} / _{+0.0016}	0.964	0.188 ⁺⁰ / _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	17.283	375
F 70 4	N180TC	1.125 ^{+0.0024} / _{+0.0016}	1.241	0.250 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	18.031	384
F 70 4	N210TC	1.375 ^{+0.0030} / _{+0.0020}	1.518	0.312 ⁺⁰ / _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	19.154	388

Imperial output versions available also in combination with IEC motor adaptor

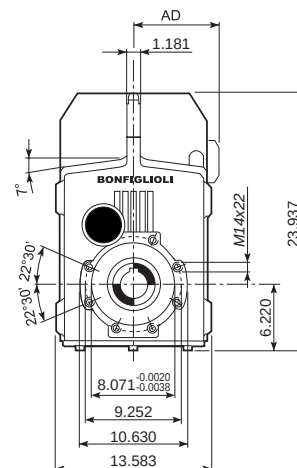
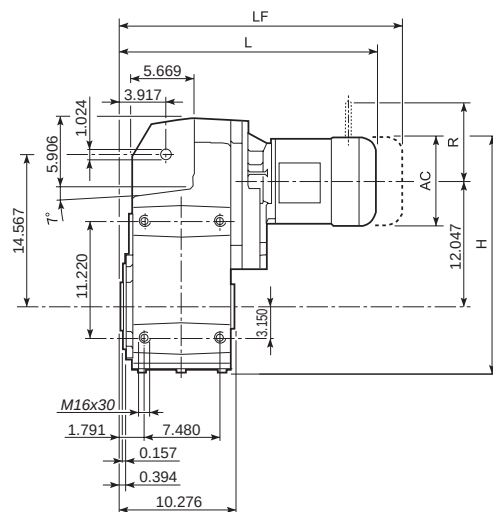
F 70...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 70 3	S2	ME2S	156	542	552	119	173	—	—	—	—	—	—
F 70 3	S3	ME3S	195	561.5	595	142	178	—	—	—	—	—	—
F 70 3	S3	ME3L	195	561.5	627	142	188	—	—	—	—	—	—
F 70 3	S4	ME4	258	593	735	193	220	—	—	—	—	—	—
F 70 3	S4	ME4LB	258	593	770	193	228	—	—	—	—	—	—
F 70 3	S5	ME5S	310	619	821.5	245	248	—	—	—	—	—	—
F 70 3	S5	ME5L	310	619	865.5	245	264	—	—	—	—	—	—
F 70 4	S1	M1	138	533	574	108	173	635	176	103	135	124	108
F 70 4	S2	ME2S	156	542	603	119	177	—	—	—	—	—	—
F 70 4	S3	ME3S	195	561.5	646	142	181	—	—	—	—	—	—
F 70 4	S3	ME3L	195	561.5	678	142	191	—	—	—	—	—	—
F 70 4	S4	ME4	258	593	786	193	223	—	—	—	—	—	—
F 70 4	S4	ME4LB	258	593	821	193	231	—	—	—	—	—	—

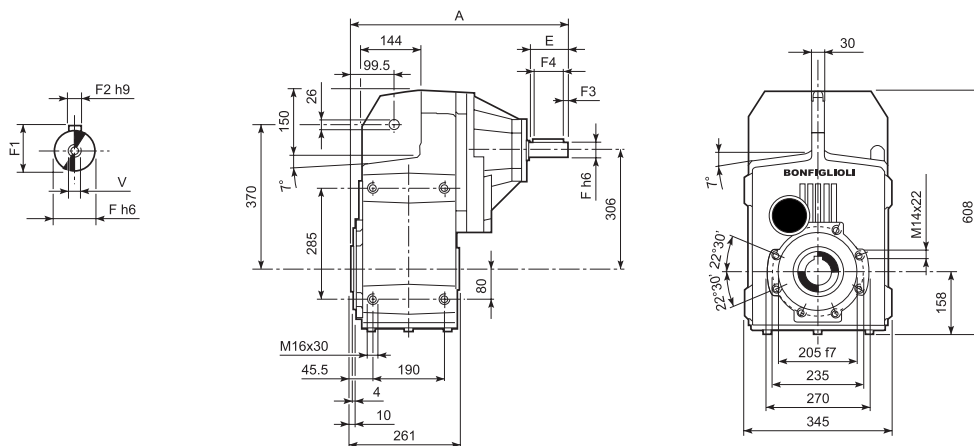
F 70...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD		LF		R	AD	R	AD
F 70 3	S2	ME2S	6.142	21.339	21.732	4.685	381	—	—	—	—	—	—
F 70 3	S3	ME3S	7.677	22.106	23.425	5.591	392	—	—	—	—	—	—
F 70 3	S3	ME3L	7.677	22.106	24.685	5.591	414	—	—	—	—	—	—
F 70 3	S4	ME4	10.157	23.346	28.937	7.598	485	—	—	—	—	—	—
F 70 3	S4	ME4LB	10.157	23.346	30.315	7.598	503	—	—	—	—	—	—
F 70 3	S5	ME5SA	12.205	24.370	32.343	9.646	547	—	—	—	—	—	—
F 70 3	S5	ME5LA	12.205	24.370	34.075	9.646	582	—	—	—	—	—	—
F 70 4	S1	M1	5.433	20.984	22.598	4.252	381	25.000	388	4.055	5.315	4.882	4.252
F 70 4	S2	ME2S	6.142	21.339	23.740	4.685	390	—	—	—	—	—	—
F 70 4	S3	ME3S	7.677	22.106	25.433	5.591	399	—	—	—	—	—	—
F 70 4	S3	ME3L	7.677	22.106	26.693	5.591	421	—	—	—	—	—	—
F 70 4	S4	ME4	10.157	23.346	30.945	7.598	492	—	—	—	—	—	—
F 70 4	S4	ME4LB	10.157	23.346	32.323	7.598	509	—	—	—	—	—	—

F 70...HS

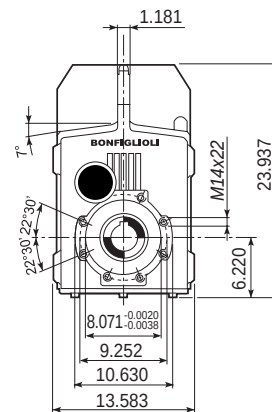
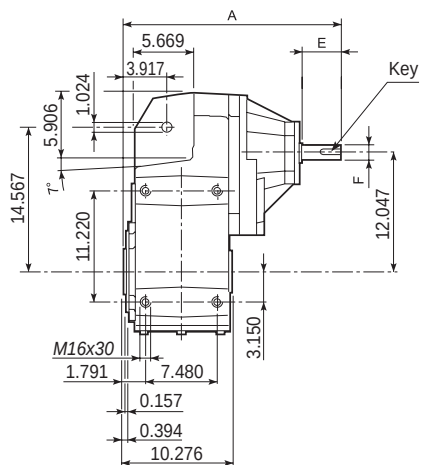
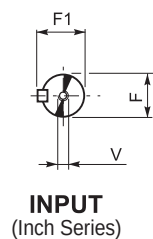


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
F 70 3	HS	572	110	42	45	12	10	90	M12x28	186
F 70 4		508.5	50	24	27	8	2.5	45	M8x19	174

Metric output versions available also in combination with NHS input

F 70...NHS



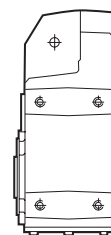
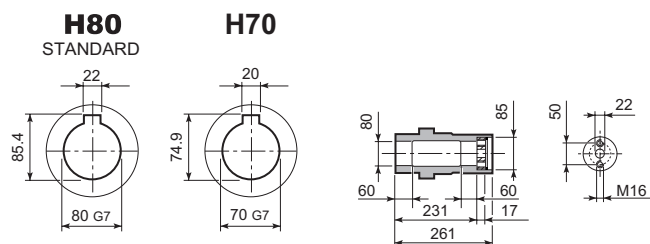
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	
F 70 3	NHS	22.439	4.25	1.625 ⁺⁰ / _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	410
F 70 4		20.020	1.969	1.000 ⁺⁰ / _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	384

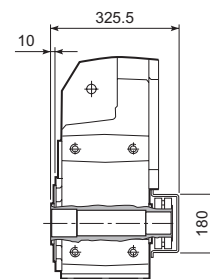
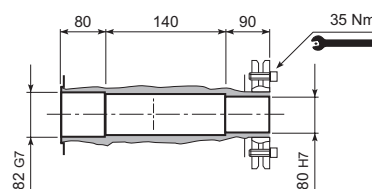
Imperial output versions available also in combination with HS input

F 70

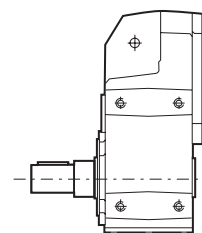
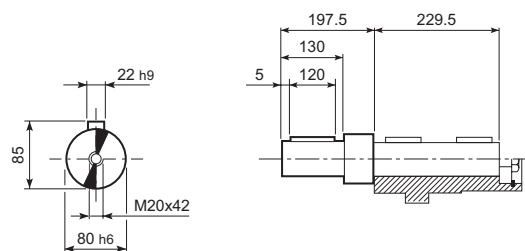
F 70...H



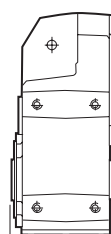
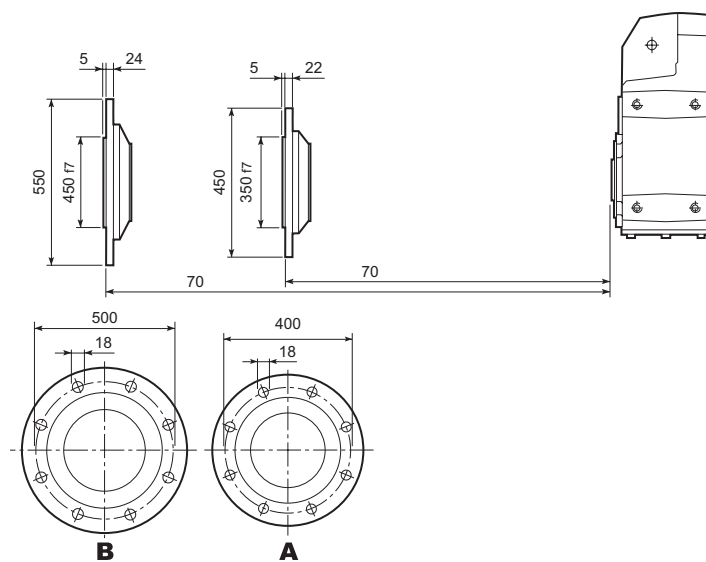
F 70...S



F 70...R



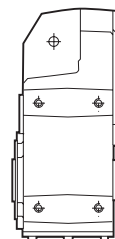
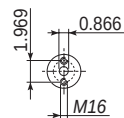
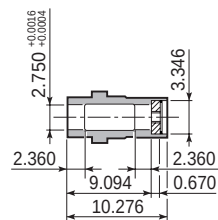
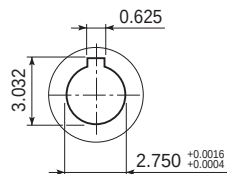
F 70...F...



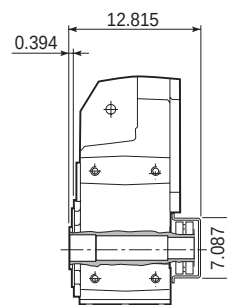
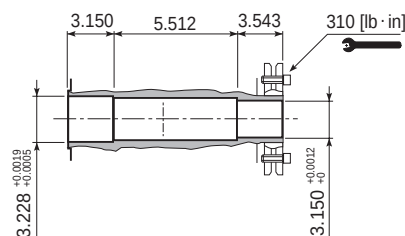
F 70

F 70...NH

OUTPUT
(Inch Series)

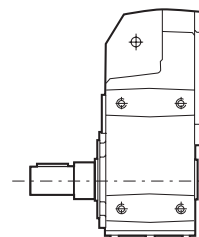
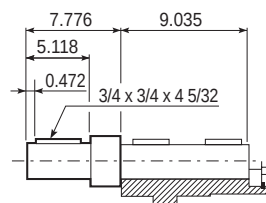
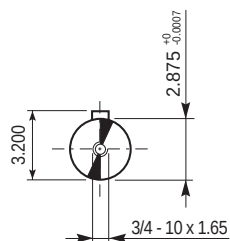


F 70...S

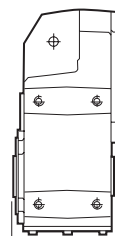
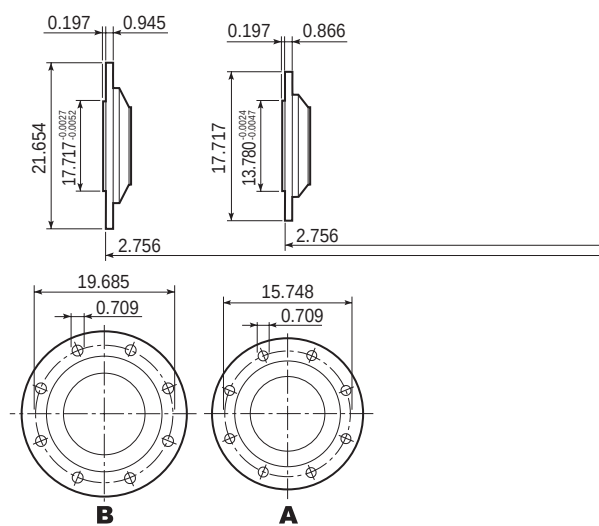


F 70...NR

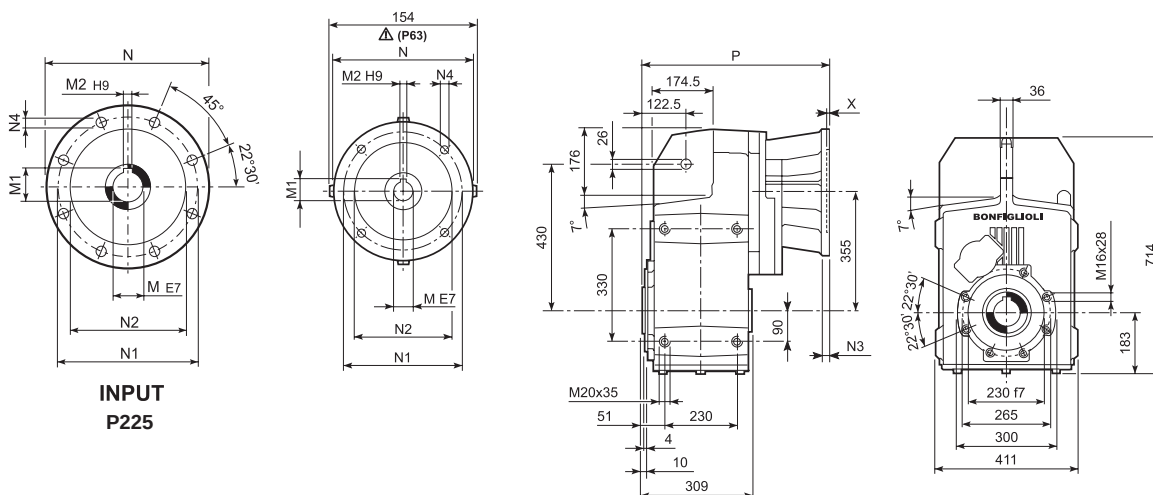
OUTPUT
(Inch Series)



F 70...F...



F 80...P(IEC)



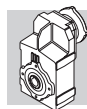
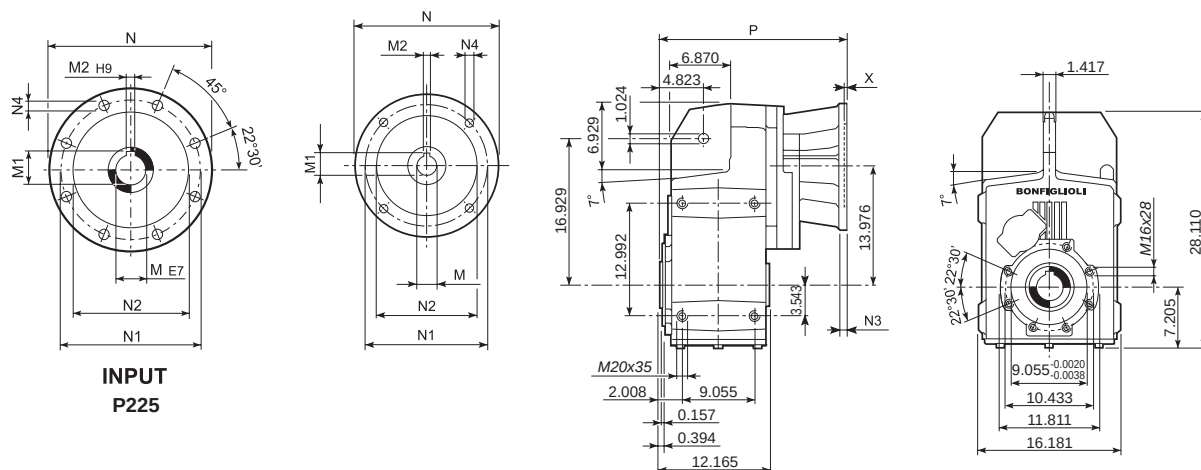
INPUT
P225

Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 80 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	445.5	255
F 80 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	445.5	255
F 80 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	455.5	259
F 80 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	455.5	259
F 80 3	P132	38	41.3	10	300	265	230	16	14	5	492	261
F 80 3	P160	42	45.3	12	350	300	250	23	18	6	547.5	276
F 80 3	P180	48	51.8	14	350	300	250	23	18	6	547.5	276
F 80 3	P200	55	59.3	16	400	350	300	—	M16x25	7	572.5	298
F 80 3	P225	60	64.4	18	450	400	350	25	18	6	618	298
F 80 4	P63	11	12.8	4	140	115	95	—	M8x19	4	489	258
F 80 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	489	258
F 80 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	508.5	260
F 80 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	508.5	260
F 80 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	518.5	264
F 80 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	518.5	264
F 80 4	P132	38	41.3	10	300	265	230	16	14	5	552	266

Metric output versions available also in combination with NEMA motor adaptor

F 80...N(NEMA Input)

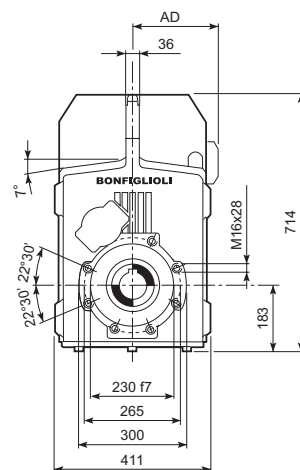
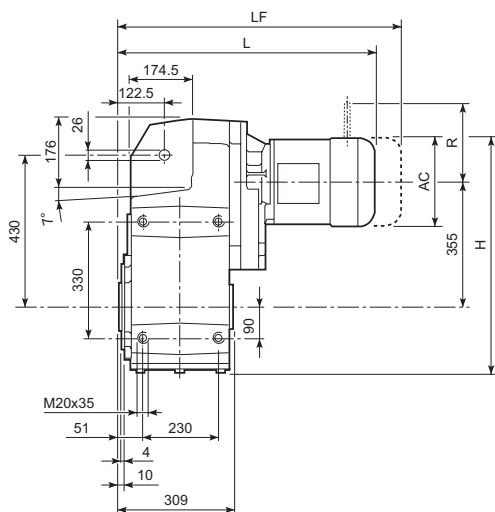
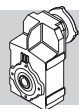


Dimensions are in Inch except when shown in *italic [mm]*

		M	M1	M2	N	N1	N2	N3	N4	X	P	
F 80 3	N180TC	1.125 ^{+0.0024 +0.0016}	1.241	0.250 ^{+0 +0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	18.307	571
F 80 3	N210TC	1.375 ^{+0.0030 +0.0020}	1.518	0.312 ^{+0 +0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	19.547	575
F 80 3	N250TC	1.625 ^{+0.0030 +0.0020}	1.796	0.375 ^{+0 +0.0014}	13.780	7.250	8.500	—	0.551	0.217	22.539	638
F 80 3	N280TC	1.875 ^{+0.0030 +0.0020}	2.102	0.500 ^{+0 +0.0017}	13.740	10.500	9.000	—	0.551	0.217	22.736	642
F 80 3	N320TC	2.125 ^{+0.0035 +0.0024}	2.350	0.500 ^{+0 +0.0017}	17.677	11.000	12.500	—	0.669	0.217	25.591	723
F 80 4	N56C	0.625 ^{+0.0020 +0.0013}	0.710	0.188 ^{+0 +0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	20.039	569
F 80 4	N140TC	0.875 ^{+0.0024 +0.0016}	0.964	0.188 ^{+0 +0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	20.039	573
F 80 4	N180TC	1.125 ^{+0.0024 +0.0016}	1.241	0.250 ^{+0 +0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	20.787	582
F 80 4	N210TC	1.375 ^{+0.0030 +0.0020}	1.518	0.312 ^{+0 +0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	21.909	586

Imperial output versions available also in combination with IEC motor adaptor

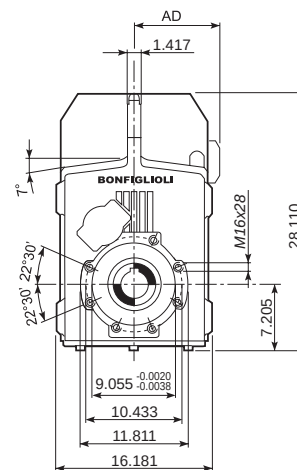
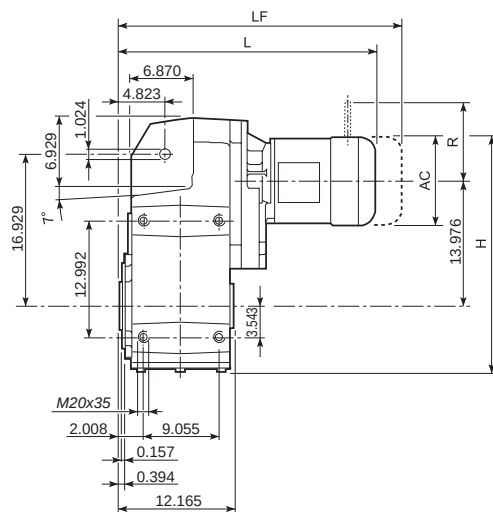
F 80...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 80 3	S3	ME3S	195	635.5	653	142	266	—	—	—	—	—	—
F 80 3	S3	ME3L	195	635.5	685	142	275	—	—	—	—	—	—
F 80 3	S4	ME4	258	667	793	193	307	—	—	—	—	—	—
F 80 3	S4	ME4LB	258	667	828	193	315	—	—	—	—	—	—
F 80 3	S5	ME5S	310	693	879.5	245	335	—	—	—	—	—	—
F 80 3	S5	ME5L	310	693	923.5	245	351	—	—	—	—	—	—
F 80 4	S1	M1	138	607	644	108	262	705	265	103	135	124	108
F 80 4	S2	M2S	156	616	673	119	266	743	269	129	146	134	119
F 80 4	S2	ME2S	156	616	673	119	266	—	—	—	—	—	—
F 80 4	S3	ME3S	195	635.5	716	142	271	—	—	—	—	—	—
F 80 4	S3	ME3L	195	635.5	748	142	280	—	—	—	—	—	—
F 80 4	S4	ME4	258	667	856	193	312	—	—	—	—	—	—
F 80 4	S4	ME4LB	258	667	891	193	320	—	—	—	—	—	—

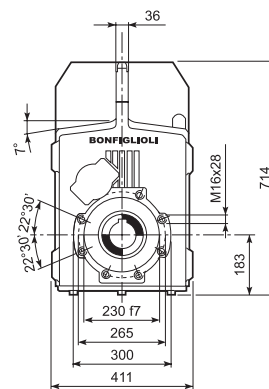
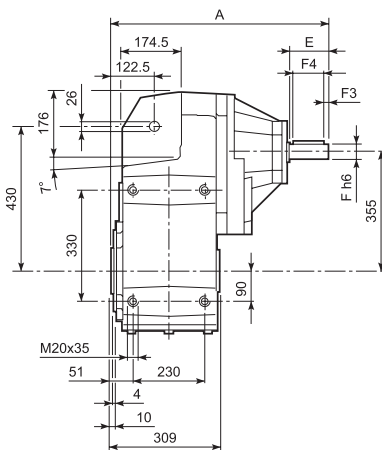
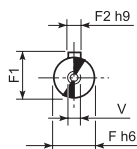
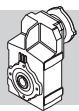
F 80...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	 lbs	LF	 lbs	R	AD	R	AD
F 80 3	S3	ME3S	7.677	25.020	25.709	5.591	586	—	—	—	—	—	—
F 80 3	S3	ME3L	7.677	25.020	26.969	5.591	606	—	—	—	—	—	—
F 80 3	S4	ME4	10.157	26.260	31.220	7.598	677	—	—	—	—	—	—
F 80 3	S4	ME4LB	10.157	26.260	32.598	7.598	694	—	—	—	—	—	—
F 80 3	S5	ME5S	12.205	27.283	34.626	9.646	739	—	—	—	—	—	—
F 80 3	S5	ME5L	12.205	27.283	36.358	9.646	774	—	—	—	—	—	—
F 80 4	S1	M1	5.433	23.898	25.354	4.252	578	27.756	584	4.055	5.315	4.882	4.252
F 80 4	S2	M2S	6.142	24.252	26.496	4.685	586	29.252	593	5.079	5.748	5.276	4.685
F 80 4	S2	ME2S	6.142	24.252	26.496	4.685	586	—	—	—	—	—	—
F 80 4	S3	ME3S	7.677	25.020	28.189	5.591	597	—	—	—	—	—	—
F 80 4	S3	ME3L	7.677	25.020	29.449	5.591	617	—	—	—	—	—	—
F 80 4	S4	ME4	10.157	26.260	33.701	7.598	688	—	—	—	—	—	—
F 80 4	S4	ME4LB	10.157	26.260	35.079	7.598	705	—	—	—	—	—	—

F 80...HS

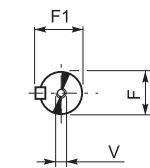


Dimensions are in mm

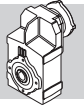
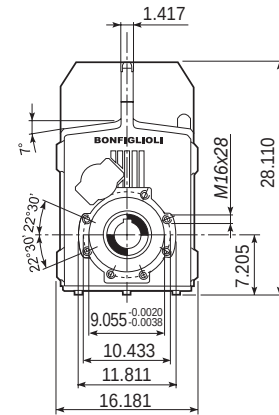
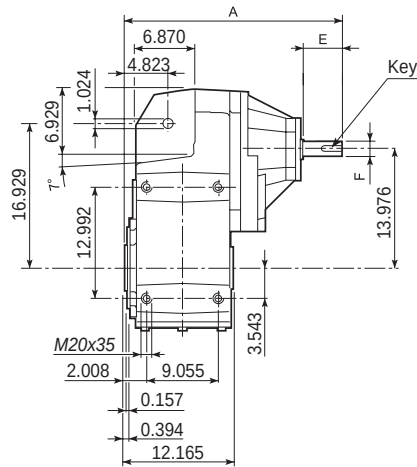
		A	E	F	F1	F2	F3	F4	V	Kg
F 80 3	HS	630	110	42	45	12	10	90	M12x28	273
F 80 4		575.5	50	24	27	8	2.5	45	M8x19	263

Metric output versions available also in combination with NHS input

F 80...NHS



INPUT
(Inch Series)



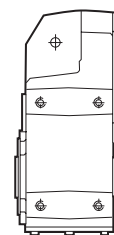
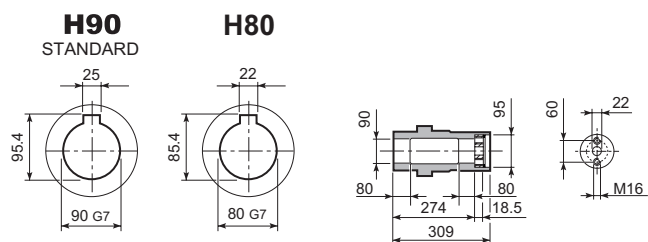
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	
F 80 3	NHS	24.722	4.25	1.625 ⁺⁰ _{-0.0006}	1.791	5/8 - 11 UNC	3/8 x 3/8 x 4	602
F 80 4		22.657	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	580

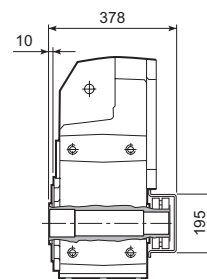
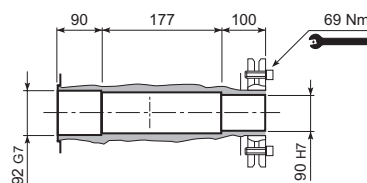
Imperial output versions available also in combination with HS input

F 80

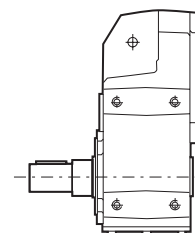
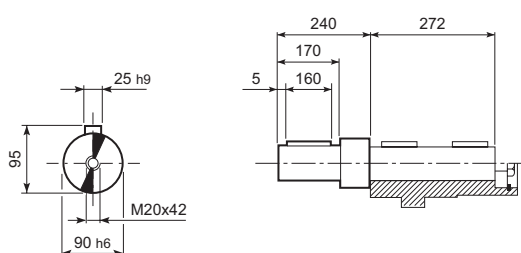
F 80...H



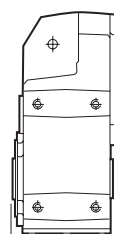
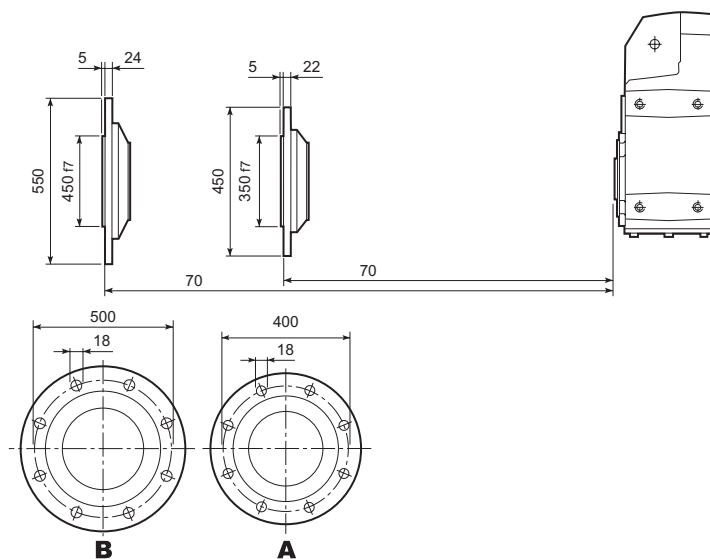
F 80...S



F 80...R



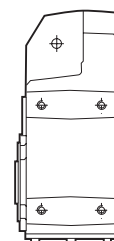
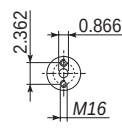
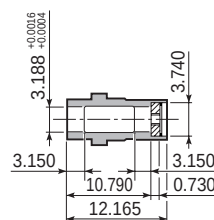
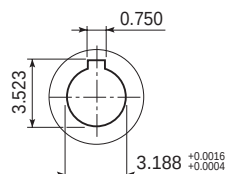
F 80...F...



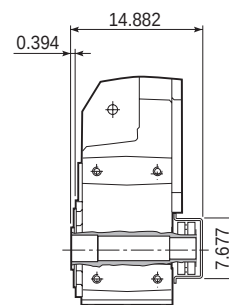
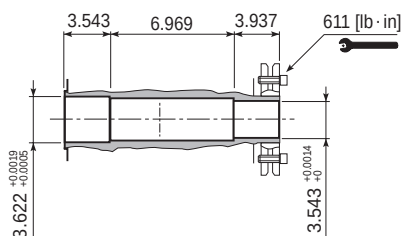
F 80

F 80...NH

OUTPUT
(Inch Series)

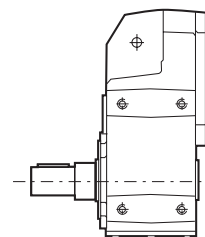
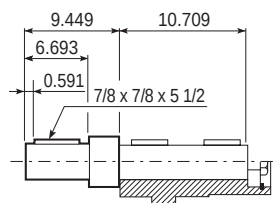
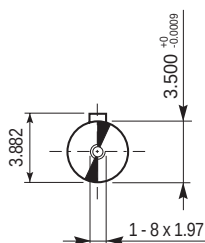


F 80...S

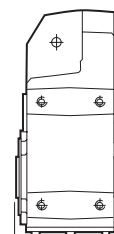
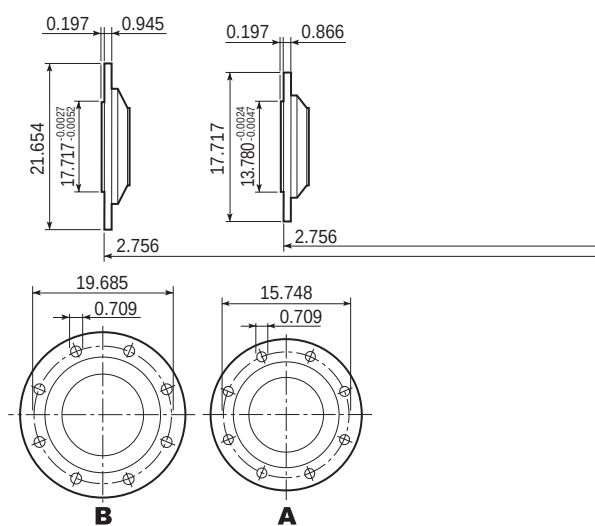


F 80...NR

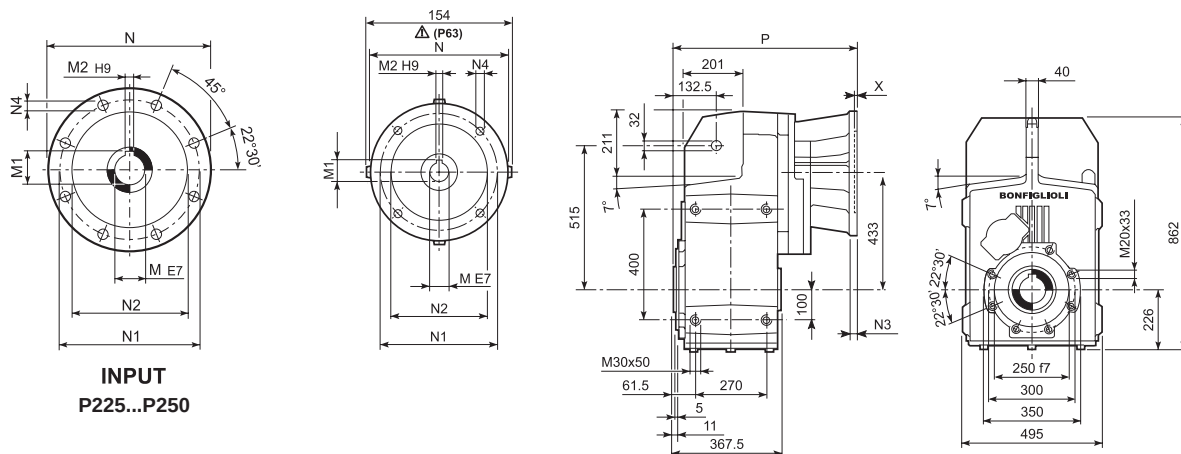
OUTPUT
(Inch Series)



F 80...F...



