



6 float & tilt level switches ranges available in more than 50 versions



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STOP SEARCHING

6 RANGES – 50 VERSIONS





SOBA regulators offered in 5 versions allowing use in almost all kinds of liquids and liquid mixtures as well as in different densities



ATMI HAS THE DEVICE YOU NEED



- > For liquids or liquid mixtures, even the most viscous or the most corrosive.
- > For drinking water for human consumption.

Height 130 mm Ø 70 mm

Neoprene 115 g/m or HRHY

loaded resin 175 g or 250

3,5,10,15 and 20 m

– plastic 200 g – cliptable

105 g

g – pio <u>275 g</u>

<u>110 g / m</u>

Height 170 mm Ø 80 mm

Neoprene 115 g/m or HRHY

195 g

110 g / m

loaded resin 250 g

3,5,10,15 and 20 m

> For solids, cereals, grains or powders in silos.

ATMI FLOAT & TILT LEVEL SWITCHES RANGES ARE UNIQUE IN THE WORLD

Main advantages (depending the types of devices).

- > Omnidirectional: can work in any position in any liquid mixtures.
- > Biconical shape: which avoids any risks of clogging, assuring maximum and long lasting effectiveness. No maintenance needed.
- > Adjustable ballasts on cables: suitable for liquids with densities from 0.70 to 1.50 (even more, depending on the floats and ballasts' types).
- > Switching angle: exceptional from 10 ° to 165 ° (depending on the types)
- > Accuracy of use: simple adjustment of the ballast depending if the liquid is calm or agitated

FOR LEVEL CONTROL OF INDIVIDUAL PUMPS FLOAT LEVEL SWITCHES WITH OR WITHOUT BALLAST ON CABLE FOR DRINKING FOR VARIOUS LIQUIDS AND LIQUID MIXTURES WATER **BIP STOP** AT 120 AT 120 HR HY ATS 165 ATS 165 EP CE CE CE X CE CE ACS)+/-165° +/-165° +/-110° +/-120° < +/-120° Switching angle Switching angle Switching angle Switching angle Switching angle VR - VT - VSVR VR VR - VT - VSVR The large switching angles ensure no jerking of the pump or electrical panels Omnidirectional Omnidirectional Omnidirectional Omnidirectional Omnidirectional 0,70 to 1,15 0,70 to 1,15 0,80 to 1,10 0,70 to 1,10 0,70 to 1,10 3,5 bars 3,5 bars 4,0 bars 3,5 bars 3,5 bars 90°C 85°C 85°C 85°C 85°C IP68 🗖 IP68 🗆 IP 68 🗆 IP68 🗆 IP68 🗖 250 VAC/VDC - 50/60 Hz 20 (8) A (20 A resistive - 8 A 20 (8) A (20 A resistive - 8 A 20 (8) A (20 A resistive - 8 A 20 (8) A (20 A resistive - 8 A 20 (8) A (20 A resistive - 8 A inductive) inductive) inductive) inductive) inductive) Copolymer polypropylene + Polypropylene special ACS Copolymer polypropylene Copolymer polypropylene Copolymer polypropylene HRHY vulcanized certified Neoprene or HRHY Neoprene or HRHY Neoprene or HRHY EPDM special ACS certified HRHY

Height 200 mm Ø 92 mm

HRHY 110 g / m

loaded resin 250 g

3,5,10,15 and 20 m

295 g

Height 152 mm Ø 95 mm

Neoprene 115 g/m or HRHY

325 g

110'g/m

loaded resin 350 g

5,10,15,20 and 25 m

Height 152 mm Ø 95 mm

230 g stainless steel AISI

5,10,15,20 and 25 m

325 g

3161

EPDM 105 g/m

RANGE 2

INSTALLATION EXAMPLES For pump control with one single device



Direct connection to pump



Fixed to a wall with a cable gland



With a multiplug



With an adjustable ballast. Optional for this device





45 YEARS OF EXPERIENCE

ABOUT ATMI

ATMI is the only company that offers 20 kinds of float & tilt level switches in 50 versions. That allows for the right devices to always be used, whatever the application.

The **« float level measurement system »** chosen by ATMI cannot be compared, for example, to the basic & flat-shaped level switches that can only work correctly in one position.

Also, be aware that the choice of a device should never be based on price without having properly studied its specifications. The consequences are always more expensive in the future!

For example, with ATMI devices, you benefit from : 1. The biconical shape to avoid clogging - 2. The omnidirectional operation - 3. The adjustable ballasts on cables to allow working in liquids with densities from 0.70 to 1.50 (and even more if necessary) - 4. Switching angles from 10 ° to 165 °.

There are many other advantages!

