

P137

Nöding

Messtechnik



Datasheet OEM Level Transmitter P137

PERFORMANCE FEATURES

- Cost optimized for standard applications
- 22 mm Ø ideal for 1" pipes
- Smallest measuring range: 0...250 mbar / 0...2,5 mH₂O
- Largest measuring range: 0...20 bar / 0...200 mH₂O
- Accuracy ≤ 0,5%
- Analog output: 4...20 mA, 2-wires
0...10 V, 3-wires
0...5 V, 3-wires
0,5...4,5V, 3-wires ratiometric
- Optionally integrated PT100/PT1000 Sensor for temperature measurement

The level transmitter P137 is an application- and cost-optimized level transmitter, especially suitable as an OEM component. The screw cap simplifies handling and installation. It remains mounted during operation and protects the membrane from contaminants in the medium. The ceramic sensor operates according to the piezoresistive principle and in combination with the stainless steel housing forms a robust and slim probe. Our modular design concept provides a wide variety of products. Feel free to contact us if you need a customization that is not listed in this datasheet.

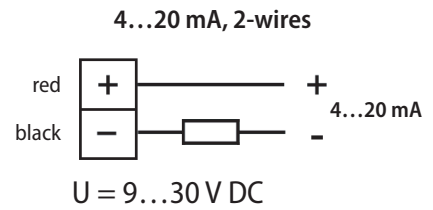
AREAS OF APPLICATION

- Gaseous media
- Liquid media
- Abrasive media
- Aggressive media
- Oil and fuel tanks

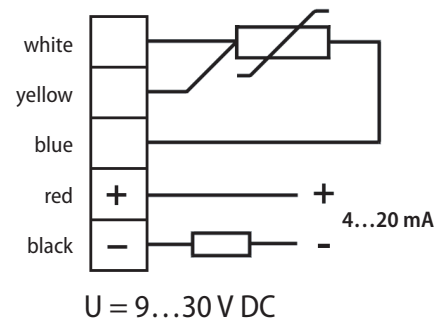
TECHNISICAL DATA

Messbereiche	
Pressure range	See table "Measuring ranges" others on request
Output	
Analog output	4...20 mA 2-wires 0...10 V, 0...5 V 3-wires 0,5...4,5V 3-wires, ratiometric
Power supply	
20 mA output, 5V output	9...30 V DC
10 V output	15...30 V DC
0,5...4,5 V output	5 V DC
Signalverhalten	
Accuracy	$\leq \pm 0,5\%$ FS @ 25 °C
Long term stability	$\leq \pm 0,5\%$ FS/Year
Response time	50 ms - others on request
Switch-on time	< 1 s
Temperature coefficient	
Zero	$\leq \pm 0,03\%$ FS / Kelvin
Span	$\leq \pm 0,02\%$ FS / Kelvin
Temperaturbereiche	
Medium temperature	-25...80 °C
Surrounding temperature	-25...80 °C
Storage temperature	-40...85 °C
Electrical protections	
Short-circuit resistance	Permanent
Reverse polarity protection	Protection against reverse polarity, but no function
Electromagnetic compatibility	Interference emissions and immunity acc. to EN 61326
Wetted materials	
Housing	Stainless steel 1.4404
Sensor	Ceramic Al ₂ O ₃
Sensor seal	FPM (Viton), EPDM, FKKM (Chemraz / Kalrez)
Surroundings	
Protection type	IP 68
Exemplary weight	
P137-4W1-1005-011 (figure p. 1)	Approx. 450 g

