

Level probe TST-HD 137

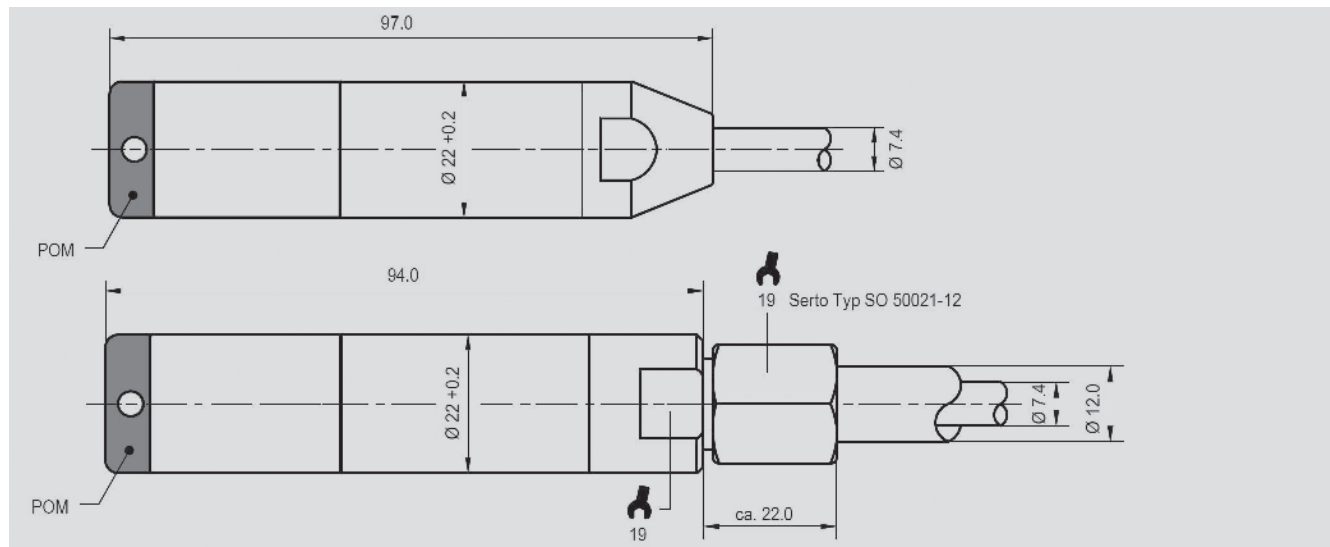
Hydrostatic pressure transmitter for liquid levels
Measuring range from 250 mbar ... 20 bar, 22 mm diameter



Description

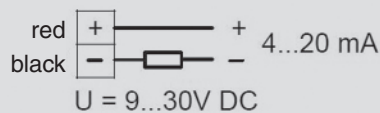
- Stainless steel housing 1.4404, IP 68
- 22 mm diameter, perfect for 1" sounding pipes
- Measuring range from 250 mbar ... 20 bar
- Total measurement error $\leq 0,5\%$
- Optional: integrated PT100 sensor for temperature measurement
- Ceramic sensor AL_2O_3
- Analog output 4 ... 20 mA, 2-wire, others upon request
- Media temperature -25 ... +80 °C

Dimensional drawing



Electrical connection

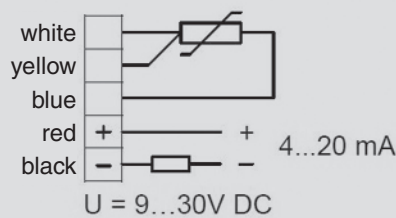
4 ... 20 mA, 2-wire



0,5 ... 4,5 V, 3-wire ratiometric 0 ... 5 V / 0 ... 10 V, 3-wire



4 ... 20 mA, 2-wire and Pt 100 / Pt 1000 sensor, 3-wire



Shielded cable will be used for all cable length > 30 m

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Measuring range

Measuring range (bar)	Measuring range (mWS)	Overload (bar)
0 ... 250 mbar*	0 ... 2,5*	-0,15 / 1,5
0 ... 400 mbar*	0 ... 4*	-0,15 / 1,5
0 ... 500 mbar	0 ... 5	-0,2 / 3
0 ... 600 mbar	0 ... 6	-0,2 / 3
0 ... 1,0 bar	0 ... 10	-0,2 / 3
0 ... 1,6 bar	0 ... 16	-0,4 / 6
0 ... 2,0 bar	0 ... 20	-0,4 / 6
0 ... 2,5 bar	0 ... 25	-0,4 / 6
0 ... 4,0 bar	0 ... 40	-0,8 / 12
0 ... 5,0 bar	0 ... 50	-0,8 / 12
0 ... 6,0 bar	0 ... 60	-1 / 25
0 ... 10 bar	0 ... 100	-1 / 25
0 ... 16 bar	0 ... 160	-1 / 50
0 ... 20 bar	0 ... 200	-1 / 50

* Total measurement error 1 % of range

Type designation

(Example)

TST-HD 137, 2 bar, 4-20 mA, 2 Ltr., 10 m PE

Description

The level probe **HD 137** has been designed as a hydrostatic pressure transmitter for liquid level measurements.

The housing is manufactured in 1.4404 (316L) stainless steel as a standard. The sensor element is made of AL₂O₃ ceramic and is protected against damages by a removeable POM cap.

Technical Data	Type: TST-HD 137
Measuring range	0 ... 250 mbar up to 0 ... 20 bar
Output signal	4 ... 20 mA (2-wire) 0 ... 10 V (3-wire, only available with HDPE cable) 0 ... 5 V (3-wire, upon request)
Optional PT 100 Sensor request upon	4 ... 20 mA, 2-wire AND PT 100, 3-wire (only available with HDPE cable)
Total measurement error	≤± 0,5 % FS
Response time	50 ms
Operating voltage U _B	9 ... 30 V DC for outputs 4 ... 20 mA and 0 ... 5 V 5 V DC for output 0,5 ... 4,5 V DC, ratiometric 15 ... 30 V DC for output 0 ... 10 V DC
Media temperature	-25 ... +80 °C
Temperature influence	≤± 0,03 % FS/K (coefficient zero point) ≤± 0,02 % FS/K (coefficient range)
Long-term stability	≤± 0,5 % of range p. a. (> 250 mbar)
Housing	Stainless steel 1.4404 (316L); gasket ring FKM (Viton)
IP protection class	IP 68
Weight, level probe	~ 200 g according to layout
Weight, cable	400 g per 10 meters
Sensor element	Ceramic AL ₂ O ₃
Electric hookup	Polyethylen-(PE) suspension cable, kevlar reinforced, wire cross-section 0,34 mm ² , ventilation hose and air filter equipped. FDR-, PUR-, PTFE-cable available.

Accessories for level probes



Terminal enclosure with pressure balance TS-KG 80
Protection class IP 67
Art.code: 1091004



Universal isolation amplifier TV 500-Ex
Repeater transmitter ST 500 Ex
Please see page 201 for details



Multifunction display TS-S 110
Please see page 188 for details



Digital display TS-MR 50
Please see page 186 for details



Zener diode barrier MTL 7787+
Please see page 207 for details