# EEx d RTD Thermometer omnigrad TST262

EEx d certified - Explosion Proof with Lamination Nipple or Lamination Nipple & Union/Sleeve 1/2" NPT female connection to thermowell









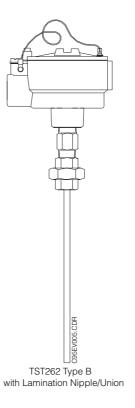


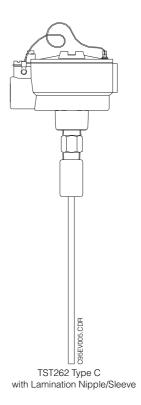












## Description

TST262 RTD thermometer assembly complies with European Standards EN 50.014 and EN 50.018 for electrical apparatus in potentially explosive atmospheres and has been specifically designed for medium duty applications. TST262 thermometer assembly must be used in combination with welded protecting tubes offering a wide range of process connections as well as diameters.

TST262 makes use of mineral insulated 6 mm diameter insets with two choices for RTD: standard or glass encapsulated (suitable for high vibration level application).

The terminal head is available with single or double 1/2" NPT electric connections or single 3/4" NPT electric connection only, with loose wires or terminal board inset.

## **Application**

Ex-Proof TST262 thermometer, with threaded process connection, may be widely used in many medium to heavy duty applications.

TST262 is certified by CESI EEx d IIC T6, certificate No. EX-95.D.070, according to EN 50.014 and 50.018.





## Technical data

## Mineral insulated inset

Sensing element: Platinum resistance, 1 or  $2 \times Pt 100\Omega$  at  $0^{\circ}C$ ,

standard or glass type

Tolerances: class A or B to IEC 751, 1/3 DIN B

Operating temperature: -50°C to 400°C

Wiring: 3 or 4 wire connections

Insulation resistance:  $\geq 100 \text{ M}\Omega$ , test voltage 250V at ambient temp.

Electrical connections: 125 mm wires or terminal board

Stem: mineral insulated cable Sheath: AISI316L / W.1.4404

Standard diameter: 6 mm

Inset length (1): inset length ML is calculated as follows

ML = L + E - D - 8 mm where L = Thermowell immersion length E = Thermowell extension length D = Thermowell bottom thickness

## **Protecting tube**

Versions: TA10, TA53X and TA54X thermowell series

Connection to head: 1/2" NPT

## **TA20H terminal head**

Certification: EEx d IIC T6
Protection grade: IP65

Transmitter mounting holes distance: 33 mm Max. temperature: 130°C

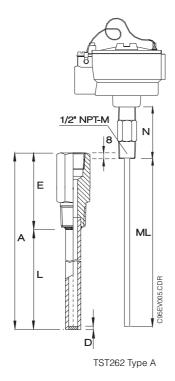
Material: aluminium alloy, Mg <6%, dye casting rubber

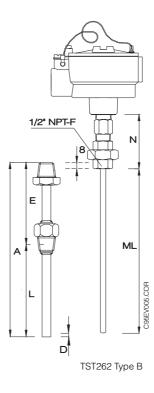
ring gasket under the cover

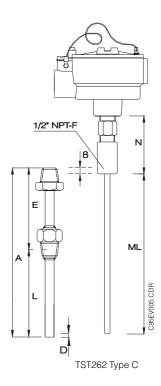
Cable entry: single or double 1/2" NPT or single 3/4" NPT

Thermowell entry: 1/2" NPT Electrical protection: ground terminal

Body colour:
Cap colour:
Weight
Al grey
S20 g
Transmitter installation:
possible







## **Order Kev**

- Each TST262 RTD thermometer must be ordered with corresponding thermowell selected from TA10, TA53X and TA54X series
- Accuracy statement is referred to the inset only as defined by IEC 751 without any protecting thermowell which may introduce thermal drift due to process connection heat dissipation in conjunction to short immersion lenghts. 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 (thermowell extension, neck and
- connection head) thermal insulation.

  Note (1): for inset length ML see technical data

## TST262 EEx d RTD Thermometer - EEx d certified - Explosion Proof With Lamination Nipple or Lamination Nipple & Union/Sleeve 1/2" NPT female connection to thermowell

## **Extension length N (including lamination nipple LN)** 0 - 52 mm lamination nipple only

(without extension neck) Type A

- 1 96 mm extension: carbon steel union
- (44 mm union + 52 mm of Lamination Nipple) Type B
- 2 96 mm extension: carbon steel coupling sleeve (44 mm coupling sleeve + 52 mm of Lamination Nipple) Type C
- 3 96 mm extension: SS 304 union
  - (44 mm union + 52 mm of Lamination Nipple) Type B
- 4 96 mm extension: SS 304 coupling sleeve
  - (44 mm coupling sleeve + 52 mm of Lamination Nipple) Type C
- 9 -.....mm extension to specification

(minimum extension 52 mm)

## Inset length ML / Thermowell immersion length L /

/ Thermowell extension length E TC - 184 mm ML /120 mm L / 75 mm E TD - 224 mm ML /160 mm L / 75 mm E

TF - 314 mm ML / 250 mm L / 75 mm E  $\,$ 

TG - 374 mm ML / 310 mm L / 75 mm E TK - 464 mm ML / 400 mm L / 75 mm E

TM - 644 mm ML / 580 mm L / 75 mm E

YY - ..... mm ML /..... mm L / .... mm E<sup>(1)</sup>

### Price for 100 mm of inset length ML

3 - MgO cable AISI316L / W1.4404 - 6 mm diam.

### Inset style and leadwire termination

- 1 spring loaded, 125 mm wires termination2 spring loaded, terminal board

## RTD Class and type of construction B - ceramic RTD 1 Pt100, class B, 3 wires

- D ceramic RTD 2 Pt100, class B, 3 wires
- E ceramic RTD 1 Pt100, class B, 4 wires
- H ceramic RTD 1 Pt100, class A, 3 wires
- L ceramic RTD 2 Pt100, class A, 3 wires
- M- ceramic RTD 1 Pt100, class A, 4 wires
- P ceramic RTD 1 Pt100, class 1/3 DIN, 3 wires Q - ceramic RTD 2 Pt100, class 1/3 DIN, 3 wires
- R ceramic RTD 1 Pt100, class 1/3 DIN, 4 wires
- 0 glass RTD 1 Pt100, class B, 3 wires 1 - glass RTD 2 Pt100, class B, 3 wires
- 2 glass RTD 1 Pt100, class B, 4 wires
- 3 glass RTD 1 Pt100, class A, 3 wires
- 4 glass RTD 2 Pt100, class A, 3 wires
- 5 glass RTD 1 Pt100, class A, 4 wires
- 6 glass RTD 1 Pt100, class 1/3 DIN, 3 wires
- 7 glass RTD 2 Pt100, class 1/3 DIN, 3 wires
- 8 glass RTD 1 Pt100, class 1/3 DIN, 4 wires
- Y RTD class and type to specification

- Head electric connection type
  A Single connection 1/2" NPT female
- B Single connection 3/4" NPT female
- C Double connection 1/2" NPT female

**Built-in transmitter** 0 - Without built-in transmitter

1 - With built-in transmitter to be separately ordered

TST262-**Complete Order Code** 

# **Supplementary** documentation

TA20 terminal heads
Technical Information TI072T/02/en
TA10, TA53X, TA54X thermowell series
specific product T.I.

## **Export Division**

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