F 90...P(IEC)

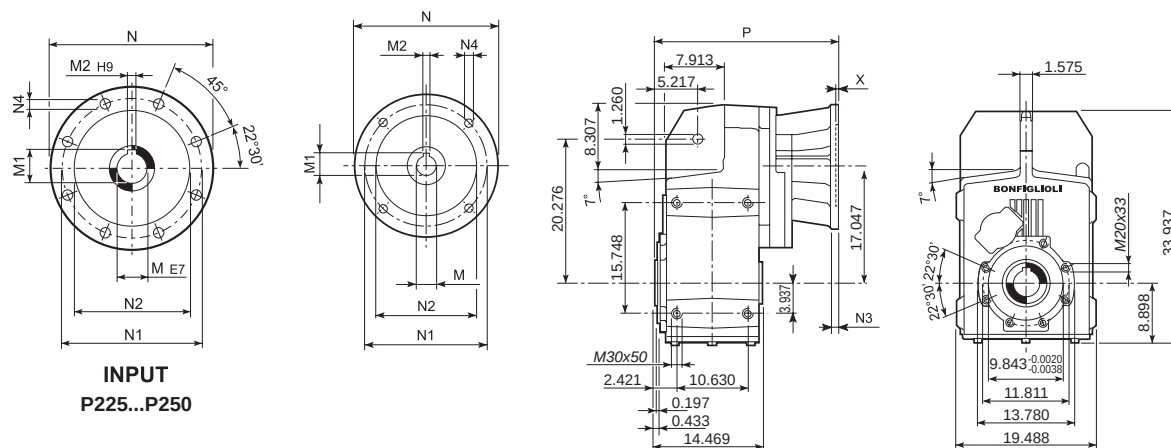


Dimensions are in mm

		M	M1	M2	N	N1	N2	N3	N4	X	P	Kg
F 90 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	520.5	442
F 90 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	520.5	442
F 90 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	530.5	446
F 90 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	530.5	446
F 90 3	P132	38	41.3	10	300	265	230	16	14	5	567	449
F 90 3	P160	42	45.3	12	350	300	250	23	18	6	622.5	463
F 90 3	P180	48	51.8	14	350	300	250	23	18	6	622.5	463
F 90 3	P200	55	59.3	16	400	350	300	—	M16x25	7	647.5	485
F 90 3	P225	60	64.4	18	450	400	350	30	18	6	693	485
F 90 3	P250	65	69.4	18	550	500	450	30	18	6	723	507
F 90 4	P63	11	12.8	4	140	115	95	—	M8x19	4	584	448
F 90 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	584	448
F 90 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	603.5	450
F 90 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	603.5	450
F 90 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	613.5	454
F 90 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	613.5	454
F 90 4	P132	38	41.3	10	300	265	230	16	14	5	650	455
F 90 4	P160	42	45.3	12	350	300	250	23	18	5.5	700.5	461
F 90 4	P180	48	51.8	14	350	300	250	23	18	5.5	700.5	461

Metric output versions available also in combination with NEMA motor adaptor

F 90...N(NEMA Input)

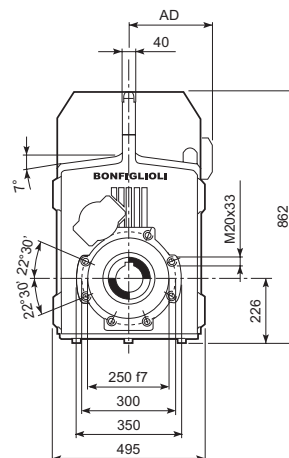
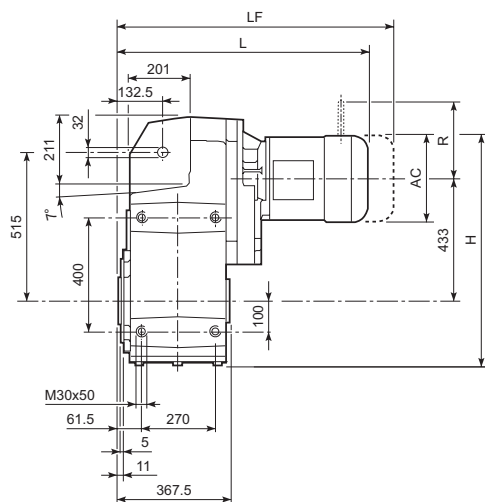
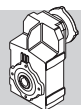


Dimensions are in Inch except when shown in *italic* [mm]

		M	M1	M2	N	N1	N2	N3	N4	X	P	lbs
F 90 3	N180TC	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	21.260	983
F 90 3	N210TC	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	22.500	990
F 90 3	N250TC	1.625 ^{+0.0030} _{+0.0020}	1.796	0.375 ⁺⁰ _{+0.0014}	13.780	7.250	8.500	—	0.551	0.217	25.492	1050
F 90 3	N280TC	1.875 ^{+0.0030} _{+0.0020}	2.102	0.500 ⁺⁰ _{+0.0017}	13.740	10.500	9.000	—	0.551	0.217	25.689	1054
F 90 3	N320TC	2.125 ^{+0.0035} _{+0.0024}	2.350	0.500 ⁺⁰ _{+0.0017}	17.677	11.000	12.500	—	0.669	0.217	28.543	1135
F 90 4	N56C	0.625 ^{+0.0020} _{+0.0013}	0.710	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	23.780	988
F 90 4	N140TC	0.875 ^{+0.0024} _{+0.0016}	0.964	0.188 ⁺⁰ _{+0.0012}	6.496	5.875	4.500	0.472	0.394	0.197	23.780	992
F 90 4	N180TC	1.125 ^{+0.0024} _{+0.0016}	1.241	0.250 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.630	0.551	0.217	24.528	1001
F 90 4	N210TC	1.375 ^{+0.0030} _{+0.0020}	1.518	0.312 ⁺⁰ _{+0.0014}	8.996	7.250	8.500	0.531	0.531	0.217	25.768	1003
F 90 4	N250TC	1.625 ^{+0.0030} _{+0.0020}	1.796	0.375 ⁺⁰ _{+0.0014}	13.780	7.250	8.500	—	0.551	0.217	28.563	1046
F 90 4	N280TC	1.875 ^{+0.0030} _{+0.0020}	2.102	0.500 ⁺⁰ _{+0.0017}	13.740	10.500	9.000	—	0.551	0.217	28.760	1050

Imperial output versions available also in combination with IEC motor adaptor

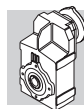
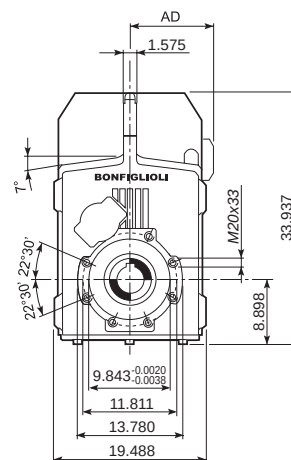
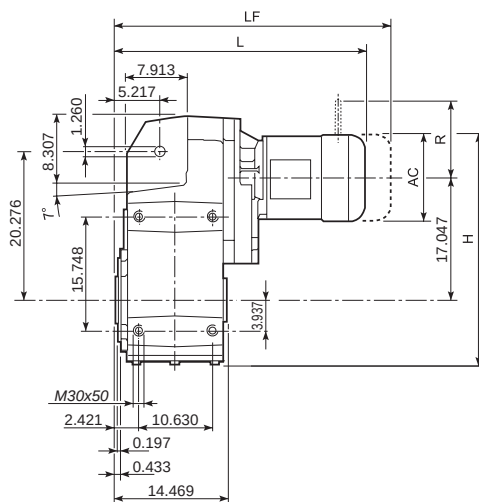
F 90...M/ME



Dimensions are in mm

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	Kg	LF	Kg	R	AD	R	AD
F 90 3	S3	ME3S	195	756	728	142	453	—	—	—	—	—	—
F 90 3	S3	ME3L	195	756	760	142	462	—	—	—	—	—	—
F 90 3	S4	ME4	258	787.5	868	193	494	—	—	—	—	—	—
F 90 3	S5	ME5L	310	813.5	998.5	245	538	—	—	—	—	—	—
F 90 4	S2	M2S	156	736.5	768	119	456	838	460	129	146	134	119
F 90 4	S2	ME2S	156	736.5	768	119	456	—	—	—	—	—	—
F 90 4	S3	ME3S	195	756	811	142	460	—	—	—	—	—	—
F 90 4	S3	ME3L	195	756	843	142	470	—	—	—	—	—	—
F 90 4	S4	ME4	258	787.5	951	193	502	—	—	—	—	—	—
F 90 4	S4	ME4LB	258	787.5	986	193	510	—	—	—	—	—	—

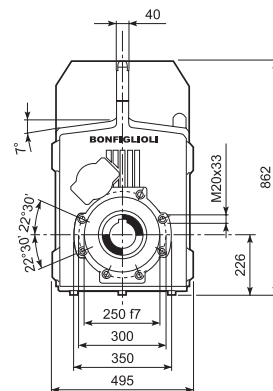
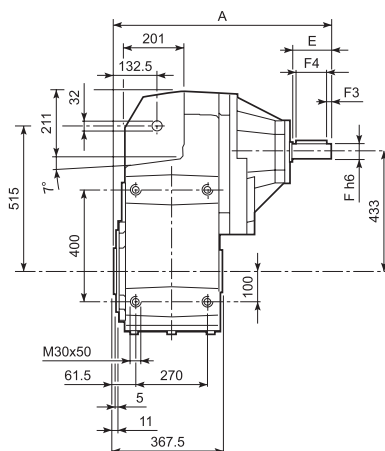
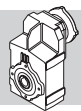
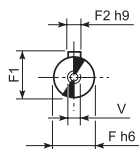
F 90...M/ME



Dimensions are in Inch except when shown in *italic* [mm]

								M...FD M...FA		M...FD		M...FA	
			AC	H	L	AD	lbs	LF	lbs	R	AD	R	AD
F 90 3	S3	ME3S	7.677	29.764	28.661	5.591	999	—	—	—	—	—	—
F 90 3	S3	ME3L	7.677	29.764	29.921	5.591	1019	—	—	—	—	—	—
F 90 3	S4	ME4	10.157	31.004	34.173	7.598	1089	—	—	—	—	—	—
F 90 3	S5	ME5L	12.205	32.028	39.311	9.646	1186	—	—	—	—	—	—
F 90 4	S2	M2S	6.142	28.996	30.236	4.685	1005	32.992	1014	5.079	5.748	5.276	4.685
F 90 4	S2	ME2S	6.142	28.996	30.236	4.685	1005	—	—	—	—	—	—
F 90 4	S3	ME3S	7.677	29.764	31.929	5.591	1014	—	—	—	—	—	—
F 90 4	S3	ME3L	7.677	29.764	33.189	5.591	1036	—	—	—	—	—	—
F 90 4	S4	ME4	10.157	31.004	37.441	7.598	1107	—	—	—	—	—	—
F 90 4	S4	ME4LB	10.157	31.004	38.819	7.598	1124	—	—	—	—	—	—

F 90...HS

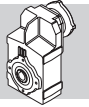
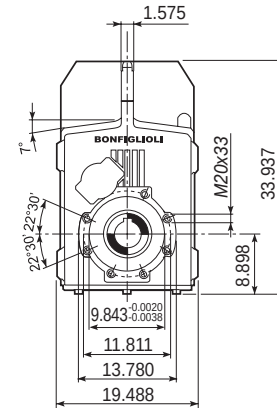
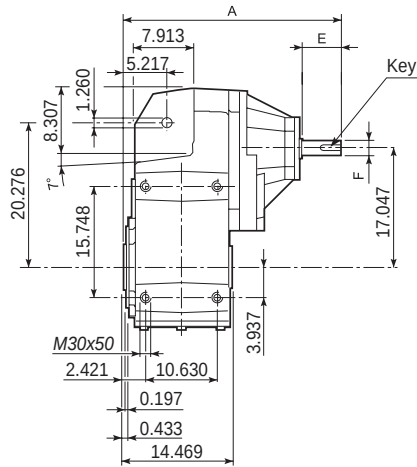
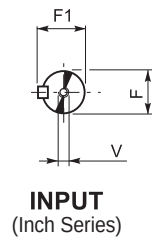


Dimensions are in mm

		A	E	F	F1	F2	F3	F4	V	Kg
F 90 3	HS	806.5	140	60	64	18	10	120	M16x36	485
F 90 4		673.5	50	24	27	8	2.5	45	M8x19	452

Metric output versions available also in combination with NHS input

F 90...NHS



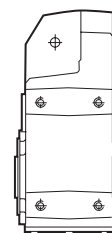
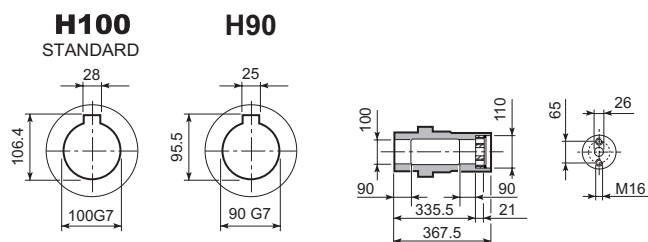
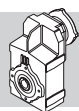
Dimensions are in Inch except when shown in *italic* [mm]

		A	E	F	F1	V	Key	lbs
F 90 3	NHS	31.240	5	2.125 ⁺⁰ _{-0.0007}	2.345	3/4 - 10 UNC	1/2 x 1/2 x 4 3/4	1069
F 90 4		26.516	1.969	1.000 ⁺⁰ _{-0.0005}	1.109	3/8 - 16 UNC	1/4 x 1/4 x 1 3/4	996

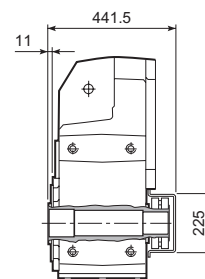
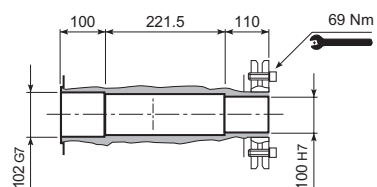
Imperial output versions available also in combination with HS input

F 90

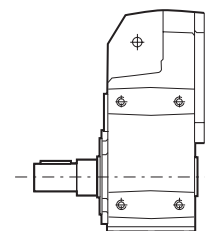
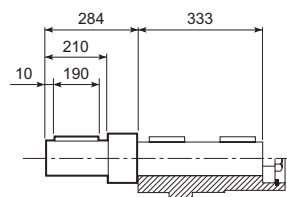
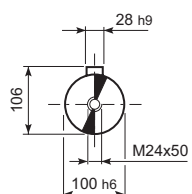
F 90...H



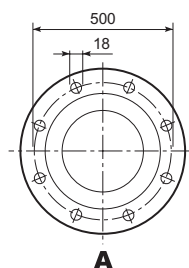
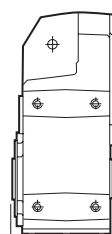
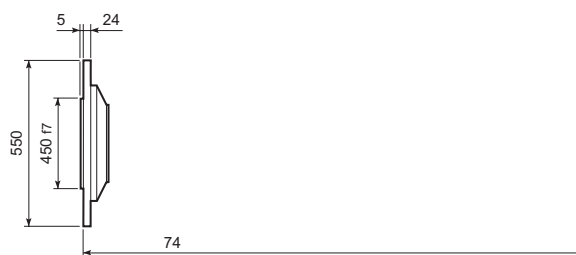
F 90...S



F 90...R



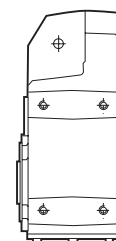
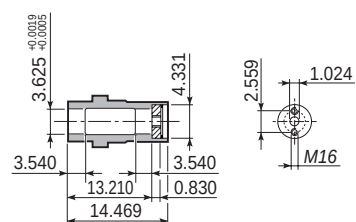
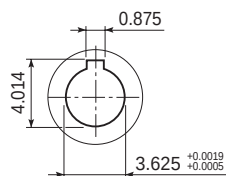
F 90...F...



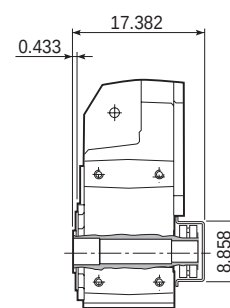
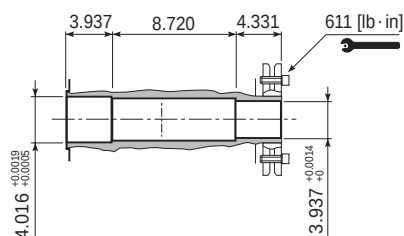
F 90

F 90...NH

OUTPUT
(Inch Series)

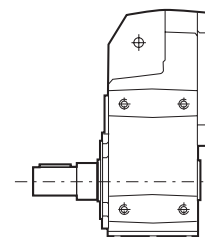
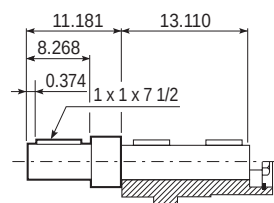
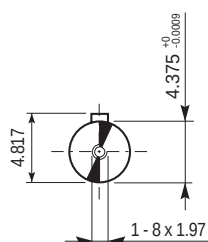


F 90...S

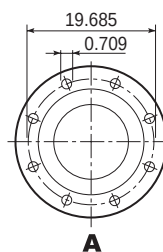
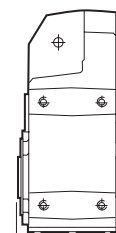
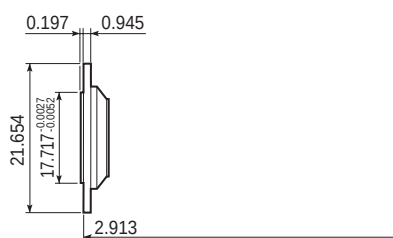


F 90...NR

OUTPUT
(Inch Series)

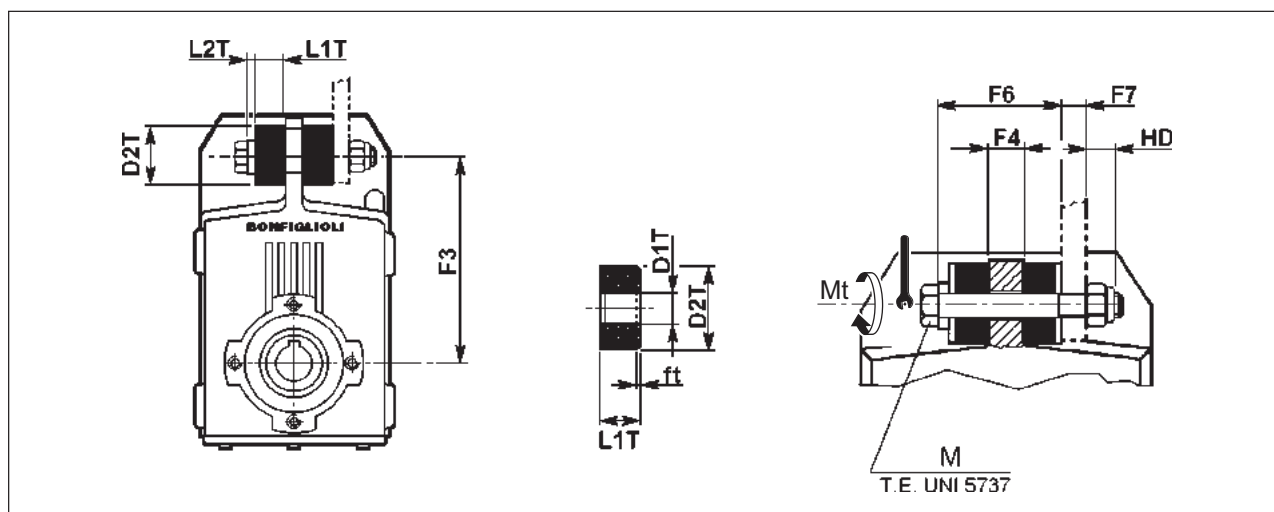
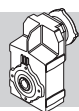


F 90...F...



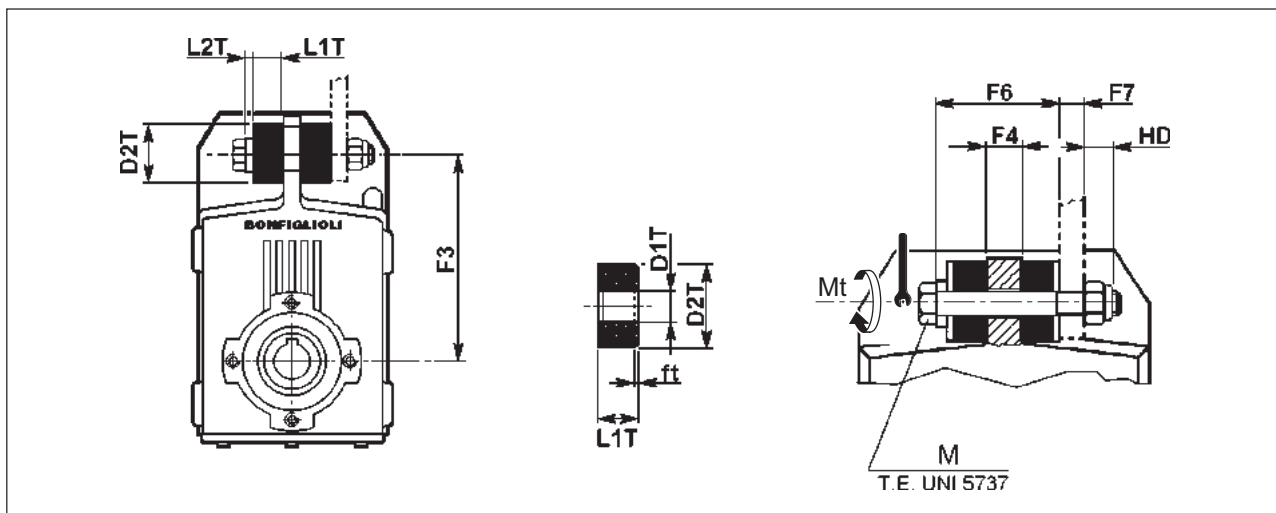
Anti-vibration kit

The gearboxes of the F series are supplied with an anti-vibration kit at customer request. The kit includes all components required for shaft mounting (torque arm is out of scope). Dimensions are shown in the following table.



Dimensions are in mm

	F3	F4	F6	F7 (max.)	HD	L1T	L2T	D1T	D2T	M	Mt [Nm]	ft
F 10	140	20	55	10	12.3	15	5	11	30	M10x80	10	1.5
F 20	160	20	55	10	12.3	15	5	11	30	M10x80	10	1.5
F 25	162	20	65	20	14.8	20	5	12.5	40	M12x100	20	1.5
F 31	170	20	65	20	14.8	20	5	12.5	40	M12x100	20	1.5
F 41	218	16	61	24	14.8	20	5	12.5	40	M12x100	20	2.3
F 51	278	20	90	47	23	30	10	21	60	M20x160	50	3.0
F 60	325	26	96	41	23	30	10	21	60	M20x160	50	4.0
F 70	370	30	122	50	28	40	12	25	80	M24x200	100	4.0
F 80	430	36	128	44	28	40	12	25	80	M24x200	100	6.0
F 90	515	40	175	40	33.2	60	15	32	100	M30x260	200	9.0



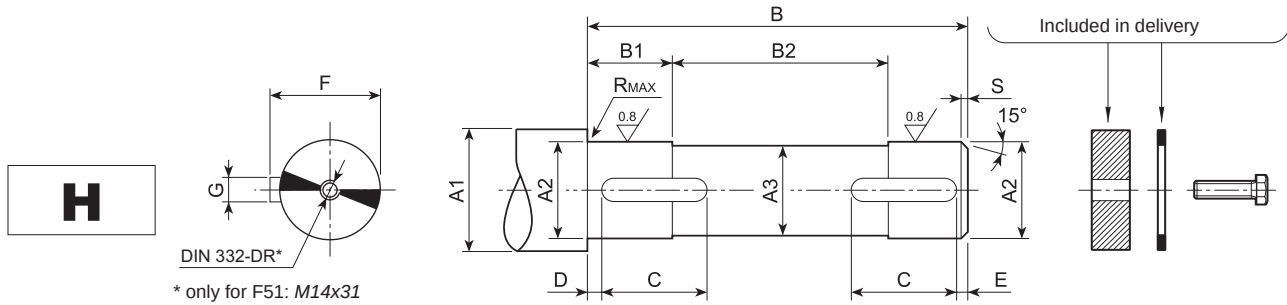
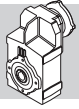
Dimensions are in Inch except when shown in *italic* [mm]

	F3	F4	F6	F7 (max.)	HD	L1T	L2T	D1T	D2T	M	Mt [lb • in]	ft
F 10	5.512	0.787	2.165	0.394	0.484	0.591	0.197	0.433	1.181	M10x80	89	0.059
F 20	6.299	0.787	2.165	0.394	0.484	0.591	0.197	0.433	1.181	M10x80	89	0.059
F 25	6.378	0.787	2.559	0.787	0.583	0.787	0.197	0.492	1.575	M12x100	177	0.059
F 31	6.693	0.787	2.559	0.787	0.583	0.787	0.197	0.492	1.575	M12x100	177	0.059
F 41	8.583	0.630	2.402	0.945	0.583	0.787	0.197	0.492	1.575	M12x100	177	0.091
F 51	10.945	0.787	3.543	1.850	0.906	1.181	0.394	0.827	2.362	M20x160	443	0.118
F 60	12.795	1.024	3.780	1.614	0.906	1.181	0.394	0.827	2.362	M20x160	443	0.157
F 70	14.567	1.181	4.803	1.969	1.102	1.575	0.472	0.984	3.150	M24x200	886	0.157
F 80	16.929	1.417	5.039	1.732	1.102	1.575	0.472	0.984	3.150	M24x200	886	0.236
F 90	20.276	1.575	6.890	1.575	1.307	2.362	0.591	1.260	3.937	M30x260	1771	0.354

59 CUSTOMER' SHAFT

Make the driven shaft to be coupled to the gear unit's output shaft from a good quality steel, respecting the dimensions given in the table.

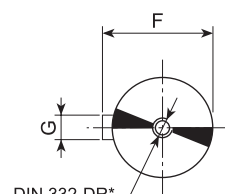
A device such as that illustrated below should also be installed to secure the shaft axially. Take care to verify and dimension the various components to suit the needs of the application.



Dimensions are in mm

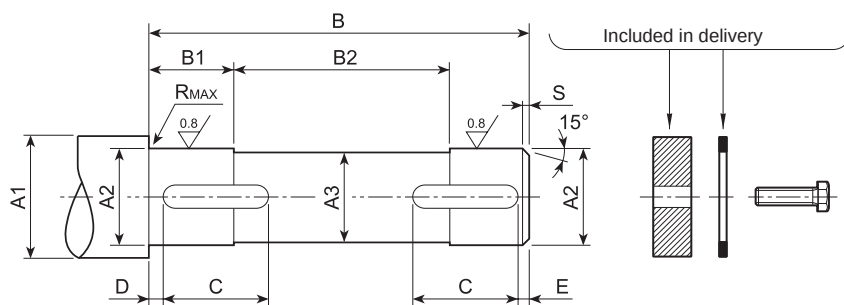
	A1	A2	A3	B	B1	B2	C	D	E	F	G	R	S	UNI 6604	UNI 5739
F 10	≥ 35	30 h7	29	87.5	15.5	56.5	20	2	2	33	8 h9	0.5	1.5	8x7x20 A	M8x25
	≥ 30	25 h7	24	87.5	15.5	56.5	20	2	2	28	8 h9	0.5	1.5	8x7x20 A	
F 20	≥ 42	35 h7	34	99	18	63	22	2	2	38	10 h9	0.5	1.5	10x8x22 A	M8x30
	≥ 35	30 h7	29	99	18	63	22	2	2	33	8 h9	0.5	1.5	8x7x22 A	
F 25	≥ 47	40 h7	39	104	23	58	30	2	2	43	12 h9	0.5	1.5	12x8x30 A	M8x30
	≥ 42	35 h7	34	104	23	58	30	2	2	38	10 h9	0.5	1.5	10x8x30 A	
F 31	≥ 47	40 h7	39	104	28	48	30	2	2	43	12 h9	0.5	1.5	12x8x30 A	M8x30
	≥ 42	35 h7	34	104	28	48	30	2	2	38	10 h9	0.5	1.5	10x8x30 A	
F 41	≥ 52	45 h7	44	118	27.5	63	45	2.5	2.5	48.5	14 h9	1	2.0	14x9x45 A	M10x30
	≥ 47	40 h7	39	118	27.5	63	45	2.5	2.5	43	12 h9	1	2.0	12x8x45 A	
F 51	≥ 63	55 h7	54	139	33	73	50	2.5	2.5	59	16 h9	1	2.0	16x10x50 A	M14x45
	≥ 57	50 h7	49	139	33	73	50	2.5	2.5	53.5	14 h9	1	2.0	14x9x50 A	
F 60	≥ 78	70 h7	69	180	38	104	70	2.5	2.5	74.5	20 h9	1	2.0	20x12x70 A	M16x45
	≥ 68	60 h7	59	180	38	104	70	2.5	2.5	64	18 h9	1	2.0	18x11x70 A	
F 70	≥ 89	80 h7	79	229	58	113	75	3	3	85	22 h9	2.5	2.5	22x14x75 A	M20x55
	≥ 78	70 h7	69	229	58	113	75	3	3	74.5	20 h9	2.5	2.5	20x12x75 A	
F 80	≥ 99	90 h7	89	272	78	116	100	3	3	95	25 h9	2.5	2.5	25x14x100 A	M20x55
	≥ 89	80 h7	79	272	78	116	100	3	3	85	22 h9	2.5	2.5	22x14x100 A	
F 90	≥ 111	100 h7	99	333	87.5	158	110	3	3	106	28 h9	2.5	2.5	28x16x110 A	M24x65
	≥ 99	90 h7	89	333	87.5	158	110	3	3	95	25 h9	2.5	2.5	25x14x110 A	

NH



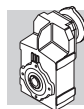
DIN 332-DR*

* only for F51: M14x31

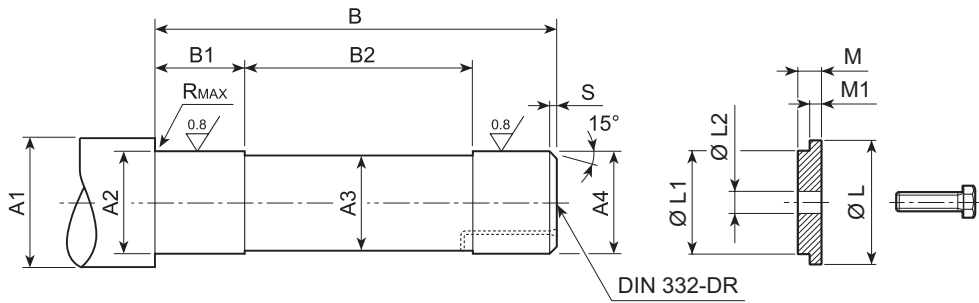


Dimensions are in Inch except when shown in *italic* [mm]

	A1	A2	A3	B	B1	B2	C	D	E	F	G	R	S	Key	UNI 5739
F 10	≥ 1.201	1.000 ⁺⁰ _{-0.0008}	0.965	3.445	0.610	2.224	0.875	0.079	0.079	1.109	0.250 ⁺⁰ _{-0.0014}	0.0196	0.059	1/4 x 1/4 x 7/8	M8x25
F 20	≥ 1.457	1.250 ⁺⁰ _{-0.0010}	1.201	3.898	0.709	2.480	1.000	0.079	0.079	1.362	0.250 ⁺⁰ _{-0.0014}	0.0196	0.059	1/4 x 1/4 x 1	M8x30
F 25	≥ 1.654	1.375 ⁺⁰ _{-0.0010}	1.339	4.094	0.906	2.283	1.250	0.079	0.079	1.513	0.313 ⁺⁰ _{-0.0014}	0.0196	0.059	5/16 x 5/16 x 1 1/4	M8x30
F 31	≥ 1.654	1.375 ⁺⁰ _{-0.0010}	1.339	4.094	1.102	1.890	1.250	0.079	0.079	1.513	0.313 ⁺⁰ _{-0.0014}	0.0196	0.059	5/16 x 5/16 x 1 1/4	M8x30
F 41	≥ 1.772	1.500 ⁺⁰ _{-0.0010}	1.457	4.646	1.102	1.890	2.000	0.079	0.079	1.664	0.375 ⁺⁰ _{-0.0014}	0.039	0.079	3/8 x 3/8 x 2	M10x30
F 51	≥ 2.283	2.000 ⁺⁰ _{-0.0012}	1.969	5.472	1.299	2.874	2.000	0.098	0.098	2.218	0.500 ⁺⁰ _{-0.0017}	0.039	0.079	1/2 x 1/2 x 2 1/2	M14x45
F 60	≥ 2.677	2.375 ⁺⁰ _{-0.0012}	2.323	7.087	1.496	4.094	3.000	0.098	0.098	2.646	0.625 ⁺⁰ _{-0.0017}	0.039	0.079	5/8 x 5/8 x 3	M16x45
F 70	≥ 3.071	2.750 ⁺⁰ _{-0.0012}	2.717	9.016	2.283	4.449	3.000	0.295	0.118	3.027	0.625 ⁺⁰ _{-0.0017}	0.098	0.098	5/8 x 5/8 x 3	M20x55
F 80	≥ 3.543	3.188 ⁺⁰ _{-0.0014}	3.150	10.709	3.071	4.567	4.156	0.295	0.118	3.536	0.750 ⁺⁰ _{-0.0020}	0.098	0.098	3/4 x 3/4 x 4 5/32	M20x55
F 90	≥ 3.543	3.625 ⁺⁰ _{-0.0014}	3.583	13.110	3.445	6.220	5.500	0.295	0.118	4.009	0.875 ⁺⁰ _{-0.0020}	0.098	0.098	7/8 x 7/8 x 5 1/2	M24x65



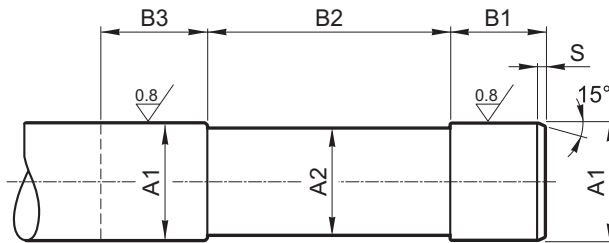
S



Dimensions are in mm

	A1	A2	A3	A4	B	B1	B2	R	S	L	L1	L2	M	M1	UNI 5739
F 10	≥ 36	27 h7	24	25 h6	138	34	70	0.5	1.5	29.5	25 d9	9	7	5.5	M8x25
F 20	≥ 42	32 h7	29	30 h6	160	38	84	0.5	1.5	35.5	30 d9	9	7	5.5	M8x25
F 25	≥ 42	32 h7	30	31 h6	172	38	96	0.5	1.5	35.5	31 d9	9	7	5.5	M8x25
F 31	≥ 50	38 h7	35	36 h6	155	40	73	1	2	43	36 d9	9	7	5.5	M8x25
F 41	≥ 58	44 h7	41	42 h6	177	46.5	82	1	2	49	42 d9	11	8.5	7	M10x30
F 51	≥ 68	54 h7	51	52 g6	201	48	91	1	2	61	52 d9	18	9	7.5	M16x45
F 60	≥ 84	67 h7	64	65 g6	248	53	133	1.5	2	80	65 d9	18	9	7.5	M16x45
F 70	≥ 104	82 h7	79	80 g6	308	78	140	2.5	2.5	95	80 d9	22	13.5	12	M20x55
F 80	≥ 114	92 h7	89	90 g6	365	88	177	2.5	2.5	105	90 d9	22	13.5	12	M20x55
F 90	≥ 126	102 h7	99	100 g6	429.5	98	221.5	2.5	2.5	120	100 d9	26	20	18.5	M24x70

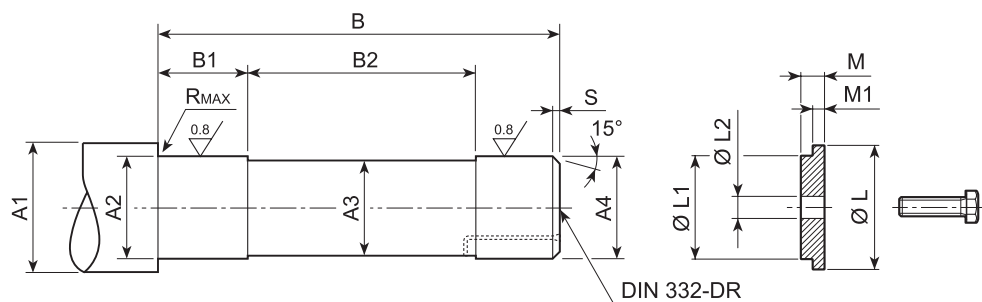
QF



Dimensions are in mm

		A1	A2	B1	B2	B3	S
F 10	QF25	25 h6	24	41	83	≥ 50	1.5
	QF30	30 h6	29				
F 20	QF25	25 h6	24	41	104.5	≥ 50	1.5
	QF30	30 h6	29				
F 25	QF30	30 h6	29	41	120.5	≥ 50	1.5
	QF32	32 h6	31				
F 31	QF35	35 h6	34	45	95.5	≥ 54	1.5
	QF40	40 h6	39				
F 41	QF42	42 h6	41	46	112.5	≥ 55	2
	QF45	45 h6	44				
F 51	QF50	50 h6	49	48	131	≥ 57	2
	QF55	55 h6	54				
F 60	QF60	60 h6	59	57	158	≥ 66	2.5
	QF65	65 h6	64				
	QF70	70 h6	69				

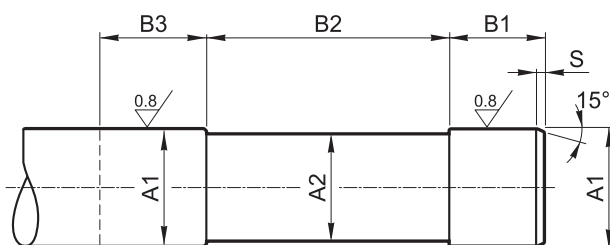
S



Dimensions are in Inch except when shown in *italic* [mm]

