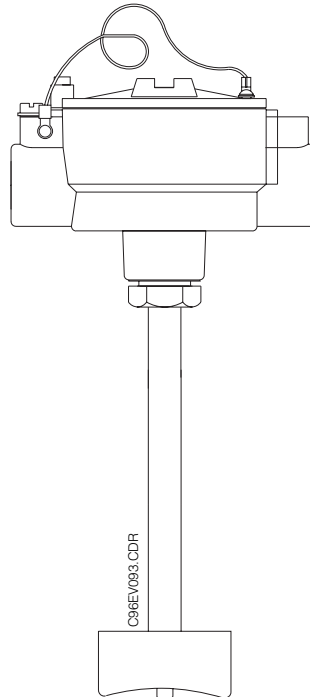


RTD Thermometer *omnigrad TST601*

Special duty - Surface measurement M.I. replaceable inset with protecting tube and T-block process connection



Description

TST601 RTD thermometer assembly includes a replaceable single or double Pt100 inset, in mineral insulated cable, a terminal head and a protecting tube. From the TET family, it is available either with free wires for head transmitter mounting or with terminal board. RTD can be selected between standard or glass version (for higher vibration application). The terminal head can be selected from a wide choice of standard items (see the order key or TA20 Technical Information for more details). The thermometer is complete of radius or flat T-block for welded or stripped fitting on pipes or flat surfaces.

Application

TST601 RTD thermometer can be used for the measurement of temperature on the surface of medium and large pipes.

Technical data

Mineral Insulated Replaceable Inset

Sensing element: Platinum resistance, 1 or 2 x Pt100 Ω at 0°C
Tolerances: class A or B to IEC 751, 1/3 DIN B
Wiring: 3 or 4 wire connections
Insulation resistance: $\geq 100 \text{ M}\Omega$, test voltage 250 V at ambient temperature
Electrical connections: washer with 70 mm wires or terminal board

Model	Sheath diameter	RTD element type	Operating temperature	Response time values ¹	
				T ₅₀	T ₉₀
TET100	6 mm	standard	-200 ÷ +600 °C	3.5 s	8 s
TET102		glass	-50 ÷ +400 °C		

(1) according to IEC 751, in moving water at 0.4 m/s

Stem: mineral insulated cable
Sheath: AISI 316L / W.1.4404
Replacement: inset length IL is calculated as follows: $IL = L + 40 \text{ mm}$

Protecting tube

Standard diameter: 13 x 7 mm
Standard material: AISI 316Ti / W.1.4571
Connection to process: Radius or flat T-Block (refer to the Order key)
Connection to head: M24 x 1.5

Terminal head

Version: refer to TA20 Technical Information
Protection class: typical IP55
Cable connection: PG11, PG16, 1 or 2 x 1/2" NPT, 3/4" NPT



Order key

- For inset replacement see Technical data.

TST601 RTD Thermometer - Special duty - Surface measurement M.I. replaceable inset - With protecting tube and T-block process connection

Process Connection

- A - T-radius block - AISI 316 - W.1.4401 - (for pipes up to 4")
- B - T-flat block - AISI 316 - W.1.4401 - (for pipes from 5" to flat surfaces)
- C - T-radius block - A105 - W.1.0402 (C22) - (for pipes up to 4")
- D - T-flat block - A105 - W.1.0402 (C22) - (for pipes from 5" to flat surfaces)
- E - T-radius block - CU - (for pipes up to 4")
- F - T-flat block - CU - (for pipes from 5" to flat surfaces)

Insertion length L

- U - 105 mm C - 235 mm
- B - 175 mm Y - mm to specification

Price for 100 mm of insertion length L

G - 13 mm diameter, AISI316Ti / W.1.4571

Price for 100 mm of inset length IL

3 - MgO cable AISI316L / W.1.4404 - Ø 6 mm

Version of RTD inset

- 2 - 70 mm wires (70 & 150 mm for 2 Pt100)
- 3 - terminal board

RTD Class and type of construction

TET100 Standard RTD

- B - standard RTD 1 Pt100, class B, 3 wires
- D - standard RTD 2 Pt100, class B, 3 wires
- E - standard RTD 1 Pt100, class B, 4 wires
- H - standard RTD 1 Pt100, class A, 3 wires
- L - standard RTD 2 Pt100, class A, 3 wires
- M - standard RTD 1 Pt100, class A, 4 wires
- P - standard RTD 1 Pt100, class 1/3 DIN, 3 wires
- Q - standard RTD 2 Pt100, class 1/3 DIN, 3 wires
- R - standard RTD 1 Pt100, class 1/3 DIN, 4 wires

