Temperature sensor type PXP

Application

Recommended for bearing temperature measurement in rotating machines such as compressors, fans, pumps, electric motors and others.

Description

The measuring element is made of a single or double PT100 resistor. An integral cable in silicone, PTFE or fiberglass insulation with 0.22mm^2 wire cross section was used. Depending on the type of measurement line and the number of the measuring element, the number of wires in the cable is from 2 to 8 (up to 4 wires in the case of fiberglass insulation). The sensor is mounted in the bearing housing through a mounting stub mounted independently in the bearing housing, a bayonet type tightening nut and a compression spring. The position of the nut on the spring is adjustable, and the compression of the spring when closing the bayonet lock determines the downforce of the sensor face to the measuring surface. The sensor cover is made of X6CrNiTi18-10(1.4541) stainless steel, and the mounting sleeve with a bayonet-type nickel-plated brass clamping nut.
The diameter of the sensor cover is 6mm.

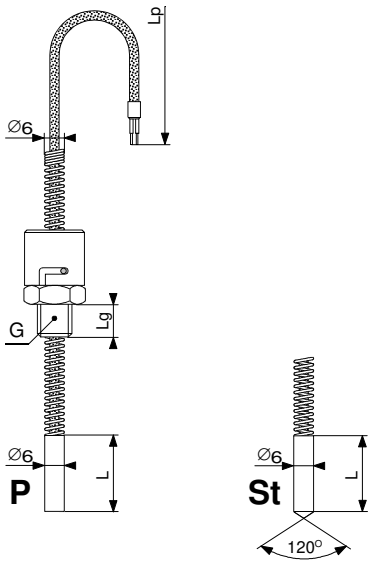
Parameters of the sensor mounting stub:

Thread "G"	Hex size	„Lg" thread length
M10x1	13mm	8mm
M12x1 M12x1,5	14mm	10mm
M14x1,5	17mm	10mm
M20x1,5	27mm	20mm
G1/2"	27mm	20mm

Permissible ambient temperature for the sensor cable:
- in silicone insulation (-50 ... + 200 ^{0}C)
- in PTFE insulation (-50 ... + 250 ^{0}C)
- in fiberglass insulation (-50 ... + 400 ^{0}C)

Other sensor parameters are subject to selection when ordering according to the ordering method below.

Limitations for options:
-The fiberglass insulation cable can be used in a sensor that requires maximum 4 wires.
-The 2Pt100 sensor with a 3-wire measuring line can only be made with a PTFE-insulated cable.



Sensor ordering information

A B C D E F G H I
PXP- ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐

Options description

A ☐ Type and number of the measuring element
Pt100 single PT100 element
2Pt100 double Pt100 element

B ☐ Measurement element accuracy class
AA accuracy class AA
A accuracy class A
B accuracy class B

C ☐ Sensor measuring range
(-50...250^{0}C) for AA, A, B accuracy classes
(-50...400 ^{0}C) for A, B accuracy classes

D ☐ Type of measuring line
2 2-wires
3 3-wires
4 4-wires

E ☐ Cable insulation
S Silicon Insulation
T PTFE Insulation
W glass fiber insulation with steel braid

F ☐ Cable length L1 in meters

G ☐ Sensor mounting thread "G"
M10x1 **M14x1,5**
M12x1 **M20x1,5**
M12x1,5 **G1/2"**

H ☐ Sensor Length L in mm (from 10mm to 200mm)

I ☐ The shape of the tip of the sensor cover
P Flat **St –** Cone 120^0

Ordering example:
PXP-Pt100-A-(-50…250 ^{0}C)-3-S-5-M12x1-20-P
The above code means a sensor with a single Pt100 element in the accuracy class A, sensor range (-50 ... 250)^{0}C, with a 3-wire measuring line, with a 5m long silicone cable, mounting thread M12x1, the length of the sensor L=20mm, flat shape of the sensor tip.