

ABOUT ATMI

A French ISO 9001-2000 certified company that proposes the most extensive range of float level switches able to meet all customers' requirements with top quality devices which are suitable to all kinds of applications.

ATMI's policy is continuous innovation, quality, zero defect and reliability. ATMI is represented all over the world by almost 200 highly skilled distributors.

All the devices manufactured by ATMI are based on the "float" system which has clearly proved for more than 30 years, to be an excellent system to solve most level regulation problems in an easy, reliable and inexpensive way.



SPECIAL FEATURES OF ATMI DEVICES UNANIMOUSLY APPRECIATED IN THE WORLD

- Biconical shape: no risks of clogging. No need of maintenance.
- Omni-directional operation of all models.
- No crimping or gluing. All the floats are welded or vulcanized.
- Protection index: IP 68 and IP 6X.
- Top quality microswitches and electrical cables RN8F.
- Stainless ballasts, clip type or adjustable on the cable.
- Operation in densities from 0,70 to 1,50 depending on the models.
- Colours, marking and packaging on request. Connection diagram delivered with each float.
- ATEX certification for hazardous areas and ACS certification for drinking water meant for human consumption.

NON-EXPLOSIVE AREA
ELECTRICAL PANEL
Intrinsic safety relay

HAZARDOUS AREA

ATEX CERTIFICATION WHAT YOU SHOULD KNOW

It is important to know that the Ex proof devices, ATEX certified, are compulsory in pumping stations, granular silos and some pulverulent materials storage facilities. It is also important to know that only the user can define, before the installation, if it fits or not a pumping station or a silo with explosive risks. The atmosphere is classified 0, 1, 2 for gas and 20, 21, 22 for dust. So, it is highly recommended taking no risks in this situation as it can trigger disastrous consequences.

NON-EXPLOSIVE AREA
ELECTRICAL PANEL
Intrinsic safety relay

HAZARDOUS AREA

ATMI OFFERS THREE TYPES OF FLOAT LEVEL SWITCHES EXCLUSIVELY MANUFACTURED IN FRANCE

- The classical devices for any use in non explosive areas.
- Special series ATEX certified for use in hazardous areas.
- Products ACS certified (Sanitary certificate) for use in drinking water for human consumption.

SUCH EQUIPMENTS ARE CLASSIFIED IN 4 FAMILIES


- Float level switches designed for any regulation with several devices in the majority of liquid mixtures.
- Tilt level switches designed for solids (cereals, powders, pulverulents, sawdust, polyethylene granulate, cement, lime, etc.).
- Float level switches designed for the automatising with only one single float in various liquids.
- Float level switches designed for various uses in industrial liquids.

LEVEL SWITCHES FOR MULTILEVEL REGULATION

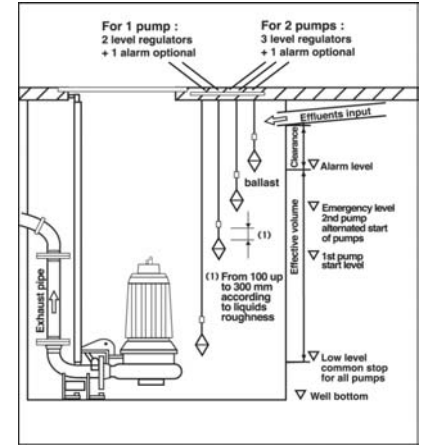
FOR ALL LIQUIDS

These omni-directional floats operate by switching as the water level rises, thus closing or opening a circuit connected to an electrical panel. To perform a pump regulation for instance, the floats will be installed at the high and low required level without any level limit. A 3rd float can be placed higher to connect a sound or light alarm. A second pump can be started by means of another device fitted at the required level, the bottom one being common to all pumps. This is the simplest, the cheapest and the most commonly used level regulation system.

The SOBA SMALL is technically similar to the SOBA but with a smaller size.

The HR HY range is highly appreciated in the chemical industry and the  devices ATEX certified are necessary to fit pumping stations and explosion-proof pumps in hazardous areas 0, 1, 2 (gas) and 20, 21, 22 (dust).

Millions of SOBA have been working all over the world for more than 30 years.



MECA SERIES

MECA devices are identical to the SOBA but with a different colour. Both the MECA and the MECA HR HY have a neutral labelling.

SOBA SMALL



Differential angle \angle +/- 25°

SOBA



Differential angle \angle +/- 25°

SOBA HR HY



Differential angle \angle +/- 25°

SOBA (EC HY2000 ECO)



Differential angle \angle +/- 25°

For further information, please, refer to the individual technical sheets.

