

iTEMP TMT85

Temperature head transmitter

Transformation of sensor signals into standardized digital output signals for all industries



More information and current pricing:

www.endress.com/TMT85

Benefits:

- Easy and standardized communication via FOUNDATION Fieldbus™ H1
- Straightforward design of measuring points in Ex-areas through FISCO/FNICO conformity in accordance with IEC 600079-27
- Safe operation in hazardous areas thanks to international approvals such as FM IS, NI; CSA IS, NI; ATEX Ex ia, Ex nA for intrinsically safe installation in zone 1 and zone 2
- High accuracy through sensor-transmitter matching
- Reliable operation with sensor monitoring and device hardware fault recognition
- Several mounting versions and sensor connection combinations
- Rapid no-tools wiring due to optional spring terminal technology

Specs at a glance

- **Accuracy** (Pt100) $\leq 0,1$ K (Pt100) $\leq 0,18$ °F

Field of application: Unsurpassed reliability, accuracy and long-term stability in critical processes over all industries. The configurable transmitter not only transfers digital converted signals from RTD and TC sensors, it also transfers resistance and voltage signals using FOUNDATION Fieldbus™ communication. High measurement point availability by means of sensor monitoring functions and device hardware fault recognition. Optimization of the measurement accuracy by sensor-transmitter matching.

Features and specifications

Temperature transmitters

Measuring principle

Head transmitter

Input

2 x RTD, TC, Ohm, mV

Output

FOUNDATION Fieldbus H1

Auxiliary power supply

9...32 V DC (FOUNDATION
Fieldbus)

9...17,5 V DC (FISCO/FNICO)

Communication

FOUNDATION Fieldbus H1

Installation

Terminal head form B

Accuracy

(Pt100) $\leq 0,1$ K

(Pt100) $\leq 0,18$ °F

Galvanic isolation

yes

Temperature transmitters**Certification**

ATEX II1G Ex ia IIC T4/T5/T6

ATEX II3G Ex nA IIC T6

ATEX II3D Ex tc IIIC Dc

ATEX II1G Ex ia IIC T6, II3D

ATEX II3G Ex nA IIC T6, II3D

ATEX II2G Ex d T6, II2D Ex tb IIIC

FM+CSA IS, NI I/1+2/ABCD

FM IS, NI I/1+2/ABCD

CSA IS, NI I/1+2/ABCD

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

NEPSI Ex ia IIC T4/T5/T6

NEPSI Ex d IIC T6 Gb

NEPSI Ex nA IIC T4/T5/T6

IECEX Ex ia IIC T4/T5/T6

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

IECEX Ex tb IIIC Db

IECEX Ex d T6 Gb, Ex tb IIIC Db

ATEX IECEX II1G Ex ia IIC T6 Ga

FM+CSA IS, NI I/1+2/ABCD

ATEX IECEX II1G Ex ia IIC T6 Ga

Temperature transmitters

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