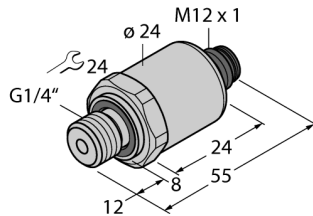


Pressure Sensor

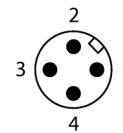
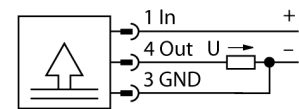
With Voltage Output (3-wire)

PT10A-1004-U1-H1143/X



- Ceramic measuring cell
- Compact and robust design
- Excellent EMC properties
- Pressure range 0...10 bar abs.
- 12...33 VDC
- Analog output 0...10 V
- Process connection G1/4" male thread
- Plug-in device, M12 × 1

Wiring Diagram



Functional principle

The pressure sensors of the PT ...-1000 series operate with a ceramic measuring cell. Depending on the sensor variant, the processed signal is available as an analog output signal of either (4...20 mA (2-wire) or 0...10 V, 0...5 V, 1...6 V (3-wire).

Type designation	PT10A-1004-U1-H1143/X
Ident-No.	6839503
Pressure range	
Absolute pressure	0...10 bar abs. 0...145psi abs. 0...1MPa abs.
Admissible overpressure	≤ 25 bar
Burst pressure	≥ 25 bar
Response time	< 2 ms, typ. 1 ms
Long-term stability	0.25% FS, according to IEC EN 60770-1
Power supply	
Operating voltage	12...33 VDC
Current consumption	≤ 7 mA
Short-circuit/reverse polarity protection	yes / yes
Protection type and class	IP67 / III
Insulation voltage	750 VDC
Outputs	
Output 1	Analog output
Analog output	
Voltage output	0...10V
Operating range	0...10 V (3-wire)
Load	≤ 100 nF / >10 kΩ
Temperature behaviour	
Medium temperature	-40...+125 °C
Temperature coefficient	± 0.2 % of full scale/10 K
Ambient conditions	
Ambient temperature	-30...+85 °C
Storage temperature	-50...+100 °C
Vibration resistance	20 g, 15...2000 Hz, 15...25 Hz with amplitude +/-15 mm acc. to IEC 68-2-6
Shock resistance	100 g, 11 ms, half sinusoidal curve, all 6 directions, free fall from 1 m onto concrete (6x) , acc. to IEC 68-2-27
Housing	
Housing material	Stainless-steel/Plastic, 1.4404 (316L)/ Polyarylamide 50 % GF UL 94 V-0
Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Pressure transducer material	Ceramic Al ₂ O ₃
Sealing material	FPM spez.
Process connection	G1/4" male thread
Wrench size pressure connection / coupling nut	24
Electrical connection	Connector, M12 × 1
Max. tightening torque housing nut	20 Nm

Pressure Sensor
With Voltage Output (3-wire)
PT10A-1004-U1-H1143/X

TURCK
works

Industrial
Automation

Reference conditions acc. to IEC 61298-1

Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC

MTTF	1238 years acc. to SN 29500 (Ed. 99) 40 °C
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