

Self-priming pumps with peripheral impeller

 Clean water

 Domestic use



PERFORMANCE RANGE

- Flow rate up to **50 l/min** (3.0 m³/h)
- Head up to **70 m**

APPLICATION LIMITS

- Manometric suction lift up to **9 m** (HS)
- Liquid temperature between **-10 °C** and **+60 °C**
- Ambient temperature up to **+40 °C** (**+50 °C** for PKS 60)
- Max. working pressure:
 - **6 bar** for PKS 60, PKS 65
 - **7 bar** for PKS 70, PKS 80
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



INSTALLATION AND USE

Suitable for use with clean water that does not contain abrasive particles and with liquids that are not chemically aggressive towards the materials from which the pump is made.

Because of their compactness, reliability and the fact that they are easy to use, they are suitable for use in domestic applications such as the distribution of water in combination with small pressure tanks, for the irrigation of gardens and orchards, for drawing water from tanks and for all those other situations where air or gas may be present in the water to be pumped. The pump comes complete with a flap-check valve.

Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

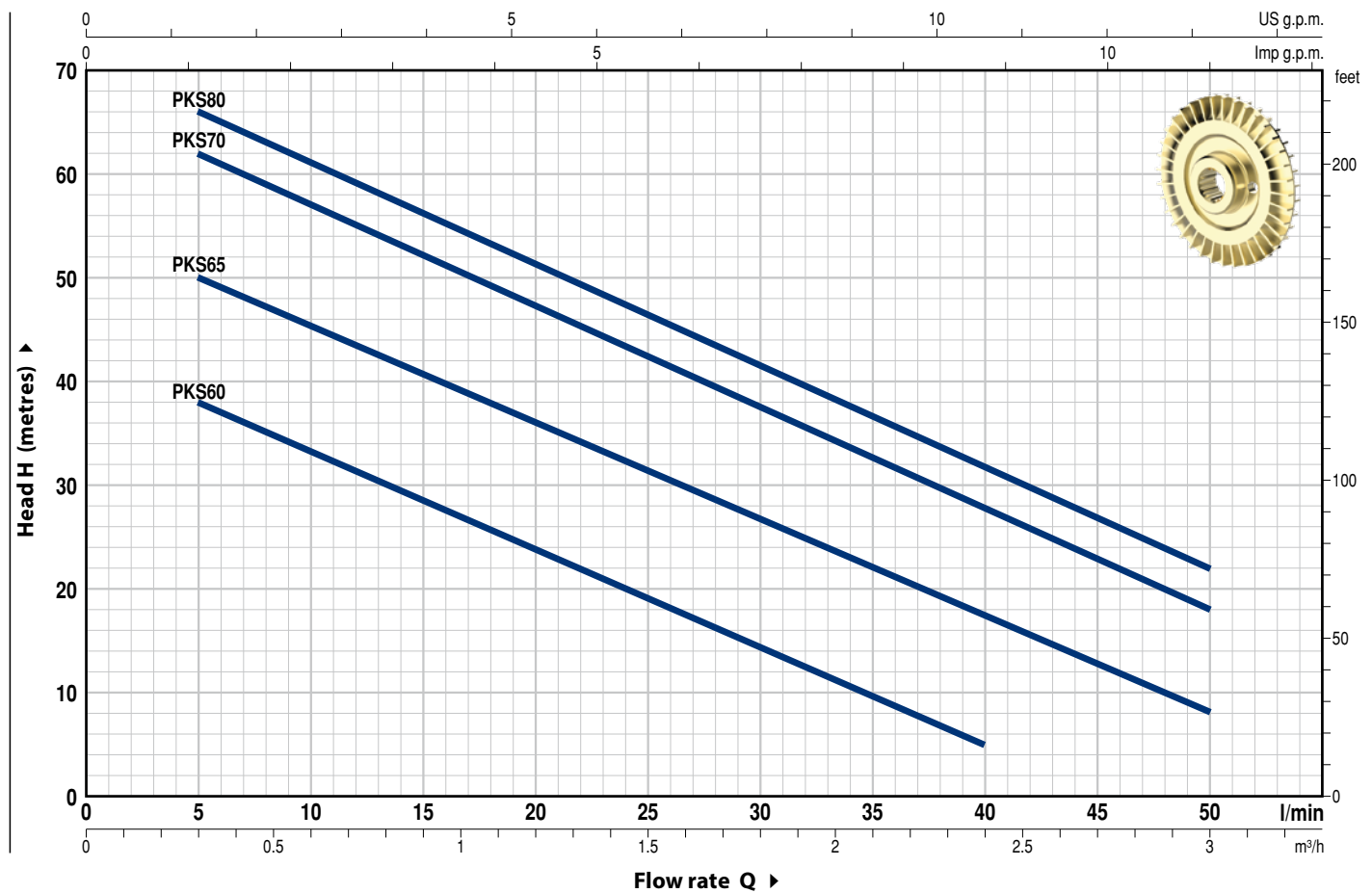
- Motor bracket: patent n. IT1243605
- Shaft: patent n. 0000275945 (PKS60, PKS65)

