### LEVEL CONTROL WITH RESISTIVE PROBES STE / BES



- For all conductive liquids
- From 1 to 5 electrodes
- All motionless parts
- Adjustable lengths on site
- Maximum pressure 15 bar
- Maximum temperature 110°C
- Process connections in PPh or stainless steel 316
- Rods are in stainless steel or titanium

#### PRINCIPLE

The difference of electrical resistance when electrodes are immerged in the conductive fluid switches a contact relay ES 2001 (please refer to documentation 530-01).

#### **APPLICATIONS**

Control or regulation of level fluid in open or closed tanks, flumes, etc. Detection of fluid or lack of fluid in pipes, fluid leakage, pumps protection...

#### **DESCRIPTION**

Each probe is made of 3 main parts:

- The housing: in PPh with cable gland 9 mm. Protection IP 65.
- Process connection: assures also electrical insulation between the rods, and with the tank. Material: PPh or stainless steel 316 Ti.
- Rods: 1 to 5 according to the model. Material: stainless steel 316 L or titanium (on request). Standard lengths are 500 to 2 000 mm and should be adjusted on site.

#### **MOUNTING**

A vertical mounting above the tank is the best; if it is not possible, the limit angle is 45°C, downward. Caution: it is necessary to avoid any short circuit due to the liquid standing between two rods.

Verify concordance of pressure, temperature and chemical resistance of the probe with the process conditions. Caution: it is necessary to avoid damages due to vapours and condensation. Our technicians may help you to choose a model.

If possible, do not fit a plastic connection probe on metal: it could destroy the thread probe; blocking nuts are available.

If there are fluid turbulences, take care of accidental rods touching originating false signals; sheathed rods are available, or a tranquilization area could be a solution.

If the fluid creates deposit or vapours exist: it is necessary to avoid any electrical short circuit between rods with sheathed rods.

To determine number of necessary rods: 1 for each level + 1 reference rod if the tank is not of an electrical conductive material.



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NIV

**540-01**/1

540 I1 01 E

#### **CODES AND REFERENCES**

		PPh Maxi. 6 bar / 110 °C		Stainless steel 316 Ti Maxi. 15 bar / 110 °C			Common feat
Rods Num	BSP [inch]	Reference	Code number	Reference	Code number	Housing	Stainless steel threaded M4
1	1/2 "	STE/A/PPH	540 110	STE/A/I	540 210	PP (IP 65)	Standard rod l
2	<b>1</b> 1/4"	STE/Z/PPH	540 120	STE/Z/I	540 220	PP (IP 65)	Maximal length
3	11/4"	STE/D/PPH	540 130	STE/D/I	540 230	PP (IP 65)	Over 2000 mm
4	2 "	STE/V/PPH	540 140	STE/V/I	540 240	PP (IP 65)	resistive probe
5	2 "	STE/F/PPH	540 150	STE/F/I	540 250	PP (IP 65)	]

#### tures

el rods Ø 4 mm

length: 500 mm th: 2 000 mm

m please see the type HE/HS es (documentation 542)

#### **SPECIAL MODELS**

Rods in titanium: normally with PPh process connection

Rods are 5 mm diameter, thread M5

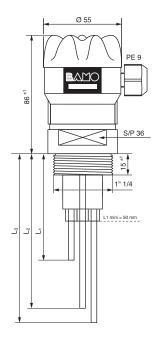
to avoid short circuit between rods (max 100°C) Sheath polyolefin:

### **DIMENSIONS**

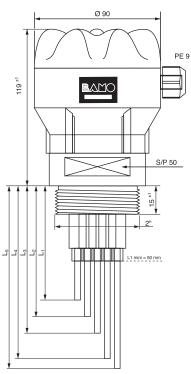
#### STE / A / ...

# BAMC S/P 22 20 ±1 L1 mini = 53 mm

#### STE / Z / ... - STE / D / ...



#### STE / V / ... - STE / F / ...



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