



# SOBA (Green/White) MECA (Blue/White)



## FLOAT LEVEL REGULATOR

For automatic regulation with several devices



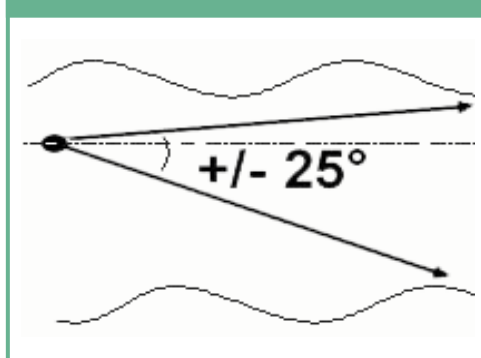
### USE

VR – Emptying / Filling

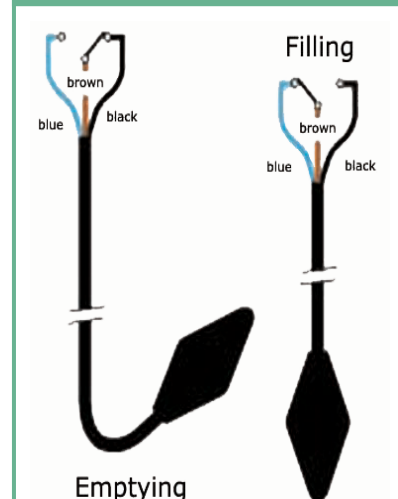
### SIZE

Height: 170 mm – Diameter: 80 mm

### DIFFERENTIAL ANGLE



### WIRING



Please, refer to the  
conection diagram  
enclosed to each float  
delivered.

### APPLIANCES

For use in various liquids. Perfect for pumping stations, applications on building sites, waste water plants, industrial applications.... and « ALARM » level detection.

### TECHNICAL CHARACTERISTICS

Operation mode	Omnidirectional
Allowed fluid density	0,70 a 1,15
Maximum pressure	3,5 bars
Maximum temperature	85°C
Protection index	IP 68 <input type="checkbox"/>
Electric characteristics	12, 24, 48 VAC/VCC and 250 VAC- 50/60 Hz
Cut-out power	16 (6) A (16 A resistive - 6 A inductive)
Microswitch	Silver / nickel reverser contacts
Biconical shell	Copolymer polypropylene
Cable	Neoprene or HR HY (hypalon) H07RN8-F
Cable type	3 conductors 1 mm <sup>2</sup>
Float weight without cable	200 g
Cable weight	Neoprene 115 g/m – HR HY 110 g/m
Adjustable ballast on cable (series)	Loaded resin 250 g
Standard cable length (series)	5, 6, 10, 13, 15, 20 and 25 m (other lengths on request)



# BIP STOP

## FLOAT LEVEL SWITCH

For automatic regulation with one single device



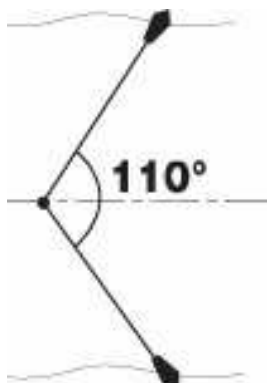
### USE

- V or R – Emptying or Filling
- VR – Emptying / Filling
- VT – Emptying + Ground
- VS – Emptying + double function plug

### SIZE

Height: 130 mm – Diameter: 70 mm

### DIFFERENTIAL ANGLE



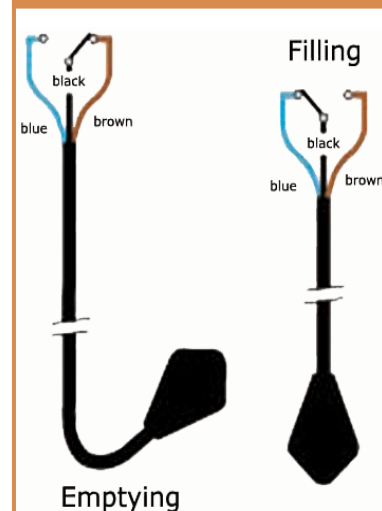
### APPLIANCES

Mainly used for the automatic working of small pumps and cellar emptying pumps in liquids a little bit agitated. This is an inexpensive device, therefore, it has the same technical advantages as the devices for intensive uses and has a 110° working angle. It is also very often used to connect a sound or light alarm.

