

iTEMP TMT85

Temperature head transmitter

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



More information and current pricing:

www.de.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

Input2 x RTD, TC, Ohm, mV

OutputFOUNDATION Fieldbus H1

Auxiliary power supply

9...32 V DC (FOUNDATION Fieldbus)

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

CommunicationFOUNDATION Fieldbus H1

InstallationTerminal head form B

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

Galvanic isolationyes

Temperature transmitters

Certification

ATEX II3G Ex ic IIC T6
 ATEX II2D Ex tb IIIC Db
 ATEX II1G Ex ia IIC T4/T5/T6
 ATEX II3G Ex nA IIC T6
 ATEX II3G Ex ic IIC T6
 ATEX II2D Ex tb IIIC Db
 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
 CSA C/US General Purpose
 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
 TIIS Ex ia IIC T6
 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
 EAC Ex ia IIC T6 Ga
 EAC Ex d IIC T6 Gb
 IECEX Ex tb IIIC Db
 IECEX Ex d T6 Gb, Ex tb IIIC Db
 INMETRO Ex ia [ia Ga] IIC T6 Gb
 INMETRO Ex d T6 Gb, Ex tb IIIC Db
 NEPSI Ex d IIC T6 Gb
 UK II2D Ex tb IIIC Db
 UK II3D Ex tc IIIC Dc
 UK II1G Ex ia IIC T6 Ga, II3D Ex ia IIIC Dc
 UK II3G Ex nA IIC Gc, II3D Ex tc IIIC Dc
 UK II2G Ex db IIC T6 Gb, II2D 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

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