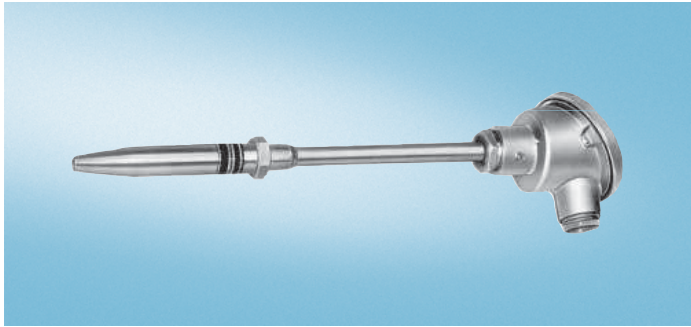


SITRANS T measuring instruments for temperature

Resistance thermometers

High-pressure welding-type resistance thermometers

Overview

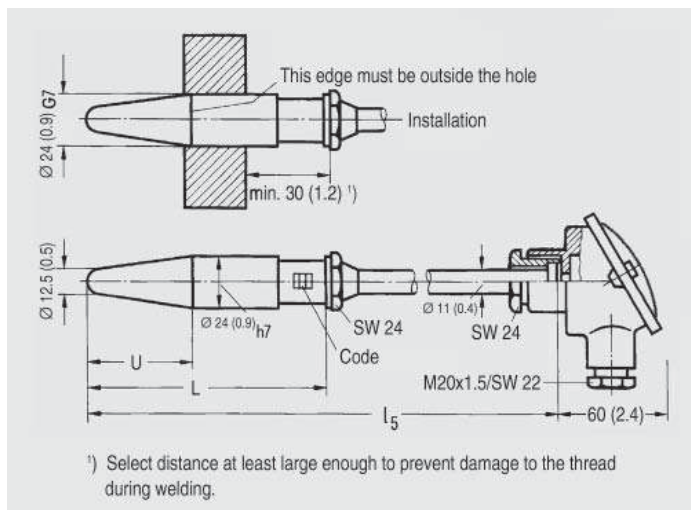


The high-pressure welding type resistance thermometer with connection head and neck tube is suitable for the temperature range from -50 to 540 or 550 °C (-58 to 1004 or 1022 °F) and can also be supplied with a built-in temperature transmitter.

Technical specifications

Design	According to DIN 43767: Welding-type thermometer
Protective tube	
• Form	4, DIN 43772; tapered, for welding in; with female thread M18 x 1.5 for neck tube
• Loading capacity	to 450 bar (6527 psi) (loading capacity dependent on material, temperature, flow rate, mounting length etc., see DIN 43772 for details)
Neck tube	Stainless steel, unscrewable
Measuring insert	Replaceable, with measuring insert tube 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)	$t_{0.5} = 25 \text{ s}$, $t_{0.9} = 80 \text{ s}$
Explosion protection	II 1/2G EEx ia IIC T4/T6

Dimensional drawings



High-pressure welding-type resistance thermometer with connection head and neck tube, dimensions in mm (inches)

Selection and Ordering data

Order No.

High-pressure welding-type resistance thermometer

Measuring resistor: Winding embedded in ceramic, protective tube to DIN 43772, form 4

1 Pt100 measuring resistor/three-wire circuit

- Measuring insert not explosion protected
 - max. 540 °C (1004 °F), protective tube 13 CrMo 44, mat. No. 1.7335
 - max. 550 °C (1022 °F), protective tube X 6 CrNiMoTi 17 122, mat. No. 1.4571
- Measuring insert with explosion protection
 - max. 550 °C (1022 °F), protective tube X 6 CrNiMoTi 17 122, mat. No. 1.4571

2 Pt100 measuring resistors/two-wire circuit

- Measuring insert not explosion protected
 - max. 540 °C (1004 °F), protective tube 13 CrMo 44, mat. No. 1.7335
 - max. 550 °C (1022 °F), protective tube X 6 CrNiMoTi 17 122, mat. No. 1.4571
- Measuring insert with explosion protection
 - max. 550 °C (1022 °F), protective tube X 6 CrNiMoTi 17 122, mat. No. 1.4571

Mounting length U	Protective tube length L	Total length without connection head l ₅	Weight with one/two measuring resistors	
mm (inch)	mm (inch)	mm (inch)	kg (lb)	
		305 (12.0)	0.78 (1.7)/ 0.79 (1.7)	1
	140 (5.5)	365 (14.4)	0.82 (1.8)/ 0.83 (1.8)	2
65 (2.6)		395 (15.6)	0.85 (1.9)/ 0.86 (1.9)	3
		365 (14.4)	0.95 (2.1)/ 0.96 (2.1)	4
	200 (7.9)	395 (15.6)	0.98 (2.2)/ 1.00 (2.2)	5
		365 (14.4)	0.95 (2.1)/ 0.96 (2.1)	6
125 (4.9)	200 (7.9)	395 (15.6)	0.98 (2.2)/ 1.00 (2.2)	7
	260 (10.2)	395 (15.6)	1.15 (2.5)/ 1.20 (2.7)	8

Connection head, form B

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

Further designs

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

- 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).

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".

Order code

Y01

Y15

Y33