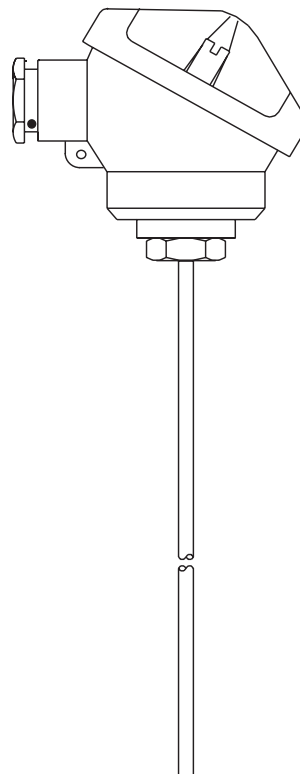


# RTD Thermometer *omnigrad TST410*

Medium duty - Mignon head  
Ø 3 mm M.I. probe  
requiring compression fitting



## Description

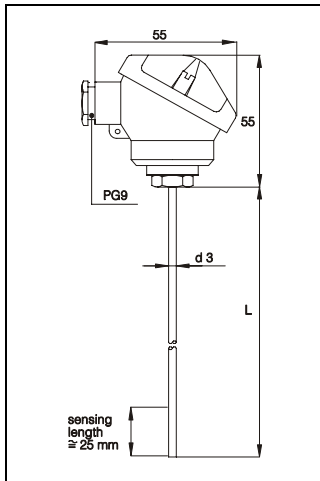
TST410 RTD thermometer assembly includes a single Pt100 probe in mineral insulated cable, 3 or 4 wire connections, with 3 mm stem diameter, a mignon terminal head and an optional compression fitting.

## Application

Typical applications for TST410 sensor are pressure-less systems such as air ducts, flues and pipelines. Special care should be given to the maximum allowed temperature surrounding the terminal head, which must be lower than 80°C.

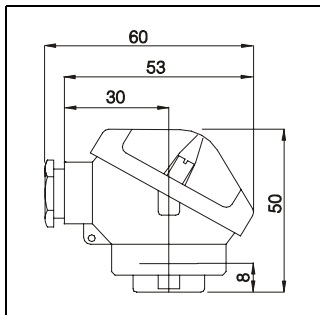
## Technical data

### Probe



Sensing element:	Platinum resistance, 1 Pt100 $\Omega$ at 0°C, standard version
Tolerances:	class A or class B to IEC 751
Wiring:	3 or 4 wire connections
Insulation resistance:	$\geq 100 \text{ M}\Omega$ , test voltage 250 V at ambient temperature
Electrical connections:	terminal block
Stem:	mineral insulated cable (MgO)
Sheath:	AISI 316L/W.1.4404
Standard diameter:	3 mm
Operating temperature:	-50 ... +400 °C
Response time values:	according to IEC751, in moving water at 0.4 m/s $T_{50} = 3 \text{ s}$ ; $T_{90} = 6 \text{ s}$
Process connection:	optional TA50 threaded compression fitting

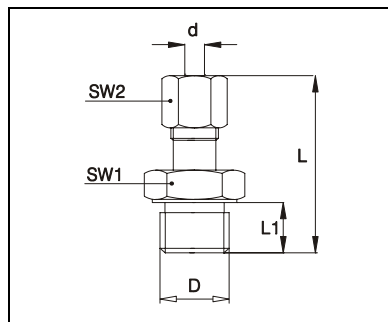
### TA20L terminal head



Dimension:	Mignon type
Protection grade:	IP 67
Max. temperature:	80°C
Material:	light alloy dye casting with rubber gasket under the cover
Cable connection:	PG9
Thermowell entry:	M10 x 1 mm
Body colour:	blue according to RAL5012 - epoxy coated
Cap colour:	grey according to RAL7015 - epoxy coated
Weight:	75 g

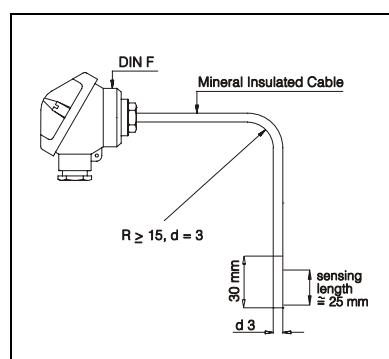
### Mounting accessories

TA50 Threaded	
Compression Fitting:	$d = 3 \text{ mm}$ ; $D = G 1/4"$
Sealing ring Teflon:	$T_{\text{max}} 200^\circ\text{C}$ ; $P_{\text{max}} 10 \text{ bar}$ (at 20°C)
Sealing ring in W.1.4404:	$T_{\text{max}} 400^\circ\text{C}$ ; $P_{\text{max}} 40 \text{ bar}$ (at 20°C)



### Installation - Bending radius

The allowed bending radius R for mineral insulated cables is  $\geq 15 \text{ mm}$  for 3 mm diameters (DIN 43721). The not bendable length is  $\sim 30 \text{ mm}$ .





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**Supplementary  
Documentation**

- Technical Information TA20 terminal heads (TI 072T/02/en)
- Technical Information TA fittings (TI 091T/02/en)

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