

TDR, Level transmitter BAMOFLEX



BAMOFLEX
Rigid stem version

BAMOFLEX
Coaxial stem version



BAMOFLEX
Flexible cable version

- Transmitter "TDR" 4-wire
- Continuous measurement (output 4-20 mA)
- Scalable ranges:
 - Rigid stem version: up to 3 m
 - Flexible stem: Cable from 1 to 20 m
 - Coaxial stem: Up to 6 m
- Pressure: -1 to 40 bar
- Accuracy: ± 3 mm
- ATEX versions
 - II 1/2 G – II 1/2 D ou II 2 G – II 2 D

DESCRIPTION

A TDR transmitter is working as a Time Domain Reflectometry application. Electromagnetic micro-pulses emitted along the stem and move at the speed of light.

These micro-pulses are reflected by the surface of the stored liquid. The electronics then measures the traveling time and converts it into distance. Micro pulses are moving only in the tank atmosphere; gaseous atmosphere or vacuum do not interfere on the measurement.

OPERATING FEATURES

BAMOFLEX probe must be mounted vertically and fixed on tank with its fitting. A BSP $\frac{3}{4}$ " is supplied with a KLINGERSIL® seal.

Rigid stem and flexible cable versions:

These versions are applicable to a very wide range of applications on liquids. Probes must not touch or come into contact with objects inside the tank, or tank walls.

Flexible cable version is recommended for length over 2 m, limiting the cost of transport or when free space above tank is limited.

Its performance characteristics and mounting are similar to the rigid stem version.

Coaxial stem version:

This probe is without installation restrictions regarding its mounting position/ fitting and the possible presence of nearby wall or other objects located inside the tank. This version is recommended for installation in non-metallic tank, or open tank.

Commissioning:

The basic configuration can be done directly on the device via DIP switches, a push button and a LED.

All the settings required to make it operational can be made directly on it.

The electronics are galvanically insulated between their inputs/ outputs and the potential of the tank, thus avoiding any problem of electrochemical corrosion on the tank.

ATEX AGREEMENTS:

These TDR transmitters are available for hazardous areas categories 1/2 G, 1/2 D or 2 G, 2 D

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TECHNICAL FEATURES

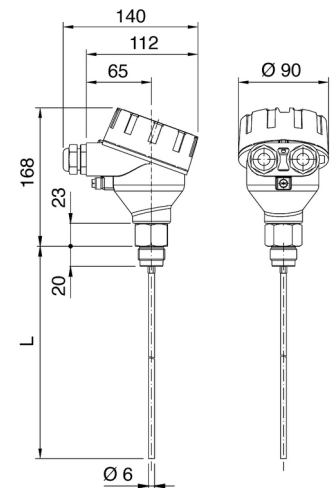
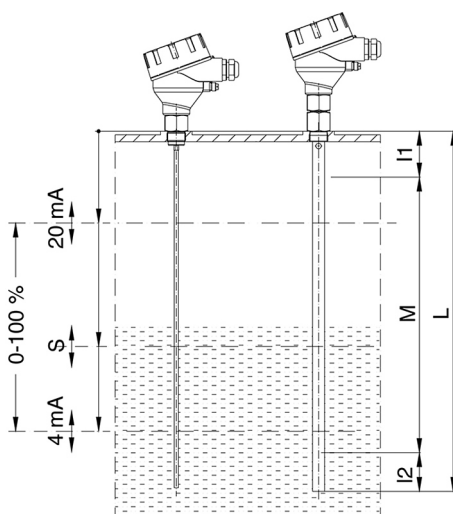
Head housing	Aluminum alloy
Protection	IP 68
Stem	AISI 316 L
Insulation	PEEK
Fitting	AISI 316 L, BSP 3/4" (NPT on request)
Power supply	12 ... 30 V DC
Pressure	-1 ... 40 bar
Temperature	-40 ... +150 °C
Supply	12 ... 30 V DC
Output 1	Analogue signal, 4-20 mA
Output 2	Contact PNP (active), N.C. or N.O.
Stems	Rigid stem, rod Ø 6 mm, length 100 ... 3,000 mm Coaxial stem, Ø 17.2 mm, length 100 ... 6,000 mm Flexible stem, cable Ø 4 mm, length 1 ... 20 m

ATEX Approvals	II 1/2G Ex ia/d IIC T6
	II 1/2D Ex iaD/tD A20/21 IP68 T86 °C
	II 2G Ex ia d IIC T6
	II 2D Ex iaD tD A21 IP68 T86 °C
	II 1/2G Ex ia/d IIC T6 Ga/Gb
	II 1/2D Ex ia/t IIIC T86 °C Da/Db
	II 2G Ex ia d IIC T6 Gb II 2D Ex ia t IIIC T86 °C Db

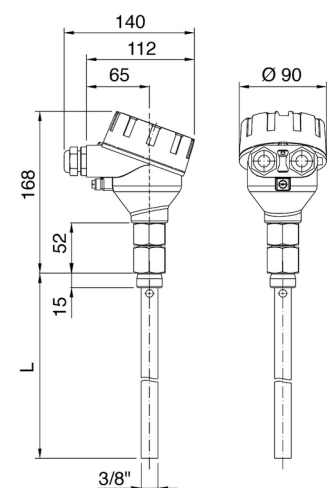
CODE NUMBERS AND REFERENCES

546 ___	BAMOFLEX; for flexible stem
546 100	BAMOFLEX for rigid stem
546 200	BAMOFLEX for coaxial stem
546 150	BAMOFLEX for rigid stem, ATEX II 1/2 G - II 1/2 D
546 ___	BAMOFLEX for rigid stem, ATEX II 2 G - II 2 D
546 250	BAMOFLEX for coaxial stem, ATEX II 1/2 G - II 1/2 D
546 ___	BAMOFLEX for coaxial stem, ATEX II 2 G - II 2 D
546 ___	BAMOFLEX for flexible stem, ATEX II 1/2 G - II 1/2 D
546 ___	BAMOFLEX for flexible stem, ATEX II 2 G - II 2 D
546 010	Stem: rigid rod, price per 500 mm
546 020	Coaxial stem, price per 500 mm

Indicate the length of stem **L = mm**



BAMOFLEX Single stem version



BAMOFLEX Coaxial stem version

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