Pressalis

Datasheet

Pressure transmitters

PT23

Mobile machinery transmitter with snubber



Gauge transmitter, 0 to 6 up to 0 to 600 bar, with a built-in pulsation snubber for construction machinery.

Range	Accuracy	Output	Protection
0 to 6 up to 0 to 600 bar	**±0.5 or ±1 % of span**	**4 to 20 mA or voltage**	**IP65**

Overview

PT23 is built for construction machinery and heavy equipment, where pump ripple and valve switching put sharp pressure peaks on the line. A pulsation snubber is built into the transmitter, and the sensing element and pressure port form one piece with no O-ring and no weld. Ranges run from 0 to 6 bar up to 0 to 600 bar, gauge.

It suits hydraulic pumps and cylinders on excavators, cranes and loaders, and hydraulic units on presses and stationary machines. Allowed overload is 3 x range and burst pressure 5 x range. Long-term stability is ±0.1 % of span per year, with temperature compensation from -10 to 70 °C.

The sensing element is glass-fused to a 17-4PH stainless steel body; the housing is 304 stainless steel. Output is 4 to 20 mA, 0.5 to 4.5 V, 0 to 5 V or 0 to 10 V, with surge protection on the circuit. Connection is by M12, Packard or DIN 43650 form A connector, or cable outlet, on an M20 x 1.5 or G1/4 port.

Specifications

Measurement

Pressure type	Gauge
Ranges	0 to 6 bar up to 0 to 600 bar
Accuracy	±0.5 % or ±1 % of span
Overpressure	3 x range
Burst pressure	5 x range
Long-term stability	±0.1 % of span per year
Zero drift	±0.02 % of span per °C

Span drift	±0.02 % of span per °C
Compensated range	-10 to 70 °C
Pulsation damping	Built-in snubber

Medium and environment

Medium temperature	-40 to 85 °C
Storage temperature	-40 to 85 °C
Shock	100 g, 11 ms
Wetted parts	17-4PH stainless steel
Housing	Stainless steel 304

Electrical

Output	4 to 20 mA two-wire; 0.5 to 4.5 V, 0 to 5 V or 0 to 10 V three-wire
Supply	9 to 30 V DC (4 to 20 mA, 0 to 5 V); 5 V DC (0.5 to 4.5 V); 15 to 30 V DC (0 to 10 V)
Circuit protection	Surge
Electrical connection	M12 connector, Packard, DIN 43650 form A or cable outlet
Protection	IP65

Mechanical

Process connection	M20 x 1.5 or G1/4 male
Sensing element	Silicon strain gauges glass-fused to a one-piece 17-4PH stainless steel body, no welds or O-rings

Common configurations

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

Range	Accuracy	Process connection	Output	Electrical connection	Order code
0 to 16 bar	±0.5 % of span	G1/4 male	4 to 20 mA	DIN 43650 form A	**PT23-016-A05-B2-I-D**
0 to 40 bar	±0.5 % of span	G1/4 male	0 to 10 V	M12 connector	**PT23-040-A05-B2-V10-M**
0 to 100 bar	±1 % of span	M20 x 1.5 male	0.5 to 4.5 V	Packard	**PT23-100-A1-M20-H-P**
0 to 250 bar	±0.5 % of span	M20 x 1.5 male	4 to 20 mA	M12 connector	**PT23-250-A05-M20-I-M**
0 to 400 bar	±0.5 % of span	M20 x 1.5 male	4 to 20 mA	Cable outlet	**PT23-400-A05-M20-I-C**
0 to 600 bar	±1 % of span	M20 x 1.5 male	0 to 5 V	M12 connector	**PT23-600-A1-M20-V5-M**

Ordering code

One code from each group, in this order. Example: **PT23-006-A05-M20-I-M**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT23	-	006	-	A05	-	M20	-	I	-	M
Model		Range		Accuracy		Process connection		Output		Electrical connection

Range

006	0 to 6 bar
010	0 to 10 bar
016	0 to 16 bar
025	0 to 25 bar
040	0 to 40 bar
060	0 to 60 bar
100	0 to 100 bar
160	0 to 160 bar
250	0 to 250 bar
400	0 to 400 bar
600	0 to 600 bar
X	Other range, state in the request

Accuracy

A05	±0.5 % of span
A1	±1 % of span

Process connection

M20	M20 x 1.5 male
B2	G1/4 male

Output

I	4 to 20 mA, two-wire
H	0.5 to 4.5 V, three-wire
V5	0 to 5 V, three-wire
V10	0 to 10 V, three-wire

Electrical connection

M	M12 connector
P	Packard connector
D	DIN 43650 form A connector
C	Cable outlet