

SITRANS T measuring instruments for temperature

Resistance thermometers

Low-pressure screw-in resistance thermometers with connection head, without neck tube

Overview

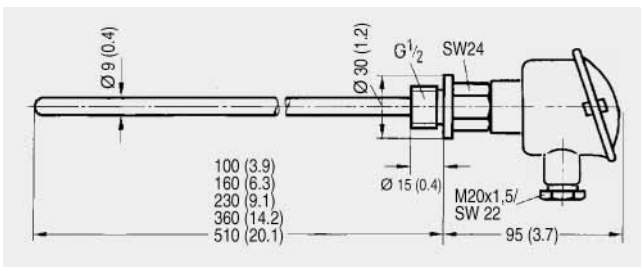


The low-pressure screw-in resistance thermometer with connection head (no neck tube) is suitable for the temperature range from -50 to +400 °C (-58 to +752 °F) and can also be supplied with a built-in temperature transmitter.

Technical specifications

Design	According to DIN 43765: Screw-in thermometer
Protective tube	
• Form	Similar to 2G, DIN 43772; cylindrical, 9 mm (0.35 inch) diameter, wall thickness 1 mm (0.04 inch)
• Loading capacity	to 20 bar (290.1 psi) (loading capacity dependent on material, temperature, flow rate, mounting length etc., see DIN 43772 for details)
Screw socket	G $\frac{1}{2}$; suitable is gasket 21 x 26, 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 $v = 0.4$ m/s (1.31 ft/s)	$t_{0.5} = 25$ s, $t_{0.9} = 75$ s
• In air with flow velocity $v = 1$ m/s (3.28 ft/s)	$t_{0.5} = 2$ min, $t_{0.9} = 6.3$ min
Explosion protection	II 1/2G EEx ia IIC T4/T6

Dimensional drawings



Low-pressure screw-in resistance thermometer with connection head, without neck tube, dimensions in mm (inches)

Selection and Ordering data

Order No.

Low-pressure screw-in resistance thermometer with connection head, without neck tube

Protective tube and screw socket
X 6 CrNiMoTi 17 122, mat. No. 1.4571
Protective tube to DIN 43,772,
form: similar to 2G

Measuring resistors embedded in ceramic,
one Pt100 measuring resistor: three-wire
circuit, Two Pt100 measuring resistors:
two-wire circuit

Measuring insert not explosion protected

One Pt100 measuring resistor,

Mounting length U_1 / mm (inch):	Weight/ kg (lb):
• 100 (3.9)	0.6 (1.32)
• 160 (6.3)	0.7 (1.54)
• 230 (9.1)	0.8 (1.76)
• 360 (14.2)	0.9 (1.98)
• 510 (20.1)	1.0 (2.20)

► **7MC1006-1DA1**
7MC1006-2DA1
7MC1006-3DA1
7MC1006-4DA1
7MC1006-5DA1

Two Pt100 measuring resistors

Mounting length U_1 / mm (inch):	Weight/ kg (lb):
• 100 (3.9)	0.6 (1.32)
• 160 (6.3)	0.71 (1.57)
• 230 (9.1)	0.81 (1.79)
• 360 (14.2)	0.91 (2.01)
• 510 (20.1)	1.01 (2.23)

► **7MC1006-1DB1**
7MC1006-2DB1
7MC1006-3DB1
7MC1006-4DB1
7MC1006-5DB1

Measuring insert with explosion protection

One Pt100 measuring resistor

Mounting length U_1 / mm (inch):	Weight/ kg (lb):
• 100 (3.9)	0.6 (1.32)
• 160 (6.3)	0.7 (1.54)
• 230 (9.1)	0.8 (1.76)
• 360 (14.2)	0.9 (1.98)
• 510 (20.1)	1.0 (2.20)

► **7MC1006-1DE1**
7MC1006-2DE1
7MC1006-3DE1
7MC1006-4DE1
7MC1006-5DE1

Two Pt100 measuring resistors

Mounting length U_1 / mm (inch):	Weight/ kg (lb):
• 100 (3.9)	0.6 (1.32)
• 160 (6.3)	0.71 (1.57)
• 230 (9.1)	0.81 (1.79)
• 360 (14.2)	0.91 (2.01)
• 510 (20.1)	1.01 (2.23)

► **7MC1006-1DF1**
7MC1006-2DF1
7MC1006-3DF1
7MC1006-4DF1
7MC1006-5DF1

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. **Y01**
- TAG plate made of stainless steel specify TAG No. in plain text **Y15**
- Calibration carried out at one point, specify desired temperature in plain text (order equivalent number of times for several calibration points). **Y33**

► Available ex stock

To order a temperature transmitter installed in the connection head, see "Temperature transmitters for installation in the connection head" (page 3/75).

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