	A1	A2	A3	A4	B	B1	B2	R	S	L	L1	L2	M	M1	UNI 5739
F 10	≥ 1.417	1.063 ⁺⁰ _{-0.0008}	0.945	0.984 ⁺⁰ _{-0.0005}	5.433	1.339	2.756	0.020	0.059	1.161	0.984 ^{-0.0026} _{-0.0046}	0.354	0.276	0.217	M8x25
F 20	≥ 1.654	1.260 ⁺⁰ _{-0.0010}	1.142	1.181 ⁺⁰ _{-0.0005}	6.299	1.496	3.307	0.020	0.059	1.398	1.181 ^{-0.0026} _{-0.0046}	0.354	0.276	0.217	M8x25
F 25	≥ 1.654	1.260 ⁺⁰ _{-0.0010}	1.181	1.220 ⁺⁰ _{-0.0006}	6.772	1.496	3.780	0.020	0.059	1.398	1.220 ^{-0.0031} _{-0.0056}	0.354	0.276	0.217	M8x25
F 31	≥ 1.969	1.496 ⁺⁰ _{-0.0010}	1.378	1.417 ⁺⁰ _{-0.0006}	6.102	1.575	2.874	0.039	0.079	1.693	1.417 ^{-0.0031} _{-0.0056}	0.354	0.276	0.217	M8x25
F 41	≥ 2.283	1.732 ⁺⁰ _{-0.0010}	1.614	1.654 ⁺⁰ _{-0.0006}	6.969	1.831	3.228	0.039	0.079	1.929	1.654 ^{-0.0031} _{-0.0056}	0.433	0.335	0.276	M10x30
F 51	≥ 2.677	2.126 ⁺⁰ _{-0.0012}	2.008	2.047 ⁺⁰ _{-0.0011}	7.913	1.890	3.583	0.039	0.079	2.402	2.047 ^{-0.0039} _{-0.0069}	0.709	0.354	0.295	M16x45
F 60	≥ 3.307	2.638 ⁺⁰ _{-0.0012}	2.520	2.559 ^{-0.0004} _{-0.0011}	9.764	2.087	5.236	0.059	0.079	3.150	2.559 ^{-0.0039} _{-0.0069}	0.709	0.354	0.295	M16x45
F 70	≥ 4.094	3.228 ⁺⁰ _{-0.0014}	3.110	3.150 ^{-0.0004} _{-0.0011}	12.126	3.071	5.512	0.098	0.098	3.740	3.150 ^{-0.0039} _{-0.0069}	0.866	0.531	0.472	M20x55
F 80	≥ 4.488	3.622 ⁺⁰ _{-0.0014}	3.504	3.543 ^{-0.0005} _{-0.0013}	14.370	3.465	6.969	0.098	0.098	4.134	3.543 ^{-0.0047} _{-0.0081}	0.866	0.531	0.472	M20x55
F 90	≥ 4.961	4.016 ⁺⁰ _{-0.0014}	3.898	3.937 ^{-0.0005} _{-0.0013}	16.909	3.858	8.720	0.098	0.098	4.724	3.937 ^{-0.0047} _{-0.0081}	1.024	0.787	0.728	M24x70

NQF



Dimensions are in Inch except when shown in *italic* [mm]

		A1	A2	B1	B2	B3	S
F 10	NQF1	1.000 ⁺⁰ _{-0.0005}	0.961	1.614	3.268	≥ 1.969	0.059
	NQF1-3/16	1.188 ⁺⁰ _{-0.0006}	1.148				
F 20	NQF1	1.000 ⁺⁰ _{-0.0005}	0.961	1.614	4.114	≥ 1.969	0.059
	NQF1-3/16	1.188 ⁺⁰ _{-0.0006}	1.148				
F 25	NQF1-3/16	1.188 ⁺⁰ _{-0.0006}	1.148	1.614	4.744	≥ 1.969	0.059
	NQF1-1/4	1.250 ⁺⁰ _{-0.0006}	1.211				
F 31	NQF1-3/8	1.375 ⁺⁰ _{-0.0006}	1.336	1.772	3.760	≥ 2.126	0.059
	NQF1-7/16	1.438 ⁺⁰ _{-0.0006}	1.398				
F 41	NQF1-5/8	1.625 ⁺⁰ _{-0.0006}	1.586	1.811	4.429	≥ 2.165	0.079
	NQF1-3/4	1.750 ⁺⁰ _{-0.0006}	1.711				
F 51	NQF1-15/16	1.938 ⁺⁰ _{-0.0006}	1.898	1.890	5.157	≥ 2.244	0.079
	NQF2	2.000 ⁺⁰ _{-0.0007}	1.961				
F 60	NQF2-3/8	2.375 ⁺⁰ _{-0.0007}	2.336	2.244	6.220	≥ 2.598	0.098
	NQF2-7/16	2.438 ⁺⁰ _{-0.0007}	2.398				
	NQF2-3/4	2.750 ⁺⁰ _{-0.0007}	2.711				

ELECTRIC MOTORS

M1 SYMBOLS AND UNITS OF MEASUREMENT

Symbols	Units of Measure	Description	Symbols	Units of Measure	Description
$\cos\varphi$	–	Power factor	n	[rpm]	Rated speed
η	–	Efficiency	P_B	[W]	Power drawn by the brake at 20°C
f_m	–	Power adjusting factor	P_n	[kW/HP]	Motor rated power
I	–	Cyclic duration factor	P_r	[kW/HP]	Required power
I_N	[A]	Rated current	t_1	[ms]	Brake response time with one-way rectifier
I_S	[A]	Locked rotor current	t_{1s}	[ms]	Brake response time with electronic-controlled rectifier
J_C	[lb·ft ²]	Load moment of inertia	t_2	[ms]	Brake reaction time with a.c. disconnect
J_M	[lb·ft ²]	Moment of inertia	t_{2c}	[ms]	Brake reaction time with a.c. and d.c. disconnect
K_c	–	Torque factor	t_a	[°F]	Ambient temperature
K_d	–	Load factor	t_f	[min]	Work time at constant load
K_J	–	Inertia factor	t_r	[min]	Rest time
T_A	[lb·in]	Mean breakaway torque	W	[lb·ft]	Braking work between service interval
T_B	[lb·in]	Brake torque	W_{max}	[lb·ft]	Maximum brake work for each braking
T_N	[lb·in]	Rated torque	Z	[1/h]	Permissible starting frequency, loaded
T_L	[lb·in]	Counter-torque during acceleration	Z_0	[1/h]	Max. permissible unloaded starting frequency (I = 50%)
T_S	[lb·in]	Starting torque			

M2 INTRODUCTION

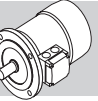
Efficiency classes and test methods

Efficiency classes characterise the efficiency with which an electric motor converts electrical energy into mechanical energy. In Europe, the energy efficiency of low voltage electric motors used to be classified using the voluntary Eff1/Eff2/Eff3 system. Outside Europe, other countries used to apply their own national systems, often very different to the European system. This uncertainty in standards led manufacturers to develop a harmonised international standard, and push for the issue of IEC (International Electrotechnical Commission) standard IEC 60034-30-1, "Efficiency classes of single-speed, three-phase, cage-induction motors (IE code)".

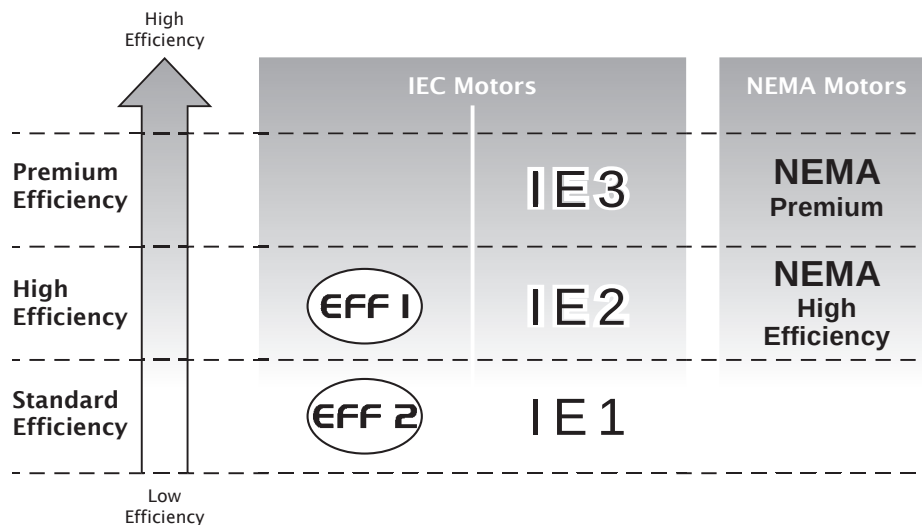
In the USA, the reference standard is NEMA MG1.

These new standards:

- defines new classes of efficiency
- **IE1** (standard efficiency)
- **IE2** (NEMA high efficiency)
- **IE3** (NEMA premium efficiency)
- provides a common, international reference system for the classification of electric motors and for national legislation
- introduces a new efficiency measurement method in conformity with standard IEC 60034-1-2:2007



The following table shows the correspondence among the main classes.



European Commission regulation 640/2009

IEC standard 60034-30-1 establishes technical guidelines for efficiency classification but does not impose any legal requirements for the adoption of any particular efficiency class. These are laid down by European Directives and national laws.

The EC Regulation applying Directive 2005/32/EC was adopted on the 22nd July 2009. This establishes the legal requirements and eco-compatible design criteria for electric motors, and imposes minimum efficiency limits according to the following schedule:

- **16/06/2011:** Electric motors must have a minimum efficiency level equivalent to class **IE2**
- **01/01/2015:** Electric motors with a rated power output between 10 HP (7.5 kW) and 500 HP (375 kW) must have
 - a minimum efficiency level corresponding to **IE3**, or to **IE2** if controlled by an inverter.
- **01/01/2017:** Electric motors with a rated power output between 1 HP (0.75 kW) and 500 HP (375 kW) must have
 - a minimum efficiency level corresponding to **IE3**, or to **IE2** if controlled by an inverter.

Scope and exclusions

EC Regulation 640/2009 applies to 2, 4, and 6 pole, single-speed, three-phase, 50 Hz or 60 Hz, cage-induction motors with rated outputs of 1 HP (0.75 kW) and 500 HP (375 kW), and rated voltage up to 1000 V, designed for continuous duty (S1).

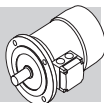
The regulation does not apply to:

- brakemotors
- motors designed to function immersed in liquid
- motors that are fully integrated in a product (like a gearbox, pump, fan), so that it is not possible to test the performance of the motor independently of that of the product.
- motors expressly designed to function:
 - at altitudes above 13.100 ft (4000 metres) a.s.l.;
 - in ambient temperatures above 140 °F (60 °C);
 - at maximum operating temperatures above 750 °F (400 °C);
 - in ambient temperatures below -20 °F (-30 °C) (all motors) or below 32 °F (0 °C) (water-cooled motors);
 - with incoming liquid coolants at temperatures below 32 °F (0 °C) or above 90 °F (32 °C);
 - in potentially explosive atmospheres as defined by Directive 2014/34/EU.

DOE (the U.S. Department of Energy)

According to the Electronic Code of Federal Regulations (eCFR) of the United States of America, part 431 (ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT), subpart B (Electric Motors), the TEFC (totally enclosed fan cover) electric induction motors, whether equipped with a brake or not, may be placed onto the USA market according to the following prescriptions:

- **IE1 / Standard** motors can be sold in USA only if one or more of the following conditions apply:
 - their rated power is $P_n < 1\text{HP}$ (0.75 kW)
 - they are rated for a non-continuous duty (all duties, except S1)
 - they are labelled for inverter (VFD) only operation
 - they are multi speed motors
- **IE2 / High Efficiency** motors can be sold in USA until **June 1st 2016**, only if:
 - have performance in accordance with NEMA design C characteristics, as described in MG1 or an equivalent IEC design(s) such as IEC Design H
- Any motors manufactured **as of June 1st 2016 onwards** shall be **IE3 / Premium Efficient**, unless the following relevant exemptions apply:
 - their rated power is $P_n < 1\text{HP}$ (0.75 kW)
 - motors rated for a non-continuous duty (all duties, except S1)
 - motors labelled for inverter (VFD) only operation
 - multi speed motors



M3 GENERAL CHARACTERISTICS

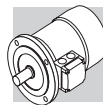
M3.1 Production range

The asynchronous three-phase electric motors BE, BN, ME and M of BONFIGLIOLI RIDUTTORI's production, are available in basic designs IMB5 and derived versions, with the following polarities: 2, 4, 6 at 50Hz and 60Hz (BE / ME motors are available at 60 Hz in 4 pole configuration only). For requests concerning other polarities (e.g. double speed motors), please contact the Technical Department.

Motors are provided as totally enclosed fan cooled (TEFC) according to NEMA MG1.

M3.2 Standards

The motors described in this catalogue are manufactured to the applicable standards shown in the following table.



(F01)

Title	CEI	IEC
General requirements for rotating electrical machines	CEI EN 60034-1	IEC 60034-1
Terminal markings and direction of rotation of rotating machines	CEI 2-8	IEC 60034-8
Methods of cooling for electrical machines	CEI EN 60034-6	IEC 60034-6
Dimensions and output ratings for rotating electrical machines	EN 50347	IEC 60072
Classification of degree of protection provided by enclosures for rotating machines	CEI EN 60034-5	IEC 60034-5
Noise limits	CEI EN 60034-9	IEC 60034-9
Classification of type of construction and mounting arrangements	CEI EN 60034-7	IEC 60034-7
Rated voltage for low voltage mains power	CEI 8-6	IEC 60038
Vibration level of electric machines	CEI EN 60034-14	IEC 60034-14
Efficiency classes of single-speed, three-phase, cage-induction motors (IE code)	CEI EN 60034-30-1	IEC 60034-30-1
Standard method for determining losses and efficiency from tests	CEI EN 60034-2-1	IEC 60034-2-1

The motors also comply with foreign standards adapted to IEC 60034-1 as shown here below.

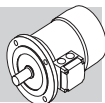
(F02)

NEMA MG1	USA
DIN VDE 0530	Germany
BS5000 / BS4999	Great Britain
AS 1359	Australia
NBNC 51 - 101	Belgium
NEK - IEC 34	Norway
NF C 51	France
OEVE M 10	Austria
SEV 3009	Switzerland
NEN 3173	Netherlands
SS 426 01 01	Sweden

M3.3 Directives 2006/95/EC (LVD) and 2004/108/EC (EMC)

BE, BN, ME and M motors meet the requirements of Directives 2006/95/EC (Low Voltage Directive) and 2004/108/EC (Electromagnetic Compatibility Directive) and their name plates bear the CE mark. As for the EMC Directive, construction is in accordance with standards CEI EN 60034-1, EN 61000-6-2, EN 61000-6-4.

Motors with FD brakes, when fitted with the suitable capacitive filter at rectifier input (option **CF**), meet the emission limits required by Standard EN 61000-6-3:2007 "Electromagnetic compatibility - Generic Emission Standard - Part 6-3 Residential, commercial and light industrial environment". Motors also meet the requirements of standard CEI EN 60204-1 "Electrical equipment of machines". The responsibility for final product safety and compliance with applicable directives rests with the manufacturer or the assembler who incorporate the motors as component parts.



M3.4 Tolerances

As per the Norms CEI EN 60034-1, applicable the tolerances here below apply to the following quantities.

(F03)

-0.15 (1 - η) $P \leq 75$ hp	Efficiency
$-(1 - \cos\phi)/6$ min 0.02 max 0.07	Power factor
$\pm 20\%$ *	Slip
+20%	Locked rotor current
-15% +25%	Locked rotor torque
-10%	Max. torque

(*) $\pm 30\%$ for motors with $P_n < 0.75$ hp

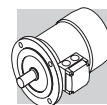
M4 VARIANTS AND OPTIONS

M4.1 Variants

(F04)

Description		Default	Option	Page
Voltage		230/400/50		 611
Protection class	BE - BN - ME - M	IP 55	IP 56	 607
	BN_FD - BN_FA M_FD - M_FA	IP 54	IP 55	
Insulation class		CLF	CLH	 614  615
Design version	BE - BN	B5 B5 R		 607

 Default values.



M4.2 Options

(F05)

Description	Catalogue numbers						Availability	Page
Thermal protective devices	D3	K1	E3				BE - BN ME - M	 630
50 Hz normalized power	PN						BN M	 613
Feedback devices	EN1	EN2	EN3	EN4	EN5	EN6	BE - BN ME - M	 636
Anti-condensate heaters	H1	NH1					BE - BN ME - M	 634
Tropicalized windings	TP						BE - BN ME - M	 634
Double-extended shaft	PS						BE - BN ME - M	 634
Rotor balancing grade B	RV						BE - BN ME - M	 635
External mechanical protections	RC	TC					BE - BN ME - M	 636
Certification	CUS						BE - BN ME - M	 613
China Compulsory Certification	CCC						BE - BN ME - M	 614
Plug connector	CON						BE - BN ME - M	 631
Surface protection	C_						BE - BN ME - M	 638
Painting	RAL						BE - BN ME - M	 638
Certificates	ACM						BE - BN ME - M	 639
Inspection certificate	CC						BE - BN ME - M	 639
Backstop device	AL	AR					ME - M	 635
Type of duty	S2	S3	S9				BN M	 615

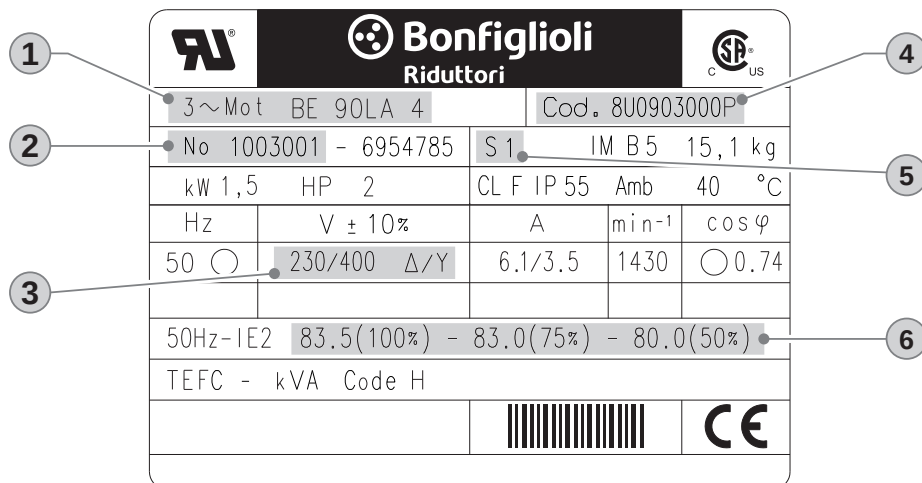
M4.3 Brake-related options

(F06)	Description	Catalogue numbers				Availability	Page
	Brake torque	Refer to the specific brake type					623 626
	Manual release lever	R	RM			BN M	628
	Release lever orientation	AB	AA	AC	AD	BN M	629
	DC brake rectifier	NB	NBR	SB	SBR	BN M	622
	Soft-start flywheel	F1				BN M	629
	Capacitive filter	CF				BN M	630
	Brake separate power supply (*)	...SA	...SD			BN M	622 626
	Brake functionality check	MSW				BN M	633
	Additional cable entry for brake motors	IC				BN M	634

(*) Specify voltage.

Default values.

M4.4 Example of identification nameplate



- ① BONFIGLIOLI Motor type
- ② Serial number
- ③ Rated voltage

- ④ Motor code
- ⑤ Type of duty: S1 Continuous duty
- ⑥ IE Class, Efficiency at: 4/4 - 3/4 - 2/4 load

M5 MECHANICAL FEATURES

M5.1 Versions

EC-normalised BE and BN motors are available in the design versions as indicated in the table below here after as per Standards EN 60034-7 (BE), CEI EN 60034-14 (BN).

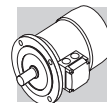
Mounting versions are:

IM B5 (basic)

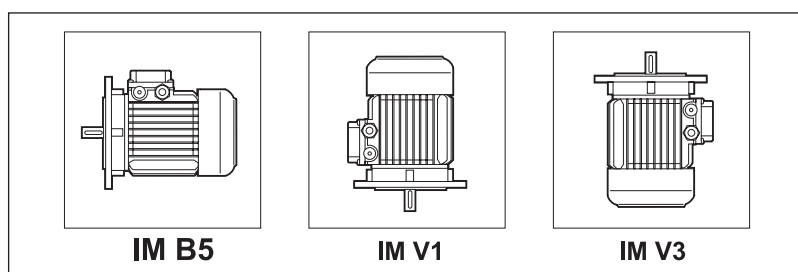
IM V1, IM V3 (derived)

IM B5 design motors can be installed in positions IM V1 and IM V3. In such cases, the basic design IM B5 is indicated on the motor name plate.

In design versions with a vertically located motor and shaft downwards, it is recommended to request the drip cover (always necessary for brake motors). This facility, included in the option list should be specified when ordering as it does not come as a standard device



(F07)



Flange output motors are also available with reduced coupling dimensions, as indicated in the table below - executions **B5R**.

(F08)

	BN 71	BE/BN 80	BE/BN 90	BE/BN 100	BE/BN 112	BE/BN 132
	DxE - Ø					
B5R	11x23 - 140	14x30 - 160	19x40 - 200	24x50 - 200	24x50 - 200	28x60 - 250

B5R flange is provided with through holes

M5.2 Degree of protection

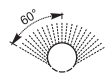
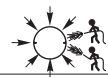
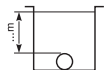
IP..

The following chart provides an overview of the degrees of protection available.

In addition to the degree of protection specified when ordering, motors to be installed outdoors require protection against direct sunlight and also – when they are to be installed vertically down – a drip cover to prevent the ingress of water and solid particles (option **RC**).

(F09)

		IP 54	IP 55	IP 56
BE - BN	ME - M		standard	
BN_FD BN_FA	M_FD M_FA	standard		

IP		5	5		
0		Not protected	0		Not protected
1		Protected against extraneous solid bodies having Ø ≥ 50 mm	1		Protected against vertical water drips
2		Protected against extraneous solid bodies having Ø ≥ 12.5 mm	2		Protected against vertical water drips inclined up to 15°
3		Protected against extraneous solid bodies having Ø ≥ 2.5 mm	3		Protected against rain
4		Protected against extraneous solid bodies having Ø ≥ 1.0 mm	4		Protected against water splashes
5		Protected against dust	5		Protected against jets of water
6		No dust ingress	6		Protected against powerful jets of water
			7		Protected against the effects of temporary immersion
			8		Protected against the effects of continuous immersion

M5.4 Direction of rotation

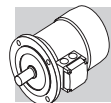
Rotation is possible in both directions. If terminals U1, V1 and W1 are connected to line phases L1, L2 and L3, clockwise rotation (looking from drive end) is obtained. For counterclockwise rotation, switch two phases.

M5.5 Noise

Noise levels, measured using the method prescribed by ISO 1680 Standards, are within the maximum levels specified by Standards CEI EN 60034-9.

M5.6 Vibrations and balancing

Rotor shafts are balanced with half key fitted and fall within the vibration class N, as per Standard CEI EN 60034-14.



M5.7 Terminal box

Terminal board features 6 studs for eyelet terminal connection (9 studs execution for US voltage "Dual Voltage"). A ground terminal is also supplied for earthing of the equipment. Terminals number and type are shown in the following table.

For brake power supply, please read par. 8 (brake FD), 9 (brake FA).

Brakemotors house the a.c./d.c. rectifier (factory pre-wired) inside the terminal box.

Wiring instructions are provided either in the box or in the user manual.

(F10)

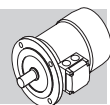
		No. of terminals	Terminal threads	Wire max cross section area mm ²
BE 80, BE 90 BN 56 ... BN 71 BN 80, BN 90	ME2 M05, M1 M2	6	M4	2.5
BE 100 ... BE 132 BN 100 ... BN 112 BN 132 ... BN 160MR	ME3, ME4 M3 M4	6	M5	6
BE 160 BN 160M ... BN 180M	ME 5 M5	6	M6	16
BE 180 BN 180L ... BN 200L	— —	6	M8	25
BE 80 ... 132 BN 63 ... BN 160MR	ME2 ... ME4 M05 ... M4	9	M4	6
BE 160 ... BE 180 BN 160M ... BN 200L	ME 5 M5	9	M6	16

M5.8 Cable entry

The holes used to bring cables to terminal boxes use metric threads in accordance with standard EN 50262 as indicated in the table here after.

(F11)

		Cable gland and dimensions		Maximum cable diameter allowed [mm / inch]
				
BN 63	M05	2 x M20 x 1.5	1 Hole on each side	13 / 0.512
BN 71	M1	2 x M25 x 1.5		17 / 0.669
BE 80, BE 90 BN 80, BN 90	ME2 M2	2 x M25 x 1.5		17 / 0.669
BE 100 BN 100	ME3 M3	2 x M32 x 1.5	2 Holes on each side	21 / 0.827
		2 x M25 x 1.5		17 / 0.669
BN 112, BE 112	—	2 x M32 x 1.5		21 / 0.827
		2 x M25 x 1.5		17 / 0.669
BE 132 BN 132...BN 160MR	ME4 M4	4 x M32 x 1.5	Pivoting, 4 x 90°	21 / 0.827
BE 160, BE 180 BN 160M...BN 200L	ME5 M5	2 x M40 x 1.5		28 / 1.102



M5.9 Bearings

Life lubricated preloaded radial ball bearings are used, types are shown in the chart here under. Calculated endurance lifetime L_{10h} , as per ISO 281, in unloaded condition, exceeds 40000 hrs.

DE = drive end

NDE = non drive end

(F12)

	DE	NDE	
	M, M_FD, M_FA	M	M_FD, M_FA
			
M05	6004 2Z C3	6201 2Z C3	6201 2RS C3
M1	6004 2Z C3	6202 2Z C3	6202 2RS C3
ME2 - M2	6007 2Z C3	6204 2Z C3	6204 2RS C3
ME3 - M3	6207 2Z C3	6206 2Z C3	6206 2RS C3
ME4 - M4	6309 2Z C3	6308 2Z C3	6308 2RS C3
ME5 - M5	6309 2Z C3	6309 2Z C3	6309 2RS C3

	DE	NDE	
	BE, BN, BN_FD, BN_FA	BE, BN	BN_FD, BN_FA
			
BN 56	6201 2Z C3	6201 2Z C3	—
BN 63	6201 2Z C3	6201 2Z C3	6201 2RS C3
BN 71	6202 2Z C3	6202 2Z C3	6202 2RS C3
BE 80 BN 80	6204 2Z C3	6204 2Z C3	6204 2RS C3
BE 90 BN 90	6205 2Z C3	6205 2Z C3	6305 2RS C3
BE 100 BN 100	6206 2Z C3	6206 2Z C3	6206 2RS C3
BE 112 BN 112	6306 2Z C3	6306 2Z C3	6306 2RS C3
BE 132 BN 132	6308 2Z C3	6308 2Z C3	6308 2RS C3
BN 160MR	6309 2Z C3	6308 2Z C3	6308 2RS C3
BE 160M/L BN 160M/L	6309 2Z C3	6309 2Z C3	6309 2RS C3
BN 180M	6310 2Z C3	6309 2Z C3	6309 2RS C3
BE 180M/L BN 180L	6310 2Z C3	6310 2Z C3	6310 2RS C3
BN 200L	6312 2Z C3	6310 2Z C3	6310 2RS C3

M6 ELECTRICAL CHARACTERISTICS

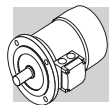
M6.1 Voltage

Single speed motors are provided in standard execution either for nominal voltage 230 / 400 V, 50 Hz, or 400 / 690 V, 50 Hz, or 230 / 460 V, 60 Hz with a voltage tolerance of $\pm 10\%$, according to what is specified on the below table.

On all the motors BN and M, for which the voltage / frequency configuration is not included on the below table, the voltage tolerance is reduced down to $\pm 5\%$.

For the operation out of the tolerance boundaries, the temperature may exceed by 10 K the limit provided by the adopted insulation class.

The motors are suitable for operation on distribution European grid with voltage complying with the publication IEC 60038.



(F13)

Efficiency class			V_{mot} $\pm 10\%$ 3 ~	Configuration
IE2	BE 80 ... 132	ME 2 ... ME 4	230 / 400 V - Δ/Y - 50 Hz	standard
			460 V Y - 60 Hz ¹	standard
			400 / 690 V - Δ/Y - 50 Hz	At request, carries no extra charge
	BE 160, BE 180	ME 5	400 / 690 V - Δ/Y - 50 Hz	standard
			460 V Δ - 60 Hz ¹	standard
IE1	BN 56 ... BN 132	M0 ... M4	230 / 400 V - Δ/Y - 50 Hz	standard
			400 / 690 V - Δ/Y - 50 Hz	At request, carries no extra charge
			460 V Y - 60 Hz	standard
	BN 160 ... 200	M5	400 / 690 V - Δ/Y - 50 Hz	standard
			460 V Δ - 60 Hz	standard

¹ 4 pole motor only

The only rated voltage for motors type at 50 Hz and all double speed motors is 400 V.
Applicable tolerances as per CEI EN 60034-1.

The table below shows the wiring options available.

(F14)

Number of poles		Winding connection
2	BE 80 ... BE 160, BN 63 ... BN 200	Δ / Y ⁽²⁾
4		
6		
8		
2/4	BN 63 ... BN 132	Δ / YY (Dahlander)
2/6	BN 71 ... BN 132	
2/8	BN 71 ... BN 132	Y / Y (Two windings)
2/12	BN 80 ... BN 132	
4/6	BN 71 ... BN 132	
4/8	BN 80 ... BN 132	Δ / YY (Dahlander)

⁽²⁾ Motors with voltage in ratio 2 (ex. 230/460 - 60) will be equipped with a 9 pin terminal box with winding connection either $\Delta\Delta / \Delta$ or YY / Y (except 6 pole BN 63 Δ / Y)

M6.2 Frequency

Rated output power BN / M for 60 Hz operation is shown in the following diagram.

(F15)

		P _n [kW/HP]					P _n [kW/HP]		
		2P	4P	6P			2P	4P	6P
									
BN 56A	–	–	0.07 / 0.09	–	BN 112M	M3LB	4.7 / 6.30	4.7 / 6.30	2.5 / 3.35
BN 56B	M0B	–	0.10 / 0.13	–	–	M3LC	–	4.7 / 6.30	2.5 / 3.35
BN 63A	M05A	0.21 / 0.28	0.14 / 0.19	0.10 / 0.13	BN 132S	M4SA	–	6.5 / 8.62	3.5 / 4.69
BN 63B	M05B	0.30 / 0.40	0.21 / 0.28	0.14 / 0.19	BN 132SA	M4SB	6.5 / 8.62	–	–
BN 71A	M05C	0.45 / 0.60	0.30 / 0.40	0.21 / 0.28	BN 132SB		8.7 / 11.67	–	–
BN 71B	M05SD	0.65 / 0.87	0.45 / 0.60	0.30 / 0.40	BN 132M	M4LA	11 / 14.75	–	–
BN 80A	M1LA	0.90 / 1.21	0.65 / 0.87	0.45 / 0.60	BN 132MA		–	8.7 / 11.67	4.6 / 6.17
BN 80B	M2SA	1.30 / 1.74	0.90 / 1.21	0.65 / 0.87	BN 132MB	M4LB	–	11 / 14.75	6.5 / 8.62
BN 90S	M2SB	–	1.30 / 1.74	0.90 / 1.21	BN 160MR	M4LC	12.5 / 16.76	12.5 / 16.76	–
BN 90SA		1.8 / 2.41	–	–	BN 160MB	M5SB	17.5 / 23.47	–	–
BN 90L	M3SA	2.5 / 3.35	–	1.30 / 1.74	BN 160M	M5SA	–	–	8.6 / 11.53
BN 90LA		–	1.8 / 2.41	–	BN 160L	M5S	21.5 / 28.83	17.5 / 23.47	12.6 / 16.9
BN 100L	M3LA	3.5 / 4.69	–	–	BN 180M	M5LA	24.5 / 32.85	21.5 / 28.83	–
BN 100LA		–	2.5 / 3.35	1.8 / 2.41	BN 180L	–	–	25.3 / 33.93	17.5 / 23.47
BN 100LB	M3LB	4.7 / 6.30	3.5 / 4.69	2.2 / 2.95	BN 200L	–	–	34 / 45.59	–
					BN 200LA	–	34 / 45.59	–	22 / 29.50

Double speed BN / M motors supplied at 60 Hz will have an increase of nominal power, referred to 50 Hz, equal to 15%. If a nominal power rating, equal to the normalised nominal power rating at 50 Hz, was requested to be on a nameplate of a motor meant to be voltage supplied at 60 Hz, the PN option shall be specified on the motor designation. Motors normally designed for a 50 Hz frequency may be used on a 60 Hz operating grid, but the related data shall be updated according to the following table.

Motors designated for 50 Hz operation show on the nameplate also the values for 60 Hz operation (excluding motors in CUS execution and brake motors). See the following table.

(F16)

	50 Hz	60 Hz			
	V - 50 Hz	V - 60 Hz	P _n - 60 Hz	T _n , T _a /T _n - 60 Hz	n [rpm] - 60 Hz
BE/ME	230/400 Δ/Y	265 - 460 Δ Y	1	0.83	1.2
	400/690 Δ/Y	460 Δ			
BN/M	230/400 Δ/Y	220 - 240 Δ			
	400/690 Δ/Y	380 - 415 Y			
BN/M	230/400 Δ/Y	265 - 280 Δ	1.15	1	1.2
	400/690 Δ/Y	440 - 480 Y			
	400/690 Δ/Y	440 - 480 Δ			

M6.3 Ambient temperature

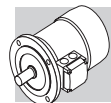
Catalogue rating values are calculated for standard ambient conditions (temperature 104 °F / 40 °C; elevation ≤ 3300 ft / 1000 m a.s.l.) as per the CEI EN 60034-1 Standards.

The motors can be used within the 104 -140 °F / 40 - 60 °C temperature range with rated power output adjusted by factors given in the table below.

(F17)

Ambient temperature [°F]	100°	115°	120°	130°	140°
Permitted power as a % of rated power	100%	95%	90%	85%	80%

Should a derating factor higher than 15% apply please consult factory.



M6.4 50 HZ normalized power

PN

With this option, motor name plate includes 50 Hz normalized power information even when motor is designated for operation with 60 Hz power mains. For 60 Hz supplies along with voltages 230/460V and 575V the PN option is applied by default.

M6.5 Motors for USA and Canada

CUS

BN motors are available in NEMA Design C configuration (concerning electrical characteristics), in compliance with CSA (Canadian standard) C22.2 No. 100 and UL (Underwriters Laboratory) UL 1004-1 (UL Bonfiglioli file number E308649). By specifying the option CUS the name plate is marked with both symbols shown here below.



The CUS option does not apply to servo-ventilated motors. US power mains voltages and the corresponding rated voltages to be specified for the motor are indicated in the following table:

(F18)

Frequency	Mains voltage	V _{mot}
60 Hz	208 V	200 V
	240 V	230 V
	480 V	460 V
	600 V	575 V

CUS option is applicable onto 50 Hz operating motors as well.

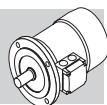
Motors with voltage in ratio 2 (e.g. 230/460-60; 220/440-60) feature, as standard, a 9-stud terminal board. For same executions, as well as for 575V-60Hz supply, the nominal rating is coincident with the correspondent 50Hz rating.

For DC brake motors type BN_FD, the rectifier is connected to a single-phase 230 VAC supply voltage in the motor terminal box.

Brake power supply for brake motors is as follows:

(F19)

BN_FD M_FD	BN_FA M_FA	Power supply
Connected to terminal box 1~230V c.a.	Separate power supply 230V Δ - 60Hz	230SA
	Separate power supplya 460V Y - 60Hz	460SA



M6.6 China Compulsory Certification

CCC

Electric motors destined to be sold in the People's Republic of China have to be certified under the CCC (China Compulsory Certification) system. BN motors of up to 7 Nm in rated torque are available with CCC certification and a special nameplate bearing the mark shown below:



CCC option is not currently available for servo - ventilated motors.

M6.7 Insulation class

CL F

Bonfiglioli motors use class **F** insulating materials (enamelled wire, insulators, impregnation resins) as compare to the standard motor.

In standard motors, stator windings over temperature normally stays below the 80 K limit corresponding to class B over temperature.

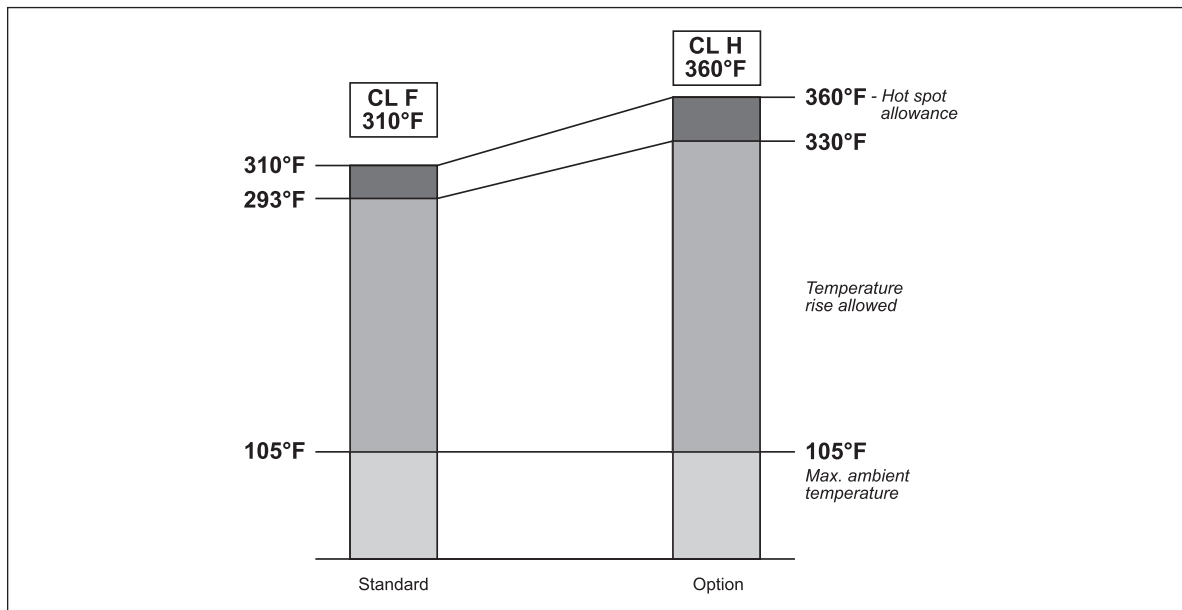
A careful selection of insulating components makes the motors compatible with tropical climates and normal vibration.