### TECHNICAL CHARACTERISTICS

Operation mode	Omnidirectional
Allowed fluid density	0,70 a 1,15
Maximum pressure	3,5 bars
Maximum temperature	85°C
Protection index	IP 68
Electric characteristics	250 VAC- 50/60 Hz
Cut-out power	20 (8) A (20 A resistive- 8 A inductive)
Microswitch	Silver / Cd oxide reverser contacts
Biconical shell	Copolymer polypropylene
Cable	Neoprene or HR HY (hypalon) H07RN8-F
Cable type	2 or 3 conductors 1 mm <sup>2</sup> (with or without T, according to versions)
Float weight without cable	105 g
Cable weight	Neoprene 115 g/m – HR HY 110 g/m
Adjustable ballast on cable (option)	Loaded resin 175 g or 250g – Plastic 200g – ecological « clip » ballast 275 g
Standard cable length (series)	0,40; 0,50; 1; 3; 5; 10 and 20 m (other lengths on request)

### WIRING



Please, refer to the connection diagram enclosed to each float delivered.



# TUBA 1"



## FLOAT LEVEL DETECTOR

For detection with one or several devices according to the use

It is always recommended placing a switch as an ALARM



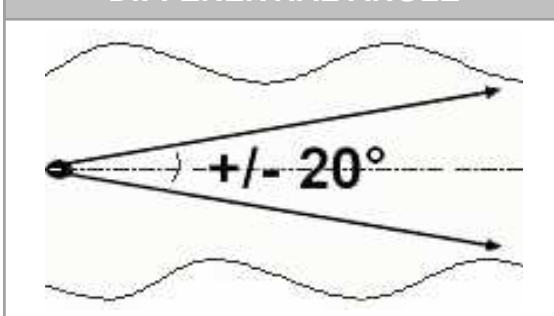
### USE

VR – Emptying / Filling

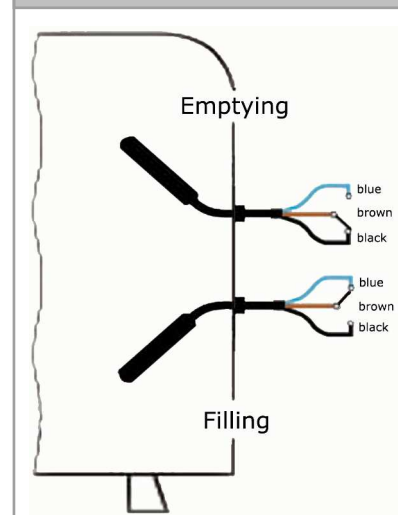
### SIZE

Height: 180 mm – Diameter: 29 mm

### DIFFERENTIAL ANGLE



### WIRING



Please, refer to the connection diagram enclosed to each float delivered.

### APPLIANCES

Suitable for level detection of liquids in tanks, cisterns, reservoirs and others, such as pump automatic regulation and «ALARM» level detection. Highly recommended for industrial uses. Its small diameter enables the passing through the tank intake holes, with watertightness security thanks to the gland fixed on the electric cable.

### TECHNICAL CHARACTERISTICS

Operation mode	Omnidirectional
Allowed fluid density	0,75 to 1,50
Maximum pressure	5,5 bars
Maximum temperature	85°C
Protection index	IP 68
Electric characteristics	250 VAC- 50/60 Hz
Cut-out power	10 (2) A (10 A resistive - 2 A inductive)
Microswitch	Silver / nickel reverser contacts
Cylindrical shape	Copolymer polypropylene
Cable	Neoprene - A05RN8-F
Cable type	3 conductors 0,75 mm <sup>2</sup>
Float weight without cable	60 g
Cable weight	Neoprene 55 g/m
Adjustable ballast on cable (option)	Loaded resin 175 g
Standard cable length (series)	2, 3, 5, 10 and 20m (other lengths on request)

## AQUA-XL FLOATLEVELSWITCH

For multilevel regulation for the automation of several pumps



The AQUA XL float level switch has an internal ballast. Thanks to its heavy weight (775g) and its density superior to the liquid, the cable is constantly straight in the vertical position.

