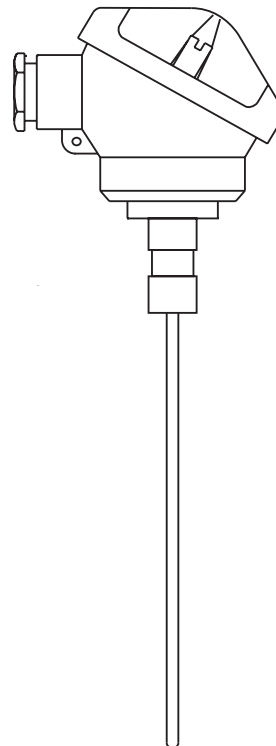


# RTD Thermometer *omnigrad TST414*

**Process thermometer- Mignon head  
Ø 3 mm M.I. probe  
with protecting pocket**



## **Description**

TST414 RTD thermometer assembly includes a single Pt100 probe in mineral insulated cable, 3 or 4 wire connections, with 3 mm stem diameter and a mignon terminal head.

It is supplied with a 4.5 mm diameter pocket, which protects the probe from chemical corrosion and allows an easy replacement of the thermometer.

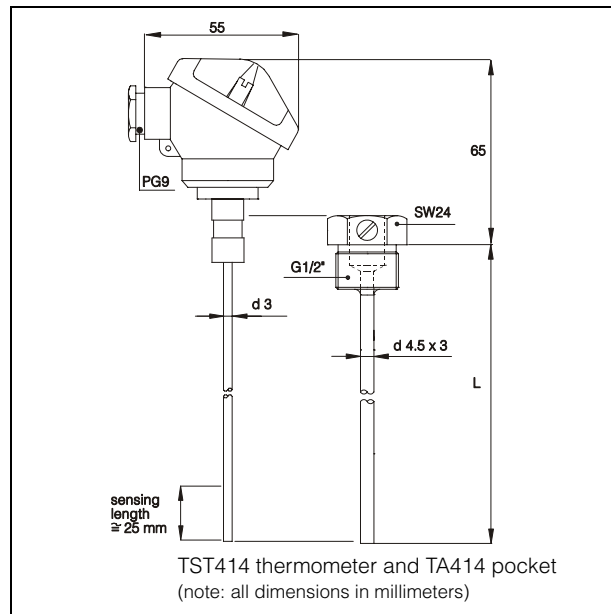
## **Application**

Due to the reduced wall thickness of the pocket, it is suggested to use this thermometer assembly in processes where no strong flow is present. Special care should be given to the maximum allowed temperature surrounding the terminal head, which must be lower than 80°C.

## Technical data

<b>Probe</b>	Sensing element:	Platinum resistance, 1 x 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

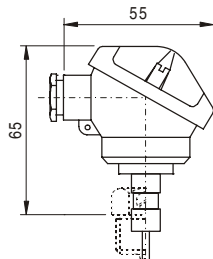
<b>TA414 Pocket</b>	Standard diameter:	4.5 x 3 mm
	Standard material:	AISI 316Ti/W.1.4571
	Process connection:	G 1/2" M
	Operating temperature:	-50°C to +400°C
	Max. operating condit.:	100 bar @ 20°C; 1 bar @ 300°C
	Response time values:	according to IEC751, in moving water at 0.4 m/s



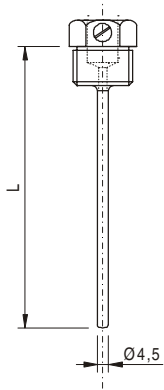
	Dimension:	Mignon type
	Protection grade:	IP 67
	Max. temperature:	80°C
	Material:	light alloy dye casting with rubber gasket under the cover
	Cable connection:	PG9
	Thermowell entry:	M10 x 1 mm
	Body colour:	blue according to RAL5012 - epoxy coated
	Cap colour:	grey according to RAL7015 - epoxy coated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

## Order key

- For spares, order TST414 thermometer without pocket specifying the immersion length.
- Accuracy statement is referred to the probe only as defined by IEC 751 without any protecting pocket which may introduce thermal drift due to process connection heat dissipation in conjunction to short immersion lengths.  
For a correct temperature measurement the thermowell immersion length must be 20 times its diameter. Shorter immersion lengths can be supplied but the thermometer requires an external (process connection, neck and connection head) thermal insulation.



TST414



TA414 pocket

**TST414- RTD THERMOMETER - Process thermometer- Mignon head**  
Ø 3mm M.I. probe - With protecting pocket

**Insertion length L (50-4000mm)**

- A 50 mm insertion length L
- B 100 mm insertion length L
- C 200 mm insertion length L
- D 300 mm insertion length L
- E 400 mm insertion length L
- F 500 mm insertion length L
- X mm insertion length to spec.
- Y mm special insertion length

**Size pipe, price 100mm L**

- 2 3 mm=D inset
- 9 To specification

**Thermopocket (TA414) to the process**

- A No thermo pocket
- B Pocket: SS316Ti, G 1/2" process conn.
- Y To specification

**Class and type of inset**

- 1B3 1 Pt100 class B, 3 wire
- 1B4 1 Pt100 class B, 4 wire
- 1A3 1 Pt100 class A, 3 wire
- 1A4 1 Pt100 class A, 4 wire
- 9Y9 RTD class and type to specification

TST414-										<b>Complete Order Code</b>
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