Operation mode

Allowed fluid density

Maximum pressure

Allowed temperature

Protection index

Power supply

Cut-out power

Wiring

Reverser microswitch

Housing material

Cable 3 cond. 1mm²

Size

Weight without cable

Cable weight

Adjustable ballast on cable (serie)

Standard cable lengths (serie)

(other lengths on request)

VR ECO

Omni-directional

0,70 to 1,25

3,5 bars

85°C

IP 68 

12, 24, 48 VAC/VDC

and 250 VAC 50/60 Hz

16 (6) A (16 A resistive - 6 A inductive)

Silver/Nickel contacts

Copolymer polypropylene

Neoprene or HR HY (hypalon) H07RN8-F

Height 130 mm Ø 70 mm

110 g

Neoprene 115 g/m - HR HY 110 g/m

Loaded resin 250 g

5, 6, 10, 13, 15, 20 and 25 m

VR ECO

Omni-directional

0,70 to 1,15

3,5 bars

85°C

IP 68 

12, 24, 48 VAC/VDC

and 250 VAC 50/60 Hz

16 (6) A (16 A resistive - 6 A inductive)

Silver/Nickel contacts

Copolymer polypropylene

Neoprene or HR HY (hypalon) H07RN8-F

Height 170 mm Ø 80 mm

200 g

Neoprene 115 g/m - HR HY 110 g/m

Loaded resin 250 g

5, 6, 10, 13, 15, 20 and 25 m

VR ECO

Omni-directional

0,80 to 1,10

4 bars

90°C

IP 68 

12, 24, 48 VAC/VDC

and 250 VAC 50/60 Hz

16 (6) A (16 A resistive - 6 A inductive)

Silver/Nickel contacts

Copolymer polypropylene

+ HR HY (hypalon) vulcanized

HR HY (hypalon) H07RN8-F

Height 200 mm Ø 92 mm

295 g

HR HY 110 g/m

Loaded resin 250 g

5, 6, 10, 13, 15, 20 and 25 m

VR ECO - "GP" version

Omni-directional

0,80 to 1,10

4 bars

T6 i.e. from -20°C to +70°C - idem for storage

IP 6X

24 VAC/VDC - 10 mA or

12 VAC/VDC 100 mA

Obligatory use with an intrinsic safety relay

Gold plated contacts

Copolymer polypropylene

+ HR HY (hypalon) vulcanized

HR HY (hypalon) H07RN8-F

Height 200 mm Ø 92 mm


300 g


HR HY 110 g/m

Loaded resin 250 g

5, 10, 15, 20, 25 and 30 m

DETAILS ABOUT THE SOBA (EC HY 2000 ECO) ATEX CERTIFIED

Designed and finalized only a few years ago, the SOBA  ATEX certified is more and more the most commonly used level regulation equipment for pumping stations. In addition to the respect of the current rules, people are more and more aware that explosion risks do really exist in different places as there is gas in several stations. For example, the urban effluents contaminated by hydrocarbons such as inflammable industrial effluents are more and more present. So, do not hesitate any longer!

The SOBA  ATEX certified provides a thorough and worry-free protection for only an additional cost.



SOLIBA TILT LEVEL SWITCHES

FOR SOLIDS

The huge success of these devices is essentially due to the reliability and the simplicity of its installation. To stop the filling of storing areas or silos, three models of SOLIBA are available for applications in both non-hazardous and hazardous areas. The offered prices are notably low. All SOLIBA level switches work by tilting in connection with the filling system circuit. This method is obviously very simple, reliable, and inexpensive.

For hazardous atmospheres (potentially explosive dust or gas), the models SOLIBA Ex P ("Dust") and GP ("Gas and Dust") are certified according to the EC type certificate LCIE 00 ATEX 6003 X in compliance with the Directive 94/9/CE and the standards EN 50014, 50281-1-1, 50281-1-2, 50020, zones 0, 1, 2 and 20, 21, 22, Group IIC, temperature class T6.

A separate instruction sheet provides all details for the installation of these devices. The GP version must be obligatory connected to an intrinsic safety relay.

Application in silos containing cereals, pet food, cattle food, cement, lime, polyethylene granulate, wood dust, powders, etc.



ATEX

The Ex proof devices ATEX certified are now compulsory in the majority of silos. They allow in total security the stopping of the silos' filling and the installation of high level "Alarms" as a complement of other detection systems. They are inexpensive and easy to install.

For further information, please, refer to the individual technical sheets.