### Applications

The AQUA XL is ideal for every type of pumping station, sewage stations, water treatment stations, etc. It is particularly appreciated when dealing with thick grease layers.

### Technical Characteristics

Operation mode	Omnidirectional
Protection Index	IP 68
Float material	Copolymer polypropylene
Electrical cable	PVC 3 x 0.75 mm 2 Ø 6.6
Electric characteristics	250 VAC/VDC50/60 Hz
Cutout power	10 A resistive – 4A inductive
Maximum pressure	2 bars
Maximum temperature	70°C
Allowed fluid density	0.95 to 1.10 g/cm <sup>3</sup>
Float dimensions	165 x 100 mm
Float weight	775 g
Cable weight	65 g/m
Ballast type	incorporated
Standard cable lengths	6, 10, 15, 20, 30 m.
Differential angle	20°



# SOBA HR HY MECA HR HY



## FLOAT LEVEL REGULATOR

For automatic regulation with several devices



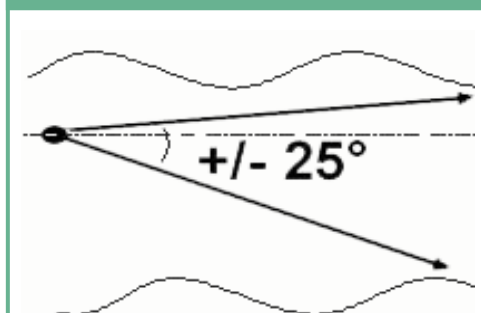
### USE

VR – Emptying / Filling

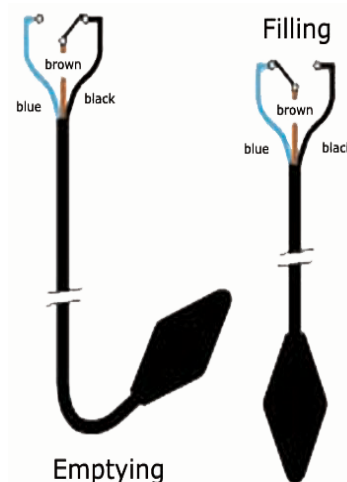
### SIZE

Height: 200 mm – Diameter: 92 mm

### DIFFERENTIAL ANGLE



### WIRING



Please, refer to the connection diagram enclosed to each float delivered.

### APPLIANCES

Same applications as the standard SOBA model. But, thanks to its double shape in HR HY (hypalon), it is especially recommended for corrosive liquid mixtures containing bases, oils and acid products... (please, refer to the SOBA technical sheet)

### TECHNICAL CHARACTERISTICS

Operation mode	Omnidirectional
Allowed fluid density	0,80 a 1,10
Maximum pressure	4 bars
Maximum temperature	90°C
Protection index	IP 68 <input type="checkbox"/>
Electric characteristics	12, 24, 48 VAC/VDC and 250 VAC- 50/60 Hz
Cut-out power	16 (6) A (16 A resistive - 6 A inductive)
Microswitch	Silver / nickel reverser contacts
Biconical shell (2)	Copolymer polypropylene + HR HY (hypalon)
Cable	HR HY (hypalon) H07RN8-F
Cable type	3 conductors 1 mm <sup>2</sup>
Float weight without cable	295 g
Cable weight	HR HY 110 g/m
Adjustable ballast on cable (series)	Loaded resin 250 g
Standard cable length (series)	5, 6, 10, 13, 15, 20 and 25 m (other lengths on request)