For applications involving the presence of aggressive chemicals or high humidity, contact Bonfiglioli Engineering for assistance with product selection.

CL H

Motors manufactured in insulation class **H** are available at request.
 Not available for motors in compliance with CSA e UL standards (CUS option).

(F20)



M6.8 Type of duty

Unless otherwise specified, catalogue motor power refers to continuous duty S1.

Any operating conditions other than S1 duty must be identified in accordance with duty cycle definitions laid down in standards CEI EN 60034-1.

For duty cycles S2 and S3, the power increase co-efficient reported in the following table may be used. Please note that the table provided below applies to single-speed motors.

As an alternative to S1 continuous duty, one of the following values can be specified at the product configuration stage: S2, S3 or S9. The motor nameplate will be marked with an increased power rating to suit the type of duty, and with specific electrical data and a duty type of S2-30 min, S3-70% or S9 respectively.

For further details, contact Bonfiglioli's Technical Service.

Please contact Bonfiglioli Engineering for the power increase coefficients applicable to switch-pole motors.

(F21)

	Type of duty					
	S2			S3 *		
	Duration (min)			Intermittence (I)		
	10	30 (*)	60	25%	40%	70% (*)
f_m	1.35	1.15	1.05	1.25	1.15	1.1

* Cycle duration must, in any event, be equal to or less than 10 minutes; if this time is exceeded, please contact our Technical Service.

(*) Default values from options (tab. F05).

M6.8.1 Cyclic duration factor:

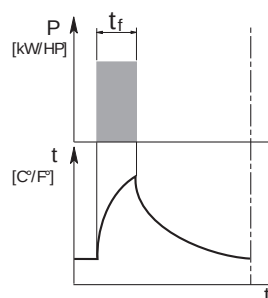
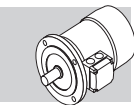
$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (01)$$

t_f = work time under constant load

t_r = rest time

M6.8.2 Limited duration duty S2

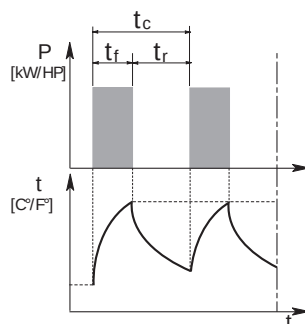
This type of duty is characterized by operation at constant load for a limited time, which is shorter than the time required to reach thermal equilibrium, followed by a rest period of sufficient duration to restore ambient temperature in the motor.



M6.8.3 Periodical intermittent duty S3:

This type of duty is characterized by a sequence of identical operation cycles, each including a constant load operation period and a rest period.

For this type of duty, the starting current does not significantly influence overtemperature.



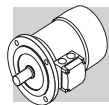
M6.9 Inverter-controlled motors

The Bonfiglioli electric motors may be used in combination with PWM inverters with rated voltage at a transformer input up to 500 V. Standard motors use a phase insulating system with separators, class 2 enameled wire and class H impregnation resins (1600V peak-to-peak voltage pulse capacity and rise edge $t_s > 0.1\mu s$ at motor terminals are allowed).

The Bonfiglioli electric motors may be continuously operated (S1 duty) in “turn - down” mode, i.e. at frequencies lower than the rated frequency, hereafter also called “base frequency” - f_b , in ratios f_b / f up to 10 : 1, according to the below reported tables.

(F22)

INVERTER OPERATION - BE MOTORS TURN-DOWN DATA																			
4 pole 1800 rpm S1	Inverter operation Motor data 10:1 (60-6Hz) CONSTANT TORQUE				Inverter operation Motor data 5:1 (60-12Hz) CONSTANT TORQUE				60HZ grid supply - Motor data										
Type	T ₆	n ₆	P ₆		T ₁₂	n ₁₂	P ₁₂		P _n		n	η	T _n	In 230V	In 460V	cosφ	Is/In	Jm	kVA Code Letter
	[lb-in]	[rpm]	[HP]	[kW]	[lb-in]	[rpm]	[HP]	[kW]	[HP]	[kW]	[rpm]	%	[lb-in]	[A]	[A]		p.u.	[lb-ft²]	
BE 80B 4	36.3	125	0.072	0.054	36.3	305	0.176	0.131	1	0.75	1745	82.5	36.3	2.92	1.46	0.78	7.6	0.066	K
BE 90S 4	53.4	120	0.102	0.076	53.4	300	0.254	0.190	1.5	1.1	1740	84	53.4	4.50	2.25	0.73	7.7	0.066	L
BE 90LA 4	65.5	120	0.125	0.093	72.9	300	0.347	0.259	2	1.5	1740	84.5	72.9	6.20	3.10	0.73	7.1	0.081	K
BE 100LA 4	99.0	125	0.196	0.146	106.6	305	0.516	0.385	3	2.2	1745	87.5	106.6	8.40	4.20	0.76	7	0.128	J
BE 100LB 4	120.9	115	0.221	0.165	146.1	295	0.684	0.510	4	3	1735	87.5	146.1	11.80	5.90	0.76	7	0.145	K
BE 112M 4	145.8	130	0.301	0.224	178.7	310	0.879	0.655	5	3.7	1750	87.5	178.7	13.20	6.60	0.80	7.8	0.249	K
BE 132S 4	228.5	140	0.507	0.378	264.1	320	1.341	1.000	7.5	5.5	1760	89.5	264.1	18.60	9.30	0.83	8.7	0.641	K
BE 132MA 4	301.9	140	0.671	0.500	360.2	320	1.829	1.364	10	7.5	1760	89.5	360.2	25.40	12.70	0.83	8	0.757	K
BE 132MB 4	370.9	140	0.824	0.614	441.8	320	2.243	1.673	12.5	9.2	1760	90	441.8	31.20	15.60	0.82	8.3	0.854	K
BE 160M 4	451.1	145	1.038	0.774	526.7	325	2.716	2.025	15	11	1765	91	526.7	37.40	19	0.81	7.7	1.542	J
BE 160L 4	543.1	150	1.292	0.964	645.8	330	3.381	2.522	20	15	1770	90.5	716.3	51.00	25.5	0.81	7.1	1.875	J
BE 180M 4	663.6	145	1.527	1.139	789.2	325	4.070	3.035	25	18.5	1765	91.9	885.9	60.60	30.3	0.83	7.3	2.966	H
BE 180L 4	757.8	150	1.803	1.345	901.2	330	4.718	3.519	30	22	1770	92.5	1050.5	72.00	36.0	0.83	8.1	3.916	J



(F23)

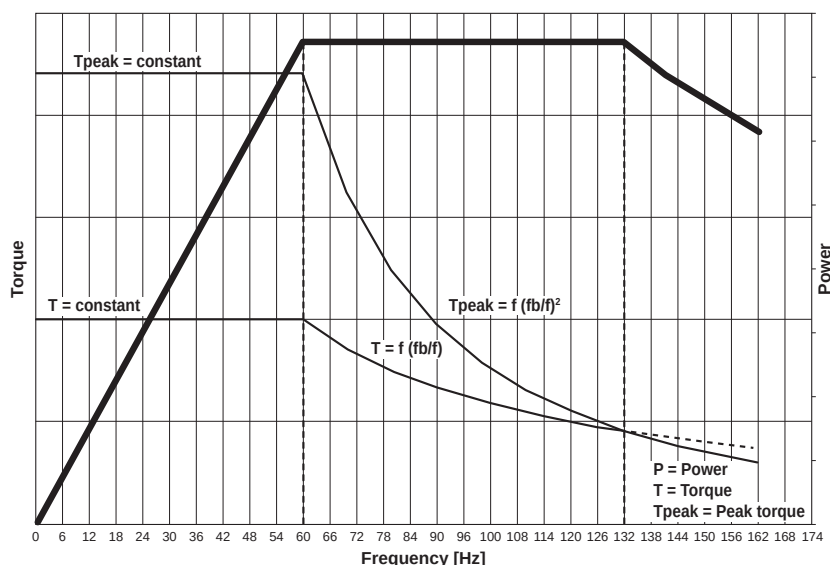
INVERTER OPERATION - BN MOTORS TURN-DOWN DATA																			
4 pole 1800 rpm S1	Inverter operation Motor data 10:1 (60-6Hz) CONSTANT TORQUE				Inverter operation Motor data 5:1 (60-12Hz) CONSTANT TORQUE				60HZ grid supply - Motor data										
Type	T ₆	n ₆	P ₆		T ₁₂	n ₁₂	P ₁₂		P _n		n	η	T _n	In 230V	In 460V	cosφ	Is/In	Jm	kVA Code Letter
	[lb-in]	[rpm]	[HP]	[kW]	[lb-in]	[rpm]	[HP]	[kW]	[HP]	[kW]	[rpm]	%	[lb-in]	[A]	[A]		p.u.	[lb-ft ²]	
BN 56A 4	3.0	50	0.0024	0.0018	3.0	230	0.011	0.008	0.08	0.06	1670	53	3.0	0.52	0.26	0.55	2.9	0.0036	J
BN 56B 4	4.1	50	0.0033	0.0024	4.5	230	0.017	0.012	0.12	0.09	1670	59	4.5	0.74	0.37	0.52	2.8	0.0036	H
BN 63A 4	5.1	30	0.0024	0.0018	6.1	210	0.020	0.015	0.16	0.12	1650	55	6.1	0.86	0.43	0.64	3.1	0.0048	H
BN 63B 4	7.2	50	0.0057	0.0043	9.4	230	0.034	0.026	0.25	0.18	1670	58	9.4	1.36	0.68	0.59	3.1	0.0055	H
BN 71A 4	9.5	80	0.012	0.009	12.2	260	0.050	0.038	0.33	0.25	1700	64	12.2	1.30	0.65	0.74	4.3	0.0138	H
BN 71B 4	14.3	80	0.018	0.014	18.5	260	0.076	0.057	0.5	0.37	1700	66	18.5	1.94	0.97	0.73	4.5	0.0164	H
BN 80A 4	21.7	90	0.031	0.023	27.6	270	0.12	0.088	0.75	0.55	1710	73	27.6	2.56	1.28	0.75	4.9	0.0356	H
BN 80B 4	28.8	100	0.046	0.03	36.6	280	0.16	0.12	1	0.75	1720	78	36.6	3.20	1.60	0.75	6.2	0.0482	J
BN 90S 4	40	100	0.063	0.05	47	280	0.21	0.16	1.5	1.1	1720	78	55	4.86	2.43	0.74	5.7	0.0499	J
BN 90LA 4	55	100	0.087	0.06	65	280	0.29	0.22	2	1.5	1720	81	73	6.24	3.12	0.74	6.6	0.0665	K
BN 90LB 4	65	100	0.103	0.08	77	280	0.34	0.26	2.5	1.85	1720	80.4	92	7.60	3.80	0.76	6.5	0.0712	K
BN 100LA 4	76	100	0.120	0.09	90	280	0.40	0.30	3	2.2	1720	81	110	9.6	4.8	0.73	5.5	0.096	H
BN 100LC 4	104	110	0.182	0.14	124	290	0.57	0.43	5	3.7	1730	84	182	15	7.5	0.74	5.6	0.145	K
BN 112M 4	147	110	0.257	0.19	175	290	0.81	0.60	5.5	4	1730	85	200	16	8	0.76	7.0	0.233	K
BN 132S 4	195	110	0.340	0.25	232	290	1.07	0.80	7.5	5.5	1730	84	273	20	10	0.84	6.3	0.506	H
BN 132MA 4	253	120	0.481	0.36	300	300	1.43	1.07	10	7.5	1740	85	362	26.2	13.1	0.84	6.1	0.641	H
BN 132MB 4	297	130	0.612	0.46	353	310	1.74	1.29	12.3	9.2	1750	86.4	443	33.0	16.5	0.81	6.8	0.757	J
BN 160MR 4	350	120	0.667	0.50	416	300	1.98	1.48	15	11	1740	88	543	38.8	19.4	0.81	6.5	0.855	H
BN 160L 4	488	130	1.007	0.75	581	310	2.86	2.13	20	15	1750	90	720	49.6	24.8	0.84	5.8	1.544	G
BN 180M 4	604	140	1.342	1.00	718	320	3.65	2.72	25	18.5	1760	90	895	62.6	31.3	0.83	5.8	1.88	G
BN 180L 4	699	140	1.552	1.16	831	320	4.22	3.15	30	22	1760	89.6	1074	78.0	39.0	0.79	6.8	2.97	H
BN 200L 4	879	140	1.954	1.46	1046	320	5.31	3.96	40	30	1760	90.5	1432	104.0	52.0	0.80	8.4	3.92	K

Key: T₆ Torque at 6 Hz n₆ Speed at 6 Hz P₆ Output power at 6 Hz
T₁₂ Torque at 12 Hz n₁₂ Speed at 12 Hz P₁₂ Output power at 12 Hz

On self - ventilated motors (IC411) the cooling capacity may be impaired at frequencies lower than 60 Hz due to the lower speed, thus the allowed torque is decreased accordingly, as per the above tables. The use of thermal protective devices (see the options section in this catalogue) is strongly recommended when a 5:1 (or higher, up to 10:1) turn down is operated, in order to guarantee the motor safety in case of accidental overheating. For a more effective cooling, even at the lowest frequencies, motors equipped with a forced ventilation system (i.e. servo fan) may be also available - please contact the Bonfiglioli Technical Department for more details. For the operation above the base frequency f_b , upon reaching the maximum output voltage of the inverter, the motor enters a constant - power field of operation also called "field weakening" range, and the shaft torque drops with ratio f / f_b . As the motor peak torque decreases with a ratio $(f / f_b)^2$, the allowed overload capacity of the motor must be reduced progressively above a certain speed, depending on the motor.

The following Torque / Power Vs Frequency curves are for reference:

- Solid lines - theoretical curves (Torque: thin line; Power: thick line);
- Dashed lines - depending on the motor size, below the base frequency $f_b = 60$ Hz, the torque capacity, as well as the motor power, may significantly decrease (see the above turn - down tables) due to the reduced cooling.
- Dotted line - theoretical torque values beyond the peak torque curve



IMPORTANT NOTE: the reported turn - down data has been worked out on empirical basis and shall be considered as indicative, please contact Bonfiglioli Technical Department for more details.

The following table reports the mechanical speed limit for motors operating above the rated frequency:

(F24)

		n [rpm]		
		2p	4p	6p
				
$\leq$ BE 112 - BN 112	ME2, ME3 M05 ... M3	5200	4000	3000
$\geq$ BE 132 - BN 132	ME4, ME5 M4, M5	4500	4000	3000

Above the rated speed, mechanical vibrations and noise might occur on the rotating parts of the motor. Class B rotor balancing is highly recommended for these applications. A separate supply fan cooling may also be advisable. Remote-controlled fan and brake (if fitted) must always be connected directly to mains power supply.

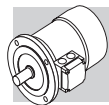
M6.10 Permissible starts per hour, Z

The rating charts of brakemotors lend the permitted number of starts Z_0 , based on 50% intermit-
tence and for unloaded operation.

The catalogue value represents the maximum number of starts per hour for the motor without ex-
ceeding the rated temperature for the insulation class F.

To give a practical example for an application characterized by inertia J_c , drawing power P_r and re-
quiring mean torque at start-up T_L the actual number of starts per hour for the motor can be calculat-
ed approximately through the following equation:

$$Z = \frac{Z_0 \cdot K_c \cdot K_d}{K_J} \quad (02)$$



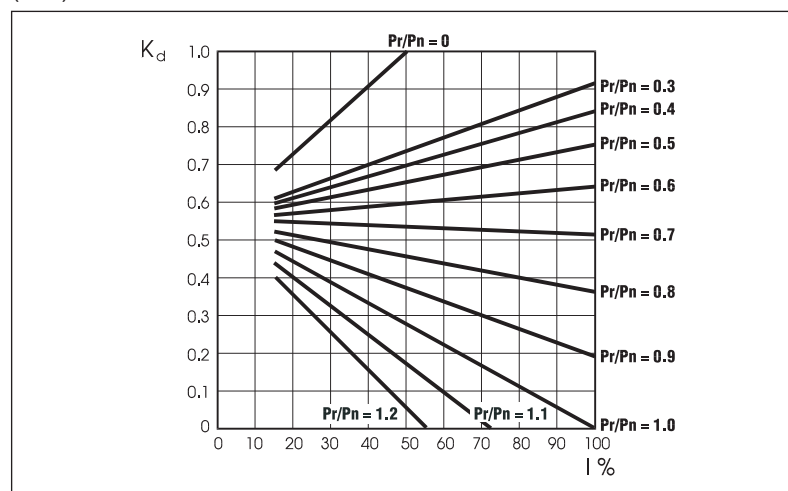
where:

$$K_J = \frac{J_m + J_c}{J_m} \quad \text{inertia factor}$$

$$K_c = \frac{T_a - T_L}{T_a} \quad \text{torque factor}$$

$$K_d = \quad \text{load factor, see the following table}$$

(F25)



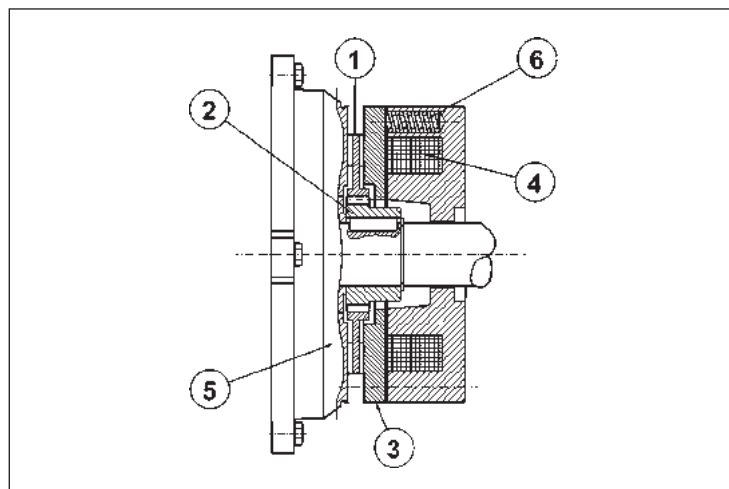
If actual starts per hour is within permitted value (Z) it may be worth checking that braking work is
compatible with brake (thermal) capacity W_{max} also given in table (F31), (F39) and dependent on
the number of switches (c/h).

M7 ASYNCHRONOUS BRAKE MOTORS

M7.1 Operation

Versions with incorporated brake use spring-applied DC (FD option) or AC (FA options) brakes. All brakes are designed to provide fail-safe operation, meaning that they are applied by spring-action in the event of power failure.

(F26)



Key:

- ① brake disc
- ② disc carrier
- ③ pressure plate
- ④ brake coil
- ⑤ motor rear shield
- ⑥ brake springs

When voltage is interrupted, pressure springs push the armature plate against the brake disc. The disc becomes trapped between the armature plate and motor shield and stops the shaft from rotation.

When the coil is energized, a magnetic field strong enough to overcome spring action attracts the armature plate, so that the brake disc – which is integral with the motor shaft – is released.

M7.2 Most significant features

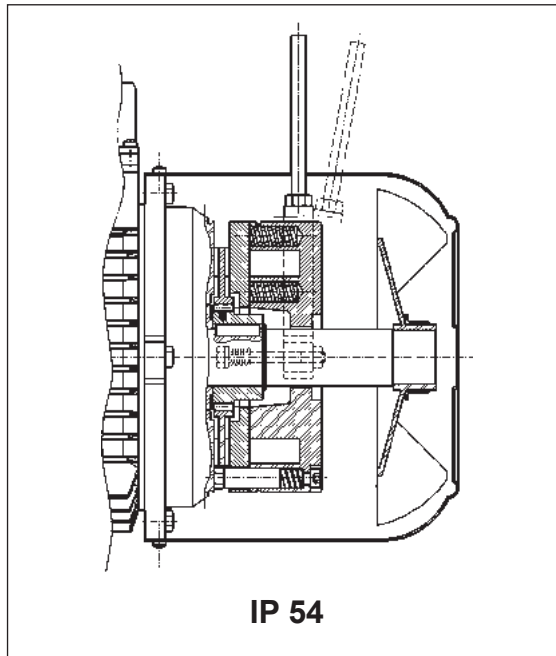
- High braking torques (normally $T_b \approx 2 T_n$), braking torque adjustment.
- Steel brake disc with double friction lining (low-wear, asbestos-free lining).
- Hexagonal seat on motor shaft fan end (N.D.E.) for manual rotation (not compatible with options PS, RC, TC, EN1, EN2, EN3, EN4, EN5, EN6).
- Manual release lever (options R and RM for BN_FD; option R for BN_FA).
- Corrosion-proof treatment on all brake surfaces.
- Insulation class F.

M8 DC BRAKE MOTORS TYPE BN_FD and M_FD

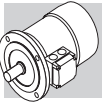
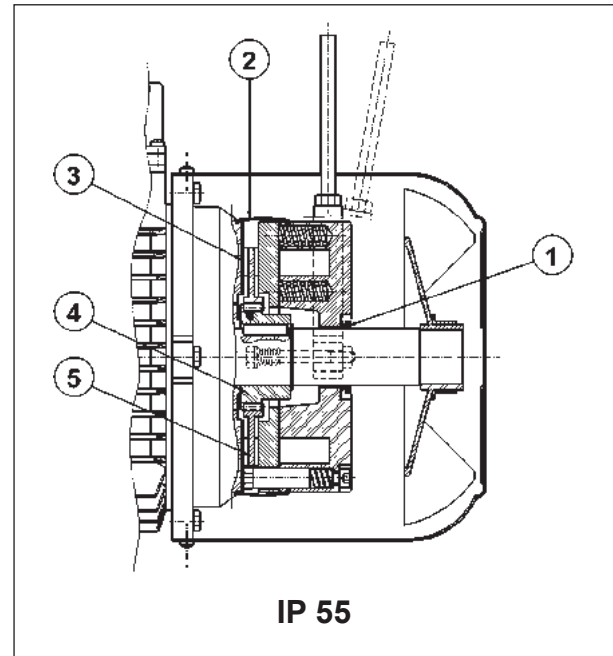
Frame sizes: BN 63 ... BN 200L / M05 ... M5

BE/ME motors may be available equipped with the FD brake, for further information please contact our Technical Department

(F27)



(F28)



Direct current toroidal-coil electromagnetic brake bolted onto motor shield. Preloading springs provide axial positioning of magnet body.

Brake disc slides axially on steel hub shrunk onto motor shaft with anti-vibration device.

Brake torque factory setting is indicated in the corresponding motor rating charts. Braking torque may be modified by changing the type and/or number of springs.

At request, motors may be equipped with manual release lever with automatic return (**R**) or system for holding brake in the released position (**RM**).

See variant at paragraph "BRAKE RELEASE SYSTEMS" for available release lever locations.

FD brakes ensure excellent dynamic performance with low noise. DC brake operating characteristics may be optimized to meet application requirements by choosing from the various rectifier/power supply and wiring connection options available.

For applications involving lifting and/or high hourly energy dissipation, contact Bonfiglioli's Technical Service.

M8.1 Degree of protection

Standard protection class is IP54.

Brake motor FD is also available in protection class **IP55**, which mandates the following variants:

- ① V-ring at N.D.E. of motor shaft
- ② dust and water-proof rubber boot
- ③ stainless steel ring placed between motor shield and brake disc
- ④ stainless steel hub
- ⑤ stainless steel brake disc

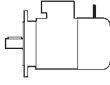
M8.2 FD brake power supply

A rectifier accommodated inside the terminal box feeds the DC brake coil. Wiring connection across rectifier and brake coil is performed at the factory.

On all single-pole motors, rectifier is connected to the motor terminal board.

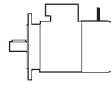
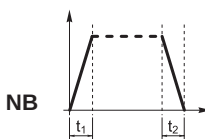
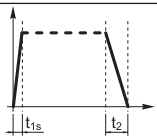
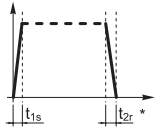
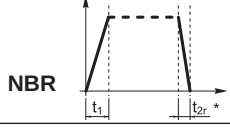
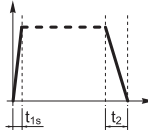
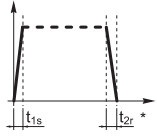
Rectifier standard power supply voltage V_B is as indicated in the following table, regardless of mains frequency:

(F29)

2, 4, 6 P			1 speed		
		BN_FD / M_FD $V_{mot} \pm 10\%$ 3 ~	$V_B \pm 10\%$ 1 ~	brake connected to terminal board power supply	separate power supply
BN 63...BN 132	M05...M4LB	230/400 V – 50 Hz	230 V	standard	specify V_B SA or V_B SD
BN 160...BN 200	M4LC...M5	400/690 V – 50 Hz	400 V	standard	specify V_B SA or V_B SD
BN 63...BN 200	M05...M5	230/400 V – 60 Hz	230 V	standard	specify V_B SA or V_B SD

The diode half-wave rectifier ($V_{DC} \approx 0,45 \times V_{AC}$) is available in versions **NB**, **SB**, **NBR** e **SBR**, as detailed in the table below:

(F30)

		brake	 standard at request	
BN 63	M05	FD 02		
BN 71	M1	FD 03 FD 53		
BN 80	M2	FD 04		
BN 90S	—	FD 14		
BN 90L	—	FD 05		
BN 100	M3	FD 15		
—		FD 55		
BN 112	—	FD 06S		
BN 132 - BN 160MR	M4	FD 56 FD 06 FD 07		
BN 160L - BN 180M	M5	FD 08		
BN 180L - BN 200M	—	FD 09		

(*) $t_{2c} < t_{2r} < t_2$

Rectifier **SB** with electronic energizing control over-energizes the electromagnet upon power-up to cut brake release response time and then switches to normal half-wave operation once the brake has been released.

Use of the **SB** rectifier is mandatory in the event of:

- high number of operations per hour
- reduced brake release response time
- brake is exposed to extreme thermal stress

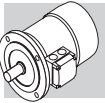
Rectifiers **NBR** or **SBR** are available for applications requiring quick brake intervention (braking condition reinstatement) response.

These rectifiers complement the **NB** and **SB** types as their electronic circuit incorporates a static switch that de-energizes the brake quickly in the event voltage is missing.

This arrangement ensures short brake release response time with no need for additional external wiring and contacts.

Optimum performance of rectifiers **NBR** and **SBR** is achieved with separate brake power supply.

Versions available: 230Vac $\pm 10\%$, 400Vac $\pm 10\%$, 50/60 Hz (with power supply); 100Vdc $\pm 10\%$, 180Vdc $\pm 10\%$ (with SD option).



M8.3 FD brake technical specifications

The table below reports the technical specifications of DC brakes FD.

(F31)

Brake	Brake torque T_b [lb·in] springs			Release		Braking		W_{max} per brake operation [lb·ft]			W [lb·ft x10 ⁶]	P [W]
	6	4	2	t_1 [ms]	t_{1s} [ms]	t_2 [ms]	t_{2c} [ms]	10 s/h	100 s/h	1000 s/h		
FD02	—	31	16	30	15	80	9	3320	1030	130	11	17
FD03	44	31	16	50	20	100	12	5160	1400	170	18	24
FD53	66	44	22	60	30	100	12					
FD04	133	89	44	80	35	140	15	7380	2290	260	22	33
FD14												
FD05	354	230	115	130	65	170	20	13300	3320	370	37	45
FD15	354	230	115	130	65	170	20					
FD55	487	328	159	—	65	170	20					
FD06S	531	354	177	—	80	220	25	14800	3540	410	52	55
FD56	—	664	328	—	90	250	20	21400	5460	590	59	65
FD06		886	443		100	250	20					
FD07	1329	886	443	—	120	200	25	29500	6860	740	96	65
FD08*	2210	1770	1510	—	140	350	30	44300	10300	1110	170	100
FD09**	3540	2660	1770	—	200	450	40	51600	11100	1250	170	120

* brake torque values obtained with 9, 7 and 6 springs, respectively

t_1 = brake release time with half-wave rectifier
 t_{1s} = brake release time with over-energizing rectifier
 t_2 = brake engagement time with AC line interruption and separate power supply

** brake torque values obtained with 12, 9 and 6 springs, respectively

t_{2c} = brake engagement time with AC and DC line interruption – Values for t_1 , t_{1s} , t_2 , t_{2c} indicated in the tab. (F30) are referred to brake set at maximum torque, medium air gap and rated voltage

W_{max} = max energy per brake operation

W = braking energy between two successive air gap adjustments

P_b = brake power absorption at 70 °F

T_b = static braking torque ($\pm 15\%$)

s/h = starts per hour

The brake pad wear depends on the operating/ambient conditions (temperature, humidity, angular speed, specific pressure); Therefore the declared wear rate must be considered as indicative.

M8.4 FD brake connections

On standard single-pole motors, the rectifier is connected to the motor terminal board at the factory. For switch-pole motors and where a separate brake power supply is required, connection to rectifier must comply with brake voltage VB stated in motor name plate.

Because the load is of the inductive type, brake control and DC line interruption must use contacts from the usage class AC-3 to IEC 60947-4-1.

Table (F32) – Brake power supply from motor terminals and AC line interruption

Delayed stop time t_2 and function of motor time constants.

Mandatory when soft-start/stops are required.

Table (F33) – Brake coil with separate power supply and AC line interruption

Normal stop time independent of motor.

Achieved stop times t_2 are indicated in the table (F31).

Table (F34) – Brake coil power supply from motor terminals and AC/DC line interruption.

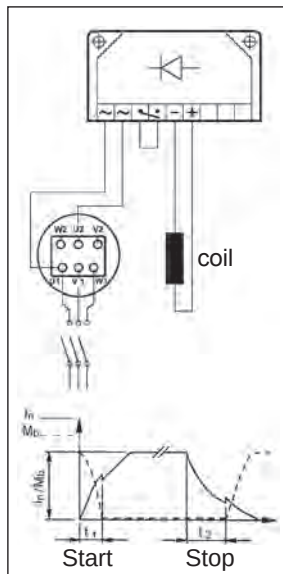
Quick stop with operation times t_{2c} as per table (F31).

Table (F35) – Brake coil with separate power supply and AC/DC line interruption.

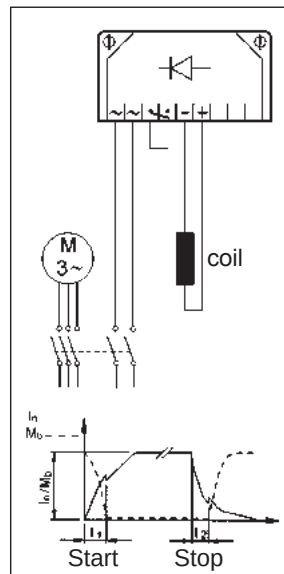
Stop time decreases by values t_{2c} indicated in the table (F31).

The brake may be voltage supplied directly from the motor terminal box (from tab. F32 to tab. F35) only if the nominal voltage of the brake is the same as the smaller voltage of the motor.

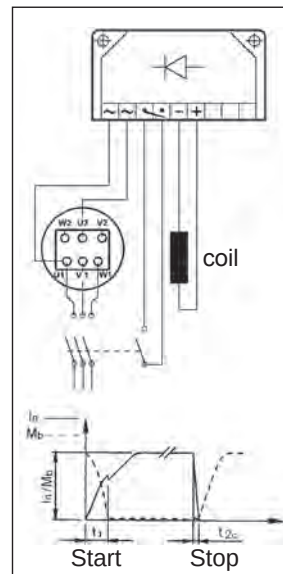
(F32)



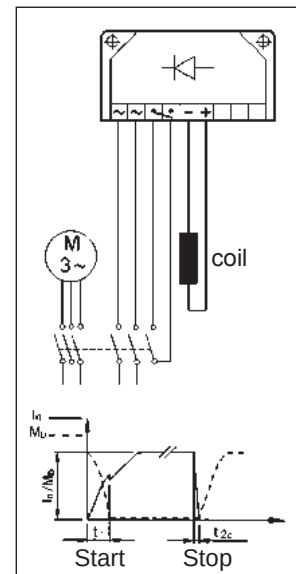
(F33)



(F34)

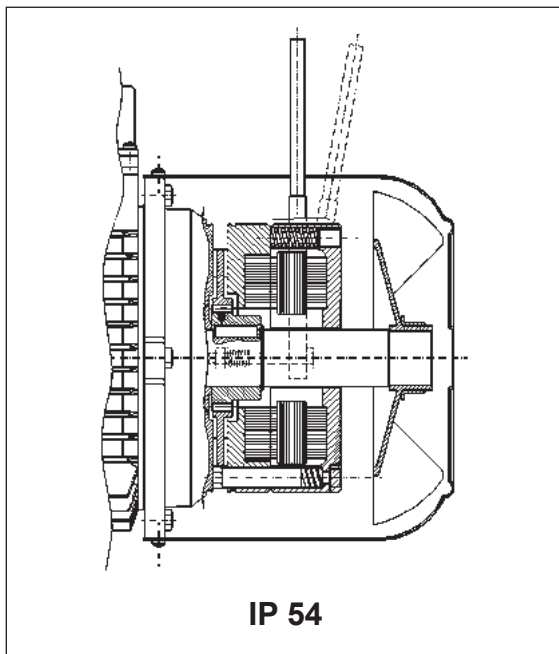


(F35)

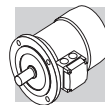
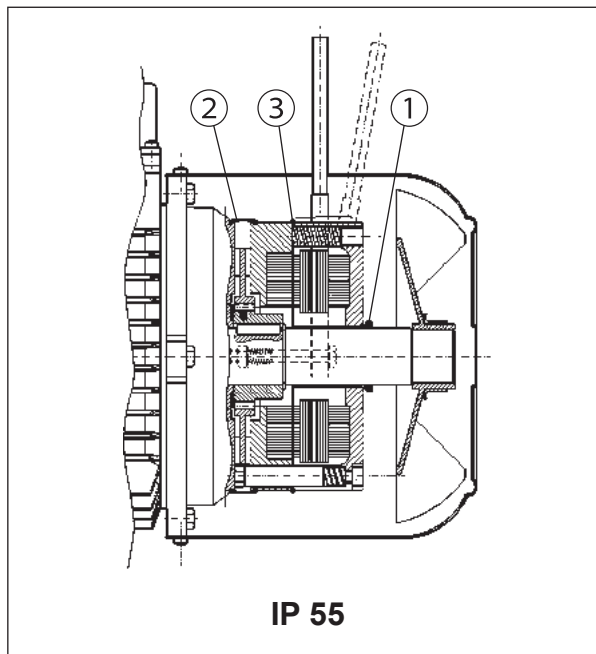


Frame sizes: BN 63 ... BN 180M / M05 ... M5

(F36)



(F37)



Electromagnetic brake operates from three-phase alternated current power supply and is bolted onto conveyor shield. Preloading springs provide axial positioning of magnet body. Steel brake disc slides axially on steel hub shrunk onto motor shaft with anti-vibration device. Brake torque factory setting is indicated in the corresponding motor rating charts. Spring preloading screws provide stepless braking torque adjustment. Torque adjustment range is $30\% T_{bMAX} < T_b < T_{bMAX}$ (where T_{bMAX} is maximum braking torque as shown in tab. (F39)). Thanks to their high dynamic characteristics, FA brakes are ideal for heavy-duty applications as well as applications requiring frequent stop/starts and very fast response time. Motors may be equipped with manual release lever with automatic return (R) at request. See variant at paragraph "BRAKE RELEASE SYSTEMS" for available release lever locations. **For applications involving lifting and/or high hourly energy dissipation, contact Bonfiglioli's Technical Service.**

M9.1 Degree of protection

Standard protection class is IP54.

Brake motor _FA is also available in protection class **IP55**, which mandates the following variants:

- ① V-ring at N.D.E. of motor shaft
- ② dust and water-proof rubber boot
- ③ O-ring

M9.2 FA brake power supply

In single speed motors, power supply is brought to the brake coil direct from the motor terminal box. As a result, brake voltage and motor voltage are the same. In this case, brake voltage indication may be omitted in the designation.

Switch-pole motors and motors with separate brake power supply feature an auxiliary terminal board with 6 terminals for connection to brake line. In both cases, brake voltage indication in the designation is mandatory.

The following table reports standard AC brake power supply ratings for single-pole motors:

(F38)

single-pole motor	BN 63...BN 132	BN 160...BN 180
	230Δ / 400Y V ±10% – 50 Hz	400Δ/ 690Y V ±10% – 50 Hz
	265Δ / 460Y ±10% - 60 Hz	460Y – 60 Hz

Unless otherwise specified, standard brake power supply is 230Δ /400Y V - 50 Hz.

Special voltages in the 24...690 V, 50-60 Hz range are available at request.

FA brakes for motors whose voltage is in ratio 2 (e.g. 230 - 460 V - 60Hz) may be only supplied separately (SA option).

