

PT1000PSIG-2014-I2-H1143 Pressure Transmitter – With Current Output (2-Wire)



Technical data

Туре	PT1000PSIG-2014-I2-H1143
ID	6837240
Pressure range	
Pressure type	Relative pressure
Pressure range	068.95 bar
	01000 psi
	06.89 MPa
Admissible overpressure	≤ 180 bar
Burst pressure	≥ 360 bar
Response time	< 2 ms, typ. 1 ms
Long-term stability	0.25 % FS, according to IEC EN 60770-1
Power supply	
Operating voltage	733 VDC
Current consumption	≤ 23 mA
Short-circuit/reverse polarity protection	yes / yes
Protection type and class	IP67 / III
Insulation voltage	750 VDC
Outputs	
Output 1	Analog output
Output function	Analog output current
Analog output	
Current output	420 mA
Load	≤ (Supply voltage -7)/20 kΩ
Resolution	<± 0.1 % FS
Accuracy LHR	±0.3 % FS (typical; max. ±0.5 % FS)

Features

Fully welded metal measuring cell
Pressure range 0...1000 psi rel.
7...33 VDC
Analog output 4...20 mA
Process connection 1/8"-27 NPT male thread

Plug-in device, M12 × 1

Wiring diagram



Functional principle

The pressure sensors in the PT...-2000 product series operate with a fully welded metal measuring cell in various pressure ranges of up to -1...1000 bar in 2-, 3- or even 4-wire technology. Depending on the sensor variant, the processed signal is available as an analog output signal (4...20 mA, 0... 10 V, 0...5 V, 1...6 V, ratiometric) or as a digital IO-Link process parameter. The IO-Link sensor variants also have two independently configurable switching outputs. In addition to the standard variants, there are

special sensors for uses such as ATEX areas or for oxygen applications. A wide range of process connections and

electrical connections offer a high degree of flexibility in a wide range of applications.



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Temperature behaviour	
Medium temperature	-40+135 °C
Temperature coefficient	± 0.2 % of full scale/10 K
Environmental conditions	
Ambient temperature	-30+85 °C
Storage temperature	-50+100 °C
Vibration resistance	20 g, 152000 Hz, 1525 Hz with amplitude ± 15 mm, 1 octave/minute in all 3 directions, 50 continuous loads, acc. to IEC 68-2-6
Shock resistance	100 g, 11 ms, half sinusoidal curve, all 6 directions, free fall from 1 m onto con- crete (6x) acc. to IEC 68-2-27
Mechanical data	
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V-0
Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Pressure transducer material	Stainless steel 1.4016 (AISI 430)
Process connection	1/8"-27 NPT male thread
Wrench size pressure connection / cou- pling nut	24
Electrical connection	Connector, M12 × 1
Max. tightening torque of housing nut	20 Nm
Reference conditions acc. to IEC 61298-1	
Temperature	15+25 °C
Atmospheric pressure	8601060 hPa abs.
Humidity	4575 % rel.
Auxiliary power	24 VDC
Tests/approvals	
Approvals	cULus
UL registration number	E302799
MTTF	1189 years acc. to SN 29500 (Ed. 99) 40 °C