

# 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 immersed 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.

**BAMO MESURES**

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL

Tél : (+33) 01 30 25 83 20 - Web : [www.bamo.fr](http://www.bamo.fr)

Fax : (+33) 01 34 10 16 05 - E-mail : [info@bamo.fr](mailto:info@bamo.fr)

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RESISTIVE PROBES  
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31-10-2008

540 11 01 E

**NIV**

**540-01/1**

## CODES AND REFERENCES

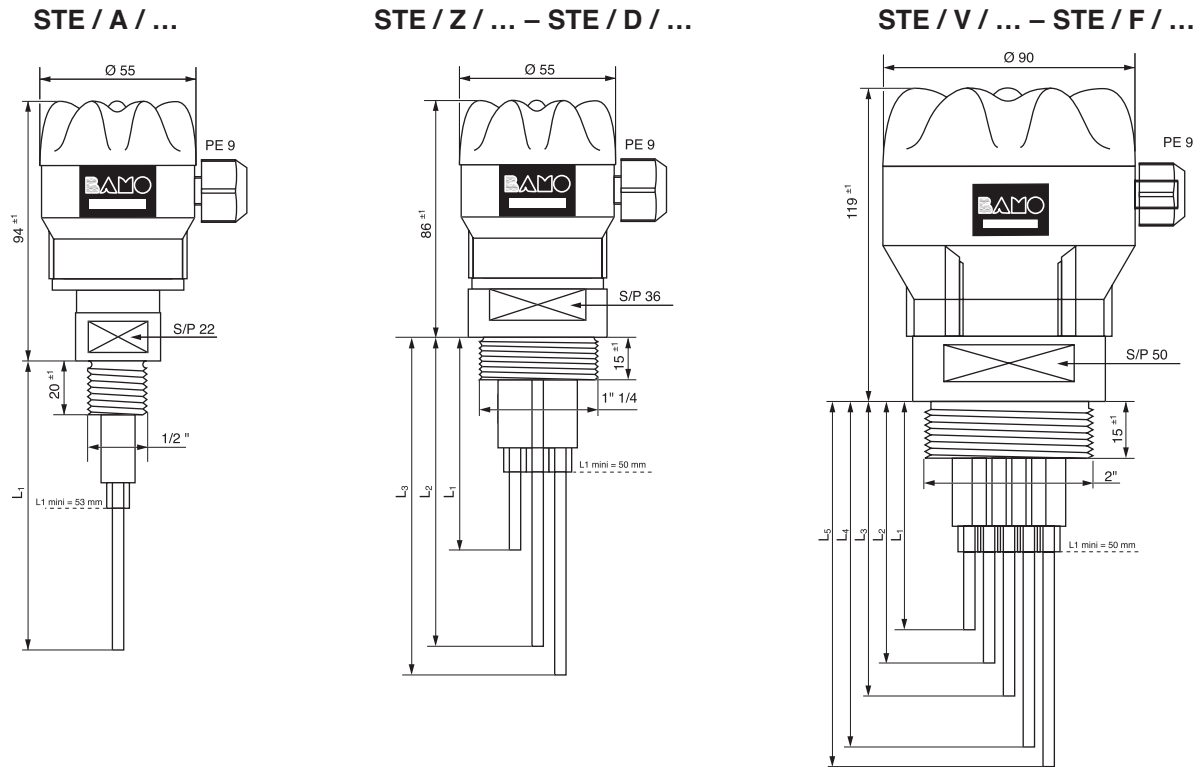
Rods Num	BSP [inch]	PPh Maxi. 6 bar / 110 °C		Stainless steel 316 Ti Maxi. 15 bar / 110 °C		Housing	Common features
		Reference	Code number	Reference	Code number		
1	1/2"	STE/A/PPH	540 110	STE/A/I	540 210	PP (IP 65)	Stainless steel rods Ø 4 mm threaded M4 Standard rod length: 500 mm Maximal length: 2 000 mm Over 2000 mm please see the type HE/HS resistive probes (documentation 542)
2	1 1/4"	STE/Z/PPH	540 120	STE/Z/I	540 220	PP (IP 65)	
3	1 1/4"	STE/D/PPH	540 130	STE/D/I	540 230	PP (IP 65)	
4	2"	STE/V/PPH	540 140	STE/V/I	540 240	PP (IP 65)	
5	2"	STE/F/PPH	540 150	STE/F/I	540 250	PP (IP 65)	

## SPECIAL MODELS

Rods in titanium: normally with PPh process connection  
Rods are 5 mm diameter, thread M5

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

## DIMENSIONS



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