Pressalis

Datasheet

Pressure transmitters

PT16

Precision transmitter, ±0.1 % of span



±0.1 % of span and ±0.1 % per year stability from vacuum to 600 bar, for test benches and control loops.

Range	Accuracy	Output	Stability
0 to 0.4 up to 0 to 600 bar	**±0.1 % of span**	**4 to 20 mA or voltage**	**±0.1 % of span per year**

Overview

PT16 is the precision grade of the welded stainless range: ±0.1 % of span accuracy and ±0.1 % of span per year stability. The pressure chamber is 304 stainless steel, laser welded, and the electronics are temperature compensated from -20 to 85 °C, with zero and span drift of ±0.02 % of span per °C.

Ranges cover vacuum from -1 to 0 bar and 0 to 0.4 bar up to 0 to 600 bar gauge. It suits test benches, pump and valve test rigs, and points in water and HVAC plant where the reading feeds a control loop and a tight figure matters. Overpressure is 2 x range and burst pressure 3 x range.

Outputs are 4 to 20 mA two-wire, or 0 to 5 V, 0 to 10 V or 0.5 to 4.5 V three-wire, with surge and reverse polarity protection. For a local reading, it is available with a DIN 43650 form A connector that carries a display. Other connections include M12, Packard, AMP, Deutsch DT04 and cable outlets, IP65.

Specifications

Measurement

Pressure type	Gauge
Ranges	-1 to 0 bar, and 0 to 0.4 bar up to 0 to 600 bar
Accuracy	±0.1 % 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

Compensated temperature	-20 to 85 °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	4 to 20 mA two-wire; 0 to 5 V, 0 to 10 V or 0.5 to 4.5 V three-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 (0.5 to 4.5 V)
Protection circuits	Surge and reverse polarity protection
Electrical connection	DIN 43650 form A (with or without display) or form C, M12, Packard, circular connector, AMP, Deutsch DT04-3P or DT04-4P, cable outlet or watertight cable outlet
Protection	IP65

Display and switching

Local display	Optional, built into the DIN 43650 form A connector

Mechanical

Process connection	G1/8, G1/4, G3/8, G1/2, 1/8 NPT, 1/4 NPT, 3/8 NPT, 1/2 NPT, R1/8, R1/4, R3/8, R1/2, M12 x 1.5, M18 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	Order code
-1 to 0 bar	G1/4 male	0 to 5 V	Packard	**PT16-V00-B2-V5-P**
0 to 1 bar	G1/4 male	4 to 20 mA	DIN 43650 form A	**PT16-001-B2-I-D**
0 to 10 bar	G1/4 male	4 to 20 mA	DIN 43650 form A with display	**PT16-010-B2-I-DD**
0 to 25 bar	G1/2 male	4 to 20 mA	M12	**PT16-025-B4-I-M**
0 to 100 bar	M20 x 1.5 male	0 to 10 V	M12	**PT16-100-M20-V10-M**
0 to 250 bar	1/4 NPT male	4 to 20 mA	Cable outlet	**PT16-250-N2-I-C**

Ordering code

One code from each group, in this order. Example: **PT16-V00-B1-I-D**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT16	-	V00	-	B1	-	I	-	D
Model		Range		Process connection		Output		Electrical connection

Range

V00	-1 to 0 bar
K40	0 to 40 kPa
001	0 to 1 bar
004	0 to 4 bar
010	0 to 10 bar
016	0 to 16 bar
025	0 to 25 bar
060	0 to 60 bar
100	0 to 100 bar
250	0 to 250 bar
600	0 to 600 bar
X	Other range, state in the request

Process connection

B1	G1/8 male
B2	G1/4 male
B3	G3/8 male
B4	G1/2 male
N1	1/8 NPT male
N2	1/4 NPT male
N4	1/2 NPT male
R2	R1/4 male
R4	R1/2 male
M12	M12 x 1.5 male
M18	M18 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

Electrical connection

D	DIN 43650 form A connector
DD	DIN 43650 form A connector with display
DC	DIN 43650 form C connector
P	Packard connector
M	M12 connector, four-pin
A	Circular connector
C	Cable outlet
CW	Watertight cable outlet
AM	AMP connector, two-pin
T3	Deutsch DT04-3P connector
T4	Deutsch DT04-4P connector