RTD Thermometer TMT142R

Benefits:
- HART® protocol for operating the device on site using handheld terminal (DXR375) or remotely via the PC
- Illuminated display, rotatable
- Single Pt100 with 3 or 4 wires connection
- Undervoltage detection responds immediately, output of falsified measured values is prevented
- Highly accurate in entire operating temperature range
- Approvals: ATEX (EEx i.a., EEx d and dust ignition-proof), CSA (IS, NI, XP and DIP)
- Output simulation

Specs at a glance
- **Accuracy** class A acc. to IEC 60751 class AA acc. to IEC 60751
- **Response time** depending on configuration t50 = 3 s t90 = 7 s
- **Max. process pressure (static)** Depending on thermowell
- **Operating temperature range** PT 100: -200 °C ...600 °C (-328 °F ...1.112 °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

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<th>Thermometer</th>
<th>Measuring principle</th>
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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

**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

**Operating temperature range**
PT 100:
-200 °C ...600 °C
(-328 °F ...1.112 °F)
## Thermometer

<table>
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<th>Feature</th>
<th>Details</th>
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<td><strong>Max. process pressure (static)</strong></td>
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<tr>
<td><strong>Integration head transmitter</strong></td>
<td>yes (4 ... 20 mA; HART)</td>
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<tr>
<td><strong>Ex - approvals</strong></td>
<td>ATEX II</td>
</tr>
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<td></td>
<td>Explosion proof</td>
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<td><strong>Certification</strong></td>
<td>Gost Metrology</td>
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More information [www.us.endress.com/TMT142R](http://www.us.endress.com/TMT142R)