Pressalis

Datasheet

Pressure transmitters

PT15

Low-pressure transmitter, vacuum to 6 bar



Laser-welded 304 stainless, from -1 bar up to 6 bar at ±0.25 % of span, for water, HVAC and suction lines.

Range	Accuracy	Output	Protection
-1 bar up to 6 bar	**±0.25 % or ±0.5 % of span**	**4 to 20 mA or voltage**	**IP65**

Overview

PT15 is built for the low end of the scale: vacuum and ranges up to 6 bar, gauge or absolute. The pressure chamber is 304 stainless steel, laser welded, and the electronics are temperature compensated from -20 to 85 °C. Accuracy is ±0.25 % or ±0.5 % of span, with ±0.1 % of span per year stability.

It goes on building water and booster sets, chilled and heating water circuits, compressed air lines and pump suction, where pressures stay within a few bar. A range can start in vacuum, for example -1 to 1 bar on a suction line that sees both. It also suits test benches for low-pressure components.

Overpressure is 1.5 x range and burst pressure 2 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. The 22 mm body takes DIN 43650 form A or form C, M12, Packard, AMP, Deutsch DT04 or circular connectors, or a cable outlet, IP65.

Specifications

Measurement

Pressure type	Gauge, absolute
Ranges	Within -1 to 6 bar
Accuracy	±0.25 % or ±0.5 % of span
Long-term stability	±0.1 % of span per year
Overpressure	1.5 x range
Burst pressure	2 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 or form C, M12, Packard, circular connector, AMP, Deutsch DT04-3P or DT04-4P, cable outlet or watertight cable outlet
Protection	IP65

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, M14 x 1.5, 7/16-20 UNF
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	Pressure type	Process connection	Output	Electrical connection	Accuracy	Order code
-1 to 0 bar	Gauge	G1/4 male	0.5 to 4.5 V	Packard	±0.5 %	**PT15-V00-G-B2-H-P-A05**
-1 to 1 bar	Gauge	G1/4 male	4 to 20 mA	DIN 43650 form A	±0.5 %	**PT15-V01-G-B2-I-D-A05**
0 to 1 bar	Gauge	G1/2 male	4 to 20 mA	DIN 43650 form A	±0.25 %	**PT15-001-G-B4-I-D-A025**
0 to 2 bar	Absolute	G1/4 male	4 to 20 mA	M12	±0.25 %	**PT15-002-A-B2-I-M-A025**
0 to 4 bar	Gauge	G1/4 male	0 to 10 V	M12	±0.25 %	**PT15-004-G-B2-V10-M-A025**
0 to 6 bar	Gauge	1/4 NPT male	4 to 20 mA	Packard	±0.5 %	**PT15-006-G-N2-I-P-A05**

Ordering code

One code from each group, in this order. Example: **PT15-V00-G-B1-I-D-A025**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT15	-	V00	-	G	-	B1	-	I	-	D	-	A025
Model		Range		Pressure type		Process connection		Output		Electrical connection		Accuracy

Range

V00	-1 to 0 bar
V01	-1 to 1 bar
001	0 to 1 bar
002	0 to 2 bar
004	0 to 4 bar
006	0 to 6 bar
X	Other range, state in the request

Pressure type

G	Gauge
A	Absolute

Process connection

B1	G1/8 male
B2	G1/4 male
B3	G3/8 male
B4	G1/2 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
U7	7/16-20 UNF 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
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

Accuracy

A025	±0.25 % of span
A05	±0.5 % of span