

iTEMP TMT180

Temperature head transmitter

Transformation of the sensor signal into a stable and standardized output signal for all industries



Benefits:

- High accuracy in total ambient temperature range
- Fault signal on sensor break or short circuit, presettable to NAMUR NE 43
- EMC according to NAMUR NE 21, CE
- Online configuration during measurement using SETUP connector
- Customer specific measurement range setting
- Marine approval
- Recognized component to UL 3111-1

Specs at a glance

- **Accuracy** Pt100, -200...650 °C (-328...1.202 °F) ≤ 0.2K / 0.08% span
Pt100, -50...250 °C (-58...482 °F) ≤ 0.1 K / 0.08% span
Pt100, -50...250 °C (-58...482 °F) ≤ 0.2 K / 0.08% span

Field of application: The transmitter is designed for the transformation of an RTD Pt100 sensor signal. Various measurement ranges are configurable. The standardized output signal used for process measurement is a 4 to 20 mA signal. This means a fast, easy and cost-saving temperature measuring as well as reliable and precise measured values for for a wide range of non-ex industry applications.

Features and specifications

Temperature transmitters

Measuring principle

Head transmitter

Temperature transmitters

Input

1 x Pt100

Output

1 x analog 4...20 mA

Auxiliary power supply

10...35 V DC

Communication

PCP (pc-programmable)

Installation

Terminal head form B

Accuracy

Pt100, -200...650 °C (-328...1.202 °F) ≤ 0.2K / 0.08% span

Pt100, -50...250 °C (-58...482 °F) ≤ 0.1 K / 0.08% span

Pt100, -50...250 °C (-58...482 °F) ≤ 0.2 K / 0.08% span

Galvanic isolation

no

Certification

Marine approval

UL according to 3111-1

UL EX NI, IS

GOST Metrology

CSA General Purpose

FM NI, Class I, Div. 2, Group ABCD

CSA NI, Class I, Div.2, Group ABCD

FM/CSA NI, Class I, Div. 2, Group ABCD

GL (German Lloyd)

More information www.casc.endress.com/TMT180