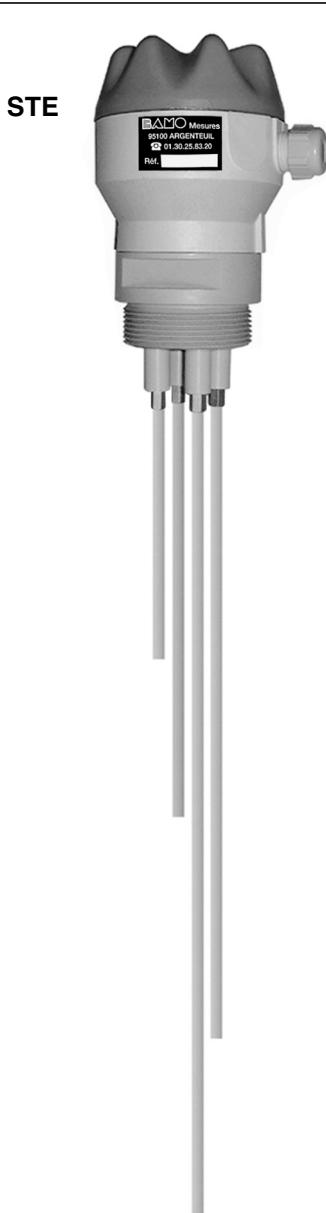


# LEVEL CONTROL WITH RESISTIVE PROBES STE / BES



- 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).

## 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.

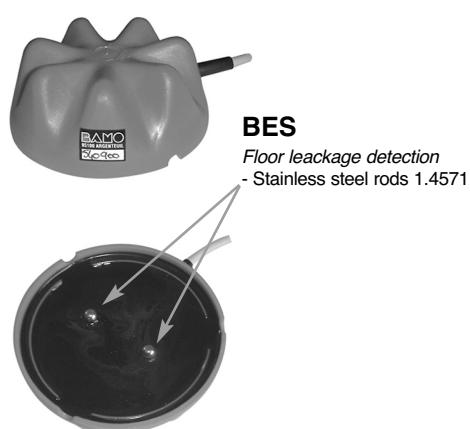
Verify concordance of pressure, temperature and chemical resistance of the probe with the process conditions. Caution: it is necessary to avoid damages due to vapours and condensation. Our technicians may help you to choose a model.

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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04-04-2006

LEVEL CONTROL WITH  
RESISTIVE PROBES  
STE / BES

NIV

540-01/1

## CODES AND REFERENCES

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

Code	Reference	Housing
540900	BES/PBT*	PBT (IP67)

\*: PVC cable (LiYY 2x 0.38 mm)  
standard length is 5 m, other on request

## STE SPECIAL MODELS

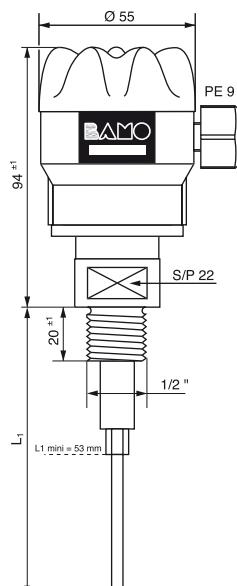
Rods in titanium: normally with PPh process connection

Rods are 5 mm diameter, thread M5

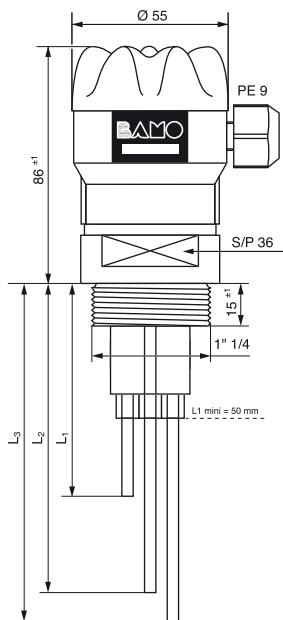
Sheath polyolefin: to avoid short circuit between rods (max 100°C)

## DIMENSIONS

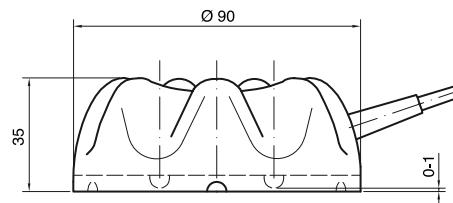
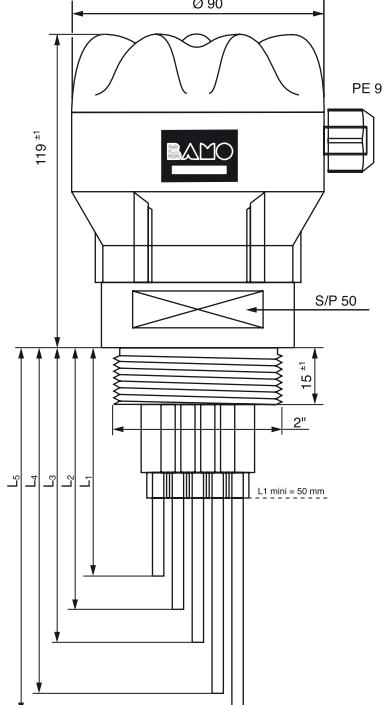
STE / A / ...



STE / Z / ... – STE / D / ...



STE / V / ... – STE / F / ...



BES (Floor leakage detection)

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