

TDR technique – LEVEL TRANSMITTER BAMOFLEX



- TDR Probe, 4 wire technique
- Continuous measurement,
4-20 mA output signal
- Scalable from 100 to 6000 mm
- Pressure limits: -1 ... 40 bar
- Accuracy: ± 3 mm
- Versions ATEX : II 1/2 G – II 1/2 D

PRINCIPLE

A TDR Probe is working as a Time Domain Reflectometry application. Electromagnetic pulses emitted through a stem, move along with the light speed. When they come across the fluid surface, they are reflected. The electronic convert the time for reflection in distance, from which value the volume or level of stoked fluid is calculated. Micro pulses are moving only in the tank atmosphere; gaseous atmosphere or vacuum do not interfere on the measurement.

APPLICATION

The probe BAMOFLEX fits on a flange or thread connection, vertically from the top of the tank. The sealing is made of KLINGERSIL®.

The single antenna is convenient for a tank where no wall effect or proximity of objects could interfere 30 cm around the stem.

The coaxial antenna is universally convenient where stainless steel is chemically compatible. It is recommended for plastic tanks and/or open tanks.

A basic configuration is done directly on site through DIP switch, push button and LED; all requirements for a perfect operating work are completed on the instrument. The BAMOFLEX is totally galvanic insulated between outputs / inputs / tank potential in order to avoid an electrochemical corrosion.

TECHNICAL FEATURES

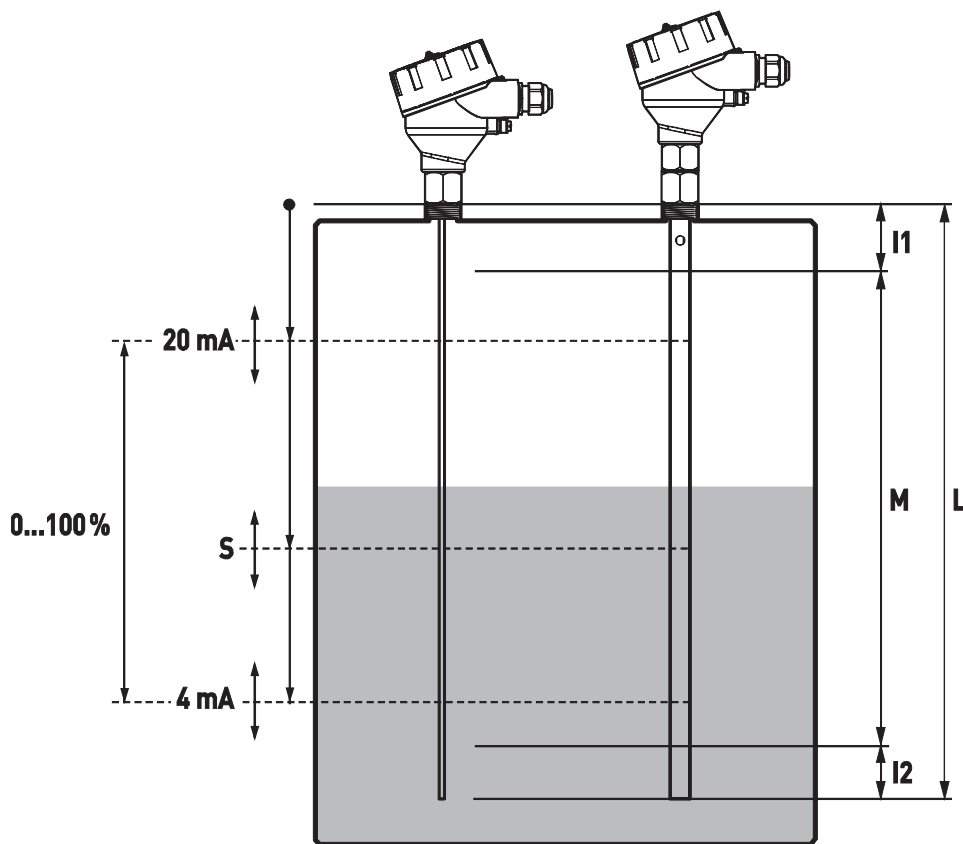
Housing:	Aluminium alloy
Protection:	IP 68
Antenna:	Stainless steel 316 L
Insulation material:	PEEK
Process connection:	Stainless steel 316 L, 3/4" G or NPT
Power supply:	12...24 V cc
Measuring loop:	4 wire technique
Pressure limits:	-1...+ 40 bar
Temperature limits:	-40...+ 150 C° for the fluid
Stem:	Single rod \varnothing 6 mm – Length from 100 to 3000 mm Coaxial \varnothing 17.2 mm – Length from 100 to 6000 mm

CODE NUMBERS AND DESIGNATIONS

Code	Designation
546 100	BAMOFLEX probe, single rod
546 200	BAMOFLEX probe, coaxial stem
546 150	BAMOFLEX probe, single rod, ATEX II 1/2 G – II 1/2 D
546 250	BAMOFLEX probe, coaxial stem, ATEX II 1/2 G – II 1/2 D
546 010	Single rod per 500 mm
546 020	Coaxial stem per 500 mm

Note the length "L":

L = mm



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BAMO MESURES

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