

SITRANS T measuring instruments for temperature

Resistance thermometers

Accessories

Measuring inserts, not explosion protected

Design

Components (design to DIN 43762)

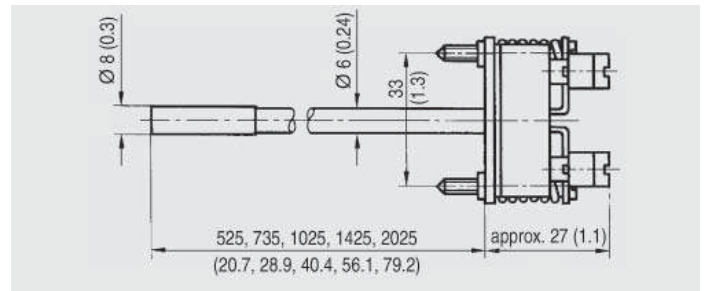
- Measuring insert with resistor,
- insert tube with retaining plate,
- terminal block with clamping springs and 2 or 3 internal conductors of Cu-Ni sheathed wire for each Pt100 measuring resistor.

The resistance of the internal conductors is stated on the measuring insert if it is greater than 0.2 Ω .

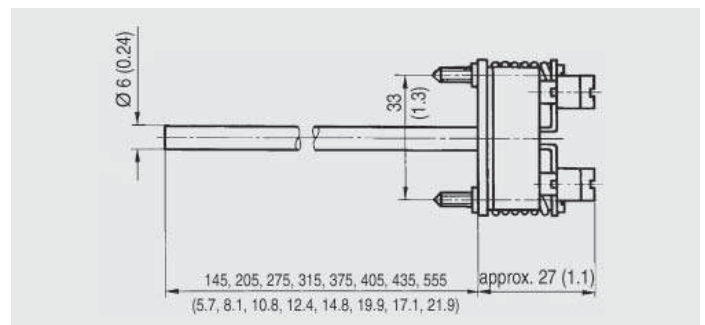
The measuring inserts have a filling of Al_2O_3 powder which surrounds the measuring resistor and the internal conductors and results in a high vibration resistance (for temperatures up to 600 °C (1112 °F)). The winding is embedded in a ceramic body.

If the vibrations at the measuring location are greater than normal, the special vibration-proof measuring inserts should be used (for temperatures up to 450 °C (842 °F)). The measuring resistor is embedded in an homogeneous, fused glass body.

Dimensional drawings



Measuring insert for flue gas resistance thermometers, dimensions in mm (inches)



Measuring insert for low-pressure, high-pressure and flange-type resistance thermometers, dimensions in mm (inches)

Selection and Ordering data

Order No.

Measuring insert for flue gas resistance thermometer 7MC1000

for temperatures to 600 °C (1112 °F), stainless steel measuring insert tube
Measuring resistor: Winding embedded in ceramic

Measuring insert not explosion protected

One Pt100 measuring resistor/three-wire circuit

Measuring insert length mm (inch):	Mounting length of the resistance thermometer mm (inch):	Weight kg (lb):	
• 525 (20.7)	500 (19.7)	0.22 (0.49)	7MC1900-1EA
• 735 (28.9)	710 (28.0)	0.27 (0.60)	7MC1900-2EA
• 1025 (40.4)	1000 (39.4)	0.32 (0.71)	7MC1900-3EA
• 1425 (56.1)	1400 (55.1)	0.42 (0.93)	7MC1900-4EA
• 2025 (79.7)	2000 (78.7)	0.62 (1.37)	7MC1900-5EA

Selection and Ordering data

Order No.

Measuring insert for low-pressure, high-pressure and flange-type resistance thermometers

Measuring resistor: Winding embedded in ceramic (max. 600 °C (1112 °F))

Measuring insert not explosion protected

One Pt100 measuring resistor/three-wire circuit

Measuring insert length	Screw-in thermometer without neck tube, 7MC1006	Screw-in thermometer with neck tube, 7MC1007 and 7MC1008	Screw-in thermometer 7MC1010	Flange-type thermometer 7MC1017	Flange-type thermometer 7MC1041	Weight	
mm (inch)	mm (inch)	mm (inch)	Total length without connection head mm (inch)	Mounting length mm (inch)	Mounting length mm (inch)	kg (lb)	
• 145 (5.7)	100 (3.9)	–	–	–	–	0.15 (0.33)	7MC1910-1JA
• 205 (8.1)	160 (6.3)	–	–	–	–	0.16 (0.35)	7MC1910-2JA
• 275 (10.8)	230 (9.1)	–	–	–	–	0.17 (0.37)	7MC1910-3JA
• 315 (12.4)	–	160 (6.3)	305 (12.0)	160 (6.3)	225 (8.9)	0.18 (0.40)	7MC1910-4JA
• 375 (14.8)	–	–	365 (14.4)	–	285 (11.2)	0.19 (0.42)	7MC1910-5JA
• 405 (15.9)	360 (14.2)	250 (9.8)	395 (15.6)	250 (9.8)	–	0.20 (0.44)	7MC1910-6JA
• 435 (17.1)	–	–	–	–	345 (13.6)	0.20 (0.44)	7MC1910-8JA
• 555 (21.1)	510 (20.1)	400 (15.8)	–	–	–	0.21 (0.46)	7MC1910-7JA

SITRANS T measuring instruments for temperature

Resistance thermometers

Accessories
Measuring inserts, not explosion protected

Selection and Ordering data

Order No.

Measuring insert for low-pressure, high-pressure and flange-type resistance thermometers

Measuring resistor: Winding embedded in ceramic (max. 600 °C (1112 °F))

Two Pt100 measuring resistors/three-wire circuit

Measuring insert length	Screw-in thermometer without neck tube, 7MC1006	Screw-in thermometer with neck tube, 7MC1007 and 7MC1008	Screw-in thermometer 7MC1010	Flange-type thermometer 7MC1017	Flange-type thermometer 7MC1041	Weight
-------------------------	---	--	------------------------------	---------------------------------	---------------------------------	--------

	Mounting length	Mounting length	Total length without connection head	Mounting length	Mounting length	
mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lb)

• 145 (5.7)	100 (3.9)	–	–	–	–	0.15 (0.33)	7MC1910-1JB
• 205 (8.1)	160 (6.3)	–	–	–	–	0.16 (0.35)	7MC1910-2JB
• 275 (10.8)	230 (9.1)	–	–	–	–	0.17 (0.37)	7MC1910-3JB
• 315 (12.4)	–	160 (6.3)	305 (12.0)	160 (6.3)	225 (8.9)	0.18 (0.40)	7MC1910-4JB
• 375 (14.8)	–	–	365 (14.4)	–	285 (11.2)	0.19 (0.42)	7MC1910-5JB
• 405 (15.9)	360 (14.2)	250 (9.8)	395 (15.6)	250 (9.8)	–	0.20 (0.44)	7MC1910-6JB
• 435 (17.1)	–	–	–	–	345 (13.6)	0.20 (0.44)	7MC1910-8JB
• 555 (21.1)	510 (20.1)	400 (15.8)	–	–	–	0.21 (0.46)	7MC1910-7JB

Further measuring inserts on request.