Operation mode

Use

Important specification

Allowed temperature

Protection index

Power supply

Cut-out power

Wiring

Reverser microswitch

Housing material

Cable 3 cond. 1mm²

Size

Weight without cable

Cable weight

Adjustable ballast on cable (option)

Standard cable lengths (series)

(other lengths on request)

SOLIBA



Differential angle

+/- 10°

Non certified

By tilting

Stopping of the silos filling (cereals, pulverulents)

Only in "non explosive" areas

From - 40°C to 85°C

IP 68 \square

250 VAC - 50/60 Hz

20 (8) A (20 A resistive - 8 A inductive)

Silver / Cd oxide contacts

Copolymer polypropylene

Neoprene H07RN8-F

Height 152 mm Ø 95 mm

462 g

Neoprene 115 g/m

Loaded resin 250 g

5, 6, 10, 13, 15, 20 and 30 m

SOLIBA Ex (SF2000 ECO)



Differential angle

+/- 10°

"P" version

By tilting

Stopping of the silos filling (cereals, pulverulents)

Especially for work in explosive areas 20, 21, 22

T6 i.e. from - 20°C to + 70°C / idem for storage

IP 6X

240 VAC - 50/60 Hz

1 A (protection by means of a 1 A fuse)

Silver / nickel contacts

Copolymer polypropylene + HR HY (hypalon) vulcanized

HR HY (hypalon) H07RN8-F

Height 260 mm Ø 92 mm

495 g

HR HY 110 g/m

Loaded resin 250 g

5, 10, 15, 20, 25 and 30 m

SOLIBA Ex (SF2000 ECO)



Differential angle

+/- 10°

"GP" version

By tilting

Stopping of the silos filling (cereals, pulverulents)

Especially for work in explosive areas 0, 1, 2 and 20, 21, 22

T6 i.e. from - 20°C to + 70°C idem for storage

IP 6X

24 VAC/VDC - 10 mA

or 12 VAC/VDC 100 mA

With intrinsic safety relay

Gold plated contacts

Copolymer polypropylene + HR HY (hypalon) vulcanized

HR HY (hypalon) H07RN8-F

Height 200 mm Ø 92 mm

495 g

HR HY 110 g/m

Loaded resin 250 g

5, 10, 15, 20, 25 and 30 m

ATEX

WARNING

The non-respect of the "Low Voltage" Directives and the "Intrinsic Safety" instructions or any different use non-specified by the constructor as well as the intervention of non competent authorities can cause serious consequences. The manufacturer denies all responsibility if the user does not respect the instructions and rules regarding sanitary, fire and explosion risks.



DETAILS ABOUT THE SOLIBA Ex (SF 2000 ECO) ATEX CERTIFIED

Concerning the silos for cereals, everybody knows the existence of explosive risks created by dust and gas.

Our SOLIBA Ex ATEX certified which has a double housing has been especially designed to be used in the most important explosive areas.

It complies with the following utilization norms:

- The "P" version can be used in areas classified 20, 21, 22 (dust).
- The "GP" version can be used in areas classified 0, 1, 2 (gas) and 20, 21, 22 (dust) - Highly recommended device.

These two devices which are simple to install and inexpensive enable to stop the silos' filling in total security but also to get an "alarm" level detection which is very often neglected but, nevertheless, very useful. So, think about the SOLIBA Ex .

For any further information, please visit our website www.atmi.fr where you can download various documentation.

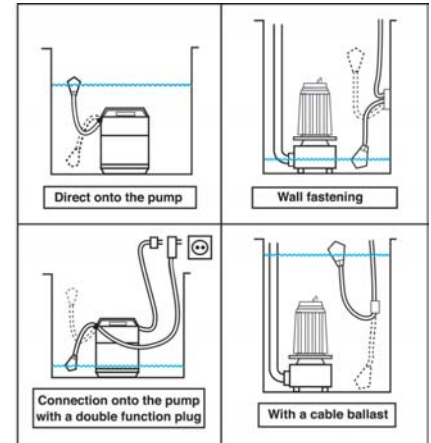


LEVEL SWITCHES TO START/STOP PUMPS - BIP STOP & AT

FOR VARIOUS LIQUIDS

The BIP STOP and the AT are omni-directional and designed for the pump automisation (start and stop of pumps), the alarm, the water shortage stop, the filling stop, with one single device. These floats simply open or close the pumps power supply circuit either directly or through a relay. The distance between the float and the cable fastening point (1,50 m. max recommended depending on models) gives the regulation height. The BIP STOP is a cheap level switch for use in lightly loaded liquids. It fits small and cellar emptying pumps and has a 110° differential angle. They are manufactured in large quantities. The AT 120 (standard or HR HY) are bigger and can withstand intensive uses in heavily loaded liquids. They are intended for the professionals to fit any power pumps. The differential angle is 120°. The ATS 165 has a very big differential working angle (165°). A unique ATS 165 can replace 2 standard regulators even in very agitated liquids.

