iTEMP TMT181 Temperature head transmitter

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



More information and current pricing: www.endress.com/TMT181

Benefits:

- High accuracy in total ambient temperature range
- Ex certification: ATEX Ex ia and dust ex zone 22 in compliance with EN 50281-1; FM IS; CSA IS
- Fault signal on sensor break or short circuit, NAMUR NE 43 compliant EMC to NAMUR NE 21, CE
- Configuration during measurement using configuration kit
- Galvanic isolation
- Output simulation
- Marine approval

Specs at a glance

• Accuracy (Pt100, -50...200 °C) <= 0,2 K (Pt100, -58...392 °F) <=</p> 0,4 °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 resistance thermometers (RTD) and thermocouples (TC), it also transfers resistance and voltage signals. The standardized output signal used for process measurement is a 4 to 20 mA signal. Swift and easy operation, visualization and maintenance by PC using operating software.

Features and specifications

Temperature transmitters

Measuring principle

Head transmitter

Input

1 x RTD, TC, Ohm, mV

Output

1 x analog 4...20 mA

Auxiliary power supply

8...35 V DC (standard-version)

8...30 V DC (Ex-version)

Communication

PCP (pc-programmable)

Installation

Terminal head form B

Accuracy

(Pt100, -50...200 °C) <= 0,2 K

(Pt100, -58...392 °F) <= 0,4 °F

Galvanic isolation

yes

Temperature transmitters

Certification

UL Ex IS, NI

Marine approval

GOST Exi

FM IS,NI,Class I,Div.1+2,Group ABCD

CSA IS,NI,Class I,Div.1+2,Group ABCD

ATEX II3G Ex nA IIC T4/T5/T6

ATEX II1G EEx ia IIC T4/T5/T6

ATEX II3D

ATEX II1G EEx ia IIC T6, II3D

ATEX II3G Ex nA IIC T6, II3D

FM+CSA IS,NI,Class I,Div.1+2,Group

ABC

CSA General Purpose

NEPSI Ex ia IIC T4-T6

NEPSI Ex nA II T4-T6

GL (German Lloyd)

More information www.endress.com/TMT181