Pressalis

Datasheet

Pressure transmitters

PT14

Low-range millivolt pressure sensor



Unamplified 10 mV/V output from vacuum up to 70 bar at ±0.25 % of span, in a laser-welded 304 stainless body.

Range	Accuracy	Output	Overpressure
0 to 0.4 up to 0 to 70 bar	**±0.25 % of span**	**10 mV/V, four-wire**	**2 x range, burst 3 x range**

Overview

PT14 is an unamplified pressure sensor for the low end of the scale: vacuum from -1 to 0 bar, and 0 to 0.4 bar up to 0 to 70 bar gauge. The bridge gives 10 mV/V on four wires from a 3 to 10 V DC excitation, 5 V DC recommended, at ±0.25 % of span with ±0.1 % of span per year stability.

The body and pressure chamber are 304 stainless steel, laser welded throughout. Overpressure is 2 x range and burst pressure 3 x range, which suits air, water and low-pressure oil lines. For high-pressure hydraulics in a millivolt sensor, PT10 covers 6 to 600 bar with 3 x range overpressure.

It goes into test benches, HVAC and pneumatic test rigs, and instruments where the builder conditions the bridge signal in their own electronics. Process connection is M20 x 1.5, G1/4 or 1/4 NPT. Electrical connection is a cable outlet, an M12 connector or a circular connector, all IP65.

Specifications

Measurement

Pressure type	Gauge
Ranges	-1 to 0 bar, and 0 to 0.4 bar up to 0 to 70 bar
Accuracy	±0.25 % of span
Long-term stability	±0.1 % of span per year
Overpressure	2 x range
Burst pressure	3 x range
Zero temperature drift	±0.02 % of span per °C

Span temperature drift	±0.02 % of span per °C

Medium and environment

Medium temperature	-40 to 85 °C
Storage temperature	-40 to 125 °C
Shock	100 g (11 ms)
Material	304 stainless steel, laser welded

Electrical

Output	10 mV/V, unamplified bridge
Wiring	Four-wire
Excitation	3 to 10 V DC, 5 V DC recommended
Electrical connection	Cable outlet, M12 connector or circular connector
Protection	IP65

Mechanical

Process connection	M20 x 1.5, G1/4, 1/4 NPT

Common configurations

Any combination from the ordering code can be quoted. Other ranges and connections on request.

Range	Output	Process connection	Electrical connection	Order code
-1 to 0 bar	10 mV/V	G1/4 male	M12	**PT14-V00-B2-M**
0 to 40 kPa	10 mV/V	G1/4 male	Cable outlet	**PT14-K40-B2-C**
0 to 2 bar	10 mV/V	1/4 NPT male	M12	**PT14-002-N2-M**
0 to 10 bar	10 mV/V	G1/4 male	Circular connector	**PT14-010-B2-A**
0 to 25 bar	10 mV/V	M20 x 1.5 male	Cable outlet	**PT14-025-M20-C**
0 to 70 bar	10 mV/V	G1/4 male	M12	**PT14-070-B2-M**

Ordering code

One code from each group, in this order. Example: **PT14-V00-M20-C**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT14	-	V00	-	M20	-	C
Model		Range		Process connection		Electrical connection

Range

V00	-1 to 0 bar
K40	0 to 40 kPa
001	0 to 1 bar
002	0 to 2 bar
004	0 to 4 bar
010	0 to 10 bar
016	0 to 16 bar
025	0 to 25 bar
040	0 to 40 bar
070	0 to 70 bar
X	Other range, state in the request

Process connection

M20	M20 x 1.5 male
B2	G1/4 male
N2	1/4 NPT male

Electrical connection

C	Cable outlet
M	M12 connector, four-pin
A	Circular connector