# FLOAT LEVEL REGULATOR

For automatic regulation with several devices

ATEX Marking code - CE 0081  $\text{Ex}$  II 1 G or D EEx ia IIC T6 IP6X T°70°C



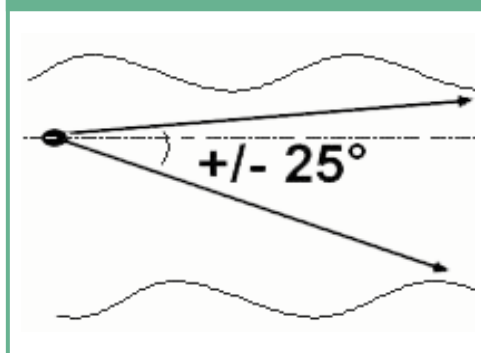
### USE

VR – Emptying / Filling

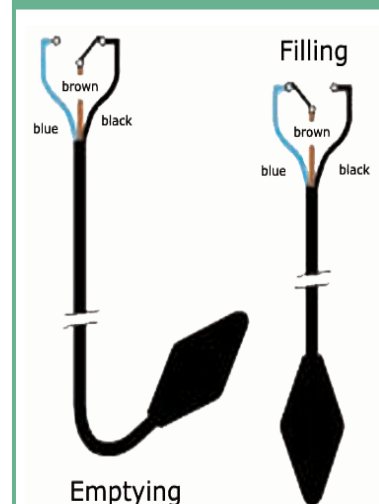
### SIZE

Height: 200 mm – Diameter: 92 mm

### DIFFERENTIAL ANGLE



### WIRING



Please, refer to the connection diagram enclosed to each float delivered.

### APPLIANCES

Same applications as the SOBA HR HY model. However, it is especially designed for working in explosive gas areas : solvents, hydrocarbons, alcohols, chemical and pharmaceutical products (please, refer to the SOBA HR HY technical sheet)

### TECHNICAL CHARACTERISTICS

Operation mode	Omnidirectional
Allowed fluid density	0,80 a 1,10
Maximum pressure	4 bars
Maximum temperature	T6 and Ta: from -20°C to +70°C / idem
Protection index	IP 6X
Electric characteristics	24 VAC/VDC – 10 mA or 12 VAC/VDC – 100 mA
Obligatory connection	With intrinsic safety relay
Microswitch	Gold plated reverser contacts
Biconical shell (2)	Copolymer polypropylene + HR HY (hypalon)
Cable	HR HY (hypalon) H07RN8-F
Cable type	3 conductors 1 mm <sup>2</sup>
Float weight without cable	300 g
Cable weight	HR HY 110 g/m
Adjustable ballast on cable (series)	Loaded resin 250 g
Standard cable length (series)	5, 10, 15, 20, 25 and 30 m (other lengths on request)





# SOBA $\text{Ex}$

## Certified ATEX (EC HY 2000 ECO)



## FLOAT LEVEL REGULATOR

For automatic regulation with several devices

ATEX Marking code - CE 0081  $\text{Ex}$  II 1 G or D EEx ia IIC T6 IP6X T°70°C



### ATEX CERTIFICATION – WHAT YOU SHOULD KNOW

It is important to know that the 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 deals or not with 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.

PROTECTION- The SOBA  $\text{Ex}$  (EC HY 2000 ECO) are designed and certified for use in hazardous areas classified 0, 1, 2 (gas) and 20, 21, 22 (dusts). They are conform to the following standards:

- EN 50014 (1992)
- NF EN 50014 (1993)
- EN 50281-1-1 (1998)
- EN 50281-1-2 (1998)
- EN 50020 (1994)
- NF EN 50020 (1995)
- Potentially explosive areas EEX ia of the group IIC.

Certified LCIE 00 ATEX 6003 X dated 2000/02/15 according to the Directive 94/9/CE

CONNECTION - **BE CAREFUL !** The non-respect of the following instructions can have serious consequences. These floats must only be connected to an intrinsically safe associated apparatus certified type. Such apparatus must be compatible with the intrinsic security instructions and must not exceed the floats electric characteristics values mentioned on the technical sheet n°1. The non respect of that would trigger the destruction of the microswitches gold plated contacts. All connections must be performed according to the Low Voltage Directive and Intrinsic Safety instructions.

$L_I \leq 2\mu\text{H}$  and  $C_I \leq 203\text{ pF}$  with 2 m cable length (*Lineic inductance: 0.36 mH (Millihenry)/km divisible by 1000 for a value in metre*).  
 $U_o \leq 30\text{V}$ ,  $I_o \leq 100\text{ mA}$ ,  $P_o \leq 0.75\text{ W}$

**IMPORTANT**- A use which is not specified by the constructor or an non competent authority intervention can damage the working of these devices and trigger serious consequences. The manufacturer denies all responsibility if the user does not respect the rules in relation with the protections against sanitary, fire and explosion risks.

PRODUCT FOLLOW-UP – The number of the series and the year of production appear on each device delivered.

AT YOUR DISPOSAL - LCIE 00 ATEX 6003 X certificate dated 2000/02/15. Information about the intrinsic safety relays. Connection diagrams...