



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

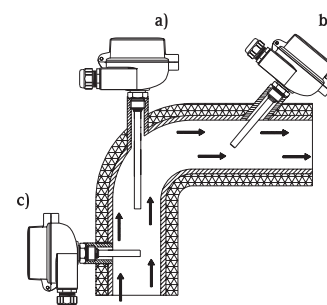
The TST487 RTD thermometer assembly includes a fiberglass insulated insert and is protected by a thermowell with process connection  $G\frac{1}{2}"$  or  $\frac{1}{2}"$  NPT. The terminal head is according to DIN 43729, form B, and is made of aluminum. The insert is available either with flying leads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

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

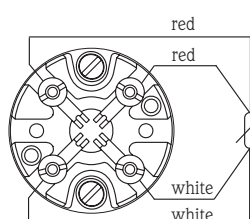
### Application example

Pipe installation:

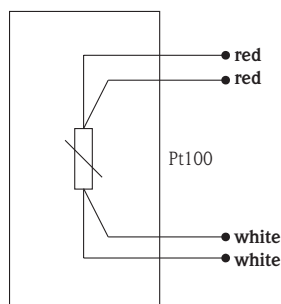
- at elbows, against the flow
- in smaller pipes, leant against the flow
- perpendicular to the flow



### Electrical connection

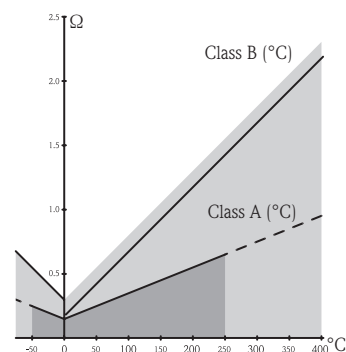


**Terminal block**  
for direct wiring



**Flying leads**  
for installation of a head transmitter

### Tolerance values

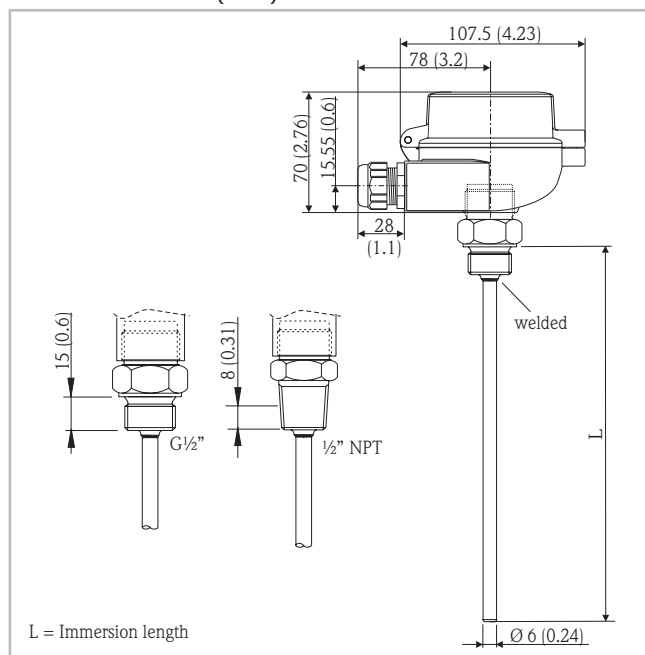


# Omnigrad T TST487

## Technical data

Sensor	
■ Sensing element	Platinum resistance element, 1x Pt100 (100 $\Omega$ 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	$\geq 100 \text{ M}\Omega$ , 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	$T_{50}/3.5 \text{ s}$ ; $T_{90}/8 \text{ s}$ ; 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 1/2" NPT

## Dimensions in mm (inch)



## Ordering information

<b>TST487</b>	<b>RTD Thermometer TST487</b> 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	1/2"NPT-F
Process connection	
A	G1/2", 1.4404/SS 316L
B	1/2" 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
<b>TST487-</b>	<b>⇐ order code</b>

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