



# SOLIBA

## LEVEL DETECTOR FOR SOLIDS

For high level detections



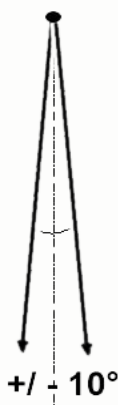
### USE

Stops the filling

### SIZE

Height: 152 mm - Diameter: 95 mm

### DIFFERENTIAL ANGLE



### WIRING



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

### APPLIANCES

Device adapted for solids level detections (cereal, grain, granular, pulverulent silos, etc.). Placed vertically, it is generally used to stop the filling of silos and other means of storage. Must only be used in «NON EXPLOSIVE» areas.

### TECHNICAL CHARACTERISTICS

Operation mode	By tilting
Use	Stopping of the silos filling (cereals, pulverulents)
Important specification	Only in « NON EXPLOSIVE » areas
Maximum temperature	85°C
Protection index	IP 68 <input type="checkbox"/>
Electric characteristics	250 VAC- 50/60 Hz
Cut-out power	20 (8) A (20 A resistive - 8 A inductive)
Microswitch	Silver / Cd oxide contacts
Biconical shell	Copolymer polypropylene
Cable	Neoprene H07RN8-F
Cable type	3 conductors 1 mm <sup>2</sup>
Float weight without cable	462 g
Cable weight	Neoprene 115 g/m
Adjustable ballast on cable (option)	Loaded resin 250 g
Standard cable length (series)	5, 6, 10, 13, 15, 20 and 30 m (other lengths on request)

# SOLIBA $\text{Ex}$ « GP » version

(gas & dust) - Certified ATEX (SF 2000 ECO)



## LEVEL DETECTOR FOR SOLIDS

For high level detections

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

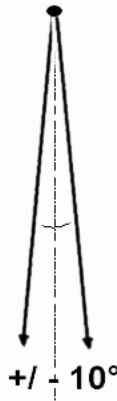
### USE

Stops the filling

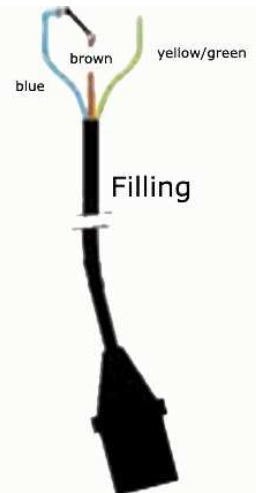
### SIZE

Height: 200 mm - Diameter: 92 mm

### DIFFERENTIAL ANGLE



### WIRING



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

### APPLIANCES

This device has a double shape and is especially suitable for use in explosive areas. It is designed for the solids level detections (cereals, granulars, pulverulents). Placed vertically, it is recommended for the stopping of the silos and other means of storage filling and is certified ATEX for use in areas classified 0, 1, 2 (gas) and 20, 21, 22 (dust)

### TECHNICAL CHARACTERISTICS

Operation mode	By tilting
Use	Stopping of the silos filling (cereals, pulverulents)
Important specification	Epecially for work in EXPLOSIVE areas 0, 1, 2
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 contacts
Biconical / Cylindrical 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	495 g
Cable weight	HR HY 110 g/m
Adjustable ballast on cable (option)	Loaded resin 250 g
Standard cable length (series)	5, 10, 15, 20, 25 and 30 m (other lengths on request)



# SOLIBA Ex « GP » version (gas & dust) - Certified ATEX (SF 2000 ECO)

## LEVEL DETECTOR FOR SOLIDS

For high level detections



ATEX Marking code - CE 0081 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 dust. So, it is highly recommended taking no risks in this situation as it can trigger disastrous consequences.



**DEFINITION-** The SOLIBA Ex "GP" version (gas and dusts) (SF 2000 ECO) are designed and certified for use in hazardous areas classified 0, 1, 2 (gas) and 20, 21, 22 (dust). They are conform to the following standards :

- EN 50014 (1992)
  - NF EN 50014 (1994)
  - EN 50281-1-1 (1998)
  - EN 50281-1-2 (1998)
  - EN 50020 (1994)
  - NF EN 50020 (1995)
  - Potentially explosive areas EEX ia from the group IIC.
- Certified LCIE 00 ATEX 6003 X dated 2000/02/15 according to the Directive 94/9/CE.

