

Temperature transmitter with RTD Sensor

SERIES: TMT45

ULTRA SMALL SIZE

- > 4-20 mA. 2-WIRE OUTPUT
- > Pt100 SENSING ELEMENT
- > EASY & FAST CONNECTION
- > VIBRATION-PROOF DESIGN
- > WATERPROOF IP65 PROTECTION
- > LOCAL INDICATOR WITHOUT OR WITH TWO OPTO CONTACTS (OPTION)

APPLICATIONS:

- Cars and Rail Vehicles
- Construction Machines
- Food & Sanitary Processes





INTRODUCTION

The new compact *TMT45* Temperature Transmitter with RTD Probe replaces expensive assemblies comprising RTD probe, terminal block, probe head and the temperature transmitter. Robust vibration-proof design, IP65 protection class and protected electronics by the means of a special compound, result into an exceptional probe; ideal for withstanding harsh environments.

Being very compact and definitely an economical approach to temperature measurement are other advantages of the TMT45. Utilizing the TMT45 eliminates the use of stainless steel probe heads in food and sanitary industries, and thanks to their small dimensions, these temperature probes are applicable in cars, trains, construction machineries and other equipments, where space is limited.

The stainless steel TMT45 sensors can be ordered in several ranges from -50° to 200°C. Various process connections as well as stem lengths from 2 to 30 cm, are available. Optionally it can be combined with the DIS100 indicator (IP65). This combination can have no contact or two opto contacts.

SPECIFICATIONS

Sensing Element

Ranges

Minimum Span Range **Output Signal**

Output @ Sensor Burnout 32 mA

Output @ Sensor Shorted 0.2 mA

Measurement Error Non-linearity Error Temperature Drift Max. Process Pressure **Power Supply Maximum Line Load**

Ambient Temperature Case Material Electrical Connection

Mounting Thread Stem Diameter

Stem Length **Case/Terminal Protection**

EM Compatibility

Pt100 (w=1.385)

-50°C to 200°C various ranges refer to the order code

50°C

4...20 mA, 2-wire

0.2% of span or 0.2°C Within measurement error 0.01% of span for 1°C 360 psi (2500 kPa or 25 bar)

10...32 VDC 750 Ω at 24 V / 20 mA

-40...85°C

Stainless steel Connector DIN 43650

Various - see the order code 6 or 8 mm

20 to 300 mm, step of 5 mm

IP65

According to EN 61326



