Pressalis

Datasheet

Pressure transmitters

PT43

Low-power RS485 pressure transmitter



Battery-powered RS485 transmitter, 2.5 mA running and 0.2 mA standby, for water network and fire main RTUs.

Range	Output	Current	Protection
-1 to 0 bar up to 0 to 600 bar	**RS485 digital**	**2.5 mA, standby 0.2 mA**	**IP65 or IP68**

Overview

PT43 is a low-power pressure transmitter with an RS485 digital output, for battery-powered RTUs and loggers. It runs from 3 to 4.2 V DC, draws no more than 2.5 mA while measuring and no more than 0.2 mA in standby. Digital temperature compensation covers -20 to 85 °C.

It goes on fire water mains, district metering points, pumping stations and heating circuits where there is no mains power and several instruments share one RS485 line back to the telemetry unit. Ranges run from -1 to 0 bar and from 0 to 0.2 bar up to 0 to 600 bar, for water, gas or oil.

Housing and thread are 304 stainless steel, 22 mm across, around a MEMS sensing element. Accuracy is ±0.3 % or ±0.5 % of span, overpressure 2 x range. A watertight cable outlet gives IP68 for valve chambers that flood; the plain cable outlet and the DIN 43650 connectors are IP65.

Specifications

Measurement

Ranges	-1 to 0 bar; 0 to 0.2 bar up to 0 to 600 bar
Accuracy	±0.3 % or ±0.5 % of span
Long-term stability	±0.2 % of span per year
Overpressure	2 x range
Burst pressure	3 x range
Sensing element	MEMS, glass micro-fused

Medium and environment

Medium	Water, gas, oil
Compensated temperature	-20 to 85 °C
Operating temperature	-40 to 85 °C
Storage temperature	-40 to 105 °C
Vibration	±20 g
Shock	100 g, 11 ms
Housing and thread	304 stainless steel

Electrical

Output	RS485 digital
Supply	3 to 4.2 V DC, for battery power
Current consumption	2.5 mA or less
Standby current	0.2 mA or less
Electrical connection	Cable outlet, watertight cable outlet, DIN 43650 form A or form C connector
Protection	IP65; IP68 with the watertight cable outlet

Mechanical

Process connection	M20 x 1.5, G1/4, 1/4 NPT; other threads on request
Body	22 mm diameter, 22 mm hex

Common configurations

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

Range	Process connection	Electrical connection	Protection	Accuracy	Order code
0 to 10 bar	G1/4 male	Cable outlet	IP65	±0.5 %	**PT43-010-B2-C-A05**
0 to 16 bar	G1/4 male	Watertight cable outlet	IP68	±0.5 %	**PT43-016-B2-CW-A05**
0 to 6 bar	1/4 NPT male	Watertight cable outlet	IP68	±0.3 %	**PT43-006-N2-CW-A03**
0 to 25 bar	M20 x 1.5 male	DIN 43650 form A	IP65	±0.3 %	**PT43-025-M20-D-A03**
0 to 100 bar	G1/4 male	Cable outlet	IP65	±0.5 %	**PT43-100-B2-C-A05**
-1 to 0 bar	G1/4 male	DIN 43650 form C	IP65	±0.5 %	**PT43-V00-B2-DC-A05**

Ordering code

One code from each group, in this order. Example: **PT43-V00-M20-C-A03**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT43	-	V00	-	M20	-	C	-	A03
Model		Range		Process connection		Electrical connection		Accuracy

Range

V00	-1 to 0 bar
K20	0 to 20 kPa
001	0 to 1 bar
006	0 to 6 bar
010	0 to 10 bar
016	0 to 16 bar
025	0 to 25 bar
100	0 to 100 bar
600	0 to 600 bar
X	Other range, state in the request

Process connection

M20	M20 x 1.5 male
B2	G1/4 male
N2	1/4 NPT male

Electrical connection

C	Cable outlet, IP65
CW	Watertight cable outlet, IP68
D	DIN 43650 form A connector, IP65
DC	DIN 43650 form C connector, IP65

Accuracy

A03	±0.3 % of span
A05	±0.5 % of span