OUR MANUFACTURING



INFORMATION ABOUT THE « ATEX » AND « ACS » CERTIFICATIONS

The SOBA ((«ATEX» certified) is made to work in the most diverse liquids and liquid mixtures. It is especially designed for use in hazardous areas classified 0, 1, 2 for Gas, and 20, 21, 22 for Dust.

The SOLIBA («ATEX» certified) is made to work in grains, cereals and powders silos. It is especially designed for use in hazardous areas classified 0, 1, 2 for Gas, and 20, 21, 22 for Dust.

For use in 0, 1, 2 areas, the devices must be connected by using an intrinsically safe relay. It is the customer's sole responsibility to determine whether or not it is located in an explosive area.

It is highly recommended not to take any risks in this field in order to avoid disastrous consequences.



The SOBA EP, AQUA MEDIUM EP and ATS 165 EP, ACS certified are specially designed to work in drinking water for human consumption.



In France, since December, 24th 2006, in compliance with the decree of May, 29th 1997, any device or accessory in contact with drinking water meant for human consumption must be ACS certified (ACS = Sanitary Conformity Certification). The SOBA EP, AQUA MEDIUM EP and ATS 165 EP float switches (designed from the classic models, having the same technical specifications) are manufactured with special components and are ACS certified for use in drinking water, in accordance with the XP P41 - 280 (1-2-3) standard. These float switches are equipped with EPDM cable (weight: 105g /m) and with an adjustable stainless steel ballast AISI 316 (weight: 230 g).

WATCH OUT FOR PENALTIES! The non-compliance of the ACS standard during an inspection of the French DGCCRF Department results in fines and products recall. However, considering that health is an important issue worldwide, it is most likely that each country may have a similar certificate. For this reason, we recommend you to contact your local authorities to find out more information about a sanitary certification requirement.

YOU MUST TAKE ADVANTAGE OF THIS

OTHER TYPES OF FLOATS FOR LEVEL CONTROL OF LIQUIDS

INTERNAL BALLAST LEVEL REGULATORS - AQUA

Although the different devices with ballast on the cable are the most popular and best selling, ATMI also offers the AQUA XL, AQUA MEDIUM and AQUA MEDIUM EP (ACS certified), that have an internal ballast. They are designed for the level control of non-aggressive liquid mixtures, with densities from 0.95 to 1.05 and are often used in sewage, waste water, pumping stations, and water treatment plants.



Thanks to their volume and heavy weight, the devices with internal ballast are able to penetrate the grease layer found sometimes in pumping stations.

TUBA FOR NARROW - ACCESS TANKS

The shape of the TUBA has been designed to allow its installation in small capacity and narrow access tanks, reservoirs and cisterns with narrow openings such as 1" or 1"1/4.1ts 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 level detection, pumps' automatic level control, for alarms, and other applications.



Depending on the problem, never forget to provide a device for the high level alarm.



FOR GRAIN SILOS, TYPES OF SOLIBA TO CONTROL LEVELS



The SOLIBA operates by tilting and controls the level of the silos in a simple and precise way. It requires no maintenance.





All **SOLIBA** tilt level switches must be installed at the opposite side of the grains' arrival and at a certain distance from the silo wall in order to ensure an optimal tilting operation.

The manual filling of the silo can affect the proper operation of the switch.

EX proof devices (ATEX certification) now compulsory in the majority of silos.

APPLICATION EXAMPLES

- Grains and cereals : Oat, soybean, rice, wheat, corn...
- Animal food : For pets, for birds and poultry, for cattle...
- **Powders** : Flour, sugar, cement...
 - Others : Granules, stones, minerals, sawdust, pellets...

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Standard cable lengths (serie) (other

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Non certified

By tilting
Bulk solids high level
measurement
Only in "non explosive" areas
85°C
IP68 🗆
250 VAC - 50/60 Hz
20 (8) A (20 A resistive - 8 A inductive)
Copolymer polypropylene
Neoprene
Height 152 mm Ø 95 mm
462 g
Neoprene 115 g/m
Loaded resin 250 g or 350 g - Adjustable 220 g - "clip" ballast 275 g

RANGE 5 TILT LEVEL SWITCHES FOR SILOS

FOR ALL CEREALS AND GRAINS SOLIBA Ex CE +/-10° Switching angle By tilting

Bulk solids high level measurement	Ē
ATEX certified device for hazardous areas 20, 21, 22	ł
T6 i.e. from - 20°C to + 70°C idem for storage IP68 🔲	
240 VAC - 50/60 Hz	- 2
10 (4) A / Protection by means of a 1 A calibrated fuse	

