Pressalis

Datasheet

Pressure transmitters

PT18

Compact ceramic transmitter for water pumps



Ceramic cell in a short welded 304 stainless body, 10, 16 or 25 bar, for water from -40 to 135 °C.

Range	Accuracy	Output	Medium temperature
0 to 10, 16 or 25 bar	**±1 % of span**	**4 to 20 mA or 0.5 to 4.5 V**	**-40 to 135 °C**

Overview

PT18 is a compact water pressure transmitter with a ceramic sensing element in a laser-welded 304 stainless steel body. It comes in 10, 16 and 25 bar gauge ranges at ±1 % of span, with ±0.2 % of span per year stability and 4 to 20 mA two-wire or 0.5 to 4.5 V three-wire output.

It goes on pumps, booster sets, pressure tanks and water distribution lines, where a short body fits behind the pump. With a Packard connector it stands 49 mm tall on a 24 mm hex, and 37.5 mm with an M12 connector. Medium temperature runs from -40 to 135 °C, which covers hot water as well as cold.

Overpressure is 2 x range and burst pressure 3 x range, with surge and reverse polarity protection on the electronics. Protection is IP65, or IP67 with the M12 connector. A Yazaki connector is available for the 0.5 to 4.5 V version. Process threads are G1/4, G1/2, 1/8 NPT, 1/4 NPT, M12 x 1.5 and M20 x 1.5.

Specifications

Measurement

Pressure type	Gauge
Ranges	0 to 10, 0 to 16, 0 to 25 bar
Accuracy	±1 % of span
Long-term stability	±0.2 % 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	-10 to 70 °C
Sensing element	Ceramic

Medium and environment

Medium	Water
Medium temperature	-40 to 135 °C
Storage temperature	-40 to 150 °C
Shock	100 g (11 ms)
Material	304 stainless steel, laser welded

Electrical

Output	4 to 20 mA two-wire; 0.5 to 4.5 V three-wire
Supply	9 to 30 V DC (4 to 20 mA); 5 V DC (0.5 to 4.5 V)
Protection circuits	Surge and reverse polarity protection
Electrical connection	Packard, M12 or Yazaki connector
Protection	IP65; IP67 with M12 connector

Mechanical

Process connection	G1/4, G1/2, 1/8 NPT, 1/4 NPT, M12 x 1.5, M20 x 1.5
Body diameter	23 mm
Wrench size	24 mm
Height	49 mm with Packard connector, 37.5 mm with M12 connector (G1/4)

Common configurations

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

Range	Process connection	Output	Electrical connection	Protection	Order code
0 to 10 bar	G1/4 male	4 to 20 mA	Packard	IP65	**PT18-010-B2-I-P**
0 to 10 bar	1/8 NPT male	0.5 to 4.5 V	Yazaki	IP65	**PT18-010-N1-H-Y**
0 to 16 bar	G1/4 male	0.5 to 4.5 V	Packard	IP65	**PT18-016-B2-H-P**
0 to 16 bar	1/4 NPT male	4 to 20 mA	M12	IP67	**PT18-016-N2-I-M**
0 to 25 bar	G1/2 male	4 to 20 mA	M12	IP67	**PT18-025-B4-I-M**

Ordering code

One code from each group, in this order. Example: **PT18-010-B2-I-P**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT18	-	010	-	B2	-	I	-	P
Model		Range		Process connection		Output		Electrical connection

Range

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
N1	1/8 NPT 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
H	0.5 to 4.5 V, three-wire, 5 V DC supply

Electrical connection

P	Packard connector
M	M12 connector, four-pin
Y	Yazaki connector, 0.5 to 4.5 V output only