**NOTA-** The « GP » version is also suitable for an application with « Dust » (please, see technical sheet of the « P » version)

**CONNECTION-PROTECTION-** All connections must be performed according to the Low Voltage Directive and Intrinsic Safety instructions.

$L_1 \leq 2\mu H$  et  $C_1 \leq 203 \phi F$  with 2 m cable length (*Lineic inductance: 0.36 mH (Millihenry)/km divisible by 1000 for a value in metre*).

$U_0 \leq 30V$ ,  $I_0 \leq 100 \text{ mA}$ ,  $P_0 \leq 0.75 \text{ W}$

**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.

**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 serie 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...

# SOLIBA $\text{Ex}$ « P » version

(dusts) - Certified ATEX (SF 2000 ECO)

## LEVEL DETECTOR FOR SOLIDS

For high level detections



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



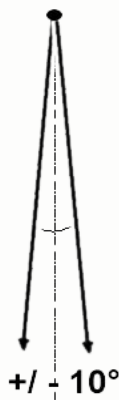
### USE

Stops the filling

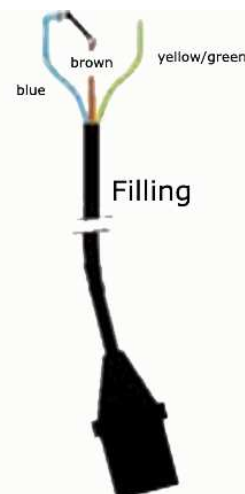
### SIZE

Height: 200 mm - Diameter: 92 mm

### DIFFERENTIAL ANGLE



### WIRING



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

### APPLIANCES

This device has a double shape and is especially suitable for use in explosive areas. It is designed for the solids level detections (cereals, granulars, pulverulents). Placed vertically, it is recommended for the stopping of the silos and other means of storage filling. It is certified ATEX for use in areas classified 20, 21, 22 (dust) but not in areas where there is gas. For that, please use the « GP » version.

### TECHNICAL CHARACTERISTICS

<b>Operation mode</b>	By tilting
<b>Use</b>	Stopping of the silos filling (cereals, pulverulents)
<b>Important specification</b>	Epecially for work in EXPLOSIVE areas 20, 21, 22
<b>Maximum temperature</b>	T6 and Ta: from -20°C to 70°C / idem
<b>Protection index</b>	IP 6X
<b>Electric characteristics</b>	240 VAC- 50/60 Hz
<b>Cut-out power</b>	1A (protection by means of a 1 A fuse)
<b>Microswitch</b>	Silver / nickel contacts
<b>Biconical / Cylindrical shell(2)</b>	Copolymer polypropylene + HR HY (hypalon)
<b>Cable</b>	HR HY (hypalon) H07RN8-F
<b>Cable type</b>	3 conductors 1 mm <sup>2</sup>
<b>Float weight without cable</b>	495 g
<b>Cable weight</b>	HR HY 110 g/m
<b>Adjustable ballast on cable (option)</b>	Loaded resin 250 g
<b>Standard cable length (series)</b>	5, 6, 10, 15, 20, 25 and 30 m (other lengths on request)




# SOLIBA Ex « P » version (dusts) - Certified ATEX (SF 2000 ECO)

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### 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.



DEFINITION- The SOLIBA Ex « P » Version (dusts)(SF 2000 ECO) are designed and certified for use in hazardous areas classified 20, 21, 22 (dusts). They are conform to the following standards :

- EN 50014 (1992)
  - NF EN 50014 (1994)
  - EN 50281-1-1 (1998)
  - EN 50281-1-2 (1998)
  - EN 50020 (1994)
  - NF EN 50020 (1995)
  - Potentially explosive areas EEX ia from the group IIC.
- Certified LCIE 00 ATEX 6003 X dated 2000/02/15 according to the Directive 94/9/CE.

CONNECTION-PROTECTION- The protection can be ensured through a calibrated fuse which precisely matches the following electrical requirements:  $U_N$ : 240 V- $I_N$ : 1 A.

**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.

**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 serie 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...