M9.3 Technical specifications of FA brakes

(F39)

Brake	Brake torque T_b [lb·in]	Release t_1 [ms]	Braking t_2 [ms]	W_{max} [lb·ft]			W [lb·ft x10 ⁶]	P [VA]
				10 s/h	100 s/h	1000 s/h		
FA 02	31	4	20	3320	1030	130	11	60
FA 03	66	4	40	5160	1400	170	18	80
FA 04	133	6	60	7380	2290	260	22	110
FA 14								
FA 05	354	8	90	13300	3320	370	37	250
FA 15								
FA 06S	531	16	120	14800	3540	410	52	470
FA 06	664	16	140	21400	5460	590	59	550
FA 07	1329	16	180	29500	6860	740	96	600
FA 08	2210	20	200	44300	10300	1110	170	1200

T_b = max static braking torque (±15%)

t_1 = brake release time

t_2 = brake engagement time

W_{max} = max energy per brake operation (brake thermal capacity)

W = braking energy between two successive air gap adjustments

P_b = power drawn by brake at 20° (50 Hz)

s/h = starts per hour

NOTE

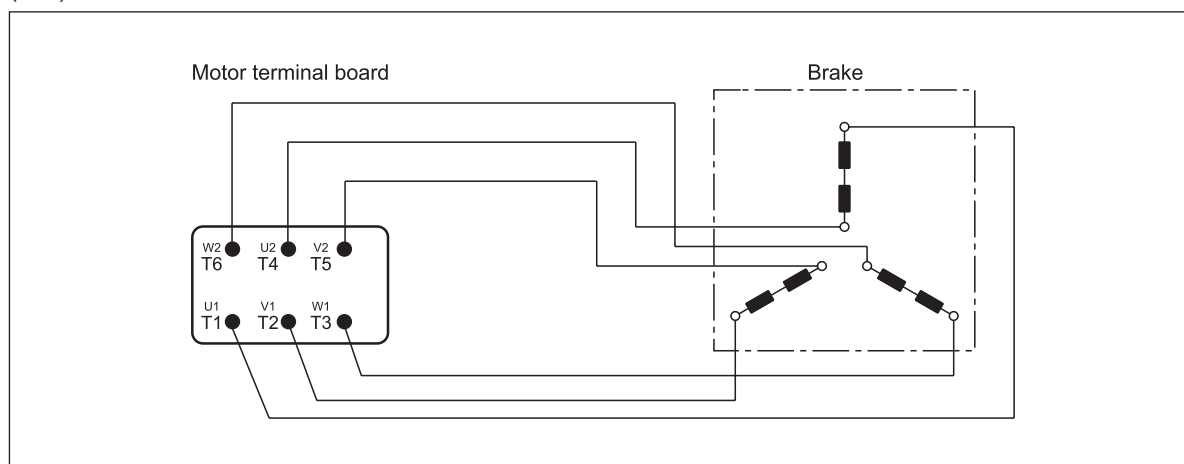
Values t_1 and t_2 in the table refer to a brake set at rated torque, medium air gap and rated voltage.

The brake pad wear depends on the operating/ambient conditions (temperature, humidity, angular speed, specific pressure); Therefore the declared wear rate must be considered as indicative.

M9.4 FA brake connections

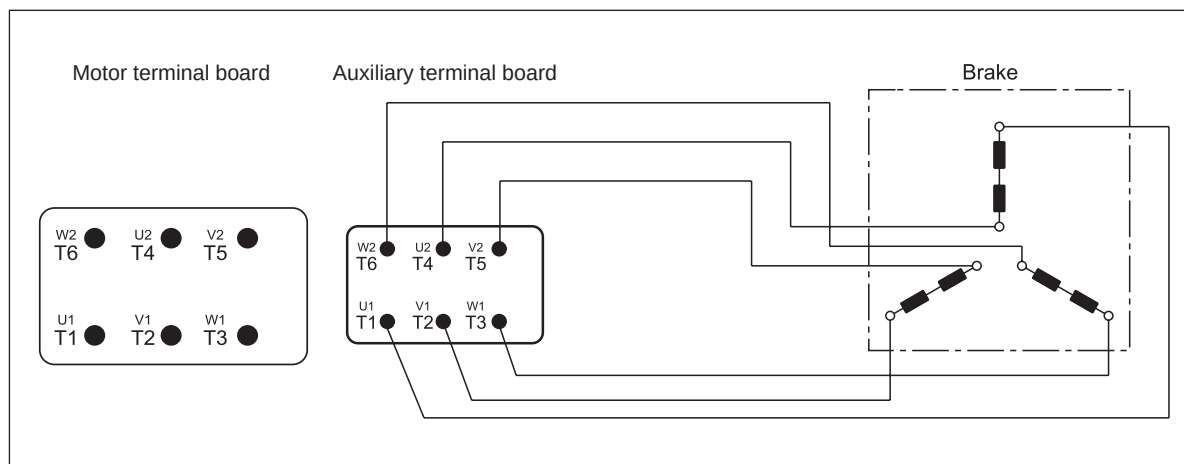
The following diagram shows the wiring when brake is connected directly to same power supply of the motor:

(F40)

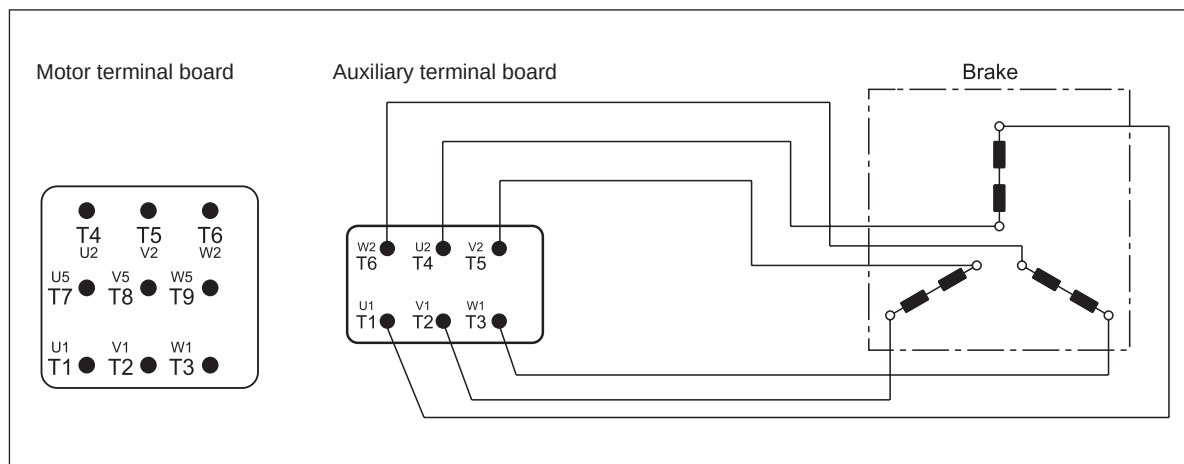


Switch-pole motors and, at request, single-pole motors with separate power supply are equipped with an auxiliary terminal board with 6 terminals for brake connection. In this version, motors feature a larger terminal box. See diagram below:

(F41)



(F42)

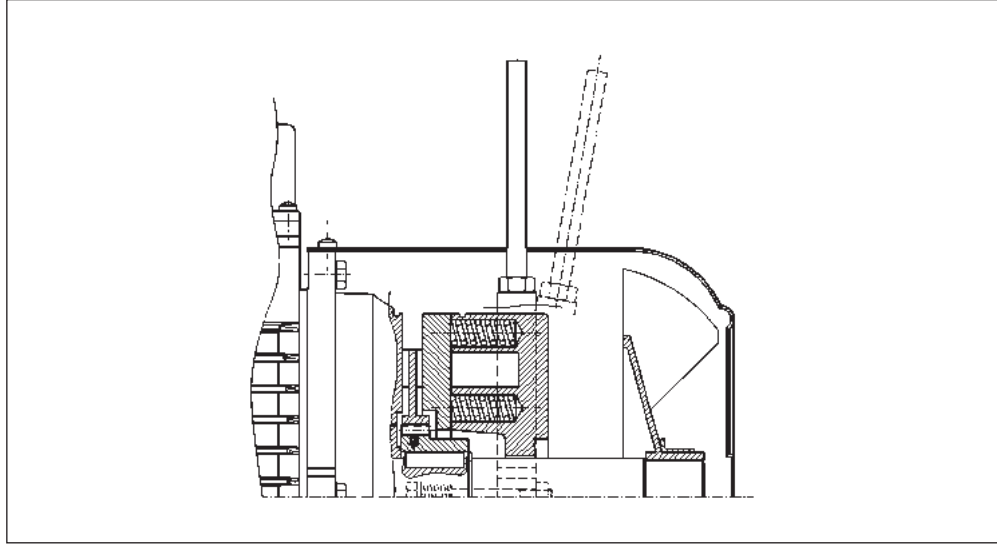


M10 BRAKE RELEASE SYSTEMS

Spring-applied brakes type FD and FA may be equipped with optional manual release devices. These are typically used for manually releasing the brake before servicing any machine or plant parts operated by the motor.

R

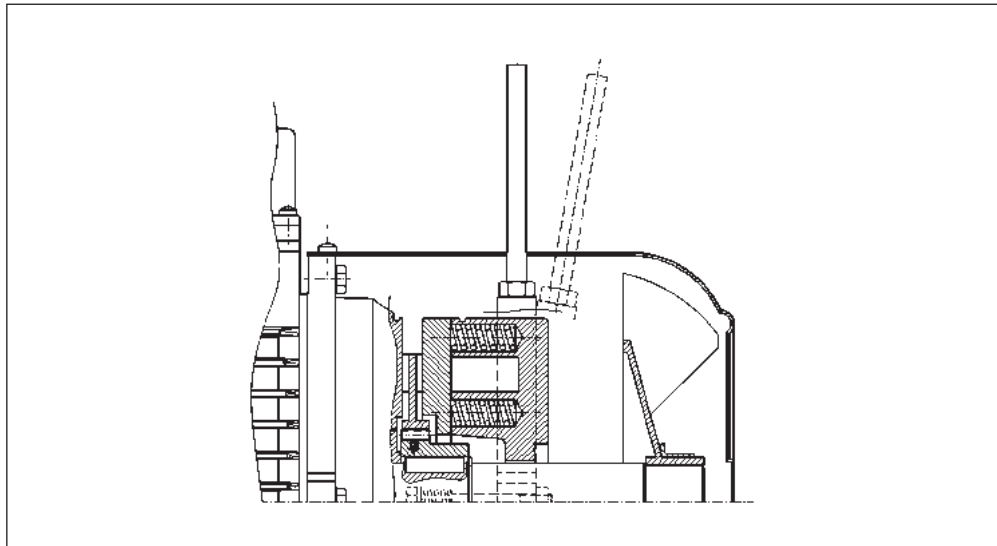
(F43)



A return spring brings the release lever back in the original position.

RM

(F44)



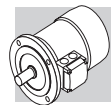
On motors type BN_FD, if the option RM is specified, the release device may be locked in the "re-release" position by tightening the lever until its end becomes engaged with a brake housing projection. The availability for the various disengagement devices is charted here below:

(F45)

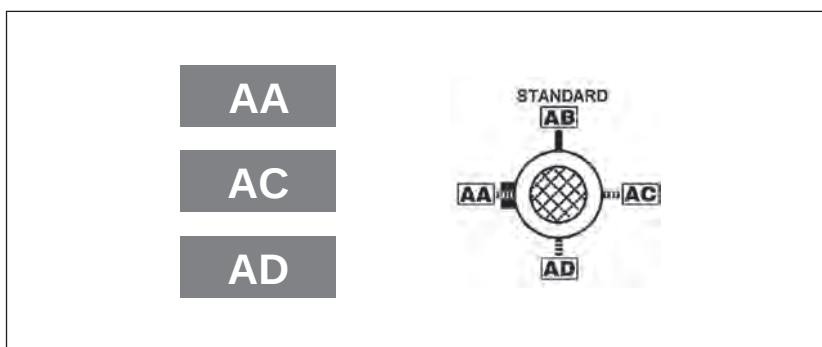
	R	RM
BN_FD	BN 63...BN 200	BN 63 ... BN 132 FD07
BN_FA	BN 63...BN 180M	

M10.1 Release lever orientation

Unless otherwise specified, the release lever is located 90° away from the terminal box – identified by letters [AB] in the diagram below – in a clockwise direction on both options **R** and **RM**. Alternative lever positions [AA], [AC] and [AD] are also possible when the corresponding option is specified:



(F46)



M11 OPTIONS

M11.1 Soft-start / stop

F1

An optional flywheel - option F1 - is available for applications requiring soft starting or stopping. The flywheel's added inertia uses up kinetic energy during starting and returns it back during braking, thus catering for more progressive and gradual shock loads. The optional flywheel is available for brake motors type BN_FD with specific characteristics as detailed in the table below:

(F47)

Main data for flywheel of motore type: BN_FD, M_FD			
		Fly-wheel weight [lbs]	Fly-wheel inertia [lb·ft²] x 10 ⁻⁵
BN 63	M05	0.31	2.7
BN 71	M1	0.51	5.7
BN 80	M2	0.76	11.4
BN 90 S - BN 90 L	–	1.14	22.3
BN 100	M3	1.58	35.4
BN 112	–	2.19	62.4
BN 132 S - BN 132 M	M4	2.81	108.6

M11.2 Capacitive filter

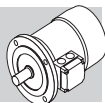
CF

An optional capacitive filter is available for DC brake motors type BN_FD only. When the suitable capacitive filter is installed upstream of the rectifier (option CF), motors comply with the emission limits required by standard EN61000-6-3:2007 "Electromagnetic Compatibility – Generic Emission Standard – Part 6-3: Residential, commercial and light industrial environment".

M11.3 Thermal protective devices

In addition to the standard protection provided by the magneto-thermal device, motors can be supplied with built-in thermal probes to protect the winding against overheating caused, by insufficient ventilation or by an intermittent duty.

This additional protection should always be specified for servoventilated motors (IC416).



M11.4 Thermistors

E3

These are semi-conductors having rapid resistance variation when they are close to the rated switch off temperature 302 °F (150 °C). Variations of the $R = f(T)$ characteristic are specified under DIN 44081, IEC 34-11 Standards. Positive temperature coefficient thermistors are normally used (also known as PTC "cold conductor resistors"). Thermistors cannot control relays directly and must be connected to a suitable disconnect device. Thus protected, three PTCs connected in series are installed in the winding, the terminals of which are located on the auxiliary terminal-board.

K1

The design characteristics of this sub-group of PTC thermistors allow them to be used as positive temperature coefficient sensors with variable resistance.

Functioning temperature range: 32 °F ... +500 °F (0°C ... +260°C).

Thermistors cannot control relays directly and must be connected to a suitable disconnect device. Terminals (polarised) for 1 x KTY 84-130 are provided on an auxiliary terminal strip.

M11.5 Bimetallic thermostates

D3

These types of protective devices house a bimetal disk. When the rated switch off temperature 302 °F (150 °C) is reached, the disk switches the contacts from their initial rest position.

As temperature falls, the disk and the contacts automatically return to rest position.

Three bimetallic thermostates connected in series are usually employed, with normally closed contacts. The terminals are located on an auxiliary terminal-board.

M11.6 Plug connector

CON

Three types of connectors (CON 1, CON 2, CON 3) are provided; they can be mounted in two different positions: right side of terminal box cover (C1D, C2D, C3D); left side of terminal box cover (C1S, C2S, C3S).

The option CON is applicable to single speed BN and M motors (2, 4, 6, 8 poles), and BE and ME motors on the sizes specified on the following table. All double speed motors are excluded.

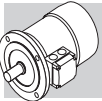
The connectors CON 1 / CON 2 are available for BE/ME and BN/M motors without brake and for BN brakemotors equipped with DC brake type FD, for the motor sizes listed below.

The male connector (with pins) is mounted on the motor, the female connector is not provided. With CON option, the winding connection is always Y.

With options EN1...EN6, the encoder connection is made by a cable not connected to the motor plug connector.

The CON option is not applicable to brakemotors equipped with AC brake type FA.

The CON option is not available when at least one of the next options are selected: CUS, IC (for more details, refer to the Bonfiglioli Technical Department).

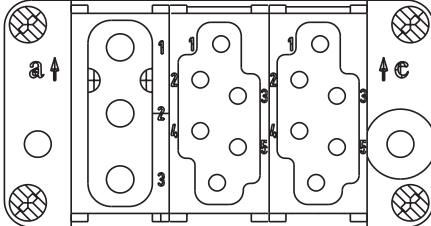


Specifications

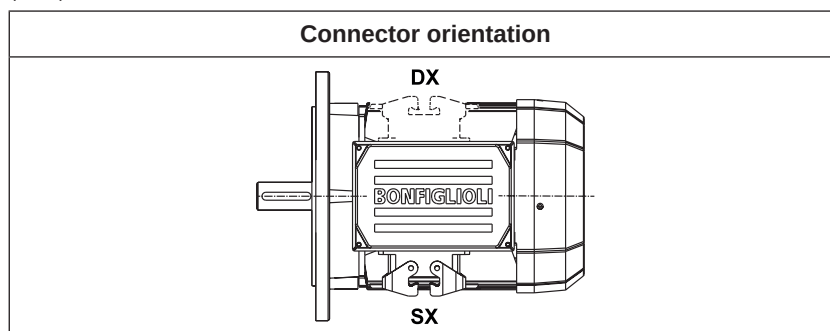
(F48)	Option	CON 1
	Motor size	BE 80 ... BE 112 / ME2, ME3 / BN 63 ... BN 112 / M05 ... M3
	Connector view	
	Type of connector	Harting Han 10ES
	Housing	Han EMC 10B with 2 levers
	Numbers of pins - nominal current	10 x 16A
	Voltage	500 Vac
	Contact connection	Screw terminals

(F49)	Option	CON 2
	Motor size	BE 80 ... BE 132M / ME2 ... ME4 / BN 63 ... BN 132M / M05 ... M4L
	Connector view	
	Type of connector	Harting Han Modular
	Housing	Han EMC 10B with 2 levers
	Module type	Module C + Module E + Module E
	Numbers of pins - nominal current	3 x 36A / 6 x 16A
	Voltage	500 Vac
	Contact connection	Crimping contacts

(F50)

Option	CON 3
Motor size	BN 63 ... BN 132M / M05 ... M4
Connector view	
Type of connector	Harting Han Modular
Housing	Han EMC 10B with 2 levers
Module type	Module C + Module E + Module E
Numbers of pins - nominal current	3 x 36A / 6 + 6 x 16A
Voltage	500 Vac
Contact connection	Crimping contacts

(F51)

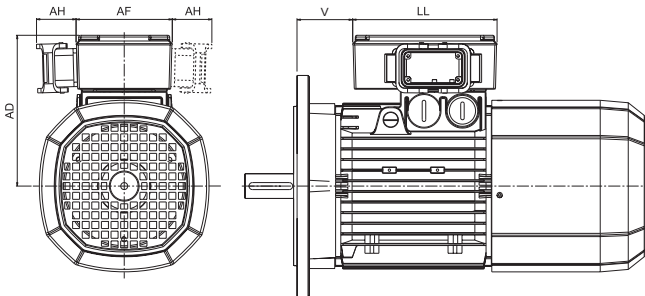
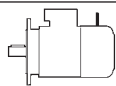


(F52)

Motors without brake dimensions						
		AD (mm)	AF (mm)	AH (mm)	LL (mm)	V ^(*) (mm)
BN 63	M05	136	110	45	165	4.5
BN 71	M1	149	110	45	165	15.5
BE 80 - BN 80	ME2 - M2	160	110	45	165	16.5
BE 90 - BN 90	—	162	110	45	165	31.5
BE 100 - BN 100	ME3 - M3	171	110	45	165	37.5
BE 112 - BN 112	—	186	110	45	165	39
BE 132 - BN 132	ME4 - M4	210	140	45	188	45.5
BN 160MR	—	210	140	45	188	161

(*) Dimension valid only for motors BE and BN.

(F53)

Motors with FD brake dimensions						
						
		AD (mm)	AF (mm)	AH (mm)	LL (mm)	V(*) (mm)
BN63	M05	136	110	45	165	4.5
BN71	M1	149	110	45	165	1.5
BN80	M2	160	110	45	165	18.5
BN90	—	162	110	45	165	39.5
BN100	M3	171	110	45	165	63.5
BN112	—	186	110	45	165	75
BN132	M4	210	140	45	188	122
BN160MR	—	210	140	45	188	161

(*) Dimension valid only for motors BN.

M11.7 Control of brake operation

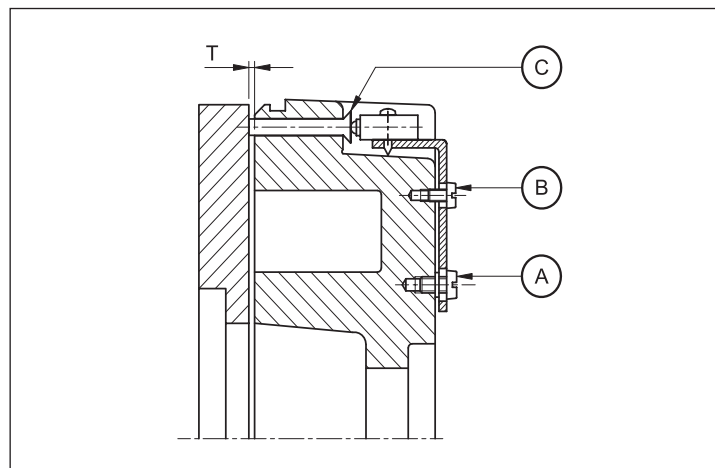
MSW

The microswitch can be set in order to obtain from it a signal related to the attraction/release of anchor plate, or it can be set in order to give feedback when the air gap reaches the maximum value.

MSW option is available for brakes FD03...FD09.

The microswitch is provided with three lead wires (NC, NO, COM). The next figure shown the main components of the brake equipped with microswitch.

(F54)



A: Plate fixing screws

B: Setting screws

C: Actuator control pin

M11.8 Additional cable entry for brakemotors

IC

The terminal box cover of brakemotors BN63...BN160MR / M05...M4 is provided with two additional cable entry M16 x 1.5 (one cable entry per side).

The terminal box cover of brakemotors BN160...BN200 / M5 is provided with an additional cable entry M16 x 1.5 next to the cable entry used for the brake.

M11.9 Anti-condensation heaters

H1

NH1

Where an application involves high humidity or extreme temperature fluctuation, motors may be equipped with an anti-condensate heater. A single-phase power supply is available in the auxiliary terminal board inside the main terminal box. Values for the absorbed power are listed here below:

(F55)

	H1	NH1
	1~ 230V ± 10% P [W]	1~ 115V ± 10% P [W]
BE 80 BN 56 ... BN 80	10	10
BE 90 ... BE 132MB BN 90 ... BN 160MR	25	25
BE 160, BE 180 BN 160, BN 200	50	50

Warning!

Always remove power supply to the anti-condensate heater before operating the motor.

M11.10 Tropicalization

TP

When option **TP** is specified, motor windings receive additional protection for operation in high humidity and temperature conditions.

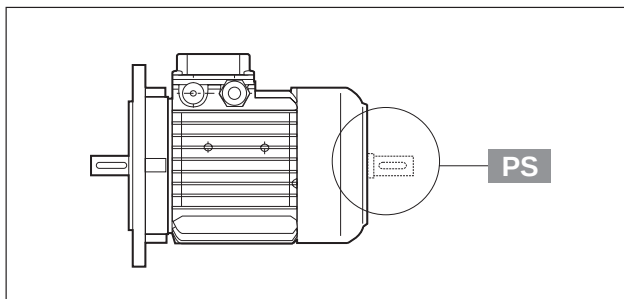
M11.11 Second shaft extension

PS

This option is not compatible with variants RC, TC, EN1, EN2, EN3, EN4, EN5, EN6.

For shaft dimensions please see motor dimensions tables.

(F56)

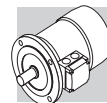


M11.12 Backstop device

AL

AR

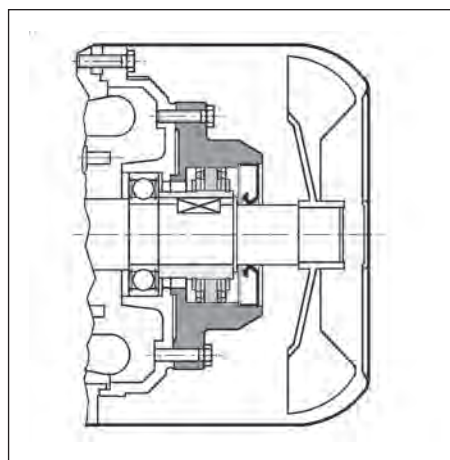
For applications where backdriving must be avoided, motors equipped with an anti run-back device can be used (available for the ME and M series only). While allowing rotation in the direction required, this device operates instantaneously in case of a power failure, preventing the shaft from running back. The anti run-back device is life lubricated with special grease for this specific application. When ordering, customers should indicate the required rotation direction, AL or AR. Never use the anti run-back device to prevent reverse rotation caused by faulty electrical connection. Table (F57) shows rated and maximum locking torques for the anti run-back devices. A diagram of the device can be seen in Table (F58). Overall dimensions are same as the corresponding brake motor. The direction of free rotation is described in the "MOTOR OPTIONS" section of specifically dedicated sections to gear units.



(F57)

	Rated locking torque [lb·in]	Max. locking torque [lb·in]	Release speed [rpm]
M1	53	90	750
ME2 M2	140	240	650
ME3 M3	480	815	520
ME4 M4	970	1815	430

(F58)



M11.13 Rotor balancing

RV

Where low noise is a priority requirement, the option RV ensures reduced vibration in accordance with vibration class B.

The table below reports effective velocity of vibration for normal (A) and B grade balancing.

Values are obtained from measurements on freely suspended motor during no-load operation; tolerance $\pm 10\%$.

(F59)

Vibration level	Angular velocity n [rpm]	Limits of the vibration velocity (mm/s) BE 80 ≤ H ≤ BE 180L BN 56 ≤ H ≤ BN 200
A	600 < n < 3600	1.6
B	600 < n < 3600	0.70

M11.14 Rain canopy

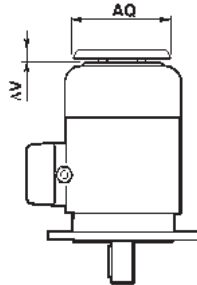
RC

The rain canopy protects the motor from dripping and avoids the ingress of solid bodies. It is recommended when motor is installed in a vertical position with the shaft downwards.

Relevant dimensions are indicated in the table below.

The drip cover is not compatible with variants PS, EN1, EN2, EN3, EN4, EN5, EN6.

(F60)

		AQ [mm / inch]	ΔV [mm / inch]	
BN 63	M05	118 / 4.646	24 / 0.945	
BN 71	M1	134 / 5.276	27 / 1.063	
BE 80 BN 80	ME2 M2	152 / 5.984	25 / 0.984	
BE 90 BN 90	—	168 / 6.614	30 / 1.181	
BE 100 BN 100	ME3 M3	190 / 7.480	28 / 1.102	
BE 112 BN 112	—	211 / 8.307	32 / 1.260	
BE 132 BN 132...BN 160MR	ME4 M4	254 / 10.000	32 / 1.260	
BE 160 BN 160M...BN 180M	ME5 M5	302 / 11.890	36 / 1.417	
BE 180 BN 180L...BN 200L	—	340 / 13.386	36 / 1.417	

M11.15 Textile canopy

TC

Option TC is a cover variant for textile industry environments, where lint may obstruct the fan grid and prevent a regular flow of cooling air.

This option is not compatible with variants EN1, EN2, EN3, EN4, EN5, EN6, PS.

Overall dimensions are the same as drip cover type RC.

M11.16 Feedback units

Motors may be combined with six different types of encoders to achieve feedback circuits.

Configurations with double-extended shaft (PS) and rain canopy (RC, TC) are not compatible with encoder installation.

EN1

Incremental encoder, $V_{IN} = 5\text{ V}$, line-driver output RS 422.

EN2

Incremental encoder, $V_{IN} = 10-30 \text{ V}$, line-driver output RS 422.

EN3

Incremental encoder, $V_{IN} = 12-30 \text{ V}$, push-pull output 12-30 V

EN4

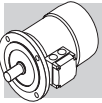
Encoder sin/cos, $V_{IN} = 4.5-5.5 \text{ V}$, output Sinus $0.5V_{PP}$.

EN5

Absolute encoder singleturn, HIPERFACE® interface, $V_{IN} = 7-12 \text{ V}$.

EN6

Absolute encoder multiturn, HIPERFACE® interface, $V_{IN} = 7-12 \text{ V}$.



(F61)

	EN1	EN2	EN3	EN4	EN5	EN6
Interface	TTL/RS 422	TTL/RS 422	HTL/push-pull	Sinus 0.5 VPP	HIPERFACE®	HIPERFACE®
Power supply voltage [V]	4...6	10...30	12...30	4.4...5.5	7...12	7...12
Output voltage [V]	5	5	12...30	—	—	—
No-load operating current [mA]	120	100	100	40	80	80
No. of pulses per revolution	1024					
Steps per revolution	—	—	—	—	15 bit	15 bit
Revolutions	—	—	—	—	—	12 bit
No. of signals	6 (A, B, Z + inverted signals)			6 (cos-, cos+, sin-, sin+, Z, Z)	—	—
Max. output frequency [kHz]	600			200		
Max. speed [rpm]	6000 (9000 rpm for 10 s)					
Temperature range [°F]	-20 ... +210					
Protection class	IP 65					

(F62)

EN1, EN2, EN3, EN4, EN5, EN6			
		A	B
		[mm / inch]	[mm / inch]
BE 80 ... BE 180L	ME2S ... ME5L	65 / 2.559	59 / 2.323
BN 63 ... BN 200L	M05 ... M5		
BN 63_FD ... BN 200L_FD	M05_FD ... M5_FD		
BN 63_FA ... BN 200L_FA	M05_FA ... M5_FA		

M11.17 Surface protection

C_

When no specific protection class is requested, the painted (ferrous) surfaces of motors are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, motors can be delivered with C3 and C4 surface protection.

(F63)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C [248 F°]	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C [248 F°]	C4

Motors with optional protection to class C3 or C4 are available in a choice of colours. If no specific colour is requested (see the “PAINTING” option) motors are finished in RAL 7042.

Motors can also be supplied with surface protection for corrosivity class C5 according to UNI EN ISO 12944-2. Contact our Technical Service for further details.

M11.18 Painting

RAL

Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(F64)

PAINTING	Colour	RAL number
RAL7042*	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010

* Gearboxes are supplied in this standard colour if no other colour is specified.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.

M11.19 Certificates

ACM

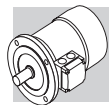
Certificate of compliance of motors

The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

CC

Inspection certificate

The document entails checking on order compliance, the visual inspection of external conditions and instrumental testing of the electrical characteristics in unloaded conditions. Units inspected are sampled within the shipping batch and marked individually.



M12 MOTOR RATING CHARTS BE-ME

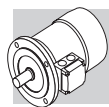
4 P	1800 rpm - S1												60 Hz - IE2		
-----	---------------	--	--	--	--	--	--	--	--	--	--	--	-------------	--	--

P _n			n	T _n	In 460V	η%			cos φ	$\frac{I_s}{I_n}$	$\frac{T_s}{T_n}$	$\frac{T_a}{T_n}$	KVA Code	J _m	IM B5		
HP	kW					rpm	lb·in	A							100%	75%	50%
1	0.75	BE 80B	4	1745	36.3	1.46	82.5	81.1	77.6	0.78	7.6	3.5	3.2	K	0.0664	12.2	27
1.5	1.1	BE 90S	4	1740	53	2.25	84	82.7	79	0.73	7.7	3.5	3.2	L	0.0664	13.6	30
2	1.5	BE 90LA	4	1740	73	3.1	84.5	83.9	80.7	0.73	7.1	3.6	3.4	K	0.0807	15.1	33
3	2.2	BE 100LA	4	1745	106	4.2	87.5	85.5	83.2	0.76	7	3.3	2.9	J	0.1281	22	49
4	3	BE 100LB	4	1735	146	5.9	87.5	87.7	86.3	0.76	7	3.2	2.9	K	0.1448	24	53
5	3.7	BE 112M	4	1750	177	6.6	87.5	87.5	86.1	0.8	7.8	3.3	3.2	K	0.2492	32	71
7.5	5.5	BE 132S	4	1760	266	9.3	89.5	89.5	87.7	0.83	8.7	3.5	3.5	K	0.6407	53	117
10	7.5	BE 132MA	4	1760	363	12.7	89.5	89.5	87.9	0.83	8	3.4	3.3	K	0.7570	59	130
12.5	9.2	BE 132MB	4	1760	443	15.6	90	90	88.6	0.82	8.3	3.5	3.6	K	0.8543	70	154
15	11	BE 160M	4	1765	531	18.7	91	91	90	0.81	7.7	2.9	2.8	J	1.5425	99	218
20	15	BE 160L	4	1770	717	25.5	91	90.5	89.5	0.81	7.1	3.1	2.7	J	1.8747	115	254
25	18.5	BE 180M	4	1765	885	30.3	92.4	91.9	90.5	0.83	7.3	2.7	2.5	H	2.9663	135	298
30	22	BE 180L	4	1770	1053	36	92.4	92.5	92.2	0.83	8.1	3.3	3.2	J	3.9155	157	346

4 P	1800 rpm - S1												60 Hz - IE2		
-----	---------------	--	--	--	--	--	--	--	--	--	--	--	-------------	--	--

P _n			n	T _n	In 460V	η%			cos φ	$\frac{I_s}{I_n}$	$\frac{T_s}{T_n}$	$\frac{T_a}{T_n}$	KVA Code	J _m	IM B5		
HP	kW					rpm	lb·in	A							100%	75%	50%
1	0.75	ME 2SB	4	1745	36.3	1.46	82.5	81.1	77.6	0.78	7.6	3.5	3.2	K	0.0664	10.9	24
1.5	1.1	ME 3SA	4	1740	53	2.25	84	82.5	80.5	0.73	6	2.9	2.7	J	0.0807	15.5	34
2	1.5	ME 3SB	4	1740	73	3.3	84.5	84	83	0.71	6.3	3.1	2.9	K	0.0949	17	37
3	2.2	ME 3LA	4	1745	106	4.2	87.5	85.5	83.2	0.76	7	3.3	2.9	J	0.1281	21	46
4	3	ME 3LB	4	1735	146	5.9	87.5	87.7	86.3	0.76	7	3.2	2.9	K	0.1448	23	51
5	3.7	ME 4SA	4	1740	177	6.7	87.5	85.6	82.9	0.79	7	3.3	2.9	J	0.5055	42	93
7.5	5.5	ME 4SB	4	1760	266	9.3	89.5	89.5	87.7	0.83	8.7	3.5	3.5	K	0.6407	51	112
10	7.5	ME 4LA	4	1760	363	12.7	89.5	89.5	87.9	0.83	8	3.4	3.3	K	0.7570	57	126
12.5	9.2	ME 4LB	4	1760	443	15.6	90	90	88.6	0.82	8.3	3.5	3.6	K	0.8543	65	143
15	11	ME 5SA	4	1765	531	18.7	91	91	90	0.81	7.7	2.9	2.8	J	1.5425	85	187
20	15	ME 5LA	4	1770	717	25.5	91	90.5	89.5	0.81	7.1	3.1	2.7	J	1.8747	101	223

2 P		3000 rpm - S1													50 Hz - IE2		
P _n			n	T _n	In 400V	η%			cos φ	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m	IM B5		
HP	kW		rpm	lb·in	A	100%	75%	50%						lb·ft²	 Kg	 lbs	
1	0.75	BE 80A	2	2860	22.1	1.65	80	79.6	76.4	0.83	6.8	3.8	3.5	J	0.0214	9.5	21
1.5	1.1	BE 80B	2	2845	32.7	2.35	81.5	82.2	79.9	0.83	6.9	3.8	3.1	J	0.0271	11.3	25
2	1.5	BE 90SA	2	2865	44.3	3.2	81.3	80.7	78.1	0.82	6.8	3.6	2.8	J	0.0297	12.3	27
3	2.2	BE 90L	2	2870	65	4.7	83.2	83.1	80.8	0.82	6.9	3.1	2.9	J	0.0396	14	31
4	3	BE 100L	2	2880	88	6.2	84.6	84.6	83.7	0.83	7.3	3.5	3.1	J	0.0925	23	51
5.5	4	BE 112M	2	2920	116	8.2	85.8	85.5	84.3	0.82	7.9	3.5	3.1	K	0.1353	28	62
7.5	5.5	BE 132SA	2	2925	159	10.6	87	85	81.7	0.86	8.5	3.6	3.3	K	0.3441	42	93
10	7.5	BE 132SB	2	2935	212	14.3	88.1	87.4	84.7	0.86	8.8	3.9	3.6	K	0.4224	53	117
12.5	9.2	BE 132MB	2	2920	266	16.4	88.8	86.5	84.2	0.91	8.4	3.7	3.3	J	0.4983	65	143
15	11	BE 160MA	2	2940	319	20	89.4	89.5	88	0.89	8.1	3	2.9	J	0.8068	84	185
20	15	BE 160MB	2	2950	434	27.2	90.5	90.5	89.5	0.88	8.5	3	2.8	K	0.9967	97	214
25	18.5	BE 160L	2	2945	531	32	90.9	90.5	89.8	0.91	7.7	2.9	2.7	H	1.1628	109	240



