Pressalis

Datasheet

Pressure transmitters

PT32

Refrigerant pressure sensor with tube stub



For R22, R407C and R134a: 6 mm tube connection, 0 to 20 or 0 to 46 bar, 0.5 to 4.5 V on 5 V DC.

Range	Accuracy	Output	Connection
0 to 20 bar or 0 to 46 bar	**±1.5 % of span**	**0.5 to 4.5 V on 5 V DC**	**6 x 1.0 mm tube stub**

Overview

PT32 is a refrigerant pressure sensor for air conditioning and refrigeration equipment, rated for R22, R407C and R134a. In place of a threaded port it has a tube stub, 6 x 1.0 mm and 51 mm long, so it is fitted into the refrigerant pipework itself. The body is 304 stainless steel and 27 mm across.

It gives the unit controller a continuous refrigerant pressure reading on air conditioning and refrigeration units and on compressors, for real-time monitoring and energy-saving control. This is a part for HVAC equipment builders, with two ranges, one output and one connector, and it is rated for 5 million full-scale pressure cycles.

Output is 0.5 to 4.5 V three-wire on a 5 V DC supply, drawing 10 mA at most, with protection against 16 V DC overvoltage and -14 V DC reverse voltage. Accuracy is ±1.5 % of span, overload 2 x range and burst 3 x range, and the operating temperature is -30 to 100 °C. The connection is a Yazaki connector, IP65.

Specifications

Measurement

Ranges	0 to 20 bar or 0 to 46 bar
Accuracy	±1.5 % of span
Temperature drift	±0.02 % of span per °C
Overpressure	2 x range
Burst pressure	3 x range
Pressure cycles	5 million full-scale cycles

Medium and environment

Refrigerants	R22, R407C, R134a
Operating temperature	-30 to 100 °C
Storage temperature	-30 to 120 °C
Vibration	11 g, 50 to 2000 Hz
Body material	304 stainless steel

Electrical

Output	0.5 to 4.5 V, three-wire
Supply	5 V DC
Supply current	10 mA maximum
Overvoltage protection	16 V DC
Reverse voltage protection	-14 V DC
Electrical connection	Yazaki connector
Protection	IP65

Mechanical

Process connection	Tube stub, Ø6 x 1.0 mm, 51 mm long
Dimensions	Ø27 mm body, 41 mm long including connector

Common configurations

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

Range	Refrigerant	Output	Connection	Order code
0 to 20 bar	R134a	0.5 to 4.5 V	Tube stub	**PT32-020-R134A**
0 to 20 bar	R22	0.5 to 4.5 V	Tube stub	**PT32-020-R22**
0 to 20 bar	R407C	0.5 to 4.5 V	Tube stub	**PT32-020-R407C**
0 to 46 bar	R22	0.5 to 4.5 V	Tube stub	**PT32-046-R22**
0 to 46 bar	R407C	0.5 to 4.5 V	Tube stub	**PT32-046-R407C**
0 to 46 bar	R134a	0.5 to 4.5 V	Tube stub	**PT32-046-R134A**

Ordering code

One code from each group, in this order. Example: **PT32-020-R22**. Send the code and the quantity to **contact@pressalis.com** for a quote.

PT32	-	020	-	R22
Model		Range		Refrigerant

Range

020	0 to 20 bar
046	0 to 46 bar
X	Other range, state in the request

Refrigerant

R22	R22
R407C	R407C
R134A	R134a