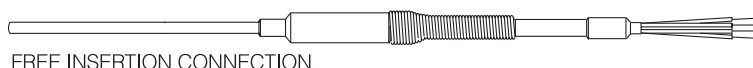
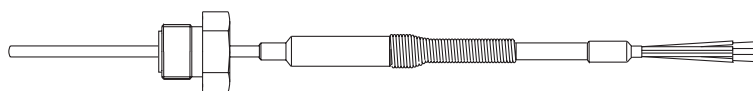


RTD Thermometer omnigrad TST310

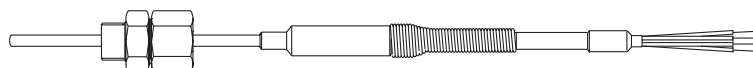
Special duty
Machineries and Lab measurements
With extension cable



FREE INSERTION CONNECTION



BRAZED PROCESS CONNECTION



ADJUSTABLE PROCESS CONNECTION

Description

TST310 RTD thermometer consists of a thin walled metal pipe, PTFE or mineral insulated, containing the Pt100 Ω resistance.

The sensing element includes a single or double Pt100 Ω having accuracy class A, B or 1/3 DIN B.

The temperature sensing length is 30 mm from the closed end bottom of the tube or cable.

The connection to process can be an adjustable threaded fitting, a brazed threaded fitting or alternatively a free insertion, without fitting.

The extension cable is protected with a wire spring for a length of about 50 mm and can be PVC or PTFE insulated, with different sheath type and lengths.

Application

The Pt100 Ω resistance thermometer TST310 is specially suited to temperature measurement in machinery, laboratory equipment and experimental plants in gaseous or liquid media like air, water, oils and others.



Technical data

Probe

Sensing element:
Tolerances:
Operating temperature:

Wiring:
Insulation resistance:
Stem:
Sheath:
Standard diameters:
Immersion lengths:
Connection to process:

Platinum resistance, 1 or 2 x Pt100 Ω at 0°C, standard type class A or B to IEC 751, 1/3 DIN B
-50°C to +400°C for MgO insulated cable
-50°C to +200°C for PTFE insulated wires
3 or 4 wire connections
≥ 100 MΩ , test voltage 250 V at ambient temperature
mineral insulated cable or PTFE insulated wires
AISI 316 / W.1.4401
3 or 6 mm
100, 250, 350, 500 mm, others on request
free insertion, adjustable or brazed threaded fitting

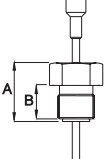
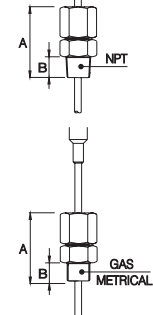
Engaged thread		Threaded	Outer Ø (mm)	A (mm)	B (mm)
BRAZED (*)		G 1/8"	3	18	10
		G 1/4"	3 & 6	22	12
		G 1/2"		27	15
		M8 x 1	3	18	10
		M10 x 1	3	18	10
ADJUSTABLE (**)		1/8" NPT (*)	3	36	10
		1/4" NPT (*)	3	42	15
			6	43	15
		1/2" NPT (*)	3	50	20
			6	51	20
		G 1/8"(*)(**)	3	38	10
		G 1/4"(*)(**)	3	40	10
			6	41	10
		G 1/2"(*)(**)	3	45	15
			6	46	15
		M8 x 1 (**)	3	38	10
		M10 x 1 (**)	3	38	10

Table A
Notes: (*) stainless steel element: Max temperature=300°C
(**) PTFE element: Max temperature=200°C

Response time values: according to IEC 751, in moving water at 0.4 m/s

Insulation	Sheath Ø	Response time values	
		T ₅₀	T ₉₀
MgO	3 mm	3 s	6 s
	6 mm	3.5 s	8 s
PTFE	3 mm	4 s	13.5 s
	6 mm	13 s	38 s

Table B

Metal transition

Standard material:
Insulation:
Max. temperature:

AISI316 / W.1.4401
potting compound
120°C

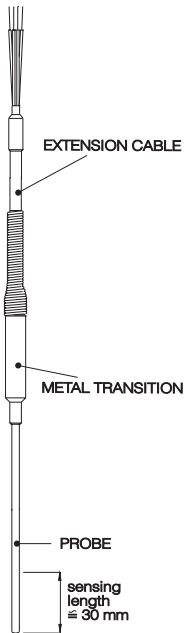
Extension cable

Versions:

Insulation	Sheath	Max. operating temperature
PVC	PVC	80°C (°)
PTFE	Silicone rubber	180°C (°)
PTFE	PTFE	200°C

Table C
Note: (°) only for MgO insulated cable

Electrical connection: free end wires or connection on request



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Nothing beats know-how