BE-ME

4 P		1500 rpm - S1													50 Hz - IE2					
P _n			n	T _n	I _n 400V	η%			cos φ	I _s	T _s	T _a	KVA Code	J _m	IM B5					
HP	kW					rpm	lb·in	A		100%	75%	50%			I _n	T _n	T _n	lb·ft²	 Kg	 lbs
1	0.75	BE 80B	4	1430	44.3	1.65	81	80.5	78	0.81	6.1	3.2	3	H	0.0664	12.2	27			
1.5	1.1	BE 90S	4	1430	65	2.53	82.5	82	79.5	0.76	6.3	2.9	2.8	J	0.0664	13.6	30			
2	1.5	BE 90LA	4	1430	89	3.5	83.5	83	80	0.74	5.9	3.1	3	J	0.0807	15.1	33			
3	2.2	BE 100LA	4	1430	130	4.9	85.4	85	84	0.76	5.8	3	2.8	H	0.1281	22	49			
4	3	BE 100LB	4	1420	177	6.6	85.5	86	85.5	0.77	5.9	2.8	2.6	H	0.1448	24	53			
5.5	4	BE 112M	4	1440	239	8.3	87	87	86	0.8	6.5	2.8	2.8	H	0.2492	32	71			
7.5	5.5	BE 132S	4	1460	319	11.1	88.5	88.5	87.5	0.81	7.3	2.9	2.9	J	0.6407	53	117			
10	7.5	BE 132MA	4	1460	434	14.8	89	89	88.5	0.82	6.9	2.9	2.8	H	0.7570	59	130			
12.5	9.2	BE 132MB	4	1460	531	18.1	89.5	89.5	88.5	0.82	6.9	2.9	3	H	0.8543	70	154			
15	11	BE 160M	4	1465	637	21.5	91	91.3	90.5	0.81	6.5	2.8	2.6	H	1.5425	99	218			
20	15	BE 160L	4	1465	867	28.7	90.8	91	90.5	0.83	6.5	2.6	2.3	H	1.8747	115	254			
25	18.5	BE 180M	4	1465	1071	35	91.6	92	91.3	0.83	6.5	2.6	2.5	H	2.9663	135	298			
30	22	BE 180L	4	1465	1266	41	91.6	91.8	91.4	0.84	6.8	2.7	2.6	H	3.9155	157	346			

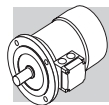
6 P	1000 rpm - S1	50 Hz - IE2
-----	---------------	-------------

P _n			n	T _n	In 400V	η%			cos φ	$\frac{I_s}{I_n}$	$\frac{T_s}{T_n}$	$\frac{T_a}{T_n}$	KVA Code	J _m	IM B5	
HP	kW		rpm	lb·in	A	100%	75%	50%						lb·ft²	 Kg	 lbs
1	0.75	BE 90S 6	935	68	2.06	75.9	75.9	73	0.69	5.1	3.1	2.9	J	0.0783	15	33
1.5	1.1	BE 100M 6 (*)	945	98	2.75	78.1	76.2	73	0.74	4.9	2.2	1.9	G	0.1946	22	49
2	1.5	BE 100LA 6	945	135	3.9	79.8	77.5	74	0.72	5.6	2.5	2.3	J	0.2254	24	53
3	2.2	BE 112M 6	950	195	5.2	81.8	81.8	79.3	0.74	5.2	2.6	2.3	G	0.3987	32	71
4	3	BE 132S 6	955	266	6.6	83.3	83.3	82.4	0.79	6.1	2.1	1.9	H	0.7000	44	97
5.5	4	BE 132MA 6	965	354	8.7	84.6	85	83.1	0.79	6.9	2.2	2	J	0.9089	56	123
7.5	5.5	BE 160MA 6 (*)	965	478	11.6	87	87	86.4	0.79	6.6	2.5	2.3	H	1.7561	83	183
10	7.5	BE 160MB 6 (*)	965	655	15	88	88	87.2	0.82	6.6	2.3	2.1	H	2.3019	103	227

(*) Power /size relation not standardized

BE-ME

2 P		3000 rpm - S1												50 Hz - IE2						
P _n			n	T _n	In 400V	η%			cos φ	I _s	T _s	T _a	KVA Code	J _m	IM B9					
HP	kW					rpm	lb·in	A		100%	75%	50%			I _n	T _n	T _n	lb·ft²		
1	0.75	ME 2SA	2	2860	22	1.63	80	79.6	76.4	0.83	6.8	3.8	3.5	J	0.0214	8.8	19			
1.5	1.1	ME 2SB	2	2845	33	2.35	81.5	82.2	79.9	0.83	6.9	3.8	3.1	J	0.0271	10.6	23			
2	1.5	ME 3SA	2	2845	44	3.2	81.3	79	76	0.84	6.1	2.9	2.7	H	0.0570	15.5	34			
3	2.2	ME 3LA	2	2895	65	4.8	83.2	83.2	81.5	0.8	6.3	2.7	2.5	H	0.0736	18.7	41			
4	3	ME 3LB	2	2880	88	6.2	84.6	84.6	83.7	0.83	7.3	3.5	3.1	J	0.0925	22	49			
5.5	4	ME 4SA	2	2900	117	7.8	85.8	84.5	82.2	0.87	7	2.9	2.8	H	0.2397	33	73			
7.5	5.5	ME 4SB	2	2925	159	10.6	87	85	81.7	0.86	8.5	3.6	3.3	K	0.3441	40	88			
10	7.5	ME 4LA	2	2935	212	14.3	88.1	87.4	84.7	0.86	8.8	3.9	3.6	K	0.4224	51	112			
12.5	9.2	ME 4LB	2	2920	266	16.4	88.8	86.5	84.2	0.91	8.4	3.7	3.3	J	0.4983	60	132			
15	11	ME 5SA	2	2940	319	20	89.4	89.5	88	0.89	8.1	3	2.9	J	0.8068	70	154			
20	15	ME 5SB	2	2950	434	27.2	90.5	90.5	89.5	0.88	8.5	3	2.8	K	0.9967	83	183			
25	18.5	ME 5LA	2	2945	531	32	90.9	90.5	89.8	0.91	7.7	2.9	2.7	H	1.1628	95	209			



BE-ME

4 P		1500 rpm - S1													50 Hz - IE2		
P _n			n	T _n	In 400V	η%			cos φ	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m	IM B9		
HP	kW		rpm	lb·in	A	100%	75%	50%						lb·ft²			
1	0.75	ME 2SB	4	1430	44	1.65	81	80.5	78	0.81	6.1	3.2	3	H	0.0664	10.9	24
1.5	1.1	ME 3SA	4	1430	65	2.6	82.5	82	79	0.74	5.5	2.5	2.8	H	0.0807	15.5	34
2	1.5	ME 3SB	4	1420	89	3.48	84	84	83	0.74	6.2	2.9	2.9	J	0.0949	17	37
3	2.2	ME 3LA	4	1430	130	4.89	85.4	85	84	0.76	5.8	3	2.8	H	0.1281	21	46
4	3	ME 3LB	4	1420	177	6.58	85.5	86	85.5	0.77	5.9	2.8	2.6	H	0.1448	23	51
5.5	4	ME 4SA	4	1440	239	8.25	87.5	86.8	84	0.8	7.1	3	3.1	J	0.5055	42	93
7.5	5.5	ME 4SB	4	1460	319	11.07	88.5	88.5	87.5	0.81	7.3	2.9	2.9	J	0.6407	51	112
10	7.5	ME 4LA	4	1460	434	14.83	89	89	88.5	0.82	6.9	2.9	2.8	H	0.7570	57	126
12.5	9.2	ME 4LB	4	1460	531	18.09	89.5	89.5	88.5	0.82	6.9	2.9	3	H	0.8543	65	143
15	11	ME 5SA	4	1465	637	21.54	91	91.3	90.5	0.81	6.5	2.8	2.6	H	1.5425	85	187
20	15	ME 5LA	4	1465	867	28.73	90.8	91	90.5	0.83	6.5	2.6	2.3	H	1.8747	101	223

6 P	1000 rpm - S1	50 Hz - IE2
-----	---------------	-------------

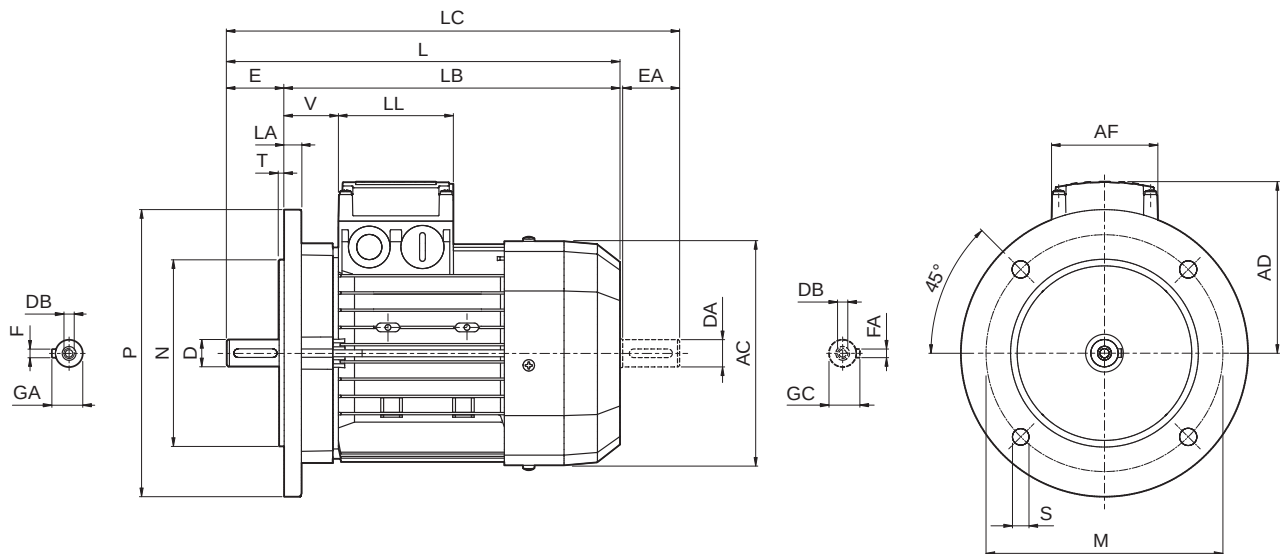
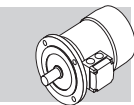
P _n			n	T _n	In 400V	η%			cos φ	$\frac{I_s}{I_n}$	$\frac{T_s}{T_n}$	$\frac{T_a}{T_n}$	KVA Code	J _m	IM B9		
HP	kW					rpm	lb·in	A							100%	75%	50%
1	0.75	ME 3SA	6	940	67	1.98	75.9	75	70.7	0.72	4.7	2.2	2	H	0.0783	17	37
1.5	1.1	ME 3LA	6 (*)	945	98	2.75	78.1	76.2	73	0.74	4.9	2.2	1.9	G	0.1946	21	46
2	1.5	ME 3LB	6	945	135	3.8	79.8	77.5	74	0.72	5.6	2.5	2.3	J	0.2254	23	51
3	2.2	ME 4SA	6	955	195	4.9	81.8	81.8	80	0.8	5.7	1.9	1.7	H	0.5126	34	75
4	3	ME 4SB	6	955	266	6.6	83.3	83.3	82.4	0.79	6.1	2.1	1.9	H	0.7000	43	95
5.5	4	ME 4LA	6	965	354	8.6	84.6	85	83.1	0.79	6.9	2.2	2	J	0.9089	54	119
7.5	5.5	ME 5SA	6 (*)	965	478	11.6	87	87	86.4	0.79	6.6	2.5	2.3	H	1.7561	69	152
10	7.5	ME 5SB	6 (*)	965	655	15	88	88	87.2	0.82	6.6	2.3	2.1	H	2.3019	89	196

(*) Power /size relation not standardized

BE-ME

M13 MOTORS DIMENSIONS BE-ME

BE - IM B5



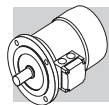
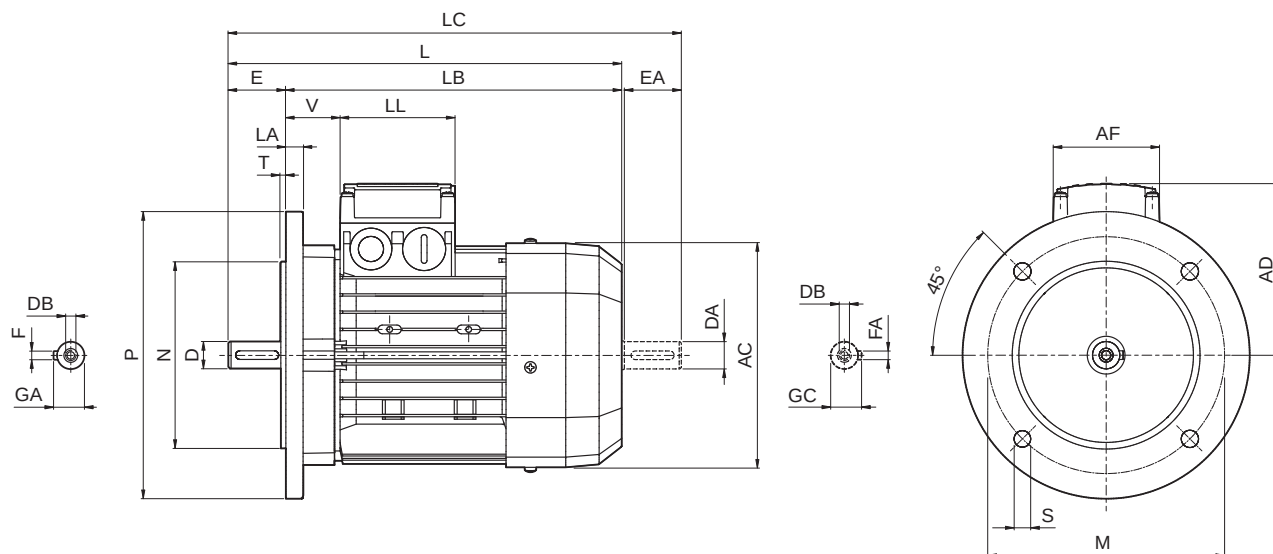
Dimensions are in [mm]

	Shaft					Flange						Motor								
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	
BE 80	19	40	M6	21.5	6	165	130	200	11.5	3.5	11.5	156	274	234	315	119	74	80	38	
BE 90 S	24	50	M8	27	8							176	326	276	378	133	98	98	44	
BE 90 L																				
BE 100	28	60	M10	31	215	180	250	14	4	14	195	367	307	429	142	50				
BE 112										15	219	385	325	448	157		52			
BE 132 S	38	80	M12	41	10	265	230			300	14	4	20	258	493	413	576	193	118	118
BE 132 MA								528	448						611					
BE 132 MB																				
BE 160 M	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾	300	250	350	18.5	5	15	310	596	486	680	245	187	187	51	
BE 160 L													640	530	724					
BE 180 M	48 42 ⁽¹⁾	110 110 ⁽¹⁾	M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾						300	250	350	18.5	5	18			348	708
BE 180 L																				

N.B.:

1) These values refer to the rear shaft end.

BE - IM B5



BE-ME

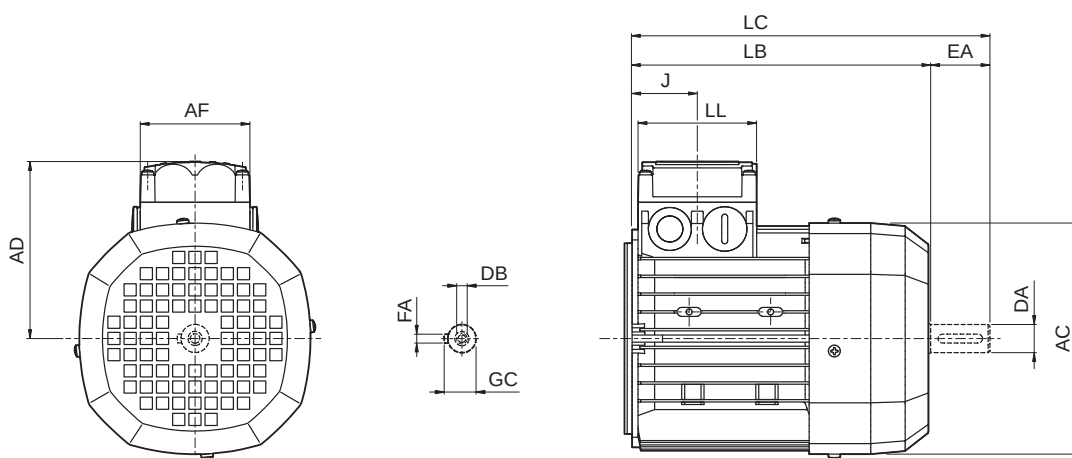
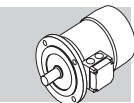
Dimensions are in Inch except when shown in *italic* [mm]

	Shaft					Flange						Motor							
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V
BE 80	0.748	1.575	M6	0.846	0.236							6.142	10.787	9.213	12.402	4.685	2.913	3.150	1.496
BE 90 S	0.945	1.969	M8	1.063	0.315	6.496	5.118	7.874	0.453	0.138	0.453	6.929	12.835	10.866	14.882	5.236			1.732
BE 90 L																			
BE 100	1.102	2.362	M10	1.220	0.315	8.465	7.087	9.843	0.551	0.157	0.551	7.677	14.449	12.087	16.890	5.591	3.858	3.858	1.969
BE 112												8.622	15.157	12.795	17.638	6.181			2.047
BE 132 S	1.496	3.150	M12	1.614	0.394	10.433	9.055	11.811	0.551	0.157	0.787	10.157	19.409	16.260	22.677	7.598	4.646	4.646	2.283
BE 132 MA																			
BE 132 MB													20.787	17.638	24.055				
BE 160 M	1.654	4.331	M16	1.772	0.472	11.811	9.843	13.780	0.728	0.197	0.591	12.205	23.465	19.134	26.772	9.646			2.008
BE 160 L	1.496 ⁽¹⁾	3.150 ⁽¹⁾	M12 ⁽¹⁾	1.615 ⁽¹⁾	0.394 ⁽¹⁾								25.197	20.866	28.504				
BE 180 M	1.890	4.331	M16	2.028	0.551	11.811	9.843	13.780	0.728	0.197	0.709	13.701	27.874	23.543	32.402	10.276	7.362	7.362	2.047
BE 180 L	1.654 ⁽¹⁾	4.331 ⁽¹⁾	M16 ⁽¹⁾	1.772 ⁽¹⁾	0.472 ⁽¹⁾														

N.B.:

1) These values refer to the rear shaft end.

ME

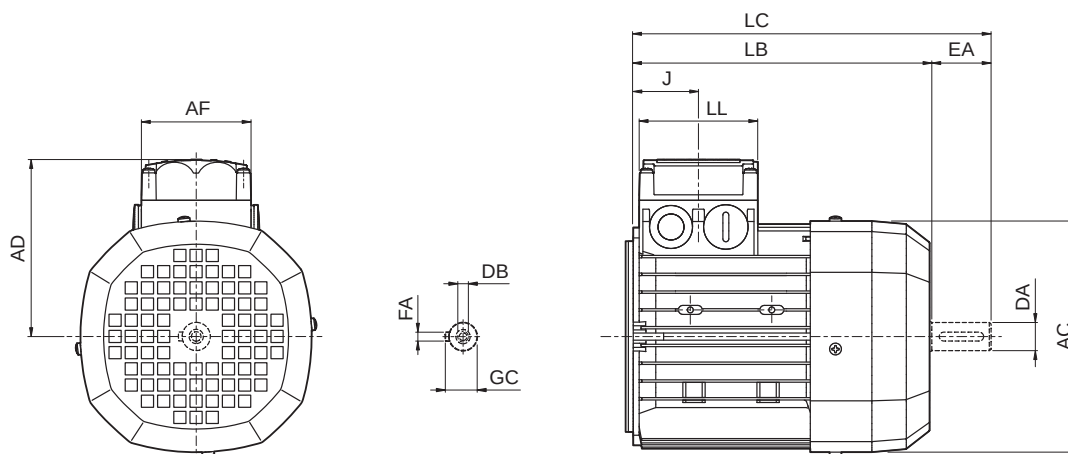


BE-ME

Dimensions are in [mm]

	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
ME 2S	19	40	M6	6	21.5	156	202	245	74	80	44	119
ME 3S	28	60	M10	8	31	195	230	293	98	98	53.5	142
ME 3L							262	325				
ME 4S	38	80	M12	10	41	258	361	444	118	118	64.5	193
ME 4L							396	479				
ME 4LB							418	502				
ME 5S						310	462	546	187	187	77	245
ME 5L												

ME



Dimensions are in Inch except when shown in *italic* [mm]

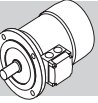
	Rear shaft end					Motor										
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD				
ME 2S	0.748	1.575	M6	0.236	0.846	6.142	7.953	9.646	2.913	3.150	1.732	4.685				
ME 3S	1.102	2.362	M10	0.315	1.220	7.677	9.055	11.535	3.858	3.858	2.106	5.591				
ME 3L							10.315	12.795								
ME 4S	1.496	3.150	M12	0.394	1.614	10.157	14.213	17.480	4.646	4.646	2.539	7.598				
ME 4L							15.591	18.858								
ME 4LB																
ME 5S						12.205	16.457	19.764	7.362	7.362	3.031	9.646				
ME 5L							18.189	21.496								

BE-ME

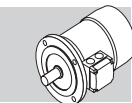
3600 rpm - S1

3600 rpm - S1															60 Hz																
2P		d.c. brake															a.c. brake														
		FD															FA														
		P _n hp	kW		n rpm	T _n lb-in	η	cosφ	I _n 460V A	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h	J _m lb-ft ²	IM B5			
kg	lbs														kg	lbs			kg	lbs		kg	lbs								
0.25	0.18	BN 63A	2	3360	4.7	58	0.74	0.55	3.7	2.9	2.4	H	0.0048	3.5	7.7	FD 02	15	2700	3300	0.0062	4.9	10.7	FA 02	15	3300	0.0062	5.0	11			
0.33	0.25	BN 63B	2	3370	6.2	61	0.73	0.69	4.2	2.9	2.9	H	0.0055	3.9	8.6	FD 02	15	2700	3300	0.0071	5.2	11.5	FA 02	15	3300	0.0071	5.4	11.9			
0.5	0.37	BN 71A	2	3420	9.2	71	0.77	0.86	5.8	3.3	3.1	J	0.0082	5.4	11.9	FD 03	30	2400	3200	0.0109	7.5	16.6	FA 03	30	3200	0.0109	7.8	17.2			
0.75	0.55	BN 71B	2	3450	13.7	76	0.75	1.23	6.2	3.4	3.4	K	0.0097	6.2	13.7	FD 03	44	2200	2700	0.0126	8.3	18.2	FA 03	44	2700	0.0126	8.6	19			
1	0.75	BN 80A	2	3440	18.3	76	0.76	1.62	5.9	3.1	2.8	J	0.0185	8.6	19	FD 04	44	1400	1700	0.0223	11.8	26	FA 04	44	1700	0.0223	12.2	27			
1.5	1.1	BN 80B	2	3430	27.6	77	0.76	2.4	6.2	3.8	2.9	J	0.0214	9.5	21	FD 04	88	1200	1600	0.0252	12.2	27	FA 04	88	1600	0.0252	13.2	29			
2	1.5	BN 90SA	2	3480	36.2	79	0.78	3.04	7.3	3.6	3.2	K	0.0297	12.2	27	FD 14	133	750	1000	0.0335	15.4	34	FA 14	133	1000	0.0335	16.3	36			
3	2.2	BN 90L	2	3490	54	81	0.79	4.4	7.3	3.8	3.3	K	0.0397	14.1	31	FD 05	230	750	1000	0.0435	18.6	41	FA 05	230	1000	0.0435	21	46			
5	3.7	BN 100LB	2	3490	90	84	0.83	6.7	6.7	2.9	3.3	J	0.0926	23	51	FD 15	354	360	500	0.102	27	59	FA 15	354	500	0.102	30	66			
7.5	5.5	BN 132SA	2	3490	135	83	0.86	9.8	6.4	2.7	2.6	H	0.240	35	77	FD 06	440	400	266	0.266	44	98	FA 06	440	400	0.266	49	108			
10	7.5	BN 132SB	2	3490	181	82	0.88	13	6.2	2.8	2.7	H	0.318	42	93	FD 06	440	350	0.344	51	113	FA 06	440	350	0.344	56	123				
15	11	BN 160MR	2	3510	271	87	0.88	18.3	6.9	2.7	2.9	H	0.499	65	143																
20	15	BN 160MB	2	3510	359	86	0.9	24.2	6	2.5	2.8	G	0.808	84	185																
25	18.5	BN 160L	2	3520	449	88	0.91	29.2	6.9	2.8	2.7	H	0.998	97	214																
30	22	BN 180M	2	3520	537	88	0.91	35.1	6.9	2.8	2.8	H	1.164	109	240																
40	30	BN 200LA	2	3530	716	89	0.91	46.2	6.9	2.6	3.5	H	1.829	140	309																

4P				1800 rpm - S1												60 Hz															
																d.c. brake								a.c. brake							
																FD								FA							
P _n			n	T _n	η	cosφ	I _n 460V	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft²	IM B5		Mod	T _b lb-in	Z _o 1/h	J _m lb-ft²	IM B5					
hp	kW												kg	lbs			kg	lbs		kg	lbs										
0.08	0.06	BN 56A	4	1670	3	53	0.55	0.26	2.9	3.1	2.5	J	0.0036	3.1	6.8																
0.12	0.09	BN 56B	4	1670	4.5	59	0.52	0.37	2.8	2.9	3.0	H	0.0036	3.1	6.8																
0.16	0.12	BN 63A	4	1650	6.1	55	0.64	0.43	3.1	2.4	2.2	H	0.0048	3.5	7.7	FD 02	15	7000	9000	0.0062	5.2	11.5	FA 02	15	9000	0.0062	5.0	11			
0.25	0.18	BN 63B	4	1670	9.4	58	0.59	0.68	3.1	2.8	2.4	H	0.0055	3.9	8.6	FD 02	30	7000	9000	0.0071	5.6	12.3	FA 02	30	9000	0.0071	5.4	11.9			
0.33	0.25	BN 71A	4	1700	12.2	64	0.74	0.65	4.3	2.6	2.1	H	0.0138	5.1	11.2	FD 03	30	6000	8500	0.0164	7.8	17.2	FA 03	30	8500	0.0164	7.5	16.5			
0.5	0.37	BN 71B	4	1700	18.5	66	0.73	0.97	4.5	2.6	2.4	H	0.0164	5.9	13	FD 03	44	4800	7500	0.0190	8.6	19	FA 03	44	7500	0.0190	8.3	18.3			
0.75	0.55	BN 80A	4	1710	27.6	73	0.75	1.28	4.9	3	2.4	H	0.0356	8.2	18.1	FD 04	89	3400	7000	0.0394	12.2	27	FA 04	89	7000	0.0394	11.8	26			
1	0.75	BN 80B	4	1720	36.6	78	0.75	1.6	6.2	3.4	3.1	J	0.0482	10.0	22	FD 04	133	3000	6000	0.0523	13.6	30	FA 04	133	6000	0.0523	13.6	30			
1.5	1.1	BN 90S	4	1720	55	78	0.74	2.43	5.7	3.1	2.7	J	0.0499	12.2	27	FD 14	133	3000	7000	0.0546	16.3	36	FA 14	133	7000	0.0546	16.3	36			
2	1.5	BN 90LA	4	1720	73	81	0.74	3.12	6.6	3.3	3.0	K	0.0665	13.6	30	FD 05	230	2200	4700	0.076	19.5	43	FA 05	230	4700	0.076	20	45			
3	2.2	BN 100LA	4	1720	110	81	0.73	4.8	5.5	2.7	2.4	H	0.096	18.1	40	FD 15	354	1000	2700	0.105	25	55	FA 15	354	2700	0.105	25	55			
5	3.7	BN 100LC	4	1730	182	84	0.74	7.5	5.6	2.8	2.9	K	0.145	25	55	FD 55	480	1200	1200	0.154	30	66	FA 15	480	1200	0.154	29	64			
5.5	4	BN 112M	4	1730	200	85	0.76	8	7	3.1	3.0	K	0.233	30	66	FD 06S	530	850	850	0.254	40	88	FA 06S	530	850	0.254	42	93			
7.5	5.5	BN 132S	4	1730	273	84	0.84	10	6.3	2.9	2.6	H	0.506	44	97	FD 56	664	850	850	0.530	57	126	FA 06	664	850	0.530	58	128			
10	7.5	BN 132MA	4	1740	362	85	0.84	13.1	6.1	2.9	2.9	H	0.641	53	117	FD 06	885	700	700	0.665	66	146	FA 07	885	700	0.665	71	157			
15	11	BN 160MR	4	1740	543	88	0.81	19.4	6.5	3.1	3.0	H	0.855	70	154	FD 07	1328	600	600	0.907	86	190	FA 07	1328	600	0.907	88	194			
20	15	BN 160L	4	1750	720	90	0.84	24.8	5.8	2.3	2.5	G	1.544	99	218	FD 08	1770	400	400	1.722	129	284	FA 08	1770	400	1.722	128	282			
25	18.5	BN 180M	4	1760	895	90	0.83	31.3	5.8	2.5	3.0	G	1.876	115	254	FD 08	2210	300	300	2.054	145	320	FA 08	2210	300	2.054	144	317			

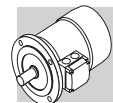


BN-M



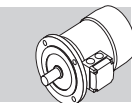
BN-M

6P		1200 rpm - S1												60 Hz														
P _n			n	T _n	η	cosφ	I _n 460V A	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft ²	IM B5	
													kg	lbs			NB	SB		kg	lbs			kg	lbs			
0.12	0.09	BN 63A	6	1100	47	0.5	0.48	2.8	2.9	2.3	K	0.0081	4.6	10.1	FD 02	30	7000	10000	0.0095	6.3	13.9	FA 02	30	10000	0.0095	6.1	13.4	
0.16	0.12	BN 63B	6	1100	50	0.55	0.55	2.4	2.4	2.2	H	0.0088	4.9	10.8	FD 02	30	7000	10000	0.0102	6.6	14.6	FA 02	30	10000	0.0102	6.4	14.1	
0.25	0.18	BN 71A	6	1100	61	0.65	0.57	3.3	2.6	2.0	G	0.0200	5.5	12.1	FD 03	44	6500	10000	0.0226	8.2	18.1	FA 03	44	10000	0.0226	7.9	17.4	
0.33	0.25	BN 71B	6	1100	64	0.65	0.75	3.2	2.6	2.1	G	0.0259	6.7	14.8	FD 03	44	6200	8000	0.0285	9.5	21	FA 03	44	8000	0.0285	9.1	20	
0.5	0.37	BN 80A	6	1130	67	0.65	1.07	3.9	2.6	2.5	H	0.0499	10.0	22	FD 04	88	4100	5500	0.0546	13.6	30	FA 04	88	5500	0.0546	13.6	30	
0.75	0.55	BN 80B	6	1140	76	0.66	1.38	4.9	3.2	2.7	J	0.0594	11.3	25	FD 04	133	3800	5000	0.0641	15.4	34	FA 04	133	5000	0.0641	15.0	33	
1	0.75	BN 90S	6	1140	55	0.63	2.05	4.5	2.9	2.8	K	0.0618	13.2	29	FD 14	133	2700	4000	0.0665	16.8	37	FA 14	133	4000	0.0665	16.8	37	
1.5	1.1	BN 90L	6	1140	83	0.65	2.83	4.3	2.8	2.4	H	0.0784	15.0	33	FD 05	230	2000	3500	0.0879	21	46	FA 05	230	3500	0.0879	22	49	
2	1.5	BN 100LA	6	1140	111	0.66	3.75	4.5	2.4	2.4	H	0.195	22	49	FD 15	354	1500	3000	0.204	28	62	FA 15	354	3000	0.204	29	64	
3	2.2	BN 112M	6	1150	164	0.69	4.9	5.5	2.8	2.4	J	0.400	32	71	FD 06S	530		1250	0.420	42	93	FA 06S	530	1250	0.420	44	97	
5	3.7	BN 132MA	6	1150	274	0.79	7.3	6.1	2.5	2.3	J	0.701	44	97	FD 06	885		900	0.724	58	128	FA 07	885	900	0.724	63	139	
7.5	5.5	BN 132MB	6	1140	414	0.75	11.2	5.4	2.7	2.3	H	0.910	56	123	FD 07	1328		800	0.964	72	159	FA 07	1328	800	0.964	74	163	
10	7.5	BN 160M	6	1160	543	0.82	13.5	5.8	2.3	2.4	G	1.758	83	183	FD 08	1500		550	1.936	112	247	FA 08	1500	550	1.936	113	249	
15	11	BN 160L	6	1160	815	0.83	19.8	5.8	2.5	2.7	G	2.304	103	227	FD 08	1770		400	2.482	133	293	FA 08	1770	400	2.482	133	293	



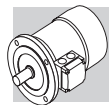
BN-M

2P		3600 rpm - S1															60 Hz														
		d.c. brake															a.c. brake														
		FD															FA														
P _n	hp		n	T _n	η	cosφ	I _n 460V	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5		J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h	J _m lb-ft ²	IM B5		
													kg	lbs		kg	lbs			kg	lbs		kg	lbs							
0.25	0.18	M 05A	2	3380	4.7	60	0.74	0.53	4.1	3	2.4	H	0.0048	3.2	7.1	FD 02	15	2700	3300	0.0062	4.9	10.8	FA 02	15	3300	0.0062	4.7	10.4			
0.33	0.25	M 05B	2	3400	6.1	65	0.75	0.63	4.9	3.2	2.9	J	0.0055	3.6	7.9	FD 02	15	2700	3300	0.0071	5.3	11.7	FA 02	15	3300	0.0071	5.1	11.2			
0.5	0.37	M 05C	2	3420	9.2	69	0.76	0.89	5.5	3.3	3.2	J	0.0062	4.8	10.6	FD 02	30	2500	3000	0.0078	6.5	14.3	FA 02	30	3000	0.0078	6.3	13.9			
0.75	0.55	M 1SD	2	3450	13.7	76	0.75	1.23	6.2	3.4	3.4	K	0.0097	5.8	12.8	FD 03	44	2200	2700	0.0126	8.5	18.7	FA 03	44	2700	0.0126	8.2	18.1			
1	0.75	M 1LA	2	3440	18.3	77	0.75	1.62	6.2	3.8	3.5	K	0.0119	6.9	15.2	FD 03	44	1500	2100	0.0145	9.5	21	FA 03	44	2100	0.0145	9.5	21			
1.5	1.1	M 2SA	2	3430	27.6	77	0.76	2.4	6.2	3.8	2.9	J	0.0214	8.8	19.4	FD 04	88	1200	1600	0.0252	12.7	28	FA 04	88	1600	0.0252	12.7	28			
2	1.5	M 2SB	2	3420	36.8	80	0.81	2.89	6	3.3	2.9	H	0.0271	10.4	23	FD 04	133	1000	1300	0.0309	14.5	32	FA 04	133	1300	0.0309	14.5	32			
3	2.2	M 3SA	2	3430	55	81	0.83	4.2	6	2.4	3.2	H	0.0570	15.4	34	FD 15	230	800	1000	0.0665	22	49	FA 15	230	1000	0.0665	23	51			
5	3.7	M 3LB	2	3490	92	84	0.83	6.7	6.7	2.9	3.2	J	0.0926	22	49	FD 15	354	360	500	0.102	28	62	FA 15	354	500	0.102	29	64			
7.5	5.5	M 4SA	2	3490	135	83	0.86	9.8	6.4	2.7	2.6	H	0.240	33	72	FD 06	440	400	400	0.266	46	101	FA 06	440	400	0.266	47	104			
10	7.5	M 4SB	2	3490	181	82	0.88	13	6.2	2.8	2.7	H	0.318	40	88	FD 06	440	350	350	0.344	53	117	FA 06	440	350	0.344	65	143			
15	11	M 4LC	2	3510	271	87	0.88	18.3	6.9	2.7	2.9	H	0.499	60	132																
20	15	M 5SB	2	3510	359	86	0.9	24.2	6	2.5	2.8	G	0.808	70	154																
25	18.5	M 5SC	2	3520	449	88	0.91	29.2	6.9	2.8	2.7	H	0.998	83	183																
30	22	M 5LA	2	3520	537	88	0.91	35.1	6.9	2.8	2.8	H	1.164	95	209																



