Pressalis

Datasheet

Pressure transmitters

PT33

Compact ceramic transmitter for compressors



Ceramic cell for oil and gas up to 135 °C, male G, NPT or metric thread, 4 to 20 mA or 0.5 to 4.5 V output.

Range	Accuracy	Output	Protection
0 to 10, 0 to 16 or 0 to 25 bar	**±1 % of span**	**4 to 20 mA or 0.5 to 4.5 V**	**IP65, IP67 with M12**

Overview

PT33 is a compact transmitter with a ceramic sensing element in a laser-welded 304 stainless steel body. It reads oil, gas and other non-conductive media at medium temperatures from -40 to 135 °C, in gauge or absolute versions. The body is 23 mm across with a 24 mm hex and stands 49 mm tall with the Packard connector.

It goes on air compressors, refrigerators and other machines, and on industrial process lines carrying oil or gas. That covers hydraulics and machinery and the builders of HVAC equipment. Unlike the refrigerant models with a female port, PT33 has male threads: G1/4, G1/2, 1/8 NPT, 1/4 NPT, M12 x 1.5 and M20 x 1.5.

Standard ranges are 0 to 10, 0 to 16 and 0 to 25 bar at ±1 % of span, with 2 x range overload and 3 x range burst. Output is 4 to 20 mA two-wire on 9 to 30 V DC, or 0.5 to 4.5 V three-wire on 5 V DC. Connection is Packard or Yazaki at IP65, M12 at IP67, or a circular connector at IP5X.

Specifications

Measurement

Pressure type	Gauge, absolute
Ranges	0 to 10, 0 to 16 or 0 to 25 bar
Accuracy	±1 % of span
Long-term stability	±0.2 % of span per year
Zero temperature drift	±0.02 % of span per °C
Span temperature drift	±0.02 % of span per °C
Overpressure	2 x range
Burst pressure	3 x range

Medium and environment

Media	Oil, gas and other non-conductive media
Medium temperature	-40 to 135 °C
Compensated temperature	-10 to 70 °C
Storage temperature	-40 to 150 °C
Shock	100 g, 11 ms
Body material	304 stainless steel, laser-welded

Electrical

Output	4 to 20 mA two-wire, or 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)
Electrical connection	Packard, M12 4-pin, Yazaki or circular connector
Protection	IP65 (Packard, Yazaki); IP67 (M12); IP5X (circular connector)
Circuit protection	Surge and reverse polarity protection

Mechanical

Process connection	G1/4, G1/2, 1/8 NPT, 1/4 NPT, M12 x 1.5 or M20 x 1.5, male
Sensing element	Ceramic
Dimensions	Ø23 mm body, 24 mm hex, 49 mm tall with Packard, 37.5 mm with M12

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	Protection	Order code
0 to 10 bar	Gauge	G1/4 male	4 to 20 mA	Packard	IP65	**PT33-010-G-B2-I-P**
0 to 16 bar	Gauge	G1/4 male	0.5 to 4.5 V	Packard	IP65	**PT33-016-G-B2-H-P**
0 to 16 bar	Gauge	1/4 NPT male	4 to 20 mA	M12	IP67	**PT33-016-G-N2-I-M**
0 to 25 bar	Gauge	M20 x 1.5 male	4 to 20 mA	M12	IP67	**PT33-025-G-M20-I-M**
0 to 25 bar	Gauge	1/8 NPT male	0.5 to 4.5 V	Yazaki	IP65	**PT33-025-G-N1-H-Y**
0 to 10 bar	Absolute	G1/4 male	0.5 to 4.5 V	Packard	IP65	**PT33-010-A-B2-H-P**

Ordering code

One code from each group, in this order. Example: **PT33-010-G-B2-I-P**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT33	-	010	-	G	-	B2	-	I	-	P
Model		Range		Pressure type		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

Pressure type

G	Gauge
A	Absolute

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

Electrical connection

P	Packard connector
M	M12 connector, 4-pin
Y	Yazaki connector
A	Circular connector