TET102 Glass RTD

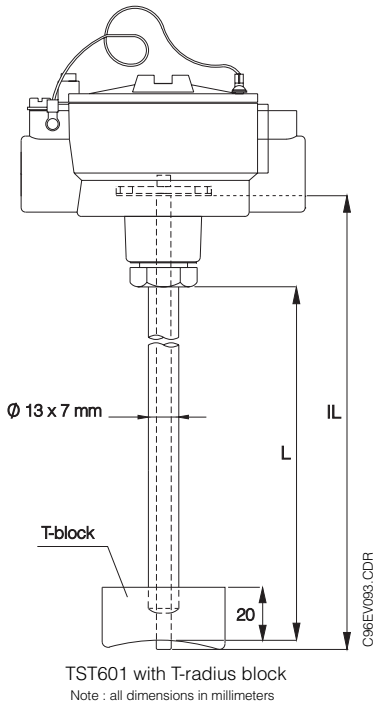
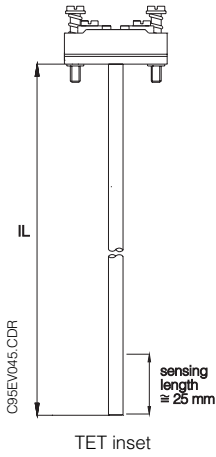
- 0 - glass RTD 1 Pt100, class B, 3 wires
- 1 - glass RTD 2 Pt100, class B, 3 wires
- 2 - glass RTD 1 Pt100, class B, 4 wires
- 3 - glass RTD 1 Pt100, class A, 3 wires
- 4 - glass RTD 2 Pt100, class A, 3 wires
- 5 - glass RTD 1 Pt100, class A, 4 wires
- 6 - glass RTD 1 Pt100, class 1/3 DIN, 3 wires
- 7 - glass RTD 2 Pt100, class 1/3 DIN, 3 wires
- 8 - glass RTD 1 Pt100, class 1/3 DIN, 4 wires
- Y - RTD class and type to specification

Heads: model, neck conn., el. conn., mater., IP

- A1 - TA20A: M24x1.5, Pg16, Al, IP55
- A2 - TA20A: M24x1.5, 1/2" NPT, Al, IP55
- A3 - TA20A: M24x1.5, Pg16, Al, IP68
- C1 - TA20C: M24x1.5, Pg16, Al, IP55
- C2 - TA20C: M24x1.5, 1/2" NPT, Al, IP55
- C3 - TA20C: M24x1.5, 3/4" NPT, Al, IP55
- C4 - TA20C: M24x1.5, 2x1/2" NPT, Al, IP55
- C5 - TA20C: M24x1.5, Pg16, Al, IP65
- C6 - TA20C: M24x1.5, 1/2" NPT, Al, IP55
- C7 - TA20C: M24x1.5, 3/4" NPT, Al, IP55
- C8 - TA20C: M24x1.5, 2x1/2" NPT, Al, IP55
- D1 - TA20D: M24x1.5, Pg16, Al, IP55
- D2 - TA20D: M24x1.5, 1/2" NPT, Al, IP55
- E1 - TA20E: M24x1.5, Pg16, Al, IP55
- M1 - TA20M: M24x1.5, Pg16, Al, IP55
- P1 - TA20P: M24x1.5, Pg16, Al, IP55
- P2 - TA20P: M24x1.5, 1/2" NPT, Al, IP55
- U1 - TA20U: M24x1.5, Pg16, POM, IP65
- W1 - TA20W: M24x1.5, Pg16, Al, IP65
- W2 - TA20W: M24x1.5, 1/2" NPT, Al, IP55
- X3 - TA20X: M24x1.5, Pg11, AISI, IP65

Built-in transmitter

- 0 - Without built-in transmitter
- 1 - With built-in transmitter to be separately ordered



Supplementary documentation

- TET100 Ø 6 mm M.I. inset
Technical Information TI071T/02/en
- TET102 Ø 6 mm M.I. inset
Technical Information TI140T/02/en
- TA20 terminal heads
Technical Information TI072T/02/en

TST601-

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Complete Order Code

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