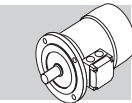
BN-M

4P				1800 rpm - S1												60 Hz																							
																d.c. brake												a.c. brake											
				FD												FA																							
P _n			n	T _n	η	cosφ	I _n 460V A	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft²	IM B5		Mod	T _b lb-in	Z _o 1/h		J _m lb-ft²	IM B5												
hp	kW												kg	lbs			kg	lbs		kg	lbs			kg	lbs		kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg
0.12	0.09	M 0B	4	1670	4.5	59	0.52	0.37	2.8	2.9	3.0	H	0.0036	2.9	6.4																								
0.16	0.12	M 05A	4	1690	6	60	0.57	0.44	3.3	2.4	2.3	J	0.0048	3.2	7.1	FD 02	15	7000	9000	0.0062	4.9	10.8	FA 02	15	9000	0.0062	4.7	10.4											
0.25	0.18	M 05B	4	1670	9.4	58	0.6	0.65	3.2	2.8	2.4	G	0.0055	3.6	7.9	FD 02	30	7000	9000	0.0071	5.3	11.7	FA 02	30	9000	0.0071	5.1	11.2											
0.33	0.25	M 05C	4	1670	12.4	64	0.64	0.77	3.3	2.5	2.4	G	0.0078	4.8	10.6	FD 02	30	6000	8000	0.0093	6.5	14.3	FA 02	30	8000	0.0093	6.3	13.9											
0.5	0.37	M 1SD	4	1700	18.5	66	0.73	0.96	4.5	2.6	2.4	G	0.0164	5.5	12.1	FD 03	44	4800	7500	0.0190	8.2	18.1	FA 03	44	7500	0.0190	7.9	17.4											
0.75	0.55	M 1LA	4	1710	27.6	72	0.7	1.37	4.9	3	2.8	J	0.0216	6.9	15.2	FD 53	66	3400	7000	0.0242	9.5	21	FA 53	66	7000	0.0242	9.5	21											
1	0.75	M 2SA	4	1720	36.6	78	0.75	1.61	6.2	3.4	3.1	J	0.0482	9.1	20	FD 04	133	3000	6000	0.0523	13.2	29	FA 04	133	6000	0.0523	13.2	29											
1.5	1.1	M 2SB	4	1720	55	78	0.76	2.33	6.3	3.4	3.0	J	0.0594	10.4	23	FD 04	133	2000	4200	0.0641	14.5	32	FA 04	133	4200	0.0641	14.5	32											
2	1.5	M 3SA	4	1720	73	82	0.73	3.15	5.7	2.9	2.6	J	0.0808	15.4	34	FD 15	230	1500	3000	0.0903	22	49	FA 15	230	3000	0.0903	23	51											
3	2.2	M 3LA	4	1720	110	81	0.73	4.67	5.5	2.7	2.4	H	0.096	16.8	37	FD 15	354	1000	2700	0.105	24	53	FA 15	354	2700	0.105	24	53											
5	3.7	M 3LC	4	1730	182	84	0.74	7.5	5.6	2.8	2.9	H	0.145	23	51	FD 55	480		1200	0.154	29	64	FA 55	480	1200	0.154	30	66											
7.5	5.5	M 4SA	4	1730	273	84	0.84	9.8	6.3	2.9	2.6	H	0.506	42	93	FD 56	664		850	0.530	55	121	FA 06	664	850	0.530	56	124											
10	7.5	M 4LA	4	1740	362	85	0.84	13.2	6.1	2.9	2.9	H	0.641	51	112	FD 06	885		700	0.665	64	141	FA 06	885	700	0.665	65	143											
15	11	M 4LC	4	1740	543	88	0.81	19.4	6.5	3.1	3.0	H	0.855	65	143	FD 07	1328		600	0.907	81	179	FA 07	1328	600	0.907	83	183											
20	15	M 5SB	4	1750	720	90	0.84	24.9	5.8	2.3	2.5	G	1.544	85	187	FD 08	1770		400	1.781	115	254	FA 08	1770	400	1.781	114	251											
25	18.5	M 5LA	4	1760	895	90	0.83	31.1	5.8	2.5	3.0	G	1.876	101	223	FD 08	2210		300	2.054	131	289	FA 08	2210	300	2.054	130	287											



BN-M

6P			1200 rpm - S1														60 Hz											
			d.c. brake														a.c. brake											
			FD														FA											
			P _n hp	kW		n rpm	T _n lb-in	η	cosφ	I _n 460V A	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h	J _m lb-ft ²	IM B5		Mod	T _b lb-in	Z _o 1/h	J _m lb-ft ²	IM B5
kg	lbs	kg														lbs												
0.12	0.09	M 05A	6	1100	6.9	47	0.46	0.52	2.4	2.9	2.3	K	0.0081	4.3	9.5	FD 02	30	7000	10000	0.0095	6.0	13.2	FA 02	30	10000	0.0095	5.8	12.8
0.16	0.12	M 05B	6	1100	9.2	49	0.54	0.57	2.3	2.4	2.2	H	0.0088	4.6	10.1	FD 02	30	7000	10000	0.0102	6.3	13.9	FA 02	30	10000	0.0102	6.1	13.4
0.25	0.18	M 1SC	6	1100	14.3	61	0.65	0.57	3.3	2.6	2.0	G	0.0200	5.1	11.2	FD 03	44	6500	10000	0.0226	7.8	17.2	FA 03	44	10000	0.0226	7.5	16.5
0.33	0.25	M 1SD	6	1100	18.9	64	0.65	0.75	3.2	2.6	2.1	G	0.0259	6.3	13.9	FD 03	44	6200	8000	0.0290	9.0	19.8	FA 03	44	8000	0.0290	8.7	19.2
0.5	0.37	M 1LA	6	1100	28.6	66	0.65	1.08	3.3	2.6	2.4	G	0.0306	7.3	16.1	FD 53	66	4000	7000	0.0330	10.0	22	FA 03	66	7000	0.0330	9.5	21
0.75	0.55	M 2SA	6	1140	41.4	76	0.66	1.38	4.9	3.2	2.7	J	0.0594	10.4	23	FD 04	133	3800	5000	0.0641	14.5	32	FA 04	133	5000	0.0641	14.5	32
1	0.75	M 2SB	6	1140	55	76	0.61	2.03	4.4	2.8	2.8	J	0.0665	11.3	25	FD 04	133	2700	5000	0.0713	15.4	34	FA 04	133	5000	0.0713	15.4	34
1.5	1.1	M 3SA	6	1140	83	74	0.68	2.74	4.4	2.4	2.2	H	0.147	16.8	37	FD 15	230	2300	4500	0.157	23	51	FA 15	230	4500	0.157	24	53
2	1.5	M 3LA	6	1140	111	76	0.66	3.75	4.5	2.4	2.4	H	0.195	21	46	FD 15	354	1500	3000	0.204	27	60	FA 15	354	3000	0.204	28	62
3	2.2	M 3LC	6	1140	166	77	0.68	5.3	5.1	2.6	2.6	J	0.226	23	51	FD 55	480		1500	0.235	29	64	FA 15	480	1500	0.235	30	66
5	3.7	M 4LA	6	1150	274	80	0.79	7.3	6.1	2.5	2.3	H	0.701	43	95	FD 06	885		900	0.724	56	123	FA 06	885	900	0.724	57	126
7.5	5.5	M 4LB	6	1140	414	82	0.75	11.2	5.4	2.7	2.3	H	0.910	54	119	FD 07	1328		800	0.964	70	154	FA 07	1328	800	0.964	72	159
10	7.5	M 5SA	6	1160	543	85	0.82	13.5	5.8	2.3	2.4	G	1.758	69	152	FD 08	1500		550	1.936	98	216	FA 08	1500	550	1.936	98	216
15	11	M 5SB	6	1160	815	84	0.83	19.8	5.8	2.5	2.7	G	2.304	89	196	FD 08	1770		400	2.482	119	262	FA 08	1770	400	2.482	118	260

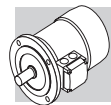


BN-M

2P 3000 rpm - S1 50 HZ

P _n			n	T _n	IE1	η (100%)	η (75%)	η (50%)	cosφ	In 400V	$\frac{I_s}{I_n}$	$\frac{T_s}{T_n}$	$\frac{T_a}{T_n}$	KVA Code	J _m lb-ft ²	IM B5		FD				FA								
																$\frac{Q}{Kg}$	$\frac{Q}{lbs}$	Mod	T _b	Z ₀ 1/h	J _m lb-ft ²	$\frac{Q}{Kg}$	$\frac{Q}{lbs}$	Mod	T _b	Z ₀ 1/h	J _m			
																$\frac{Q}{Kg}$	$\frac{Q}{lbs}$		lb-in	NB	SB		lb-in		lb-in					
0.18	0.25	BN 63A 2	2730	5.6	○	59.9	56.9	51.9	0.77	0.56	3.0	2.1	2.0	E	0.0005	3.5	7.7	FD 02	15	3900	4800	0.0006	5.2	11	FA 02	15	4800	0.0006	5.0	11
0.25	0.33	BN 63B 2	2740	7.7	○	66.0	64.8	64.8	0.76	0.72	3.3	2.3	2.3	E	0.0005	3.9	8.6	FD 02	15	3900	4800	0.0007	5.6	12	FA 02	15	4800	0.0007	5.4	12
0.37	0.5	BN 63C 2	2800	11.2	○	69.1	66.8	66.8	0.78	0.99	3.9	2.6	2.6	F	0.0008	5.1	11	FD 02	31	3600	4500	0.0009	6.8	15	FA 02	31	4500	0.0009	6.6	15
0.37	0.5	BN 71A 2	2820	11.1	○	73.8	73.0	70.6	0.76	0.95	4.8	2.8	2.6	H	0.0008	5.4	12	FD 03	31	3000	4100	0.0011	8.1	18	FA 03	31	4200	0.0011	7.8	17
0.55	0.75	BN 71B 2	2820	16.5	○	76.0	75.8	74.8	0.76	1.37	5.0	2.9	2.8	H	0.0010	6.2	14	FD 03	44	2900	4200	0.0013	8.9	20	FA 03	44	4200	0.0013	8.6	19
0.75	1	BN 71C 2	2810	23.0	○	76.6	76.2	76.2	0.76	1.86	5.1	3.1	2.8	H	0.0012	7.3	16	FD 03	44	1900	3300	0.0014	10.0	22	FA 03	44	3600	0.0014	9.7	21
0.75	1	BN 80A 2	2810	23.0	●	76.2	75.5	68.3	0.81	1.75	4.8	2.6	2.2	G	0.0019	8.6	19	FD 04	44	1700	3200	0.0022	12.5	28	FA 04	44	3200	0.0022	12.4	27
1.1	1.5	BN 80B 2	2800	33.6	●	76.4	76.2	75.0	0.81	2.57	4.8	2.8	2.4	G	0.0021	9.5	21	FD 04	89	1500	3000	0.0025	13.4	30	FA 04	89	3000	0.0025	13.3	29
1.5	2	BN 80C 2	2800	45	●	79.1	79.5	77.2	0.81	3.4	4.9	2.7	2.4	G	0.0027	11.3	25	FD 04	133	1300	2600	0.0031	15.2	34	FA 04	133	2600	0.0031	15.1	33
1.5	2	BN 90SA 2	2870	44	●	82.0	81.5	78.1	0.80	3.4	5.9	2.7	2.6	H	0.0030	12.3	27	FD 14	133	900	2200	0.0033	16.5	36	FA 14	133	2200	0.0033	16.4	36
1.85	2.5	BN 90SB 2	2880	54	●	82.5	82.0	75.4	0.80	4.0	6.2	2.9	2.6	H	0.0040	14	31	FD 14	133	900	2200	0.0043	18.2	40	FA 14	133	2200	0.0043	18.1	40
2.2	3	BN 90L 2	2880	65	●	82.7	82.1	80.8	0.80	4.8	6.3	2.9	2.7	J	0.0040	14	31	FD 05	230	900	2200	0.0050	20	44	FA 05	230	2200	0.0050	20.7	46
3	4	BN 100L 2	2860	89	●	81.5	81.3	77.4	0.79	6.7	5.6	2.6	2.2	H	0.0074	20	44	FD 15	230	700	1600	0.0083	26	57	FA 15	230	1600	0.0083	27	60
4	5.5	BN 100LB 2	2870	118	●	83.1	83.0	77.8	0.80	8.7	5.8	2.7	2.5	H	0.0093	23	51	FD 15	354	450	900	0.0102	29	64	FA 15	1000	0.0102	30	66	
4	5.5	BN 112M 2	2900	117	●	85.5	84.5	83.0	0.82	8.2	6.9	3.0	2.9	J	0.0135	28	62	FD 06S	354	—	950	0.0157	39	86	FA 06S	354	950	0.0157	40	88
5.5	7.5	BN 132SA 2	2890	161	●	84.7	84.5	81.2	0.84	11.2	5.9	2.6	2.2	G	0.0240	35	77	FD 06	443	—	600	0.0266	48	106	FA 06	600	0.0266	49	108	
7.5	10	BN 132SB 2	2900	221	●	86.5	86.3	84.4	0.85	14.7	6.4	2.6	2.2	H	0.0344	42	93	FD 06	443	—	550	0.0365	55	121	FA 06	443	550	0.0365	56	123
9.2	12.5	BN 132M 2	2930	266	●	87.0	86.5	83.6	0.86	17.7	6.7	2.8	2.3	H	0.0422	53	117	FD 56	664	—	430	0.0449	66	146	FA 06	664	430	0.0449	67	148
11	15	BN 160MR 2	2920	319	●	87.6	87.0	86.0	0.88	20.6	6.9	2.9	2.5	H	0.0498	65	143													
15	20	BN 160MB 2	2930	434	●	89.6	89.4	88.0	0.86	28.1	7.1	2.6	2.3	H	0.0807	84	185													
18.5	25	BN 160L 2	2930	531	●	90.4	90.1	89.0	0.86	34	7.6	2.7	2.3	J	0.0997	97	214													
22	30	BN 180M 2	2930	637	●	89.9	89.7	89.5	0.88	40	7.8	2.6	2.4	J	0.116	109	240													
30	40	BN 200LA 2	2930	867	●	90.7	90.1	87.6	0.89	54	7.8	2.7	2.9	J	0.183	140	309													

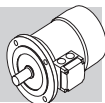
○ = n.a. ● = IE1



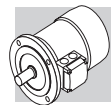
BN-M

4P		1500 rpm - S1															50 Hz														
P _n			n	T _n	IE1	η (100%)	η (75%)	η (50%)	cosφ	I _n 400V	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5 	d.c. brake						a.c. brake								
																	FD						FA								
																	Mod	T _b	Z _o 1/h	J _m lb-ft ²	IM B5 	Mod	T _b	Z _o 1/h	J _m lb-ft ²	IM B5 					
kW	HP		rpm	lb-in		%	%	%		A								lb-in	Mod	T _b	Z _o 1/h	J _m lb-ft ²	IM B5 	Mod	T _b	Z _o 1/h	J _m lb-ft ²	IM B5 			
0.06	0.08	BN 56A	4	1340	3.8	○	46.8	44.2	41.3	0.65	0.28	2.6	2.3	2.0	H	0.0004	3.1	6.8													
0.09	0.12	BN 56B	4	1350	5.7	○	51.7	47.6	42.9	0.60	0.42	2.6	2.5	2.4	H	0.0004	3.1	6.8													
0.12	0.16	BN 63A	4	1350	7.5	○	59.8	56.2	47.0	0.62	0.47	2.6	1.9	1.8	F	0.0005	3.5	7.7	FD 02	15	10000	13000	0.0006	5.2	11	FA 02	15	13000	0.0006	5.0	11
0.18	0.25	BN 63B	4	1320	11.5	○	54.8	52.9	52.5	0.67	0.71	2.6	2.2	2.0	F	0.0005	3.9	8.6	FD 02	31	10000	13000	0.0007	5.6	12	FA 02	31	13000	0.0007	5.4	12
0.25	0.33	BN 63C	4	1340	15.8	○	65.3	65.0	57.9	0.69	0.80	2.7	2.1	1.9	E	0.0008	5.1	11	FD 02	31	7800	10000	0.0009	6.8	15	FA 02	31	10000	0.0009	6.6	15
0.25	0.33	BN 71A	4	1380	15.3	○	63.7	62.2	59.1	0.73	0.78	3.3	1.9	1.7	F	0.0014	5.1	11	FD 03	31	7700	11000	0.0016	7.8	17	FA 03	31	11000	0.0016	7.5	17
0.37	0.5	BN 71B	4	1370	23.0	○	66.8	66.7	63.0	0.76	1.05	3.7	2.0	1.9	F	0.0016	5.9	13	FD 03	44	6000	9400	0.0019	8.6	19	FA 03	44	9400	0.0019	8.3	18
0.55	0.75	BN 71C	4	1380	33.6	○	69.0	68.9	68.8	0.74	1.55	4.1	2.3	2.3	G	0.0022	7.3	16	FD 53	66	4300	8700	0.0024	10.0	22	FA 03	66	8700	0.0024	9.7	21
0.55	0.75	BN 80A	4	1390	33.6	○	72.0	71.3	69.7	0.77	1.43	4.1	2.3	2.0	F	0.0036	8.2	18	FD 04	89	4100	8000	0.0039	12.1	27	FA 04	89	8000	0.0039	12.0	26
0.75	1	BN 80B	4	1400	45	●	75.0	74.5	69.3	0.78	1.85	4.9	2.7	2.5	H	0.0047	9.9	22	FD 04	133	4100	7800	0.0052	13.8	30	FA 04	133	7800	0.0052	13.7	30
1.1	1.5	BN 80C	4	1400	66	●	75.5	76.2	70.4	0.78	2.7	5.1	2.8	2.5	H	0.0059	11.3	25	FD 04	133	2600	5300	0.0064	15.2	34	FA 04	133	5300	0.0064	15.1	33
1.1	1.5	BN 90S	4	1390	67	●	76.5	76.2	72.2	0.77	2.70	4.6	2.6	2.2	G	0.0050	12.2	27	FD 14	133	4800	8000	0.0055	16.4	36	FA 14	133	8000	0.0055	16.3	36
1.5	2	BN 90LA	4	1410	90	●	78.7	78.5	74.9	0.77	3.6	5.3	2.8	2.4	H	0.0066	13.6	30	FD 05	230	3400	6000	0.0076	19.6	43	FA 05	230	6000	0.0076	20.3	45
1.85	2.5	BN 90LB	4	1390	112	●	78.6	78.9	77.2	0.79	4.3	5.1	2.8	2.6	G	0.0071	15.1	33	FD 05	230	3200	5900	0.0081	21.1	47	FA 05	230	5900	0.0081	21.8	48
2.2	3	BN 100LA	4	1410	132	●	81.1	81.4	79.9	0.75	5.2	4.5	2.2	2.0	F	0.0095	18	40	FD 15	354	2600	4700	0.0104	25	55	FA 15	354	4700	0.0104	25	55
3	4	BN 100LB	4	1410	177	●	82.6	83.8	83.7	0.77	6.8	5.0	2.3	2.2	G	0.0128	22	49	FD 15	354	2400	4400	0.0138	28	62	FA 15	354	4400	0.0138	29	64
4	5.5	BN 112M	4	1430	239	●	84.4	84.2	81.6	0.81	8.4	5.6	2.7	2.5	G	0.0233	30	66	FD 06S	531	—	1400	0.0254	40	88	FA 06S	531	2100	0.0254	42	93
5.5	7.5	BN 132S	4	1440	319	●	84.7	84.8	82.5	0.81	11.6	5.5	2.3	2.2	G	0.0505	44	97	FD 56	664	—	1050	0.0529	57	126	FA 06	664	1200	0.0529	58	128
7.5	10	BN 132MA	4	1440	443	●	86.0	86.3	85.3	0.81	15.5	5.7	2.5	2.4	H	0.0641	53	117	FD 06	885	—	950	0.0664	66	146	FA 07	885	1000	0.0664	71	157
9.2	12.5	BN 132MB	4	1440	540	●	88.4	88.6	87.5	0.81	18.8	5.9	2.7	2.5	H	0.0757	59	130	FD 07	1328	—	900	0.0812	75	165	FA 07	1328	900	0.0812	77	170
11	15	BN 160MR	4	1440	646	●	87.6	87.8	86.0	0.81	22.4	6.0	2.7	2.5	G	0.0854	70	154	FD 07	1328	—	850	0.0906	86	190	FA 07	1328	850	0.0906	88	194
15	20	BN 160L	4	1460	867	●	88.7	88.5	88.4	0.81	30	6.0	2.3	2.1	G	0.154	99	218	FD 08	1770	—	750	0.172	129	284	FA 08	1770	750	0.168	128	282
18.5	25	BN 180M	4	1460	1071	●	89.3	89.5	89.2	0.81	37	6.2	2.6	2.5	H	0.187	115	254	FD 08	2213	—	700	0.205	145	320	FA 08	2213	700	0.202	144	317
22	30	BN 180L	4	1460	1275	●	89.9	90.0	90.0	0.80	44	6.4	2.5	2.5	G	0.297	135	298	FD 09	2655	—	400	0.344	175	386						
30	40	BN 200L	4	1460	1735	●	91.4	91.7	91.0	0.80	59	7.1	2.7	2.8	J	0.392	157	346	FD 09	3540	—	300	0.439	197	434						

○ = n.a. ● = IE1



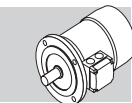
$\bullet = |E|$



BN-M

2P		3000 rpm - S1										50 Hz									
P _n		d.c. brake										a.c. brake									
		FD										FA									
		Mod	T _b lb-in	Z _o 1/h NB	S _B	J _m lb-ft ²	IM B5 Kg lbs	KVA Code	T _a T _n	T _s T _n	I _s I _n	In 400V A	cosφ	η (100%) %	η (75%) %	η (50%) %	IE1	T _n lb-in	n rpm	Image	Image
kW	HP	Mod	T _b lb-in	Z _o 1/h NB	S _B	J _m lb-ft ²	IM B5 Kg lbs	KVA Code	T _a T _n	T _s T _n	I _s I _n	In 400V A	cosφ	η (100%) %	η (75%) %	η (50%) %	IE1	T _n lb-in	n rpm	Image	Image
		Mod	T _b lb-in	Z _o 1/h NB	S _B	J _m lb-ft ²	IM B5 Kg lbs	KVA Code	T _a T _n	T _s T _n	I _s I _n	In 400V A	cosφ	η (100%) %	η (75%) %	η (50%) %	IE1	T _n lb-in	n rpm	Image	Image
0.18	0.25	M 05A	2	2730	5.6	5.6	○	59.9	56.9	51.9	56.9	51.9	0.77	56.9	56.9	51.9	○	5.6	2730		
0.25	0.33	M 05B	2	2740	7.7	7.7	○	66.0	64.8	64.8	64.8	64.8	0.76	66.0	64.8	64.8	○	7.7	2740		
0.37	0.5	M 05C	2	2800	11.2	11.2	○	69.1	66.8	66.8	66.8	66.8	0.78	69.1	66.8	66.8	○	11.2	2800		
0.55	0.75	M 1SD	2	2820	16.5	16.5	○	76.0	75.8	74.8	74.8	74.8	0.76	76.0	75.8	74.8	○	16.5	2820		
0.75	1	M 1LA	2	2810	23.0	23.0	○	76.6	76.2	76.2	76.2	76.2	0.76	76.6	76.2	76.2	○	23.0	2810		
1.1	1.5	M 2SA	2	2800	33.6	33.6	●	76.4	76.2	75.0	75.0	75.0	0.81	76.4	76.2	75.0	●	33.6	2800		
1.5	2	M 2SB	2	2800	45	45	●	79.1	79.5	77.2	77.2	77.2	0.81	79.1	79.5	77.2	●	45	2800		
2.2	3	M 3SA	2	2880	65	65	●	82.7	82.1	81.0	81.0	81.0	0.80	82.7	82.1	81.0	●	65	2880		
3	4	M 3LA	2	2860	89	89	●	81.5	81.3	77.4	77.4	77.4	0.79	81.5	81.3	77.4	●	89	2860		
4	5.5	M 3LB	2	2870	118	118	●	83.1	83.0	77.8	77.8	77.8	0.80	83.1	83.0	77.8	●	118	2870		
5.5	7.5	M 4SA	2	2890	161	161	●	84.7	84.5	81.2	81.2	81.2	0.84	84.7	84.5	81.2	●	161	2890		
7.5	10	M 4SB	2	2900	221	221	●	86.5	86.3	84.4	84.4	84.4	0.85	86.5	86.3	84.4	●	221	2900		
9.2	12.5	M 4LA	2	2930	266	266	●	87.0	86.5	83.6	83.6	83.6	0.86	87.0	86.5	83.6	●	266	2930		
11	15	M 4LC	2	2920	319	319	●	87.6	87.0	86.0	86.0	86.0	0.88	87.6	87.0	86.0	●	319	2920		
15	20	M 5SB	2	2930	434	434	●	89.6	89.4	88.0	88.0	88.0	0.86	89.6	89.4	88.0	●	434	2930		
18.5	25	M 5SC	2	2930	531	531	●	90.4	90.1	89.0	89.0	89.0	0.86	90.4	90.1	89.0	●	531	2930		
22	30	M 5LA	2	2930	637	637	●	89.9	89.7	89.5	89.5	89.5	0.88	89.9	89.7	89.5	●	637	2930		

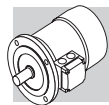
○ = n.a. ● = IE1



BN-M

4P				1500 rpm - S1										50 Hz									
				d.c. brake															a.c. brake				
				FD															FA				
				Mod	T _b	Z ₀ 1/h	J _m	IM B5 Kg lbs	KVA Code	T _s T _n	T _a T _n	I _s I _n	cosφ	η (50%)	η (75%)	η (100%)	IE1	T _n	n		P _n kW	HP	
Mod	T _b	Z ₀ 1/h	J _m	IM B5 Kg lbs	KVA Code	T _s T _n	T _a T _n	I _s I _n	cosφ	η (50%)	η (75%)	η (100%)	IE1	T _n	n		P _n kW	HP					

○ = n.a. ● = IE1



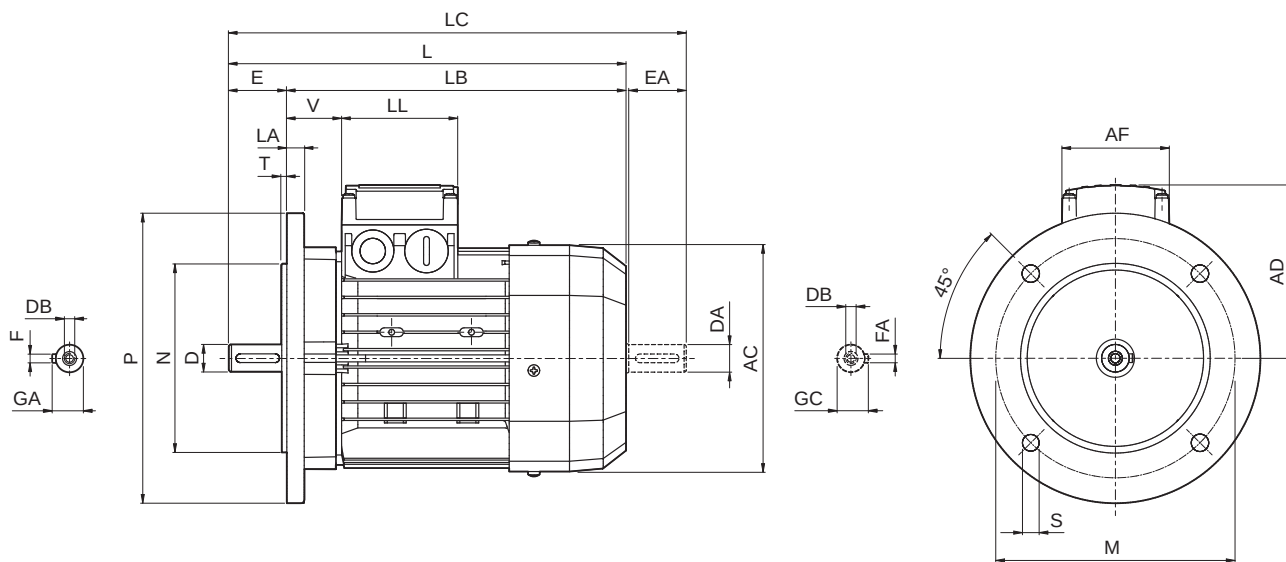
BN-M

6P										1000 rpm - S1										50 Hz											
										d.c. brake										a.c. brake											
										FD										FA											
										P _n		n	T _n	IE1	η (100%) %	η (75%) %	η (50%) %	cosφ	In 400V A	I _s I _n	T _s T _n	T _a T _n	KVA Code	J _m lb-ft ²	IM B5 Kg lbs	Mod	T _b lb-in	Z _o 1/h	J _m lb-ft ²	IM B5 Kg lbs	Mod
kW	HP																														
0.09	0.12	M 05A	6	880	8.7	○	41.0	41.0	32.9	0.53	0.60	2.1	2.1	1.8	J	0.0008	4.3	9.5	FD 02	31	9000	14000	0.0009	6.0	13	FA 02	31	14000	0.0009	5.8	13
0.12	0.16	M 05B	6	870	11.7	○	45.0	44.0	41.8	0.60	0.64	2.1	1.9	1.7	F	0.0009	4.6	10	FD 02	31	9000	14000	0.0010	6.3	14	FA 02	31	14000	0.0010	6.1	13
0.18	0.25	M 1SC	6	900	16.9	○	55.0	55.5	51.0	0.69	0.68	2.6	1.9	1.7	A	0.0020	5.1	11	FD 03	44	8100	13500	0.0023	7.8	17	FA 03	44	13500	0.0023	7.5	17
0.25	0.33	M 1SD	6	900	23.9	○	62.0	58.5	51.4	0.71	0.82	2.6	1.9	1.7	D	0.0026	6.3	14	FD 03	44	7800	13000	0.0028	9.0	20	FA 03	44	13000	0.0028	8.7	19
0.37	0.5	M 1LA	6	910	34.5	○	66.0	60.0	53.3	0.69	1.17	3.0	2.4	2.0	B	0.0031	7.3	16	FD 53	66	5100	9500	0.0033	10.0	22	FA 03	66	9500	0.0033	9.7	21
0.55	0.75	M 2SA	6	920	50	○	70.0	69.8	64.3	0.68	1.67	3.9	2.6	2.2	G	0.0059	10.6	23	FD 04	133	4800	7200	0.0064	14.5	32	FA 04	133	7200	0.0064	14.4	32
0.75	1	M 2SB	6	920	69	●	70.0	70.0	64.4	0.65	2.38	3.8	2.5	2.2	A	0.0066	11.5	25	FD 04	133	3400	6400	0.0071	15.4	34	FA 04	133	6400	0.0071	15.3	34
1.1	1.5	M 3SA	6	920	101	●	75.0	74.0	72.0	0.72	2.9	4.3	2.0	1.8	G	0.0078	17	37	FD 15	230	2700	5000	0.0088	23	51	FA 15	230	5000	0.0088	24	53
1.5	2	M 3LA	6	940	135	●	75.2	74.2	70.3	0.72	4.0	4.1	2.1	2.0	D	0.0195	21	46	FD 15	354	1900	4100	0.0204	27	60	FA 15	354	4100	0.0204	28	62
1.85	2.5	M 3LB	6	930	168	●	76.6	72.8	62.6	0.73	4.8	4.6	2.1	2.0	A	0.0225	23	51	FD 15	354	1700	3600	0.0235	29	64	FA 15	354	3600	0.0235	30	66
2.2	3	M 3LC	6	930	204	●	77.7	76.8	72.4	0.71	5.8	4.7	2.3	2.1	G	0.0225	23	51	FD 55	487	—	1900	0.0235	29	64	FA 15	487	1900	0.0235	30	66
3	4	M 4SA	6	940	266	●	79.7	77.0	75.1	0.76	7.1	5.1	1.9	1.8	G	0.0513	34	75	FD 56	664	—	1400	0.0536	47	104	FA 06	664	1400	0.0536	48	106
4	5.5	M 4LA	6	950	354	●	81.4	81.5	79.5	0.77	9.2	5.5	2.0	1.8	A	0.0700	43	95	FD 06	885	—	1200	0.0724	56	123	FA 07	885	1200	0.0724	57	126
5.5	7.5	M 4LB	6	945	496	●	83.1	80.9	79.1	0.78	12.2	6.1	2.1	1.9	H	0.0909	54	119	FD 07	1328	—	1050	0.0963	70	154	FA 07	1328	1050	0.0963	72	159
7.5	10	M 5SA	6	955	664	●	85.0	85.0	84.8	0.81	15.7	5.9	2.2	2.0	H	0.176	69	152	FD 08	1505	—	900	0.193	98	216	FA 08	1505	900	0.190	98	216
11	15	M 5SB	6	960	965	●	86.4	86.5	85.9	0.81	22.7	6.6	2.5	2.3	H	0.230	89	196	FD 08	1770	—	800	0.248	119	262	FA 08	1770	800	0.244	118	260

○ = n.a. ● = IE1

M15 MOTORS DIMENSIONS BN-M

BN - IM B5



Dimensions are in [mm]

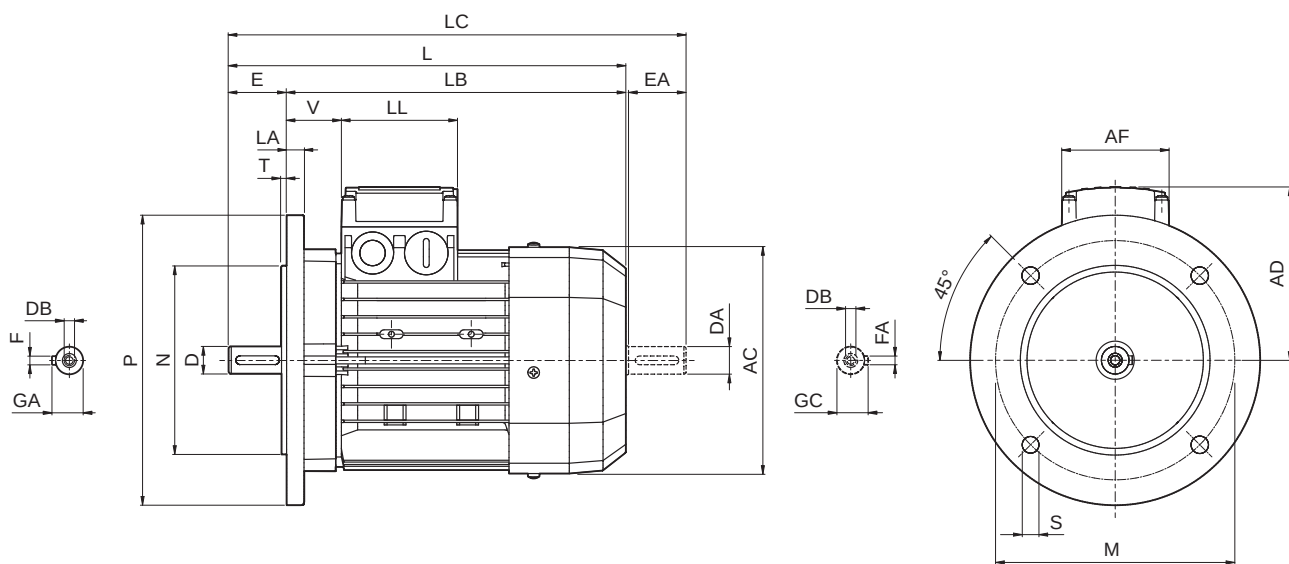
BN-M

	Shaft					Flange						Motor								
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	
BN 56	9	20	M3	10.2	3	100	80	120	7	3	8	110	185	165	207	91	74	80	34	
BN 63	11	23	M4	12.5	4	115	95	140	9.5		10	121	207	184	232	95			26	
BN 71	14	30	M5	16	5	130	110	160				138	249	219	281	108			37	
BN 80	19	40	M6	21.5	6	165	130	200	11.5	3.5	11.5	156	274	234	315	119	98	98	38	
BN 90	24	50	M8	27	8							215	180	250	14	4			176	326
BN 100	28	60	M10	31		265	230	300	14	5	14						195	367	307	429
BN 112					15						219	385	325	448	157	52				
BN 132	38	80	M12	41	10	300	250	350	18.5	5	20	258	493	413	576	193	187	187	58	
BN 160 MR	42 38 (1)	110 80 (1)	M16 M12 (1)	45 41 (1)	12 10 (1)						562		452	645	245				51	
BN 160 M												15				310				596
BN 160 L											310		596	486	680				245	
BN 180 M	48 38 (1)	110 110 (1)	M16 M12 (1)	51.5 41 (1)	14 10 (1)	350	300	400	18	5	18	348	708	598	823	261	187	187	52	
BN 180 L	48 42 (1)		M16 M16 (1)	51.5 45 (1)	14 12 (1)								722	612	837				66	
BN 200 L	55 42 (1)		M20 M16 (1)	59 45 (1)	16 12 (1)															

NOTE:

1) These values refer to the rear shaft end.

