



Level



Pressure



Flow



Temperature



Liquid Analysis



Registration



Systems Components



Services



Solutions

Technical Information

Omnigrad T TST487

RTD thermometer with screw-in thread for universal applications



- Class A accuracy
- Fiberglass insulated measurement insert
- Diameter 6 mm (0.24")

Application

The TST487 RTD thermometer is used for universal applications. Preferred applications are in vessels or in pipes, where no high process pressures and no extreme temperatures appear.

Function

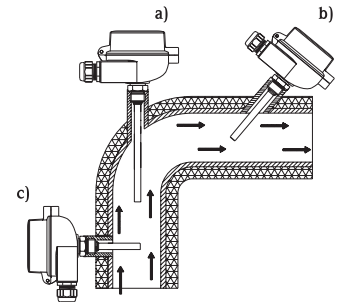
The TST487 RTD thermometer assembly includes a fiberglass insulated insert and is protected by a thermowell with process connection G $\frac{1}{2}$ " or $\frac{1}{2}$ " NPT. The terminal head is according to DIN 43729, form B, and is made of aluminum. The insert is available either with flying leads for head transmitter mounting or with terminal block.

Measurement range: -50... +300 °C (-58... +572 °F)	Accuracy: Pt100 class A
Immersion length : mm: 50, 100, 150, 250 (Ø 6) Inch: 2, 3.9, 5.9, 9.8 (Ø 0.24)	Response time: ≤ 3.5 s (T ₅₀); ≤ 8 s (T ₉₀)
Operating conditions: 20 bar at +20 °C (290 PSI at +68 °F)	

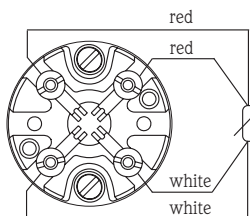
Application example

Pipe installation:

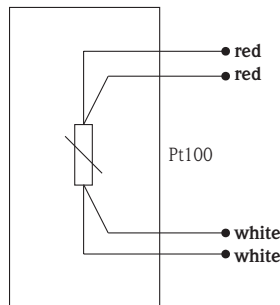
- at elbows, against the flow
- in smaller pipes, leant against the flow
- perpendicular to the flow



Electrical connection

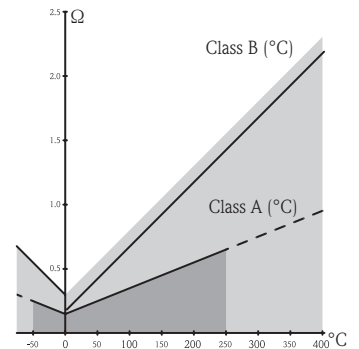


Terminal block
for direct wiring



Flying leads
for installation of a head transmitter

Tolerance values



Omnigrad T TST487

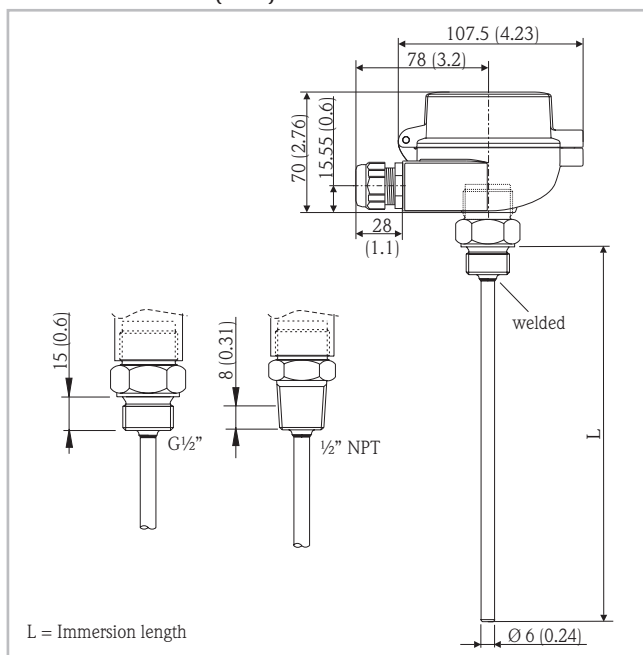
Technical data

Sensor	
■ Sensing element	Platinum resistance element, 1x Pt100 (100 Ω at 0 °C)
■ Accuracy	Class A acc. to IEC 751: -50... +250 °C Class B acc. to IEC 751: 250... +300 °C
■ Wiring	4-wire connection, fiberglass insulated
■ Insulation resistance	≥ 100 MΩ, test voltage 250 V at ambient temperature
■ Wiring	Flying leads or terminal block
■ Sheat diameter	6 mm (0.24")
■ Measurement range	-50... +300 °C (-58... +572 °F)
■ Sheat material	SS 316L/1.4404
■ Response time	T ₅₀ /3.5 s; T ₉₀ /8 s; according to IEC 751
■ Operating conditions	Max. 20 bar at +20 °C (290 PSI at +68 °F)
■ Ambient temp.	-40... +100 °C (-58...+212 °F)

Process connection	
■ Shape	DIN 43772 form 2G
■ Material	SS 316L/1.4404

Terminal head	
■ Type	DIN 43729 form B
■ Protection class	IP66/68
■ Material	Aluminum, polyester powder coated
■ Cable entry	M20x1.5 ½" NPT

Dimensions in mm (inch)



Ordering information

TST487	RTD Thermometer TST487 Terminal head: DIN43729, form B, material: 316L/1.4404, diameter 6 mm (0.24"), non-replaceable insert, in fiberglass insulation. Sensing element: 1xPt100 class A, 4 wires. Measuring temperature: -50...+300 °C (-58...+572 °F).
	Electrical connection
	1 M20x1.5 Skintop
	2 ½"NPT-F
	Process connection
	A G½", 1.4404/SS 316L
	B ½" NPT-M, 1.4404/SS 316L
	Terminal type
	2 Flying leads
	3 Terminal block
	Immersion length L
	A 50 mm
	B 100 mm
	C 150 mm
	D 250 mm
TST487-	← order code

Instruments International

Endress+Hauser
Instruments International AG
Kaegenstrasse 2
4153 Reinach
Switzerland

Tel.+41 61 715 81 00
Fax+41 61 715 25 00
www.endress.com
info@ii.endress.com

Endress+Hauser 

People for Process Automation