ATMI

Applications Techniques Modernes Industrielles

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WHAT IS ATMI ?

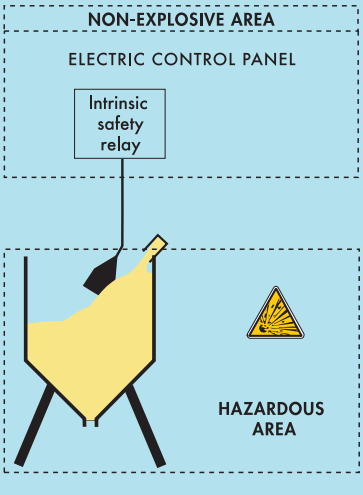
A French ISO 9001-2000 version certified company that proposes the most extensive range of float level contactors able to fulfil all customers' requirements with top quality devices which are suitable to all kinds of applications.
ATMI's policy is continuous innovation, quality, zero defect and reliability. 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 what allows, as it has been clearly proved for more than 30 years, complying with the major part of the demands in an easy, reliable and cheap way.

MOODY CERTIFICATION FRANCE ISO 9001-2000

THE RANGE

SPECIAL FEATURES OF ATMI DEVICES UNANIMOUSLY APPRECIATED IN THE WORLD

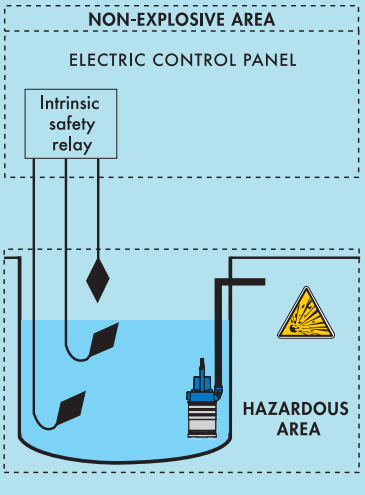
- *Biconical shape: no risks of clogging. No need of maintenance.*
- *Omni-directional working for all the models.*
- *No crimping or gluing. All the floats are soldered or vulcanized.*
- *Protection index: IP 68 and IP 6X.*
- *Top quality microswitches and electric cables RN8F.*
- *Stainless ballasts, clip type or adjustable on the cable length.*
- *Working 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.*



ATEX CERTIFICATION

WHAT YOU SHOULD KWON

It is important to know that the Ex level regulation devices certified ATEX are compulsory in the main 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 dusts. So, it is highly recommended taking no risks in this situation as it can trigger disastrous consequences.



ATMI OFFERS THREE FLOAT LEVEL RANGES EXCLUSIVELY MANUFACTURED IN FRANCE

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

SUCH EQUIPMENTS ARE CLASSIFIED IN 4 FAMILIES

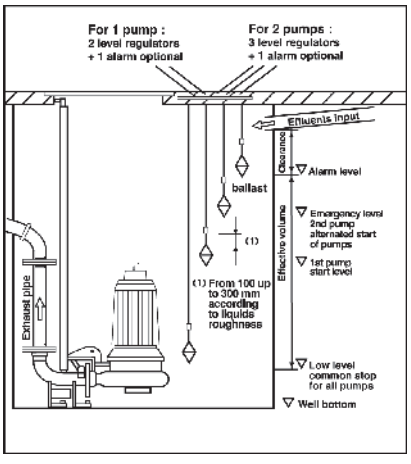
The level regulators designed for any regulation with several devices in the majority of the liquid mixtures.
The level detectors designed for solids (cereals, powders, pulverulents).
The level switches designed for the automisation with only one single float in various liquids.
The level detectors designed for various uses in industrial liquids.

SOBA AND SOBA SMALL LEVEL REGULATORS

FOR ALL LIQUIDS

These omni-directional floats operate by rocking under the liquid pressure, thus closing or opening a circuit connected to a control panel. To perform a pump regulation for instance, the floats will be installed at the high and low level required 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 widely type of monitoring installation used.
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 Ex certified ATEX are necessary to fit the pumping stations and the explosion-proof pumps in hazardous areas 0, 1, 2 (gas) and 20, 21, 22 (dusts).

Millions of SOBA, very often called "level pears", have been working all over the world for more than 30 years.



MECA

Please, have a look on the MECA devices which are similar to the SOBA but with a different colour and to the SOBA HR HY. Both of these products have a neutral labelling.

