EPIC® SENSORS T-MP / W-MP or T-MPT / W-MPT

Multi-point temperature sensor

Features
- temperature range -200...+1200 °C
- multi-point measurement
- Pt100 or thermocouple as sensing element
- AISI 316L or INCONEL 600 as standard delivery material, other materials on request
- available with a connection box
- Pt100 accuracy class A as standard delivery
- thermocouple accuracy class 1 as standard delivery
- MI cable structured sensor elements
- bendable
- vibration proof structure
- Flexible armoured conduit version available
- changeable measurement elements
- tailored solutions according to customer specific needs.

Typical applications
- energy and power plant technology
- process industry
- chemical industry
- machinery and vessel construction
- manufacturing industry.

Technical data

<table>
<thead>
<tr>
<th>Materials</th>
<th>AISI 316L, maximum temperature +550 °C, temporarily +600 °C, INCONEL 600, max. temperature +1000 °C, temporarily +1200 °C, other materials on request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange material</td>
<td>AISI 316L, max. temperature +550 °C, temporarily +600 °C, other flange materials on request</td>
</tr>
<tr>
<td>Flange type</td>
<td>Flange type according to ANSI, EN 1092-1, other flange types on request</td>
</tr>
<tr>
<td>Diameter of sensor elements</td>
<td>3 or 6 mm, other diameters on request</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Enclosure according to customer specific needs</td>
</tr>
</tbody>
</table>
| Cable material            | SIL = silicone, max. +180 °C  
FEP = Teflon®, max. +205 °C  
GGD = glass silk cable/metal braid jacket, max. +350 °C  
SDS = silicone wire insulation/braid shield/silicone jacket, only available as 2 wire cable, max. +180 °C  
TDT = Teflon® wire insulation/braid shield/Teflon® jacket, max. +205 °C  
FDS = FEP wire insulation/braid shield/silicone jacket, max. +180 °C  
FS = FEP wire insulation/silicone jacket, max. +180 °C  
CON = no cable, individual single wires, FEP wire insulation, max. +205 °C |
| Tolerances Pt100 (IEC 60751) | A tolerance ±0.15 + 0.002 x t, operating temperature -100...+450 °C  
B tolerance ±0.3 + 0.005 x t, operating temperature -196...+600 °C  
B 1/3 DIN, tolerance ±1/3 x (0.3 + 0.005 x t), operating temperature -196...+600 °C  
B 1/10 DIN, tolerance ±1/10 x (0.3 + 0.005 x t), operating temperature -196...+600 °C |
| Tolerances thermocouple (IEC 60584) | Type J tolerance class 1 = -40...375 °C ±1.5 °C, 375...750 °C ±0.004 x t  
Type K and N tolerance class 1 = -40...375 °C ±1.5 °C, 375...1000 °C ±0.004 x t |
| Temperature range Pt100   | -200...+550 °C, depending on materials                                                                                                                                                           |
| Temperature range thermocouple | -200...+1200 °C, depending on thermocouple type, neck pipe length and other materials                                                                                                             |
| Approvals                 | METROLOGICAL PATTERN APPROVAL                                                                                                                                                                   |
| Quality certificate       | ISO 9001:2015 issued by DNV                                                                                                                                                                     |
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Pt100 connections

1x Pt100, Class A, 3-wire, connection acc. to standards EN 60751

1x Pt100, Class A, 4-wire, connection acc. to standards EN 60751

2x Pt100, Class A, 4-wire, connection acc. to standards EN 60751

Thermoelement connections

Thermocouple, Type J, Class 1, Acc. to standard EN 60584-1

Thermocouple, Type K, Class 1, Acc. to standard EN 60584-1

Thermocouple, Type N, Class 1, Acc. to standard EN 60584-1
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Drawing

Product code key


- W = Pt100 resistance thermometer
- 2xW = 2 x Pt100 resistance thermometer
- nxW = n x Pt100 resistance thermometer
- T = thermocouple
- 2xT = 2 x thermocouple
- nxT = n x thermocouple
- MP = multipoint sensor, no armour
- MPT = multipoint sensor, with armour
- 3, 6 = outer diameter of sensor elements (ØOD) [mm]
- 2500/... = sensor element lengths [mm]
- DN25/PN40, DN40/PN40, DN50/PN16, DN80/PN16, DN80/PN40 = flange size / flange thickness
- (only typical stocked values listed)
- (all flange sizes available)
- (please contact our sales for more information)
- 4, 3, 2 = Pt100 wire count
- A, B = Pt100 accuracy class, (class A as standard delivery)
- K, N, J = thermocouple type
- 1, 2, 3 = thermocouple accuracy class, (class 1 as standard delivery)
- TR = wires for transmitter connection
- CB = with ceramic terminal block
- empty BOX = no junction box
- BOX = supplied with junction box,
  (add info of supplier, type, etc. to the text line)
- X = additional details on the text line