BN - IM B5



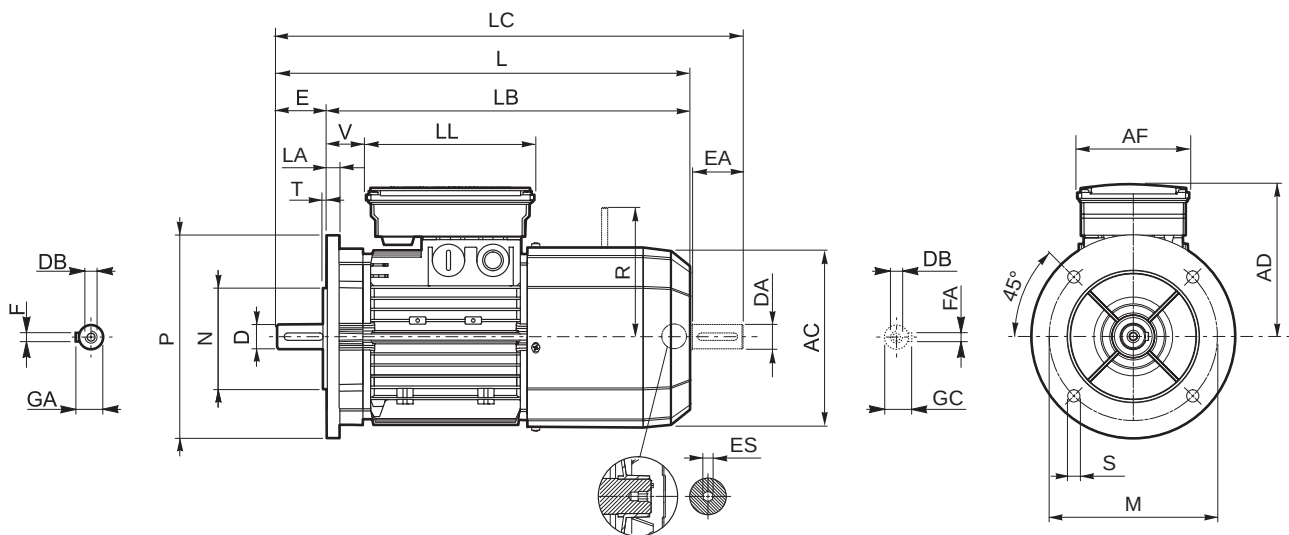
Dimensions are in Inch except when shown in *italic* [mm]

	Shaft					Flange						Motor								
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	
BN 56	0.354	0.787	M3	0.402	0.118	3.937	3.150	4.724	0.276	0.118	0.315	4.331	7.283	6.496	8.150	3.583	2.913	3.150	1.339	
BN 63	0.433	0.906	M4	0.492	0.157	4.528	3.740	5.512	0.374		0.394	4.764	8.150	7.244	9.134	3.740			1.024	
BN 71	0.551	1.181	M5	0.630	0.197	5.118	4.331	6.299				5.433	9.803	8.622	11.063	4.252			1.457	
BN 80	0.748	1.575	M6	0.846	0.236	6.496	5.118	7.874	0.453	0.138	0.453	6.142	10.787	9.213	12.402	4.685	3.858	3.858	1.496	
BN 90	0.945	1.969	M8	1.063	0.315							8.465	7.087	9.843	0.551	0.157			6.929	12.835
BN 100	1.102	2.362	M10	1.220		0.551	0.157	0.551	7.677	14.449	12.087						16.890	5.591	1.969	
BN 112								0.591	8.622	15.157	12.795						17.638	6.181	2.047	
BN 132	1.496	3.150	M12	1.614	0.394	10.433	9.055	11.811	0.728	0.197	0.787	10.157	19.409	16.260	22.677	7.598	4.646	4.646	2.283	
BN 160 MR	1.654 1.496 ⁽¹⁾	4.331 3.150 ⁽¹⁾	M16 M12 ⁽²⁾	1.772 1.614 ⁽¹⁾	0.472 0.395 ⁽¹⁾	11.811	9.843	13.780					0.591	12.205	23.465				19.134	26.772
BN 160 M											22.126	17.795				25.394	2.008			
BN 160 L											12.205	23.465	19.134	26.772	9.646	7.362	7.362	2.008		
BN 180 M	1.890 1.496 ⁽¹⁾	4.331 4.331 ⁽¹⁾	M16 M12 ⁽²⁾	2.028 1.614 ⁽¹⁾	0.551 0.394 ⁽¹⁾	13.780	11.811	15.748	0.728	0.197	0.709	13.701	27.874	23.543	32.402	10.276			2.047	
BN 180 L	1.890 1.654 ⁽¹⁾		M16 M16 ⁽²⁾	2.018 1.772 ⁽¹⁾	0.551 0.472 ⁽¹⁾								28.425	24.094	32.953				2.598	
BN 200 L	2.165 1.654 ⁽¹⁾			M20 M16 ⁽²⁾	2.323 1.772 ⁽¹⁾						0.630 0.472 ⁽¹⁾									

NOTE:

1) These values refer to the rear shaft end.

BN_FD ; IM B5



Dimensions are in [mm]

BN-M

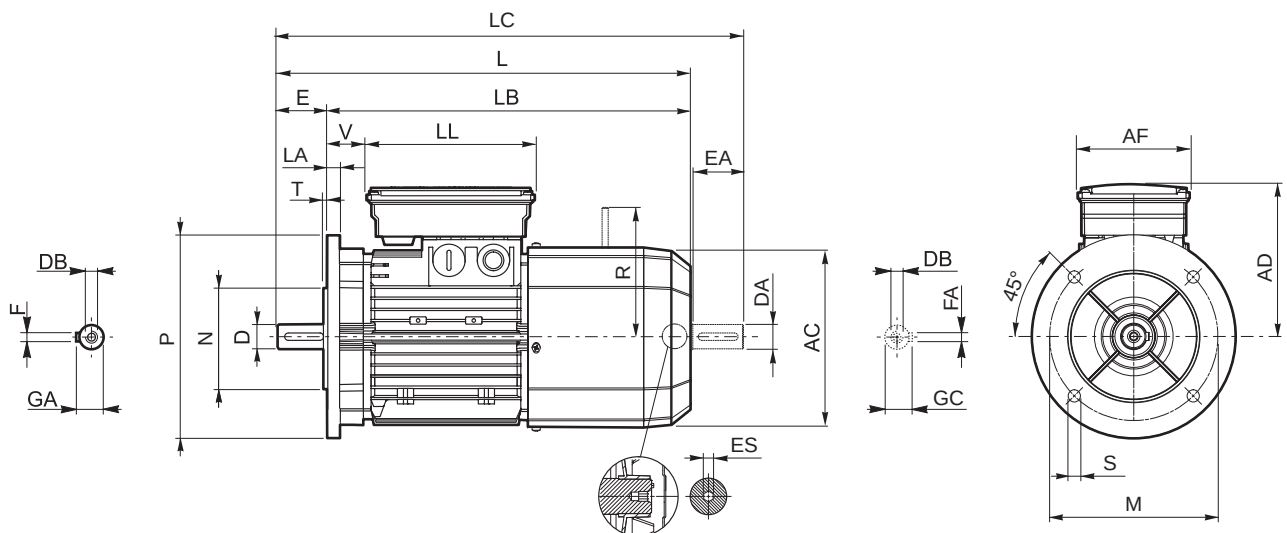
	Shaft					Flange						Motor													
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES				
BN 63	11	23	M4	12.5	4	115	95	140	9.5	3	10	121	272	249	297	122	98	133	14	96	5				
BN 71	14	30	M5	16	5	130	110	160	9.5	3.5		138	310	280	342	135			25	103					
BN 80	19	40	M6	21.5	6	165	130	200	11.5		11.5	156	346	306	388	146			41	129		6			
BN 90 S	24	50	M8	27	8					215		180	250	14	4	176	409	359	461	149	110		165	39	160
BN 90 L						146	165	62	199																
BN 100	28	60	M10	31	10	265	230	300	14	4	14	195	458	398	521	158	140	188	46	204 (2)	—				
BN 112											15	219	484	424	547	173			165	73					
BN 132	38	80	M12	41	10	265	230	300			20		603	523	686				46	204 (2)					
BN 160 MR	42	110	M16	45	12	300	250	350	18.5	5	15	258	672	562	755	210	140	188	161	226					
BN 160 M	38 (1)	80 (1)	M12 (1)	41 (1)	10 (1)							310		736	626	820								51	266
BN 160 L	42	110	M16	45	12								780	670	864	245	187	187	261	52	305				
BN 180 M	48			51.5	14																				
BN 180 L	48	110	M16	51.5	14						348	866	756	981	261	52	305								
BN 200 L	42 (1)			M16 (1)	45 (1)	12 (1)	350	300	400	18.5								878	768	993	64				

NOTE:

- These values refer to the rear shaft end.
- For FD07 brake value R=226.

ES hexagon is not supplied with PS option.

BN_FD ; IM B5



Dimensions are in Inch except when shown in *italic* [mm]

	Shaft					Flange						Motor										
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES	
BN 63	0.433	0.906	M4	0.492	0.157	4.528	3.740	5.512	0.374	0.118	0.394	4.764	10.709	9.803	11.693	4.803	3.858	5.236	0.551	3.780	0.197	
BN 71	0.551	1.181	M5	0.630	0.197	5.118	4.331	6.299	0.374	5.433		12.205	11.024	13.465	5.315	0.984			4.055			
BN 80	0.748	1.575	M6	0.846	0.236	6.496	5.118	7.874	0.453	0.138	0.453	6.142	13.622	12.047	15.276	5.748	4.331	6.496	1.614	5.079	0.236	
BN 90 S	0.945	1.969	M8	1.063	0.315							6.929	16.102	14.134	18.150	5.866			1.535			
BN 90 L						5.748	6.299															
BN 100	1.102	2.362	M10	1.220	8.465	7.087	9.843	0.551	0.157	0.551	7.677	18.031	15.669	20.512	6.220	5.512	7.402	6.496	2.441	—		
BN 112										0.591	8.622	19.055	16.693	21.535	6.811			6.496	2.874		7.835	
BN 132	1.496	3.150	M12	1.614	0.394	10.433	9.055	11.811	0.551	0.157	0.787	10.157	23.740	20.591	27.008	8.268	5.512	7.402	1.811	8.031 ⁽²⁾	—	
BN 160 MR	1.654	4.331	M16	1.772	0.472	11.811	9.843	13.780			0.728	0.197	0.591	12.205	26.457	22.126			29.724	9.646		7.362
BN 160 M	1.496 ⁽¹⁾	3.150 ⁽¹⁾	M12 ⁽²⁾	1.614 ⁽¹⁾	0.394 ⁽¹⁾				11.811	9.843							13.780	0.728			0.197	
BN 160 L	1.654	4.331	M16	1.772	0.472	11.811	9.843	13.780			0.728	0.197	0.591	12.205	30.709	26.378			34.016	9.646		7.362
BN 180 M	1.890			1.614 ⁽¹⁾	2.028				0.551	11.811							9.843	13.780			0.728	
BN 180 L	1.890	1.614 ⁽¹⁾	2.028	0.551	11.811	9.843	13.780	0.728	0.197		0.591	12.205	30.709	26.378	34.016	9.646			7.362	7.362		2.008
BN 200 L	2.165	4.331 ⁽¹⁾	M20	2.323						0.630							13.780	11.811			15.748	
	1.654 ⁽¹⁾	M16 ⁽³⁾	1.772 ⁽³⁾	0.472 ⁽³⁾	13.780	11.811	15.748	0.728	0.197	0.709	13.701	34.567	30.236	39.094	10.276	7.362			7.362	2.520		12.008

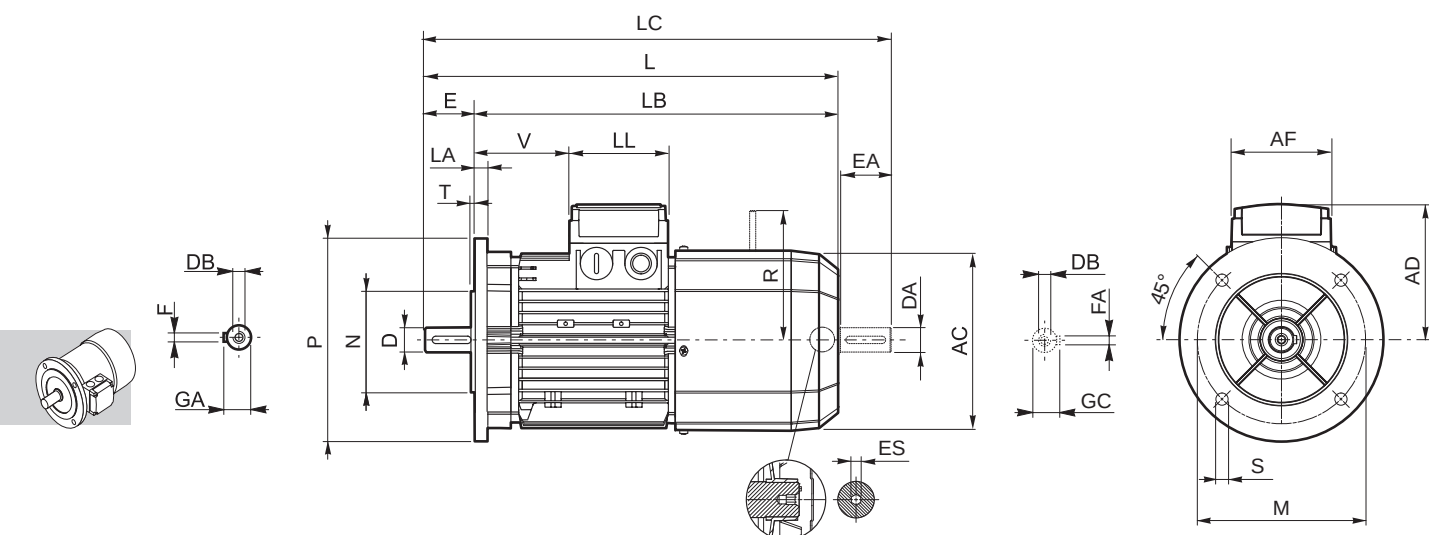
NOTE:

1) These values refer to the rear shaft end.

2) For FD07 brake value R=8.898

ES hexagon is not supplied with PS option.

BN FA - IM B5



Dimensions are in [mm]

	Shaft					Flange						Motor									
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES
BN 63	11	23	M4	12.5	4	115	95	140	9.5	3	10	121	272	249	297	95	74	80	26	116	5
BN 71	14	30	M5	16	5	130	110	160		138		310	280	342	108	68			124		
BN 80	19	40	M6	21.5	6	165	130	200	11.5	3.5	11.5	156	346	306	388	119			83	134	
BN 90	24	50	M8	27	8							215	180	250	14	4	20	176	409	359	461
BN 100	28	60	M10	31		215	180	250	14	4	20							14	195	458	398
BN 112												15	219	484	424	547	157	128	198		
BN 132	38	80	M12	41	10	265	230	300	18.5	5	15	258	603	523	686	210	140	188	46	200 (2)	—
BN 160 MR	42 38 (1)	110 80 (1)	M16 M12 (1)	45 41 (1)	12 10 (1)	300	250	350					672	562	755	193	118	118	218	217	
BN 160 M																					
BN 160 L				310	736							626	820	245	187	187	51	247			
BN 180 M									780	670	864										

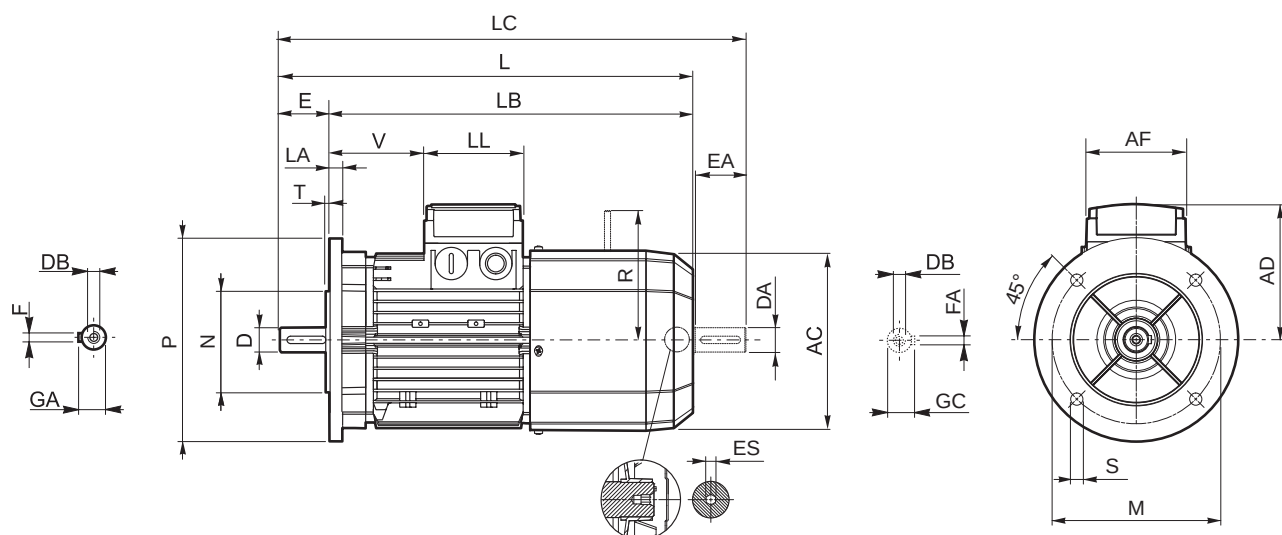
NOTE:

- 1) These values refer to the rear shaft end.
2) For FA07 brake value $R=217$.

Dimensions AD, AF, LL and V, relevant to terminal box of motors BN...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size BN...FD motors

ES hexagon is not supplied with PS option.

BN_FA - IM B5



Dimensions are in Inch except when shown in *italic* [mm]

	Shaft					Flange						Motor											
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES		
BN 63	0.433	0.906	M4	0.492	0.157	4.528	3.740	5.512	0.374	0.118	0.394	4.764	10.709	9.803	11.693	3.740	2.913	3.150	1.024	4.567	0.197		
BN 71	0.551	1.181	M5	0.630	0.197	5.118	4.331	6.299		0.138		5.433	12.205	11.024	13.465	4.252			2.677	4.882			
BN 80	0.748	1.575	M6	0.846	0.236	6.496	5.118	7.874				0.453	6.142	13.622	12.047	15.276			4.685	3.268		5.276	
BN 90	0.945	1.969	M8	1.063	0.315	8.465	7.087	9.843	0.551	0.157	0.453	6.929	16.102	14.134	18.150	5.236	3.858	3.858	3.740	6.299	0.236		
BN 100	1.102	2.362	M10	1.220								7.677	18.031	15.669	20.512	5.591			4.685				
BN 112												8.622	19.055	16.693	21.535	6.181			5.039	7.795			
BN 132	1.496	3.150	M12	1.614	0.394	10.433	9.055	11.811	0.787	10.157	0.591	12.205	23.740	20.591	27.008	8.268	5.512	7.402	1.811	7.874 ⁽²⁾	—		
BN 160 MR	1.654 1.496 ⁽¹⁾	4.331 3.150 ⁽¹⁾	M16 M12 ⁽²⁾	1.772 1.614 ⁽¹⁾	0.472 0.394 ⁽¹⁾	11.811	9.843	13.780					0.728	0.197	26.457	22.126	29.724	7.598	4.646	4.646		8.583	8.543
BN 160 M															28.976	24.646	32.283	9.646	7.362	7.362		2.008	9.724
BN 160 L																							
BN 180 M																							

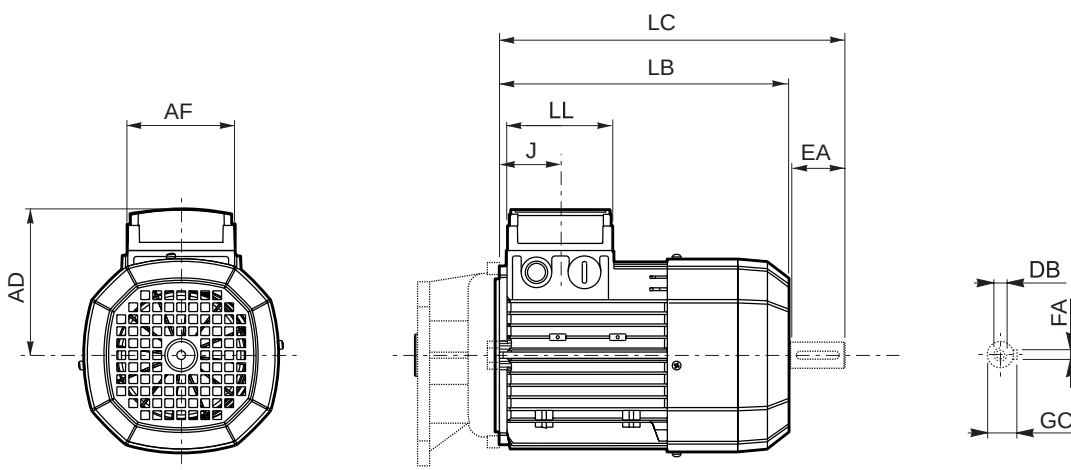
NOTE:

- 1) These values refer to the rear shaft end.
- 2) For FA07 brake value R=8.543

Dimensions AD, AF, LL and V, relevant to terminal box of motors BN...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size BN...FD motors

ES hexagon is not supplied with PS option.

M

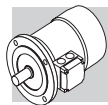
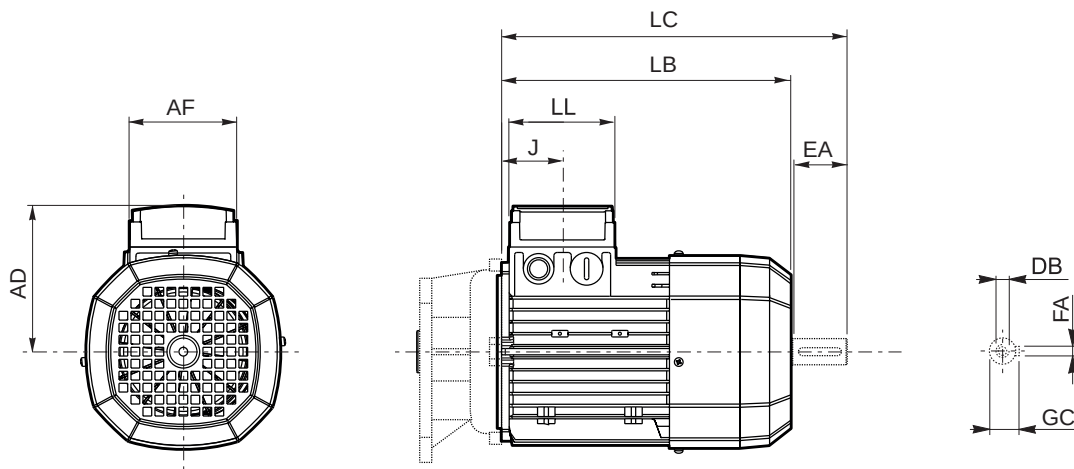


Dimensions are in [mm]

	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
M 0	9	20	M3	3	10.2	110	133	155	74	80	42	91
M 05	11	23	M4	4	12.5	121	165	191			48	95
M 1	14	30	M5	5	16	138	187	219			45	108
M 2 S	19	40	M6	6	21.5	156	202	245			44	119
M 3 S	28	60	M10	8	31	195	230	293	98	98	53.5	142
M 3 L							262	325				
M 4	38	80	M12	10	41	258	361	444	118	118	64.5	193
M 4 LC							396	479				
M 5 S						310	418	502	187	187	77	245
M 5 L							462	546				

BN-M

M

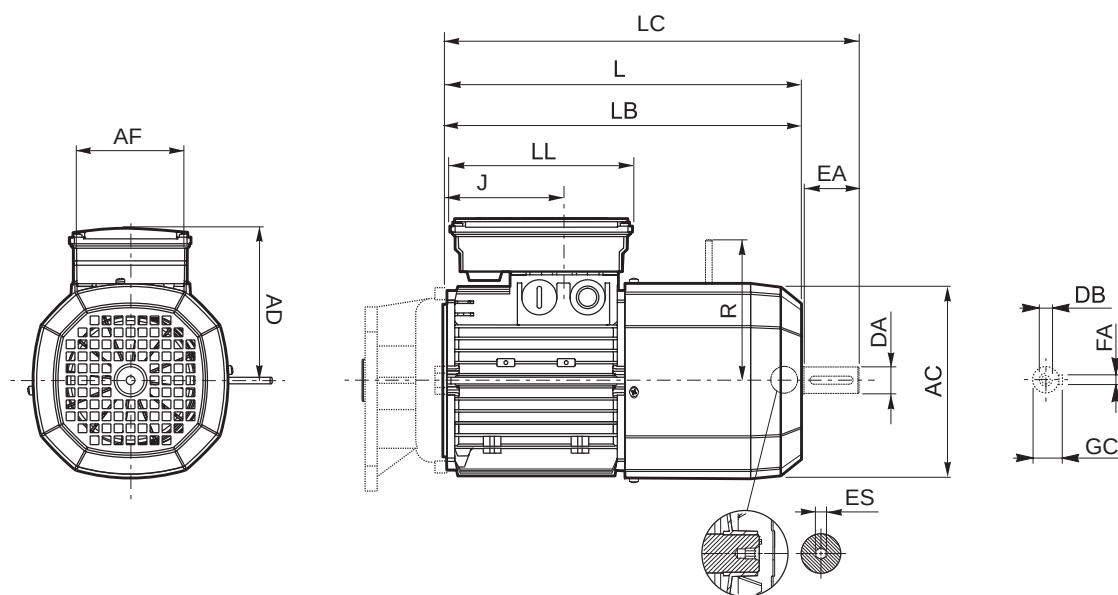
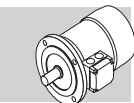


Dimensions are in Inch except when shown in *italic* [mm]

	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
M 0	0.354	0.787	<i>M3</i>	0.118	0.402	4.331	5.236	6.102	2.913	3.150	1.654	3.583
M 05	0.433	0.906	<i>M4</i>	0.157	0.492	4.764	6.496	7.520			1.890	3.740
M 1	0.551	1.181	<i>M5</i>	0.197	0.630	5.433	7.362	8.622			1.772	4.252
M 2 S	0.748	1.575	<i>M6</i>	0.236	0.846	6.142	7.953	9.646			1.732	4.685
M 3 S	1.102	2.362	<i>M10</i>	0.315	1.220	7.677	9.055	11.535	3.858	3.858	2.106	5.591
M 3 L							10.315	12.795				
M 4	1.496	3.150	<i>M12</i>	0.394	1.614	10.157	14.213	17.480	4.646	4.646	2.539	7.598
M 4 LC							15.591	18.858				
M 5 S						12.205	16.457	19.764	7.362	7.362	3.031	9.646
M 5 L							18.189	21.496				

BN-M

M_FD



Dimensions are in [mm]

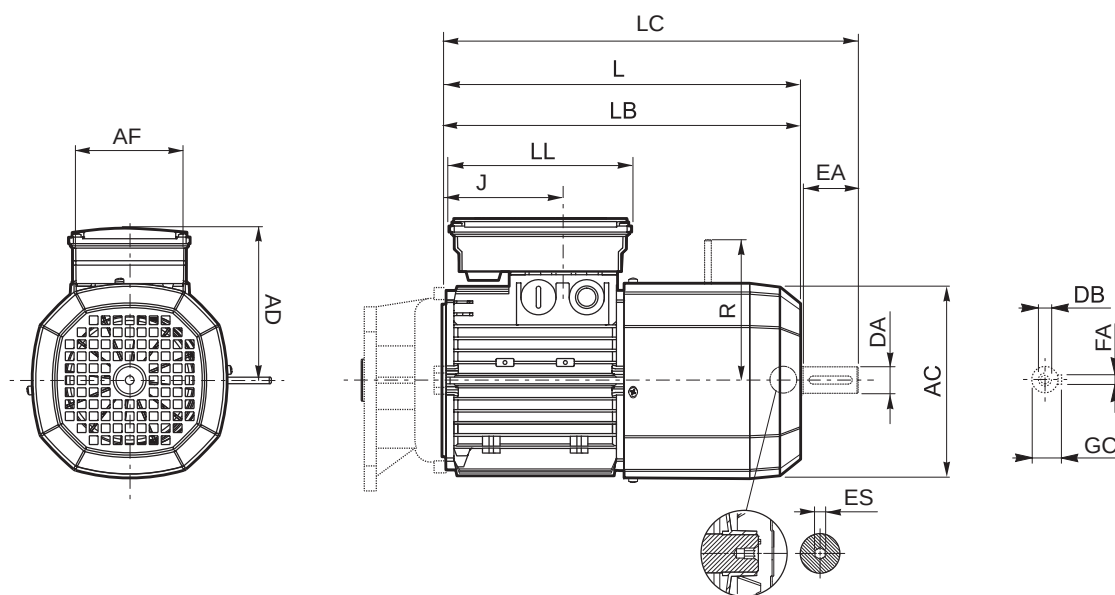
	Rear shaft end					Motor									
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES	
M 05	11	23	M4	4	12.5	121	231	256	98	133	48	122	96	5	
M 1	14	30	M5	5	16	138	248	280			73	135	103		
M 2 S	19	40	M6	6	21.5	156	272	314			88	146	129		
M 3 S	28	60	M10	8	31	195	326	389	110	165	124.5	158	160	6	
M 3 L							353	416							
M 4	38	80	M12	10	41	258	470	553	140	188	185.5	210	204 (1)		—
M 4 LC							495	578			64.5		226		
M 5 S						310	558	642	187	187	77	245	266		
M 5 L							602	686							

NOTE:

1) For FD07 brake value R=226.

ES hexagon is not supplied with PS option.

M_FD



Dimensions are in Inch except when shown in *italic* [mm]

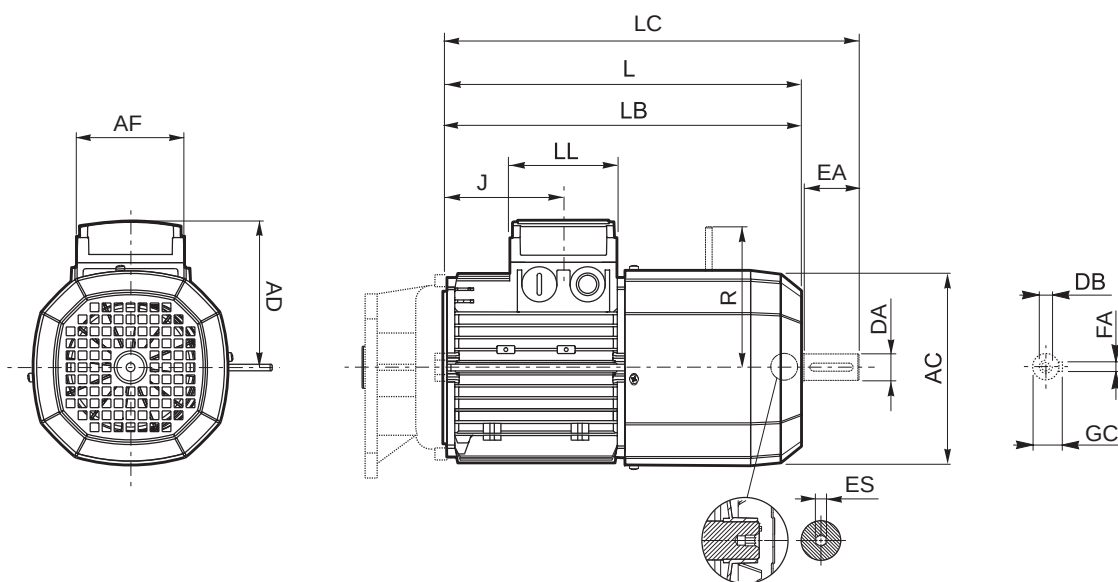
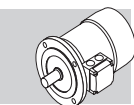
	Rear shaft end					Motor								
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES
M 05	0.433	0.906	<i>M4</i>	0.157	0.492	4.764	9.094	10.079	3.858	5.236	1.890	4.803	3.780	0.197
M 1	0.551	1.181	<i>M5</i>	0.197	0.630	5.433	9.764	11.024			2.874	5.315	4.055	
M 2 S	0.748	1.575	<i>M6</i>	0.236	0.846	6.142	10.709	12.362			3.465	5.748	5.079	
M 3 S	1.102	2.362	<i>M10</i>	0.315	1.220	7.677	12.835	15.315	4.331	6.496	4.902	6.220	6.299	0.236
M 3 L							13.898	16.378						
M 4	1.496	3.150	<i>M12</i>	0.394	1.614	10.157	18.504	21.772	5.512	7.402	7.303	8.268	8.031 ⁽¹⁾	
M 4 LC							19.488	22.756			2.539		8.898	
M 5 S						12.205	21.969	25.276	7.362	7.362	3.031	9.646	10.472	—
M 5 L							23.701	27.008						

NOTE:

1) For FD07 brake value R=8.898

ES hexagon is not supplied with PS option.

M_FA



Dimensions are in [mm]

BN-M

	Rear shaft end					Motor								
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES
M 05	11	23	M4	4	12.5	121	231	256	74	80	48	95	116	5
M 1	14	30	M5	5	16	138	248	280			73	108	124	
M 2 S	19	40	M6	6	21.5	156	272	314			88	119	134	
M 3 S	28	60	M10	8	31	195	326	389	98	98	124.5	142	160	6
M 3 L							353	416						
M 4	38	80	M14	10	41	258	470	553	140	188	185.5	210	200 (1)	
M 4 LC							495	578			64.5		217	
M 5 S			M12			310	558	642	187	187	77	245	247	—
M 5 L							602	686						

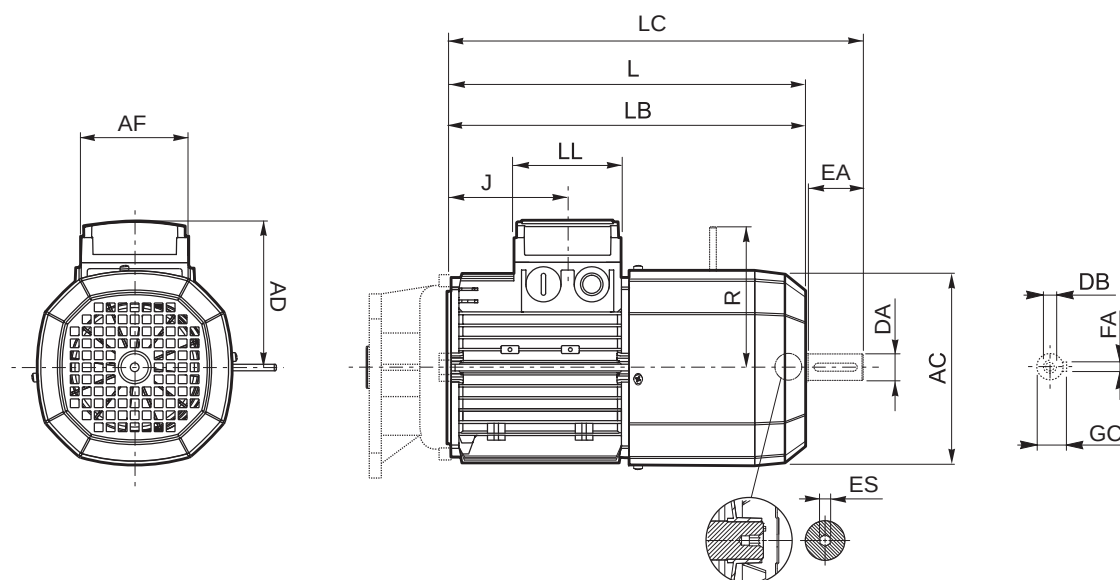
NOTE:

1) For FA07 brake value R=217.

Dimensions AD, AF, LL and V, relevant to terminal box of motors M...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size M...FD motors

ES hexagon is not supplied with PS option.

M_FA



Dimensions are in Inch except when shown in *italic* [mm]

	Rear shaft end					Motor									
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES	
M 05	0.433	0.906	M4	0.157	0.492	4.764	9.094	10.079	2.913	3.150	1.890	3.740	4.567	0.197	
M 1	0.551	1.181	M5	0.197	0.630	5.433	9.764	11.024			2.874	4.252	4.882		
M 2 S	0.748	1.575	M6	0.236	0.846	6.142	10.709	12.362			3.465	4.685	5.276		
M 3 S	1.102	2.362	M10	0.315	1.220	7.677	12.835	15.315	3.858	3.858	4.902	5.591	6.299	0.236	
M 3 L							13.898	16.378							
M 4	1.496	3.150	M14	0.394	1.614	10.157	18.504	21.772	5.512	7.402	7.303	8.268	7.874 ⁽¹⁾		
M 4 LC							19.488	22.756			2.539		8.543		
M 5 S			M12			12.205	21.969	25.276	7.362	7.362	3.031	9.646	9.724		—
M 5 L							23.701	27.008							

NOTE:

1) For FA07 brake value R=8.543

Dimensions AD, AF, LL and V, relevant to terminal box of motors M...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size M...FD motors

ES hexagon is not supplied with PS option.



INDEX OF REVISIONS

BR_CAT_CAF_NEM_ENG_R03_0	
	Description
41, 43	Fixed gearmotor rating charts for rated power of 0.50 and 0.75 hp
380 ... 405	Amended drawings of gearboxes A60 US, A70 US, A80 US, A90 US

2016 12 31

This publication supersedes and replaces any previous edition and revision. We reserve the right to implement modifications without notice.

This catalogue cannot be reproduced, even partially, without prior consent.

Conversion table for commonly used metric – imperial units

Length

1 in	=	25.40 mm	= 0.0254 m
1 ft	=	304.8 mm	= 0.3048 m
1 yd	=	914.4 mm	= 0.9144 m

Area

1 in ²	=	645.16 mm ²	= 0.645×10 ⁻³ m ²
1 ft ²	=	92.9×10 ³ mm ²	= 92.9×10 ³ m ²
1 yd ²	=	836×10 ³ mm ²	= 0.8361 m ²

Volume

1 in ³	=	16.4×10 ⁻³ dm ³	= 16.4×10 ⁻⁶ m ³
1 ft ³	=	28.32 dm ³	= 28.3×10 ⁻³ m ³

Force – Weight

1 lbm	=	2.2046 kg
1 lbf	=	4.4482 N

Torque

1 lb in	=	0.1129 Nm
1 lb ft	=	1.3558 Nm

Power

1 hp	=	0.7457 kW
------	---	-----------

Moment of inertia

1 lb ft ²	=	4.214×10 ⁻²	kg m ²
1 lb in s ²	=	1.12985×10 ⁻¹	kg m ²
1 lb ft s ²	=	1.35582	kg m ²

Pressure – stress

1 lb/in ²	=	6.89×10 ⁻³	N/mm ²
1 lb/ft ²	=	47.88	N/m ²

Temperature

t [°F]	=	$\frac{5}{9} \times [t - 32]$	[°C]
T [°C]	=	$\left(\frac{9}{5} \times T + 32 \right)$	[°F]



Bonfiglioli has been designing and developing innovative and reliable power transmission and control solutions for industry, mobile machinery and renewable energy applications since 1956.