	SOBA SMALL	SOBA	SOBA HR HY	SOBA Ex (EC HY2000 ECO)
				
	Differential angle +/- 25°	Differential angle +/- 25°	Differential angle +/- 25°	Differential angle +/- 25°
For further information, please, refer to the individual technical sheets.	VR ECO	VR ECO	VR ECO	VR ECO - "GP" version
Operation mode	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Allowed fluid density	0,70 to 1,25	0,70 to 1,15	0,80 to 1,10	0,80 to 1,10
Maximum pressure	3,5 bars	3,5 bars	4 bars	4 bars
Maximum temperature	85°C	85°C	90°C	T6 i.e. from -20°C to +70°C - idem for storage
Protection index	IP 68 ▣	IP 68 ▣	IP 68 ▣	IP 6X
Power supply	12, 24, 48 VAC/VDC and 250 VAC 50/60 Hz	12, 24, 48 VAC/VDC and 250 VAC 50/60 Hz	12, 24, 48 VAC/VDC and 250 VAC 50/60 Hz	24 VAC/VDC - 10 mA or 12 VAC/VDC 100 mA
Cut-out power	16 (6) A (16 A resistive - 6 A inductive)	16 (6) A (16 A resistive - 6 A inductive)	16 (6) A (16 A resistive - 6 A inductive)	Obligatory use with an intrinsic safety relay
Wiring				
Reverser microswitch	Silver/Nickel contacts	Silver/Nickel contacts	Silver/Nickel contacts	Gold plated contacts
Biconical shape	Copolymer polypropylene	Copolymer polypropylene	Copolymer polypropylene + HR HY (hypalon) vulcanized	Copolymer polypropylene + HR HY (hypalon) vulcanized
Cable 3 cond. 1mm²	Neoprene or HR HY (hypalon) H07RN8-F	Neoprene or HR HY (hypalon) H07RN8-F	HR HY (hypalon) H07RN8-F	HR HY (hypalon) H07RN8-F
Size of the device	Height 130 mm Ø 70 mm	Height 170 mm Ø 80 mm	Height 200 mm Ø 92 mm	Height 200 mm Ø 92 mm
Float weight without cable	110 g	200 g	295 g	300 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	HR HY 110 g/m
Adjustable ballast on cable (serie)	Loaded resin 250 g	Loaded resin 250 g	Loaded resin 250 g	Loaded resin 250 g
Standard cable lengths (serie) (other lengths on request)	5, 6, 10, 13, 15, 20 and 25 m	5, 6, 10, 13, 15, 20 and 25 m	5, 6, 10, 13, 15, 20 and 25 m	5, 10, 15, 20, 25 and 30 m

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

Designed and finalized only a few years ago, the SOBA Ex certified ATEX is more and more the most widely type of automatic monitoring equipment used for pumping stations. In addition to the respect of the current rules, people are more and more aware that the 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 Ex and the ATEX certification are synonymous with total protection and tranquillity for only a small extra cost.

SOLIBA LEVEL DETECTORS

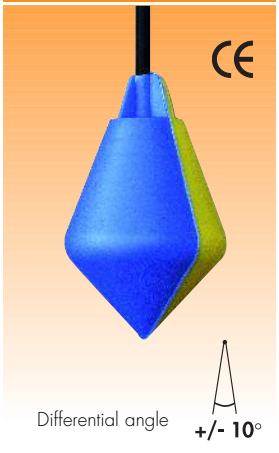
FOR SOLIDS

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 detectors work by tilting in connection with filling system circuit. This method is obviously very simple, reliable and inexpensive.
For hazardous atmospheres (potentially explosive dust or gas), the 2 models SOLIBA Ex P ("Dust") or GP ("Gas and Dust") are certified according to the EC type certificate LCIE 00 ATEX 6003 X in conformance with the Directive 94/9/CE and 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 wiring these devices. The GP version must obligatory be associated to an intrinsic safety relay.

ATEX

The Ex regulation devices certified ATEX are now compulsory in the majority of the silos. They allow in total security the stopping of the silos' filling and the "Alarm" detection at the high level in complement with other detection methods. They are very easy to set up and inexpensive.

