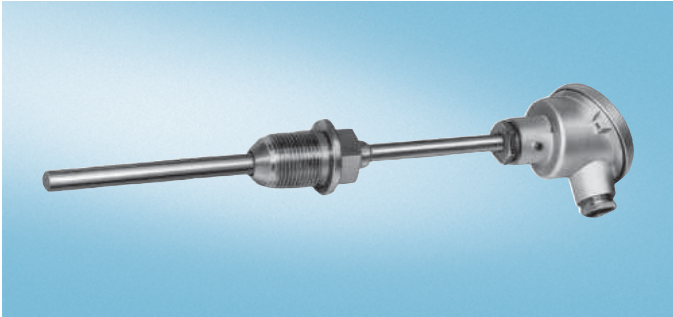


SITRANS T measuring instruments for temperature

Resistance thermometers

High-pressure screw-in resistance thermometers

Overview

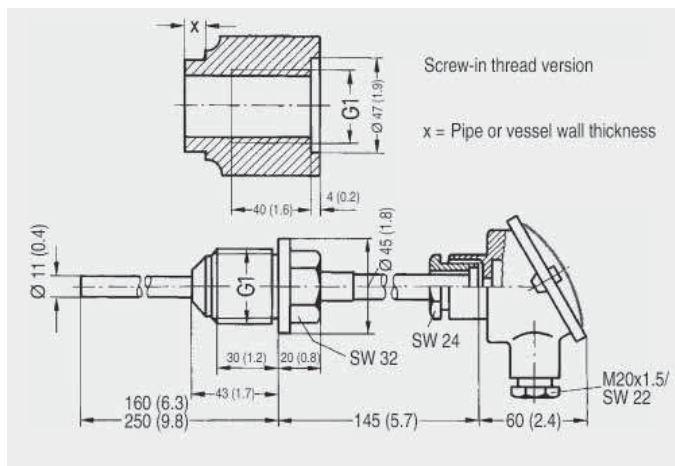


The high-pressure screw-in resistance thermometer with connection head and neck tube is suitable for the temperature range from -50 to +600 °C (-58 to +1112 °F) and can also be supplied with a built-in temperature transmitter.

Technical specifications

Design	According to DIN 43765: Screw-in thermometer
Protective tube	
• Form	2G, DIN 43772; cylindrical, 11 mm (0.43 inch) diameter, wall thickness 2 mm (0.08 inch)
• Loading capacity	to 50 bar (725.2 psi) (loading capacity dependent on material, temperature, flow rate, mounting length etc., see DIN 43772 for details)
Screw socket	G1; suitable is gasket 33 x 39, similar to form C or D, DIN 7603
Measuring insert	Replaceable, with measuring insert tube (6 mm diameter (0.24 inch) made of stainless steel; terminal block with clamping springs
Response times (to VDI/VDE 3 522)	
• In water with flow velocity $v = 0.4 \text{ m/s}$ (1.31 ft/s)	$t_{0.5} = 32 \text{ s}$, $t_{0.9} = 96 \text{ s}$
• In air with flow velocity $v = 1 \text{ m/s}$ (3.28 ft/s)	$t_{0.5} = 2.2 \text{ min}$, $t_{0.9} = 6.8 \text{ min}$

Dimensional drawings



High-pressure screw-in resistance thermometer with neck tube, dimensions in mm (inches)

Selection and Ordering data

Order No.

High-pressure screw-in resistance thermometer with connection head and neck tube

Protective tube and screw socket
X 6 CrNiMoTi 17 122, mat. No. 1.4571
Protective tube to DIN 43772,
form: 2G

One Pt100 measuring resistor

embedded in ceramic, three-wire circuit

Mounting length U_1 / Weight/
mm (inch): kg (lb):

- 160 (6.3) 0.83 (1.83)
- 250 (9.84) 0.93 (2.05)

7MC1008-6DA1

7MC1008-7DA1

Two Pt100 measuring resistors

embedded in ceramic, two-wire circuit

Mounting length U_1 / Weight/
mm (inch): kg (lb):

- 160 (6.3) 0.86 (1.20)
- 250 (9.84) 0.94 (2.07)

7MC1008-6DB1

7MC1008-7DB1

Connection head, form B,

- made of cast light alloy, with 1 cable inlet and
 - screw cover
 - standard hinged cover
 - high hinged cover
- made of stainless steel, with 1 cable inlet and screw cover

1
4
6
7

Further designs

Please add "-Z" to Order No. and specify Order code(s) and plain text.

Order code

- Different design (mounting length, protective tube material etc.), specify in plain text.
- TAG plate made of stainless steel specify TAG No. in plain text
- Calibration carried out at one point, specify desired temperature in plain text (order equivalent number of times for several calibration points).

Y01

Y15

Y33

To order a temperature transmitter installed in the connection head, see "Temperature transmitters for installation in the connection head" (page 3/64).

Individual parts: Measuring inserts and connection heads, see "Accessories".