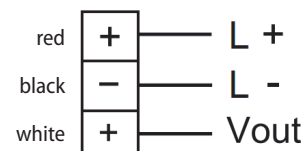
ELECTRICAL CONNECTION



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

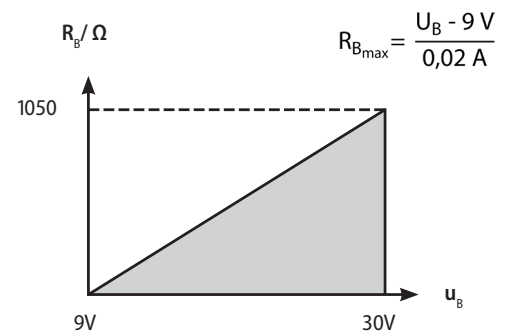


0,5...4,5 V, 3-wire ratiometric 0...5 V/0...10 V, 3-wires



For cable lengths > 30 m shielded cable is used

LOAD



MEASURING RANGE

Measuring ranges in bar / Pa		Measuring ranges in mH ₂ O		Overload (bar)
0...250 mbar / 0...25 kPa*	02	0...2,5 mH ₂ O	52	-0,1/1
0...300 mbar / 0...30 kPa*	X5	0...3 mH ₂ O	66	-0,1/1
0...350 mbar / 0...30 kPa*	X1	0...3,5 mH ₂ O	67	-0,1/1
0...400 mbar / 0...40 kPa*	03	0...4 mH ₂ O	53	-0,1/1
0...500 mbar / 0...50 kPa	B7	0...5 mH ₂ O	W2	-0,1/1
0...600 mbar / 0...60 kPa	04	0...6 mH ₂ O	54	-0,5/2
0...1 bar / 0...100 kPa	05	0...10 mH ₂ O	55	-0,5/2
0...1,6 bar / 0...160 kPa	06	0...16 mH ₂ O	56	-1/4
0...2 bar / 0...200 kPa	B3	0...20 mH ₂ O	W3	-1/4
0...2,5 bar / 0...250 kPa	07	0...25 mH ₂ O	57	-1/10
0...4 bar / 0...400 kPa	08	0...40 mH ₂ O	58	-1/10
0...5 bar / 0...500 kPa	F1	0...50 mH ₂ O	68	-1/10
0...6 bar / 0...600 kPa	09	0...60 mH ₂ O	59	-1/15
0...10 bar / 0...1 MPa	10	0...100 mH ₂ O	60	-1/15
0...16 bar / 0...1,6 MPa	11	0...160 mH ₂ O	61	-1/35
0...20 bar / 0...2 MPa	B5	0...200 mH ₂ O	W5	-1/35

* Accuracy 1%

ORDERING CODE

Output signal

- 1 0...10 V 3-wires
- 4 4...20 mA 2-wires
- 8 0...5 V 3-wires (on request)
- A 0,5...4,5 V 3-wires, ratiometric (on request)
- T 4...20 mA 2-wires and PT 100 3-wires
- F 4...20 mA 2-wires and PT 1000 3-wires

Ranges

Measuring ranges see table

- 99 Non-standard range (on request)

Material housing

- 1 Stainless steel 1.4404
- S 1.4404 12 mm Serto screw fitting
- 2 Brass (on request)

Cable length

- 002 2 m cable
- 005 5 m cable
- 010 10 m cable
- 020 20 m cable

Specify custom lengths in meters

Material cable

- 0 PE cable (3-wires a. PT100/PT1000 N/A)
- 2 PUR cable
- 4 HDPE cable
- 6 FEP cable

Cable type

- 0 Unshielded cable, standard
- 1 Shielded cable

Sensor seal

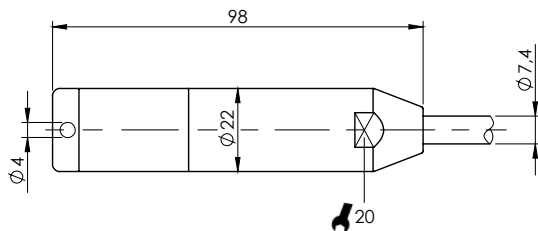
- 1 FPM (Viton), standard
- 3 EPDM
- 5 FFKM (Chemraz / Kalrez)

Optionen

- DH Diesel/Heizöl

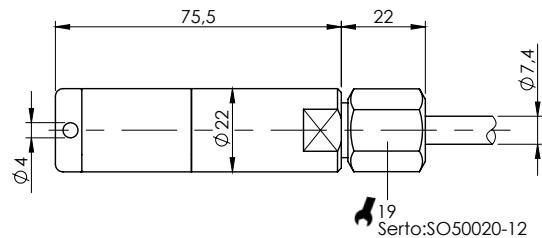
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DIMENSIONS



VERSION

■ TYPE 1



■ TYPE S

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