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

	SOLIBA	SOLIBA Ex (SF2000 ECO)	
	 Differential angle +/- 10°	 Differential angle +/- 10°	 Differential angle +/- 10°
	Non certified	"P" version	"GP" version
Operation mode	By tilting	By tilting	By tilting
Use	Stopping of the silos filling (cereals, pulverulents)	Stopping of the silos filling (cereals, pulverulents)	Stopping of the silos filling (cereals, pulverulents)
Important specification	Only in "non explosive" areas	Especially for work in explosive areas 20, 21, 22	Especially for work in explosive areas 0, 1, 2 and 20, 21, 22
Maximum temperature	85°C	T6 i.e. from - 20°C to + 70°C / idem for storage	T6 i.e. from - 20°C to + 70°C idem for storage
Protection index	IP 68 ▣	IP 6X	IP 6X
Power supply	250 VAC - 50/60 Hz	240 VAC - 50/60 Hz	24 VAC/VDC - 10 mA or 12 VAC/VDC 100 mA With intrinsic safety relay
Cut-out power	20 (8) A (20 A resistive - 8 A inductive)	1 A (protection by means of a 1 A fuse)	
Wiring			
Reverser microswitch	Silver / Cd oxide contacts	Silver / nickel contacts	Gold plated contacts
Biconical / cylindrical shell	Copolymer polypropylene	Copolymer polypropylene + HR HY (hypalon) vulcanized	Copolymer polypropylene + HR HY (hypalon) vulcanized
Cable 3 cond. 1mm²	Neoprene HO7RN8-F	HR HY (hypalon) HO7RN8-F	HR HY (hypalon) HO7RN8-F
Float size	Height 152 mm Ø 95 mm	Height 260 mm Ø 92 mm	Height 200 mm Ø 92 mm
Float weight without cable	462 g	495 g	495 g
Cable weight	Neoprene 115 g/m	HR HY 110 g/m	HR HY 110 g/m
Adjustable ballast on cable (option)	Loaded resin 250 g	Loaded resin 250 g	Loaded resin 250 g
Standard cable lengths (series) (other lengths on request)	5, 6, 10, 13, 15, 20 and 30 m	5, 10, 15, 20, 25 and 30 m	5, 10, 15, 20, 25 and 30 m

ATEX

CAUTION
The non-respect of the "Low Voltage" Directives and the "Intrinsic Safety" instructions or a use which is not specified by the constructor and the intervention of non competent authorities can trigger serious consequences. The manufacturer denies all responsibility if the user does not respect the instructions and rules in relation with the protections against sanitary, fire and explosion risks.

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

Concerning the silos for cereals, everybody knows the continuous existence of the explosive risks triggered by dust and gas.
Our SOLIBA Ex certified ATEX are fitted with a double envelop and are especially designed to be used in the most important explosive risks 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) - Float highly recommended.

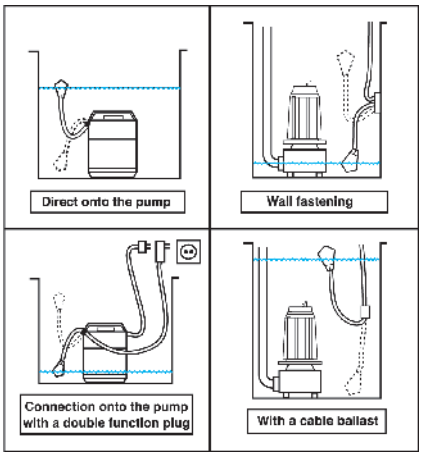
These two devices which are simple to install and inexpensive enable to stop the silos filling in a total security but also to get an "alarm" level detection what is very often neglected and therefore very useful. So, think about the SOLIBA Ex.

For any further information, please refer to our website www.atmi.fr from which you can download various documentation.

LEVEL SWITCHES - 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 direct 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 switch for use in liquids little loaded. 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 loaded liquids. They are intended for the professionals to fit any power pumps. The differential angle is 120°.
The ATS 165 have a very wide differential working angle (165°). A unique ATS 165 can replace 2 standard regulators even in very rough and loaded liquids.
Most of these devices are available in several versions: V - R - VR - VT - VS to fulfil all requirements (please, refer glossary). Several models of ballasts are available in option.



IMPORTANT

Please, refer to the accessories column (on the back) for the intrinsic safety relays, the different ballasts if necessary and the 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 proposed in option.

