Pressalis

Datasheet

Pressure transmitters

PT17

Ceramic flat-diaphragm pressure transmitter



Ceramic sensing element, 2 to 25 bar gauge, with 4 to 20 mA, voltage or RS485 output for water and air.

Range	Accuracy	Output	Sensing element
0 to 2 up to 0 to 25 bar	**±0.5 % or ±1 % of span**	**4 to 20 mA, voltage or RS485**	**Ceramic, flat diaphragm**

Overview

PT17 uses a flat ceramic diaphragm with a piezoresistive bridge, held in a stainless steel housing, with zero and full scale set by laser trimming. The ceramic diaphragm resists corrosion and wear. Standard ranges are 0 to 2, 6, 10, 16 and 25 bar gauge, at ±0.5 % or ±1 % of span.

It fits water treatment, air compressors, refrigeration and HVAC circuits, and hydraulic and pneumatic equipment up to 25 bar. Besides 4 to 20 mA and 0 to 5 V, 0 to 10 V or 0.5 to 4.5 V, it is available with a four-wire RS485 digital output for a direct link to a controller or gateway.

Overpressure is 1.5 x range and burst pressure 2 x range. It is rated for ±20 g vibration and 100 g shock, and operates from -40 to 85 °C. The 22 mm body takes a cable outlet, M12, Packard, or DIN 43650 form A or form C connectors, on G1/4, G1/2, 1/4 NPT, M12 x 1.5 or M20 x 1.5 threads.

Specifications

Measurement

Pressure type	Gauge
Ranges	0 to 2, 0 to 6, 0 to 10, 0 to 16, 0 to 25 bar
Accuracy	±0.5 % or ±1 % of span
Overpressure	1.5 x range
Burst pressure	2 x range
Sensing element	Ceramic flat diaphragm, piezoresistive

Medium and environment

Operating temperature	-40 to 85 °C
Storage temperature	-40 to 105 °C
Vibration	±20 g
Shock	100 g (11 ms)
Housing	Stainless steel

Electrical

Output	4 to 20 mA two-wire; 0 to 5 V, 0 to 10 V or 0.5 to 4.5 V three-wire; RS485 four-wire
Supply	9 to 30 V DC (4 to 20 mA, 0 to 5 V); 15 to 30 V DC (0 to 10 V); 5 V DC or 9 to 30 V DC (0.5 to 4.5 V); 3.3 to 30 V DC (RS485)
Electrical connection	Cable outlet, M12, Packard, DIN 43650 form A or form C
Protection	IP65

Mechanical

Process connection	G1/4, G1/2, 1/4 NPT, M12 x 1.5, M20 x 1.5
Body diameter	22 mm
Wrench size	22 mm

Common configurations

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

Range	Process connection	Output	Electrical connection	Accuracy	Order code
0 to 2 bar	1/4 NPT male	0.5 to 4.5 V	Packard	±1 %	**PT17-002-N2-H-P-A1**
0 to 6 bar	G1/4 male	4 to 20 mA	DIN 43650 form A	±0.5 %	**PT17-006-B2-I-D-A05**
0 to 10 bar	G1/4 male	4 to 20 mA	DIN 43650 form A	±0.5 %	**PT17-010-B2-I-D-A05**
0 to 10 bar	G1/4 male	0 to 5 V	DIN 43650 form C	±1 %	**PT17-010-B2-V5-DC-A1**
0 to 16 bar	G1/2 male	RS485	Cable outlet	±0.5 %	**PT17-016-B4-M-C-A05**
0 to 25 bar	M20 x 1.5 male	0 to 10 V	M12	±0.5 %	**PT17-025-M20-V10-M-A05**

Ordering code

One code from each group, in this order. Example: **PT17-002-B2-I-D-A05**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT17	-	002	-	B2	-	I	-	D	-	A05
Model		Range		Process connection		Output		Electrical connection		Accuracy

Range

002	0 to 2 bar
006	0 to 6 bar
010	0 to 10 bar
016	0 to 16 bar
025	0 to 25 bar
X	Other range, state in the request

Process connection

B2	G1/4 male
B4	G1/2 male
N2	1/4 NPT male
M12	M12 x 1.5 male
M20	M20 x 1.5 male

Output

I	4 to 20 mA, two-wire
V5	0 to 5 V, three-wire
V10	0 to 10 V, three-wire
H	0.5 to 4.5 V, three-wire, 5 V DC supply
H9	0.5 to 4.5 V, three-wire, 9 to 30 V DC supply
M	RS485, four-wire

Electrical connection

D	DIN 43650 form A connector
DC	DIN 43650 form C connector
P	Packard connector
M	M12 connector, four-pin
C	Cable outlet

Accuracy

A05	±0.5 % of span
A1	±1 % of span