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- IP X5 class protection for PKS 70, PKS 80

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz $n = 2900 \text{ min}^{-1}$ HS = 0 m



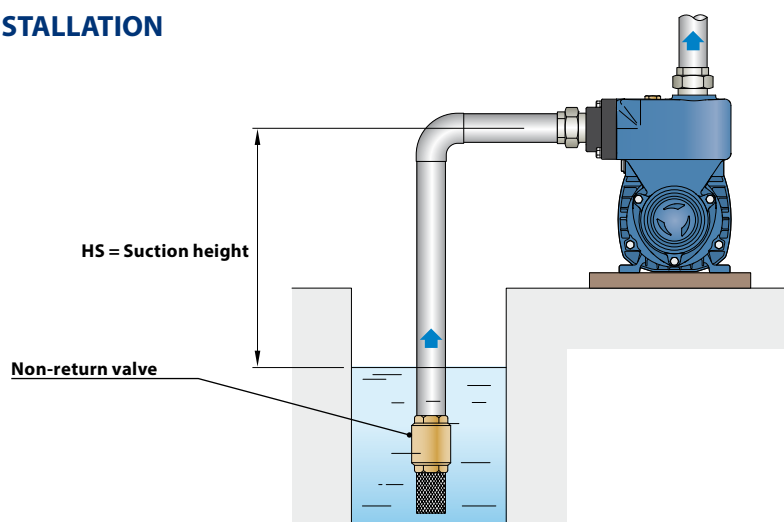
MODEL		POWER (P ₂)			Q	m³/h l/min	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
Single-phase	Three-phase	kW	HP	▲			0	5	10	15	20	25	30	35	40	45	50
PKSm 60	PKS 60	0.37	0.50	IE2	H metres	40	38	33.5	29	24	19.5	15	10	5			
PKSm 65	PKS 65	0.55	0.75			55	50	45.5	40.5	36	31	27	22	17	12.5	8	
PKSm 70	PKS 70	0.60	0.85	IE3		65	62	57	52	47	42	37	32	27	22	18	
PKSm 80	PKS 80	0.75	1			70	66	61	56	51	46	41	36.5	31	27	22	

Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

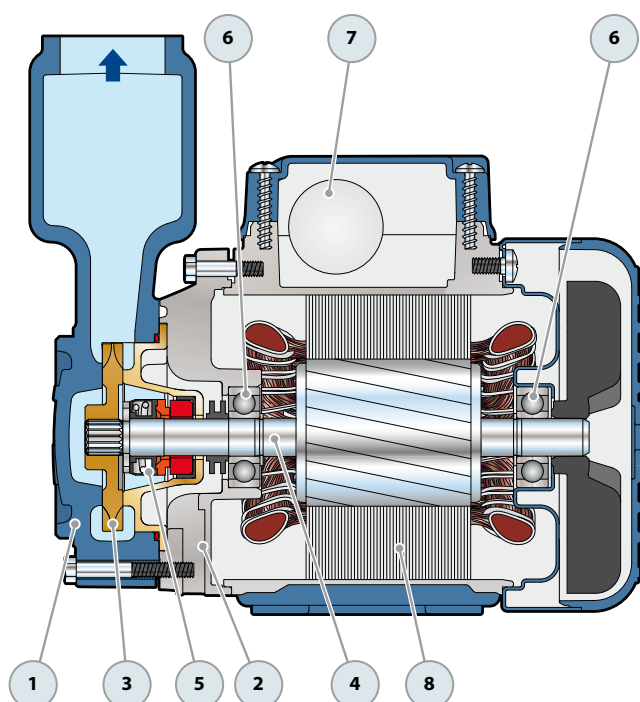
STANDARD INSTALLATION



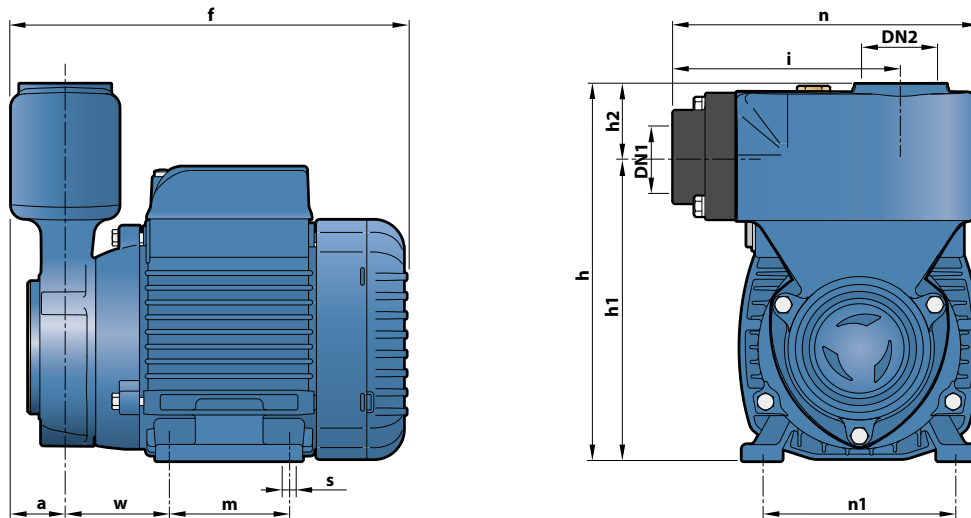
POS. COMPONENT

CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron with threaded ports in compliance with ISO 228/1 and a built-in flap-check valve in the suction port				
2	MOTOR BRACKET	Aluminium with brass insert (patented), reduces the risk of impeller seizure				
3	IMPELLER	Brass with peripheral radial vanes				
4	MOTOR SHAFT	Stainless steel AISI 431 (EN 10088-3 - 1.4104 for PKS 60, PKS 65)				
5	MECHANICAL SEAL	Seal	Shaft	Materials		
		Model	Diameter	Stationary ring	Rotational ring	Elastomer
		AR-12	Ø 12 mm	Ceramic	Graphite	NBR
6	BEARINGS	Pump	Model			
		PKS 60-65	6201 ZZ / 6201 ZZ			
		PKS 70-80	6203 ZZ / 6203 ZZ			
7	CAPACITOR	Pump	Capacitance			
		Single-phase	(230 V or 240 V)	(110 V)		
		PKSm 60	10 µF - 450 VL	25 µF - 250 VL		
		PKSm 65	14 µF - 450 VL	25 µF - 250 VL		
		PKSm 70	16 µF - 450 VL	60 µF - 300 VL		
		PKSm 80	20 µF - 450 VL	60 µF - 300 VL		
8	ELECTRIC MOTOR	PKSm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding. PKS: three-phase 230/400 V - 50 Hz. ➡ The three-phase pumps are fitted with high performance motors up to P₂=0.55 kW in class IE2 and from P₂=0.60 kW in class IE3 (IEC 60034-30-1) – Insulation: class F – Protection: IP X4				



DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm											kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	i	m	n	n1	w	s	1~	3~
PKSm 60	PKS 60	1"	1"	28	196	183	149	34	110	55	148	93-100	53	7	5.6	5.6
PKSm 65	PKS 65				227	190	156			80		100			7.6	6.9
PKSm 70	PKS 70				263	198	164			90	160	112	62		10.5	10.5
PKSm 80	PKS 80														10.5	10.5

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
PKSm 60	2.6 A	2.5 A	5.2 A
PKSm 65	3.7 A	3.5 A	7.4 A
PKSm 70	5.2 A	4.8 A	10.4 A
PKSm 80	5.2 A	4.8 A	10.4 A

MODEL	VOLTAGE			
Three-phase	230 V	400 V	240 V	415 V
PKS 60	2.0 A	1.15 A	1.9 A	1.1 A
PKS 65	3.0 A	1.7 A	2.8 A	1.6 A
PKS 70	3.8 A	2.2 A	3.6 A	2.1 A
PKS 80	3.8 A	2.2 A	3.8 A	2.2 A

PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
PKSm 60	PKS 60	224	288
PKSm 65	PKS 65	168	216
PKSm 70	PKS 70	96	144
PKSm 80	PKS 80	96	144