Most of these devices are available in several versions: V - R - VR - VT - VS to meet all requirements (please, refer to glossary). Several models of ballasts are available in option.



IMPORTANT

Please, refer to the accessories column (on the back) for intrinsic safety relays, different types of ballasts and cable-clamps. All the SOBA, including the certified ACS are delivered with the appropriate ballast. For the BIP STOP, the AT, the SOLIBA, the SOLIBA (Ex) and the TUBA, the ballast is sold separately.

For further information, please, refer to the individual technical sheets.

	BIP STOP	AT 120	AT 120 HR HY	ATS 165
				
Differential angle	+/- 110°	+/- 120°	+/- 120°	+/- 165°
Version	V - R - VR - VT - VS - ECO	V - R - VR - VT - VS - ECO	V - R - VR - VT - VS - ECO	VR ECO
Operation mode	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Allowed fluid density	0,70 to 1,15	0,70 to 1,15	0,80 to 1,10	0,70 a 1,10
Maximum pressure	3,5 bars	3,5 bars	4 bars	3,5 bars
Allowed temperature	85°C	85°C	90°C	85°C
Protection index	IP 68	IP 68	IP 68	IP 68
Power supply	250 VAC/VDC - 50/60 Hz	250 VAC/VDC - 50/60 Hz	250 VAC/VDC - 50/60 Hz	250 VAC/VDC - 50/60 Hz
Cut-out power	20 (8) A (20 A resistive - 8 A inductive)	20 (8) A (20 A resistive - 8 A inductive)	20 (8) A (20 A resistive - 8 A inductive)	20 (8) A (20 A resistive - 8 A inductive)
Microswitch	Silver/Cd oxide reverser contacts	Silver/Cd oxide reverser contacts	Silver/Cd oxide reverser contacts	Silver/Nickel reverser contacts
Housing material	Copolymer polypropylene	Copolymer polypropylene	Copolymer polypropylene + HR HY (hypalon)	Copolymer polypropylene
Cable 2 or 3 cond. 1mm ²	Neoprene or HR HY (hypalon) HO7RN8-F	Neoprene or HR HY (hypalon) HO7RN8-F	HR HY (hypalon) HO7RN8-F	Neoprene or HR HY (hypalon) HO7RN8-F
Size	Height 130 mm Ø 70 mm	Height 170 mm Ø 80 mm	Height 200 mm Ø 92 mm	Height 152 mm Ø 95 mm
Weight without cable	105 g	195 g	295 g	325 g
Cable weight	Neoprene 115 g/m - HR HY 110 g/m	Neoprene 115 g/m - HR HY 110 g/m	HR HY 110 g/m	Neoprene 115 g/m - HR HY 110 g/m
Adjustable ballast on cable (option)	Loaded resin 175 g or 250 g - Plastic 200 g - "clip" ballast 275 g	Loaded resin 250 g	Loaded resin 250 g	Loaded resin 250 g
Standard cable lengths (serie) (other lengths on request)	0,40 - 0,50 - 1, 3, 5, 10 and 20 m	1, 3, 5, 10 and 20 m	1, 3, 5, 10 and 20 m	5, 10, 15, 20 and 25m

SPECIAL RANGE FOR DRINKING WATER meant for human consumption



These two devices are manufactured with special materials and are ACS certified in conformity with the XP P41-250 (1-2-3) norm. The SOBA "EP" level switch is the drinking water version of the standard SOBA. It is designed for the automatic regulation with several devices, with no height limit between them. The ATS 165 "EP" level switch, like the standard

ATS 165 enables pumps automatic regulation with a single float. It is specially designed to work in agitated water thanks to its 165° differential angle. It avoids any deterioration risks on the pumps engines.

