Technical Information TI067T/02/en No. 71108015

RTD Thermometer omnigrad TST414

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









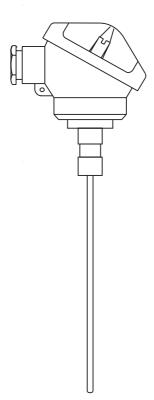












Description

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

Probe Sensing element: Platinum resistance, 1 x Pt100 Ω at 0°C, standard version

Tolerances: class A or class B to IEC 751 Wiring: 3 or 4 wire connections

Insulation resistance: \geq 100 M Ω , test voltage 250 V at ambient temperature

Electrical connections: terminal block

Stem: mineral insulated cable (MgO)

Sheath: AISI 316L/W.1.4404

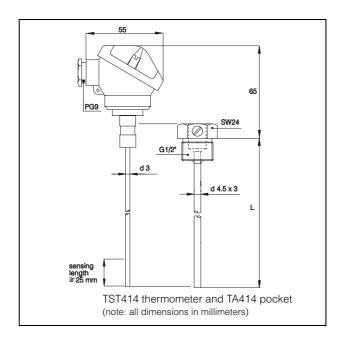
TA414 Pocket Standard diameter: 4.5 x 3 mm

Standard material: AISI 316Ti/W.1.4571

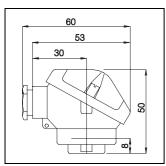
Process connection: G 1/2" M Operating temperature: -50°C to +400°C

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



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

Thermowell entry: M10 x 1 mm

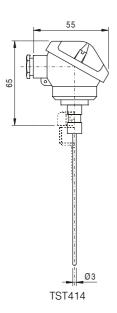
Body colour: blue according to RAL5012 - epoxy coated Cap colour: grey according to RAL7015 - epoxy coated

Weight: 75 g

Order key

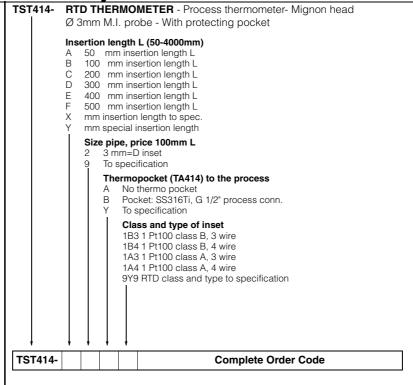
- For spares, order TST414 thermometer without pocket specifing the immersion length.
 Accuracy statement is referred to the probe only as defined by IEC 751 without any protecting pocket which may introduce thermal drift due to process connection heat dissipation in conjuction to short immersion conjuction to short immersion lengths.

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 bead) thermal connection head) thermal insulation.





TA414 pocket



Endress + Hauser 3 Supplementary Documentation

• Technical Information TA20 terminal heads

(TI 072T/02/en)

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