PT-01

Compact Resistance Thermometer

Features

/ Small design

/ Integrated transmitter

/ Power- or resistance output

/ Stainless steel

/ -200°C to +400°C

Description:

A temperature-dependent electrical resistance is integrated in a stainless steel protection tube. It changes its ohmic resistance in relation to the temperature of the media. In the version with a built-in transmitter, the measured value will be converted into a 4. . .20 mA current signal and made available at the connections of the square-type plug point in 2-wire system. In the version without a transmitter, the plain resistance can be tapped at the plug point. the sensor element is designed in 2-, 3- or 4-wire with a system in order to compensate for the measuring errors through the electrical leads.

Application:

The PT-01 series of Compact Thermometers is unbeatable in their versatility. A choice of 2 shaft diameters, 5 different shaft lengths and various connecting threads allow the user to customize them practically in any location of measurement. In addition, the wide range of temperatures of -200. . .400°C contributes its part to the fact, that these sensors are used nearly in the entire industry with great success. From a temperature of 120°C upwards, the thermometers are provided with an additional neck tube that serves as a cooling section and protects the sensitive electronic components against overheating.

Versions:

PT-01 Compact Resistance Thermometer

Output: Resistance outputs PT100 2-, 3- or 4-wire without a transmitter are possible. With transmitter the device gives a 4. . .20 mA current signal in 2-wire circuit.

Process connection: G½" B male, smooth shaft (others on request)

Shaft diameter: Protective pipes with 6 mm or 8 mm are available.

Shaft length: Depends on the required depth.

Technical Specifications:

Accuracy /	Transmitter: < 0.1% from the range Class A for DIN EN 60751 ±(0.15°C + 0.002°C x |t|) Class B for DIN EN 60751 ±(0.3°C + 0.005°C x |t|)
Material /	Stainless steel 1.4571
Process connection /	G½"B (others on request)
Shaft diameter /	6 mm or 8 mm (others on request)
Shaft length /	50. . .2000 mm
Neck tube /	55 ± 2 mm from 120°C
Storage temp. /	-40. . .85°C
Pressure /	max. 25 bar

Ordering Codes:

Order number	PT-01.	1.	2.	[][][].	[][][].	[][][]

PT-01 Compact Resistance Thermometer

Output /
1 = 1 x PT100 3-wire
2 = 4. . .20 mA 2-wire

Shaft diameter /
1 = 6 mm
2 = 8 mm

Desired shaft length /
[][][] mm (max. 2000mm)

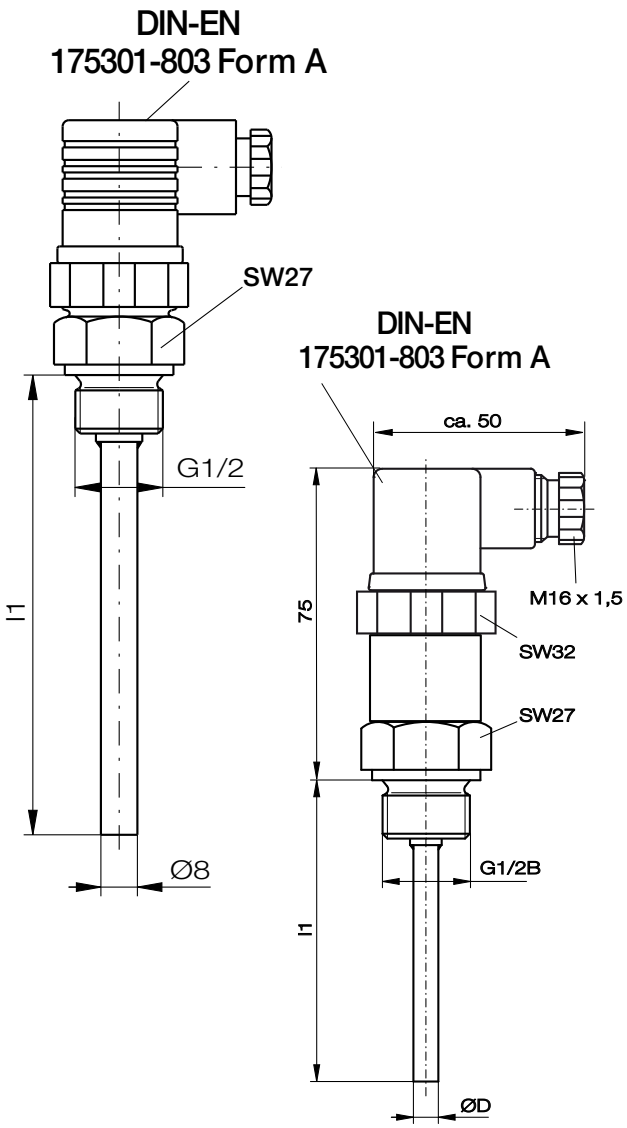
Temperature range /
[][][] = start value (from -200°C)

Temperature range /
[][][] = end vlaue (up to +400°C)

Electrical Specifications:

Output /	4. . .20 mA, 2-wire or 1 x PT100, 2-, 3- or 4-wire
Supply voltage /	7.5. . .35 VDC
max. Current /	0.3. . .1.0 mA
Connection /	angled plug from DIN EN 175301-803 A for 2-, 3- or 4-wire
Protection class /	IP65 ENC60529
EMC /	2004/108/EG, EN 61326 emission (Group 1 Class B) and immune to interference (industrial)

Dimensions in mm:



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