DETAILS ABOUT THE SOBA EP AND THE ATS 165 EP ACS CERTIFIED

Blue EPDM electrical cable = 105g/m. Stainless steel AISI 316 L: 230 g adjustable ballast

SOBA EP and ATS 165 EP - ACS certified


	
Differential angle +/- 25°	Differential angle +/- 165°
VR ECO	VR ECO

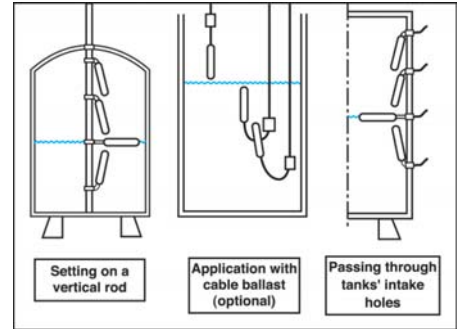
TUBA LEVEL SWITCHES

FOR INDUSTRIAL LIQUIDS

The shape of the TUBA has been studied to allow their installation in small capacity and narrow access - generally 1" or 1 1/4" - tanks, cisterns and reservoirs. Its small diameter enables the passing through the tank intake holes. The TUBA can be equipped with a gland on the electrical cable to ensure watertightness.

Generally speaking, they are used for the detection of several levels, for automatic pumps regulation, for alarm level detections and other applications. Moreover, the Tuba are fitted with extra flexible high quality cable resistant to most liquid mixtures used in the industry.







Depending on the problem to solve, never forget to use a float as a high level "alarm". Sometimes, it is also necessary to use  proof floats, ATEX certified, in tanks in case of gas risks.



IMPORTANT

We wish to draw the fitters' attention to the fact that they are the only responsible for the float level switches selection according to the problem to solve. It is never good to be influenced by a question of price neglecting the respect of the security and the good results.

For further information, please, refer to the individual technical sheets.


	TUBA 1" MR	TUBA 1"	TUBA 1" 1/4
			
	CE	CE	CE
Differential angle	$\pm 10^\circ$	$\pm 20^\circ$	$\pm 20^\circ$
VR Mercury	VR ECO	VR ECO	VR ECO
Operation mode	Omni-directional	Omni-directional	Omni-directional
Allowed fluid density	0,75 to 1,50	0,75 to 1,50	0,75 to 1,50
Maximum pressure	5,5 bars	5,5 bars	5,5 bars
Allowed temperature	85°C	85°C	85°C
Protection index	IP 68 	IP 68 	IP 68 
Power supply	250 VAC - 50/60 Hz	250 VAC - 50/60 Hz	250 VAC - 50/60 Hz
Cut-out power	10 (5) A (10 A resistive - 5 A inductive)	10 (2) A (10 A resistive - 2 A inductive)	12 (6) A (12 A resistive - 6 A inductive)
Reverser microswitch	Metallic mercury bulb	Silver / Nickel contacts	Silver / Nickel contacts
Housing material	Copolymer polypropylene	Copolymer polypropylene	Copolymer polypropylene
Cable 3 cond. 0,75 mm ²	Neoprene - A05RN-F	Neoprene - A05RN-F	Neoprene - A05RN-F
Size	Height 160 mm Ø 25 mm	Height 180 mm Ø 29 mm	Height 160 mm Ø 36 mm
Weight without cable	50 g	60 g	75 g
Cable weight	Neoprene 55 g/m	Neoprene 55 g/m	Neoprene 55 g/m
Adjustable ballast on cable (option)	Loaded resin 175 g	Loaded resin 175 g	Loaded resin 175 g
Standard cable lengths (serie)	2, 3, 5, 10 and 20 m	2, 3, 5, 10 and 20 m	2, 3, 5, 10 and 20 m
	(other lengths on request)		

INFORMATION

For further information about ATMI products, you can download several documents from our website

www.atmi.fr

GLOSSARY

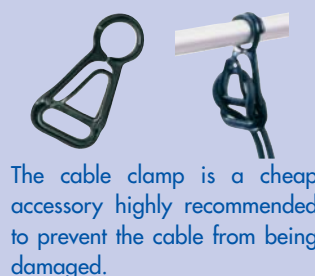
- ACS: drinking water certification
- Differential angle: angle from the cable fastening point to the low and high level
- CE: European Community
- ECO: ecological, no lead, nor mercury
- : certification for hazardous areas
- GP: "Gas and Dust" version
- HR HY: High resistance - Hypalon
- P: "Dust" version
- R: Filling (2 wires)
- V: Emptying (2 wires)
- VR: Emptying/Filling (3 wires)
- VS: Emptying + multifunction plug (2 wires + Ground)
- VT: Emptying (2 wires + Ground)

ACCESSORIES

The adjustable ballasts on cables are necessary if the fixing of the floats is not secured by another mean. To be placed according to the liquids' agitation.




IMPORTANT



The cable clamp is a cheap accessory highly recommended to prevent the cable from being damaged.

Distributor stamp:

Please contact us concerning the intrinsic safety relays, which are obligatory with the installation of  devices ATEX certified, depending on the hazardous areas.

ATMI



ATMI

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