

## 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
- mineral insulated cable
- bendable
- vibration proof structure
- Flexible armoured conduit version available
- changeable measurement elements
- tailored solutions according to customer specific needs
- ATEX and IECEx compatible Ex i versions available
- 3D step models available on request.

#### Typical applications

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



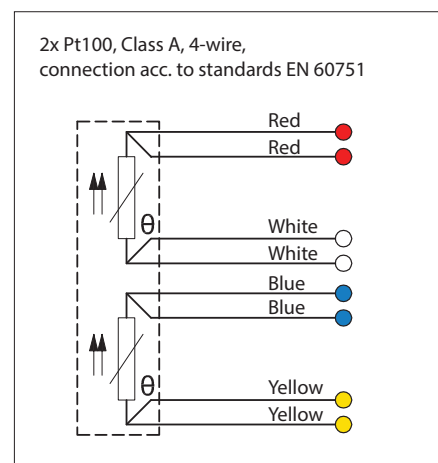
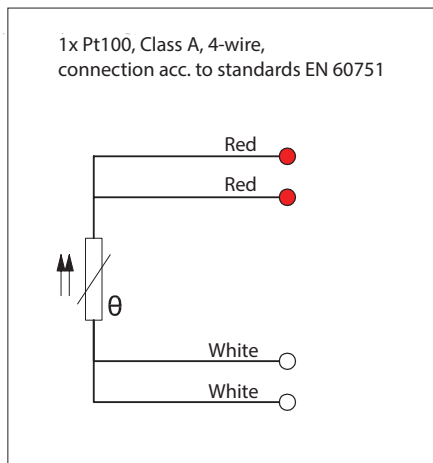
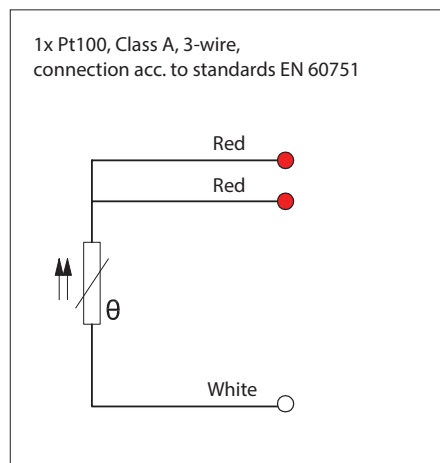
#### Technical data

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>*) Materials</b>                        | AISI 316L, maximum temperature +550 °C, temporarily +600 °C, INCONEL 600, max. temperature +1000 °C, temporarily +1200 °C, other materials on request                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Flange material</b>                     | AISI 316L, max. temperature +550 °C, temporarily +600 °C, other flange materials on request                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Flange type</b>                         | Flange type according to ANSI, EN 1092-1, other flange types on request                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Diameter of sensor elements</b>         | 3 or 6 mm, other diameters on request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Enclosure</b>                           | Enclosure according to customer specific needs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cable material</b>                      | SIL = silicone, max. +180 °C<br>FEP = fluoropolymer, max. +205 °C<br>GGD = glass silk cable/metal braid jacket, max. +350 °C<br>FDF = FEP wire insulation/braid shield/FEP jacket, max. +205 °C<br>SDS = silicone wire insulation/braid shield/silicone jacket, only available as 2 wire cable, max. +180 °C<br>TDT = fluoropolymer wire insulation/braid shield/fluoropolymer jacket, max. +205 °C<br>FDS = FEP wire insulation/braid shield/silicone jacket, max. +180 °C<br>FS = FEP wire insulation/silicone jacket, max. +180 °C |
| <b>Tolerances Pt100 (IEC 60751)</b>        | AA tolerance $\pm 0.1 + 0.0017 \times t$ , operating temperature -50...+250 °C<br>A tolerance $\pm 0.15 + 0.002 \times t$ , operating temperature -100...+450 °C<br>B tolerance $\pm 0.3 + 0.005 \times t$ , operating temperature -196...+600 °C<br>B 1/3 DIN, 0.1 °C +0.5%, B1/10 DIN 0.03 °C +0.5%, operating temperature -196...+250 °C                                                                                                                                                                                           |
| <b>Tolerances thermocouple (IEC 60584)</b> | Type J tolerance class 1 = -40...375 °C $\pm 1.5$ °C, 375...750 °C $\pm 0.004 \times t$<br>Type K and N tolerance class 1 = -40...375 °C $\pm 1.5$ °C, 375...1000 °C $\pm 0.004 \times t$                                                                                                                                                                                                                                                                                                                                             |
| <b>*) Temperature range Pt100</b>          | -200...+550 °C, depending on materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>*) Temperature range thermocouple</b>   | -200...+1200 °C, depending on thermocouple type, neck pipe length and other materials                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Approvals</b>                           | ATEX, IECEx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Quality certificate</b>                 | ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 issued by DNV                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

