



LMP 308i

Separable Precision Stainless Steel Probe with Stainless Steel Sensor

- ▶ diameter: 35 mm
- ▶ transmitter head and cable assembly plugged
- ▶ nominal pressure ranges from 0 ... 1.7 mWC up to 0 ... 170 mWC (0 ... 170 mbar up to 0 ... 17 bar)

The precision stainless steel submersible transmitter LMP 308i is suited for continuous level measurement of fluids compatible with stainless steel.

The LMP 308i based on a piezoresistive stainless steel sensor and features a high accuracy (0.05 % FSO BFSL) and a small thermal effect. The signal processing of the sensor signal is done via a digital amplifier with 16-bit A/D and D/A conversion. Now it's possible to compensate actively the sensor specific deviations like nonlinearity and thermal effects. In order to facilitate stock-keeping and maintenance the transmitter head is plugged to the cable assembly with a connector and can be changed easily.

In addition to the several cable materials (PVC, PUR and FEP) the customer has the possibility to consider different versions of cable protection. The submersible probe is suited for explosive area (zone 0).

Preferred areas of use are:

- ▶ environmental engineering: water supply, sewage treatment
- ▶ depth or level measurement in wells and open waters
- ▶ ground water level measurement
- ▶ level monitoring in open tanks

- ▶ output signal
4 ... 20 mA / 2-wire or
0 ... 10 V / 3-wire
with **communication interface for adjusting of offset, span, and damping**
- ▶ **accuracy**
0.05 % FSO BFSL
(0.1 % FSO IEC 60770)
- ▶ **thermal error for offset and span in temperature range -20 ... 80 °C: 0.2 % FSO, average TC 0.02 % FSO / 10 K**
- ▶ good long term stability
- ▶ **option Ex version (only for 4 ... 20 mA / 2-wire) TÜV 03 ATEX 2006 X**
- ▶ option cable protection with corrugated pipe

Characteristics

LMP 308i
Smart Stainless Steel Level Transmitter



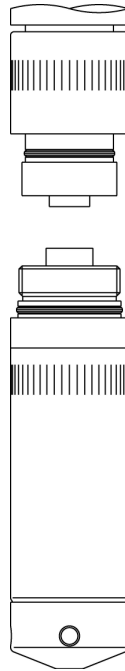
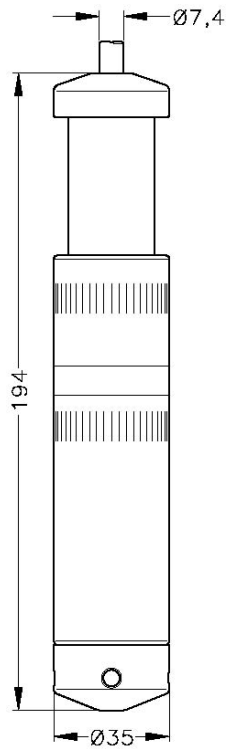
LMP 308i

Smart Stainless Steel Level Transmitter

Technical Data

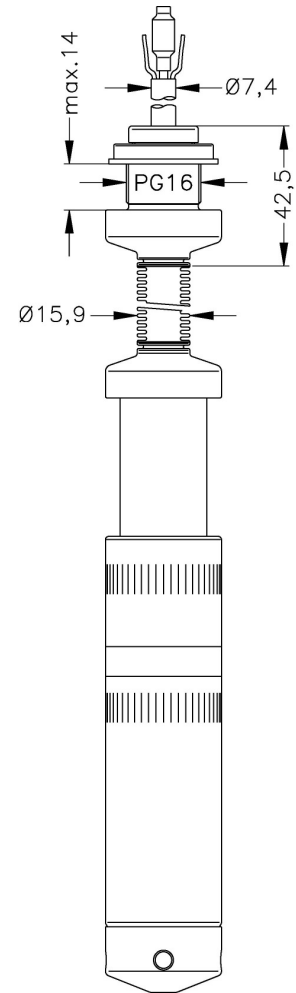
Dimensions

Standard



separability of transmitter
head and cable assembly

Option



version with
corrugated pipe

Electrical connection

Cable with sheath material ⁶	PVC grey PUR black FEP black others on request
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⁶ cable with integrated air tube for atmospheric pressure reference

LMP 308i

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Technical Data

Materials

Housing	stainless steel 1.4571 (316Ti)
Seals	FKM / EPDM / others on request
Diaphragm	stainless steel 1.4435 (316L)
Cable sheath	PVC / PUR / FEP / others on request

Miscellaneous

Cable capacitance	signal line/shield: 150 pF/m	signal line/signal line: 100 pF/m
Cable inductance	signal line/shield: 1.0 μ H/m	signal line/signal line: 1.0 μ H/m
Current consumption	signal output current: max. 25 mA	
Weight	approx. 250 g (without cable)	
Ingress protection	IP 68	

Mounting accessories (not part of delivery)

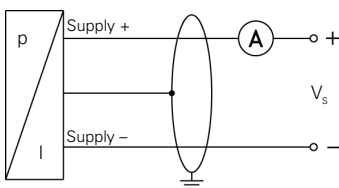
Screw fitting, stainless steel 1.4571 (316Ti)
Terminal clamp, stainless steel 1.4301 (304) or steel, zinc plated

Pin configuration

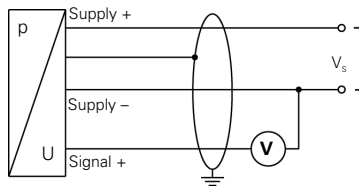
Electrical connection		Binder Series 723 ⁷ (7-pin)	cable colours (DIN 47100)
2-wire-system	Supply +	3	white
	Supply -	1	brown
	Ground	2	yellow / green (shield)
3-wire-system	Supply +	3	white
	Supply -	1	brown
	Signal +	6	green
	Ground	2	yellow / green (shield)
Communication interface ⁸	RxD	4	-
	TxD	5	-
	GND	7	-

Wiring diagram

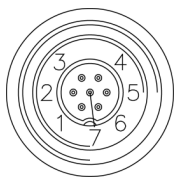
2-wire-system (current)



3-wire-system (voltage)



connector⁷



⁷ in separated version

⁸ may not be transmitted directly with the PC (the suitable adapter "Adapt 1" is available as accessory)

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