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

	BIP STOP	AT 120	AT 120 HR HY	ATS 165
	 Differential angle +/- 110°	 Differential angle +/- 120°	 Differential angle +/- 120°	 Differential angle +/- 165°
	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
Maximum 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
Biconical shape	Copolymer polypropylene	Copolymer polypropylene	Copolymer polypropylene + HR HY (hypalon)	Copolymer polypropylene
Cable 2 or 3 cond. 1mm²	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 of the device	Height 130 mm Ø 70 mm	Height 170 mm Ø 80 mm	Height 200 mm Ø 92 mm	Height 152 mm Ø 95 mm
Float 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, issued from the standard ranges, are manufactured with special materials and are certified ACS in conformity with the norm XP P41-250 (1-2-3). The SOBA "EP" regulator allows the same applications in drinking water as the standard SOBA in various and loaded liquids. It is designed for the automatic regulation with several devices, with no height limit between them. The ATS 165 "EP" switch enables, like the standard ATS 165, pumps automatic regulation with a single float. It is specially designed to work in rough water thanks to its 165° differential working angle. It avoids any deterioration risks on the pumps engines.

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

Electric cable EPDM, special blue ACS = 105g/m. Adjustable ballast in stainless steel AISI 316 L: 230 g

SOBA EP and ATS 165 EP - certified ACS

Differential angle +/- 25°

VR ECO

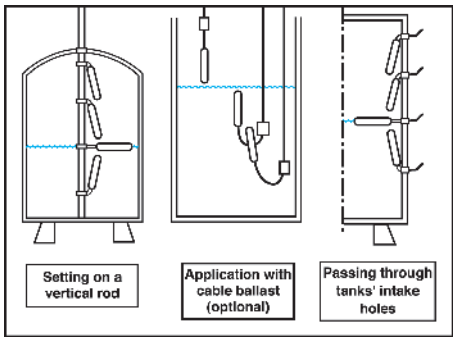

Differential angle +/- 165°

VR ECO

TUBA LEVEL DETECTORS

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 electric cable what enables the 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.
Never forget to think about, depending on the problem to solve, a float for "alarm" level detection to be placed at the security high level. Sometimes, it is also necessary to use Ex floats certified ATEX in tanks if there is presence of gas.



IMPORTANT

We wish draw the fitter's attention to the fact that they are the only responsible for the float level regulators 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
	 Differential angle +/- 10°	 Differential angle +/- 20°	 Differential angle +/- 20°
Operation mode	VR Mercury	VR ECO	VR ECO
Allowed fluid density	Omni-directional	Omni-directional	Omni-directional
Maximum pressure	0,75 to 1,50	0,75 to 1,50	0,75 to 1,50
Maximum temperature	5,5 bars	5,5 bars	5,5 bars
Protection index	85°C	85°C	85°C
Power supply	IP 68 ▣	IP 68 ▣	IP 68 ▣
Cut-out power	250 VAC - 50/60 Hz	250 VAC - 50/60 Hz	250 VAC - 50/60 Hz
Reverser microswitch	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)
Cylindrical shape	Metallic mercury bulb	Silver / Nickel contacts	Silver / Nickel contacts
Cable 3 cond. 0,75 mm²	Copolymer polypropylene	Copolymer polypropylene	Copolymer polypropylene
Size of the device	Neoprene - AO5RN-F	Neoprene - AO5RN-F	Neoprene - AO5RN-F
Float weight without cable	Height 160 mm Ø 25 mm	Height 180 mm Ø 29 mm	Height 160 mm Ø 36 mm
Cable weight	50 g	60 g	75 g
Adjustable ballast on cable (option)	Neoprene 55 g/m	Neoprene 55 g/m	Neoprene 55 g/m
Standard cable lengths (serie)	Loaded resin 175 g	Loaded resin 175 g	Loaded resin 175 g
(other lengths on request)	2, 3, 5, 10 and 20 m	2, 3, 5, 10 and 20 m	2, 3, 5, 10 and 20 m

INFORMATION

For any other information you may need about ATMI products, you can download several documents online on 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
Ex: 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.

 Plastic 200 g

 Loaded resin 250 g

 Loaded resin 175 g

 Stainless steel 230 g

 Ecological "clip" ballast 275 g

IMPORTANT

The cable clamp is a cheap accessory strongly advised for all hanging devices to prevent the cable from being damaged.

Concerning the intrinsic safety relays, obligatory with the use of Ex devices certified ATEX, depending on the hazardous areas, please contact us (they are included in our accessories range).

Distributor stamp:

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