Thermocouple TMT142C

Benefits:
- Dual compartment housing
- Backlit display with large measured value, bar graph and fault condition indication
- Galvanic isolation 2 kV (sensor input to the output)
- Wide range of threaded thermowell connections available as standard
- Replaceable measuring insert comprising a mineral insulated tube (SS 316L/1.4404)
- Approvals for hazardous areas: Flameproof enclosure (Ex d), Intrinsic safety (Ex ia), Non-sparking (Ex nA)
- Aluminum or stainless steel housing, degree of protection IP67, NEMA 4x

Specs at a glance
- **Accuracy** class 1 acc. to IEC 60584 class 2 acc. to IEC 60584
- **Response time** depending on configuration t50 = 3 s t90 = 7 s
- **Max. process pressure (static)** depending on thermowell
- **Operating temperature range** Type K: -40 °C ...800 °C (-40 °F ...1.472 °F) Type J: -40 °C ... 750 °C (-40 °F ...1.382 °F)
- **Max. immersion length on request** up to 30.000,00 mm (1.181,10")

Field of application: The robust thermometer is designed for use in demanding and safety relevant applications e.g. in the Chemical, Oil & Gas and Energy industry. The thermometer fulfills the corresponding safety requirements due to various certificates and tests. The use of a transmitter leads to higher accuracy and reliability in comparison to directly wired sensors.

Features and specifications
Thermometer

**Characteristic / Application**
US style
modular temperature assembly
for heavy duty applications
suitable for hazardous areas
threaded process connection
to use with thermowell
backlit display

**Thermowell / protection tube**
to use with thermowell

**Insert / probe**
mineral insulated (MI), flexible

**Outer diameter protection tube / Insert**
Not defined

**Max. immersion length on request**
up to 30,000,00 mm (1,181,10")

**Material protection tube/ thermowell**
Not defined

**Optional coating**
Not defined

**Process connection**
male thread:
G1/2"
NPT1/2"
NPT3/4"
union nut:
NPT1/2"
M24x1.5

**Tip shape**
straight
Thermometer

Operating temperature range
Type K:
-40 °C ... 800 °C
(-40 °F ... 1,472 °F)
Type J:
-40 °C ... 750 °C
(-40 °F ... 1,382 °F)

Max. process pressure (static)
depending on thermowell

Accuracy
class 1 acc. to IEC 60584
class 2 acc. to IEC 60584

Response time
depending on configuration
t50 = 3 s
t90 = 7 s

Integration head transmitter
yes (4 ... 20 mA; HART; PROFIBUS PA; FOUNDATION FIELDBUS)

Ex - approvals
ATEX II
Explosion proof

More information www.us.endress.com/TMT142C