

















# 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 G½" or ½" 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: Accuracy: -50... +300 °C (-58... +572 °F) Immersion length:

mm: 50, 100, 150, 250 (Ø 6) Inch: 2, 3.9, 5.9, 9.8 (Ø 0.24)

Pt100 class A

Response time:

 $\leq 3.5 \text{ s } (T_{50}); \leq 8 \text{ s } (T_{90})$ 

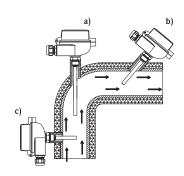
# Operating conditions:

20 bar at +20 °C (290 PSI at +68 °F)

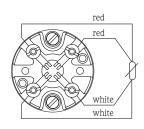
### Application example

Pipe installation:

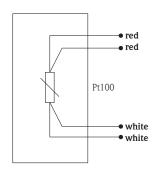
- a) at elbows, against the flow
- b) in smaller pipes, leant against the flow
- c) perpendicular to the flow



# **Electrical connection**

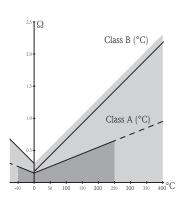


Terminal block for direct wiring



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)

Class A acc. to IEC 751: -50... +250  $^{\circ}$ C Class B acc. to IEC 751: 250... +300  $^{\circ}$ C Accuracy

4-wire connection, fiberglass insulated Wiring ■ 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")

-50... +300 °C (-58... +572 °F) Measurement range

■ 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)

-40... +100 °C (-58...+212 °F) Ambient temp.

**Process connection** 

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

Terminal head

■ Type DIN 43729 form B

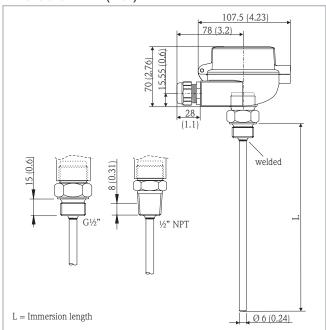
■ Protection class IP66/68

Material Aluminum, polyester powder coated

M20x1.5 ■ Cable entry

1/2" NPT

# Dimensions in mm (inch)



# Ordering information

TST487-

Ordering information				
TST487	RTD Thermometer TST487			
	dia	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		
		Α	G½", 1.4404/SS 316L	
		В	½" NPT-M, 1.4404/SS 316L	
			Terminal type	
			2	Flying leads
			3	Terminal block
				Immersion length L

50 mm

100 mm

150 mm

250 mm

 $\Leftarrow$  order code

R

С

D

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