Copolymer polypropylene + HRHY vulcanized

HRHY Height 200 mm Ø 92 mm 495 g HRHY 110 g/m Loaded resin 250 g or 350 g Adjustable 220 g - "clip" ballast <u>275 g</u>

5,6,10,13,15,20,25 and 30 m



By tilting
Bulk solids high level
measurement
ATEX certified device for
hazardous areas 0,1,2 and 20,
21, 22
T6 i.e. from - 20°C to + 70°C
idem for storage
IP 68 🗆
24 VAC/VDC - 10 mA mini or
12 VAC/VDC 100 mA mini
10 (4) A / Protection with an intrinsic safety relay
Copolymer polypropylene
+ HRHY vulcanized
HRHY
Height 200 mm Ø 92 mm
495 g
v

HRHY 110 g/m Loaded resin 250 g or 350 g -Adjustable 220 g - "clip" ballast <u>275 g</u>

5,6,10,13,15,20,25 and 30 m

FOR POWDERS AND BULK SOLIDS, 2 TYPES OF SOLIBA EXTREMELY ROBUST

WORKING SAFETY

Tens of thousands of **SOLIBA** and **SOLIBA EX** are installed in silos or storing areas around the world to control levels. They are also used as essential high level alarms which is not only useful but essential.

WHY ?

The SOLIBA is inexpensive. Its design is simple and it's very easy to install.

- The SOLIBA can be used in explosive environments with risks of gas and/or dust (Ex devices, ATEX certified).
- The SOLIBA can provide a high level alarm, even in silos that already have another level control system.
- The SOLIBA is perfect for all cereals and even for very light powders, with the SPECIAL version ideal for extremely volatile products.
- For bulk solids, the SOLIBA PLUS has very robust special protection. It provides an ideal solution to detect the high level in all types of conveyors transporting loads of excessive heights like stones, for example.

ATMI is a company that has specialized in the manufacture and distribution of float & tilt level control devices for 45 years. Its success is due to the **CONTINUOUS INNOVATION, THE VERY HIGH QUALITY** of its products and its **ZERO DEFECT** policy.



ATMI - FRENCH MADE

ATMI is an ISO 9001-2008 certified company responsible for a worldwide-acclaimed float level measurement system. For nearly 45 years now, the SOBA range has equipped pumping stations. Nowadays, in collaboration with 400 distributors in more than 150 countries, ATMI offers 20 kinds of level switches in 50 versions. As indicated on the previous pages, the different devices we offer solve almost all needs for applications in drinking water as well as applications with any kind of liquid mixtures and most corrosive liquids (see pages 2,3,4 and 5).

ATMI also has a great success worldwide with the "SOLIBA" tilt level switch specially designed to control levels of grains' and powders' silos, as well as, stopping conveyor belts for very heavy, bulky and excessive heights products.

Further information and advice

- ✓ To reduce costs, it is necessary to get the right selection between the different angles: from - / + 10° to - / + 165° for the pump's start and stop.
- ✓ Caution in the selection of the electric cables according to the application: PVC, neoprene, HR HY (High Resistance), EPDM cable types.
- ✓ Do not forget the advantages of the regulators with ballast on cables (see page 4).
- Always offer your customer the appropriate equipment for the high and low alarms.
- ✓ Upon request and depending on the annual volume, customization of color, marking and packaging is possible.
- ✓ Refer to the Cole Parmer compatibility table to determine the resistance in very aggressive liquid mixtures of the different components that equip the devices.

NO WORRIES:

All float level switches are tested electrically and on sealing before shipping.

Distributor stamp

SOME MORE DETAILS ABOUT OUR ACCESSORIES AND COMPONENTS

EXTERNAL BALLASTS

They precisely fix the rotation point of the float level switch (angles from 10 ° to 165 ° depending on the devices). They allow the float switch to work in a very wide range of densities.

They are unbreakable and easily adjustable on the cables, even at pre-existing installations. The "clip" ballast and the ball ballast can be added at any time after installation.





CABLE CLAMP

This very useful and inexpensive accessory is highly recommended for all suspended devices.

The cable clamp is too often overlooked and this causes deterioration of the electrical cables when clamps or any other inappropriate accessories are used.

PULSE ISOLATOR :

Intrinsic safety relays are compulsory with the installation of ATEX certified devices, as when using our models SOBA Ex and SOLIBA EX GP, SOLIBA SPECIAL EX GP, ATEX certified.



INDIVIDUAL BOXES:

The individual boxes are ATMI branded and display the whole products ranges. With sober and attractive colors, this individual packing highlights each device and allows easy storage on your shelves. These boxes are offered in three sizes to fit with the different products and different

cable lengths that exist in our ranges. We can tick the type of device the box contains.



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