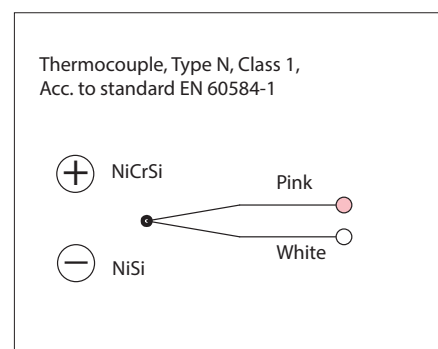
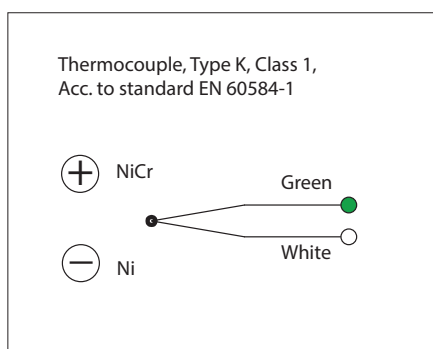
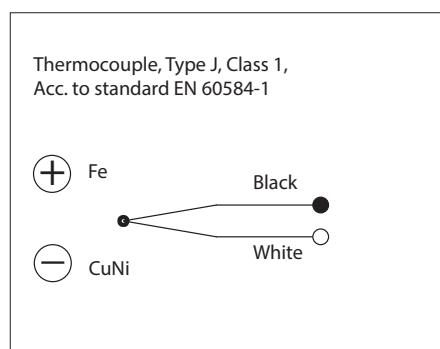
# EPIC® SENSORS T-MP / W-MP or T-MPT / W-MPT

## Multi-point temperature sensor

### Pt 100 connections



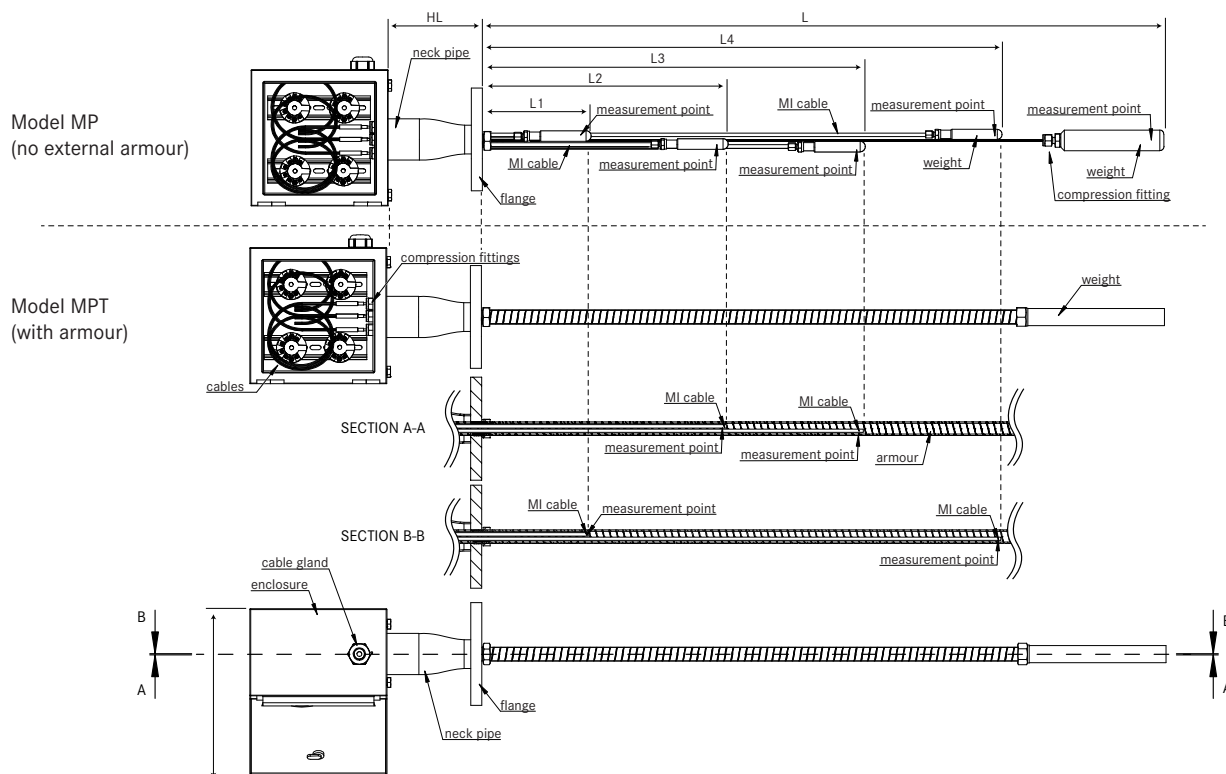
### Thermoelement connections



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

## Multi-point temperature sensor

### Drawing



### Product code key

n times the lengths, according to the amount of measurement points

Example code: 3XW — MPT — 3 / 2500/.../7500 — DN50/PN16 — 4 — A — TR — BOX — X

|           |                                                                                   |
|-----------|-----------------------------------------------------------------------------------|
| 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 | = flange size / flange thickness                                                  |
| DN50/PN40 | (only typical stocked values listed)                                              |
| DN80/PN16 | (all flange sizes available)                                                      |
| DN80/PN40 | (please contact our sales for more information)                                   |
| 4, 3, 2   | = Pt100 wire count                                                                |
| K, N, J   | = thermocouple type                                                               |
| A, B      | = Pt100 accuracy class, (class A as standard delivery)                            |
| 1, 2, 3   | = thermocouple accuracy class, (class 1 as standard delivery)                     |
| TR        | = wires for transmitter connection                                                |
| CB        | = with ceramic terminal block                                                     |
| empty     | = no junction box                                                                 |
| BOX       | = supplied with junction box, (add info of supplier, type, etc. to the text line) |
| EXI       | = Ex i certified sensor                                                           |
| X         | = additional details on the text line                                             |