iTHERM ModuLine TM121

Thermometer with RTD or TC insert complete with manufactured thermowell produced from pipe material

Benefits:
- Economical, reliable measurement
- User-friendly from product selection to maintenance
- Wide range of process connections
- Easy and safe device setup and service using Bluetooth® communication

Specs at a glance
- **Accuracy** Class A acc. to IEC 60751 Class B acc. to IEC 60751 Class standard acc. to ASTM E230 Class 2 acc. to IEC 60584-2
- **Response time** t90 around 100 s depending on configuration
- **Max. process pressure (static)** depending on the configuration
- **Operating temperature range** Basic PT100 TF: -50 °C ...200 °C (-58 °F ...392 °F) Typ K: max. 1.100 °C (max. 2.012 °F)
- **Max. immersion length on request** up to 1.000,0 mm (39")

Field of application: RTD or TC assembly characterized by basic sensor technology, application in non-hazardous areas, standard extension neck, low-cost unit. The devices are available with optional Bluetooth®-enabled head transmitters with 4 to 20 mA output or HART® communication, providing enhanced measurement accuracy and reliability compared to directly wired sensors.

Features and specifications

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<th>Thermometer</th>
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<td><strong>Measuring principle</strong></td>
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<td>Resistance Temperature Detector</td>
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Thermometer

**Characteristic / Application**
- metric style
- modular temperature assembly
- universal range of application
- with neck
- incl. thermowell / protection tube (metal)

**Thermowell / protection tube**
- welded protection tube or to be used with thermowell

**Insert / probe**
- Basis Sensortechnologie

**Outer diameter protection tube / Insert**
- Thermowell:
  - 9x1,25 mm
  - 11x2 mm

**Max. immersion length on request**
- up to 1,000,0 mm (39')

**Material protection tube/ thermowell**
- 316L (1.4404)
Thermometer

**Process connection**
Thread:
- G1/2"
- NPT1/2"
- M20x1.5, M27x2, M33x2
Compression fitting:
- NPT1/2", G1/2", G1"
Flansche:
- DN25 DN40 B1
- ASME 1" 150 RF
- ASME 1" 300 RF
- ASME 1 1/2" 150 RF
- ASME 2" 150 RF
- ASME 2" 300 RF

**Tip shape**
straight

**Operating temperature range**
Basic PT100 TF:
- -50 °C ... 200 °C
  (-58 °F ... 392 °F)
Typ K:
- max. 1.100 °C
  (max. 2.012 °F)

**Max. process pressure (static)**
depending on the configuration

**Accuracy**
Class A acc. to IEC 60751
Class B acc. to IEC 60751
Class standard acc. to ASTM E230
Class 2 acc. to IEC 60584-2

**Response time**
t90 around 100 s
depending on configuration
Thermometer

Integration head transmitter
yes (4 ... 20 mA; HART)

More information www.endress.com/TM121