

P143

Nöding

Messtechnik



Datasheet Combi Sensor P143

PERFORMANCE FEATURES

- PP housing (Polypropylene)
- 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...4,5 V, 3-wires ratiometric
- Optionally integrated PT100 / PT1000 Sensor for temperature measurement
- Optionally with stainless steel cap usable as level sensor

ANWENDUNGSGEBIETE

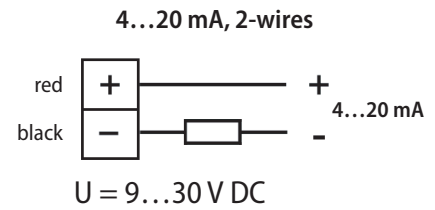
- Chlorine and salt water applications
- Chemicals
- Gaseous media
- Water
- Waste water
- Well / Deep well
- Aggressive media

The model P143 can be used as a level sensor or as a screw-in transmitter. The screw-on stainless steel cap provides the necessary weight to prevent floating during level measurement and at the same time protects the diaphragm. Without the cap, the device can be used as a screw-in transmitter with G 1/2 in. thread, integrated seal and protection class IP68. The measuring cell operates based on the piezoresistive principle and forms, in combination with the polypropylene housing, a slim transmitter with high chemical resistance. 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.

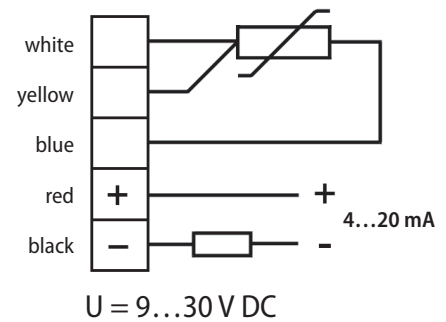
TECHNISICAL DATA

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	$\leq \pm 0,5 \% \text{ FS @ } 25^\circ\text{C}$
Long term stability	$\leq \pm 0,5\% \text{ FS/Year}$
Response time	50 ms - others on request
Switch-on time	< 1 s
Temperature coefficient	
Zero	$\leq \pm 0,03 \% \text{ FS/Kelvin}$
Span	$\leq \pm 0,02 \% \text{ FS/Kelvin}$
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	PP
Sensor	Ceramic Al_2O_3
Sensor seal	FPM (Viton), EPDM, FKKM (Chemraz / Kalrez)
Surrounding	
Schutzart	IP 68
Exemplary weight	
P137-4W1-1005-011 (figure p. 1)	Approx. 450 g

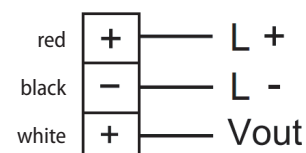
ELECTRICAL CONNECTION



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

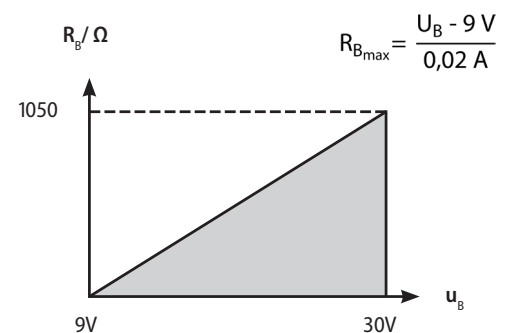


0,5...4,5 V, 3-wire ratiometric 0...5 V/0...10 V, 3-wires

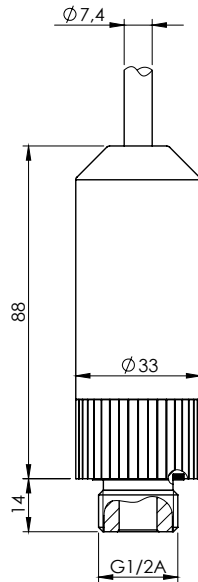
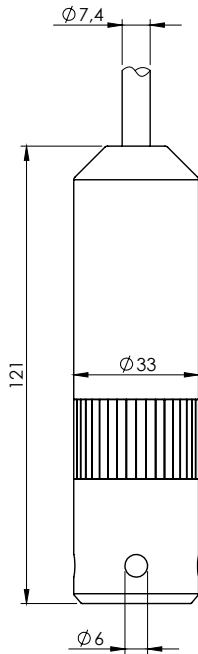


For cable lengths > 30 m shielded cable is used

LOAD



■ DIMENSIONS



VERSION

■ LEVEL SENSOR WITH STAINLESS STEEL CAP

■ SCREW-IN TRANSMITTER