

iTEMP TMT142

Temperature field transmitter

Transformation of sensor signals into stable and standardized output signals for all industries



More information and current pricing:

www.endress.com/TMT142

Benefits:

- Illuminated display, rotatable
- Operation, visualization and maintenance with PC, e.g. using FieldCare operating software
- Sensor monitoring: Failure conditioning, corrosion detection to NAMUR NE 89 and in event of sensor break or sensor short-circuit, NAMUR NE 43 compliant
- Stainless steel housing for Ex d applications, optional
- Approvals: ATEX (Ex ia, Ex d and dust ignition-proof), FM and CSA (IS, NI, XP and DIP)
- Galvanic isolation
- Min./max. process value recorded

Specs at a glance

- **Accuracy** (Pt100, -50...200 °C) $\leq 0,15$ K (Pt100, -58...392 °F) $\leq 0,3$ °F

Field of application: Unsurpassed reliability, accuracy and long-term stability in critical processes over all industries. The configurable transmitter not only transfers converted signals from RTD sensors and thermocouples, but also resistance and voltage signals using HART[®] communication. It visualizes the signals on its own backlit display. A rugged field housing allows a direct connection in the process areas. Moreover, a swift and easy operation and maintenance can be realized by PC using operating software.

Features and specifications

Temperature transmitters**Measuring principle**

Field transmitter

Input

1 x RTD, TC, Ohm, mV

Output

1 x analog 4...20 mA

Auxiliary power supply

10,5...40 V DC (standard-version)

10,5...30 V DC (Ex-version)

Communication

HART-protocol

Installation

in field

Accuracy(Pt100, -50...200 °C) $\leq 0,15$ K(Pt100, -58...392 °F) $\leq 0,3$ °F

Galvanic isolation

yes

Temperature transmitters**Certification**

UL rec. Comp

FM IS, NI I/1+2/A-D

ATEX II1G Ex ia IIC T6

ATEX II2G Ex d IIC T6

ATEX II3G Ex nA IIC T6

ATEX IECEx II2D Ex tb IIIC Db

ATEX II1G Ex ia IIC T6, II2D Ex ia
IIIC

CSA IS, NI I/1+2/A-D

FM XP, NI, DIP I,II,III/1+2/A-G

CSA XP, NI, DIP I,II,III/1+2/A-G

CSA General Purpose

IECEX Ex ia IIC T6 Ga

IECEX Ex d IIC T6 Gb

NEPSI Ex ia IIC T4-T6

NEPSI Ex nA II T4-T6

NEPSI Ex d IIC T4-T6

EAC Ex ia IIC T6 Ga

EAC Ex d IIC T6 Gb

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