

EPIC® SENSORS T-A-Ø / W-A-Ø or T-A-Ø-U / W-A-Ø-U

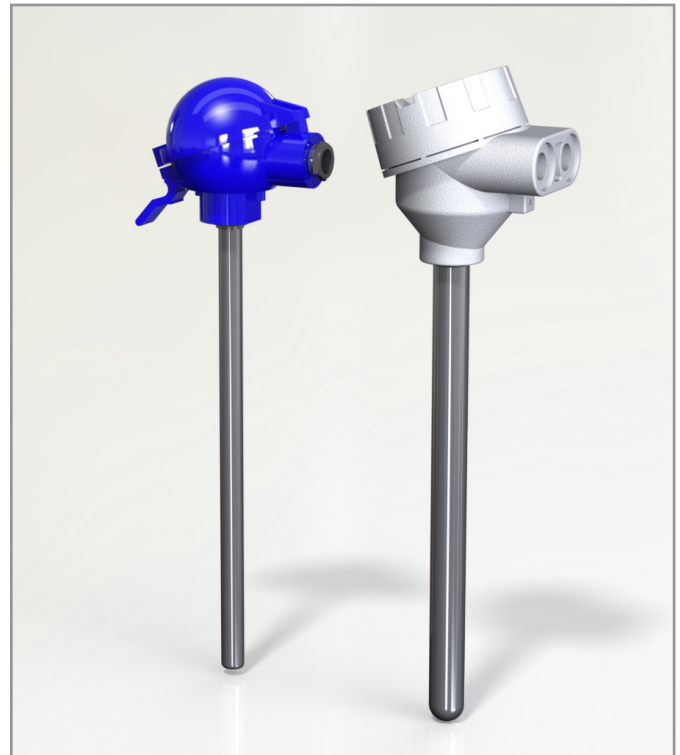
Immersible temperature sensor

Features

- according to DIN 43772 form 1
- temperature range *) -200...+1200 °C
- AISI 316L/EN1.4044 or heat-resistant steel AISI 446-1/EN1.4749 as typical material, other materials on request
- available with solid tip
- 200 mm as typical length for the solid tip
- Pt100 or thermocouple as sensing element
- Pt100 accuracy class A as standard delivery
- thermocouple accuracy class 1 as standard delivery
- MI cable structured sensor element
- internal sensor element replaceable on the fly
- tailored solutions according to customer specific needs
- ATEX and IECEx compatible Ex db and 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.



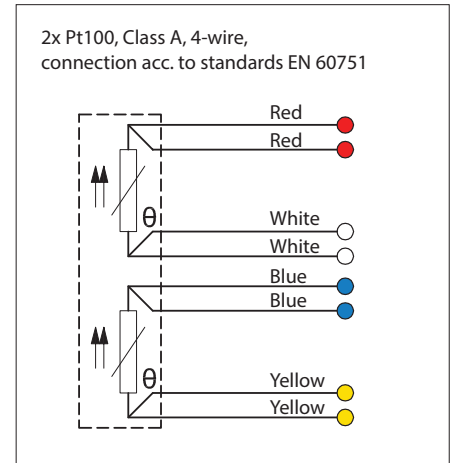
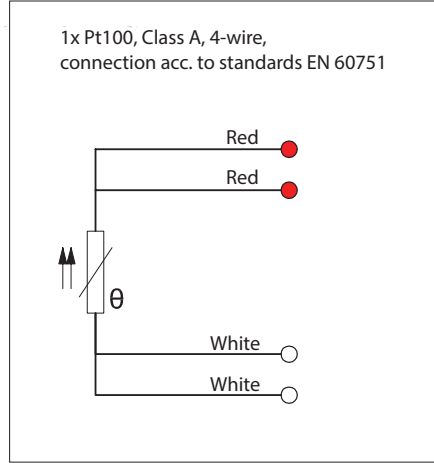
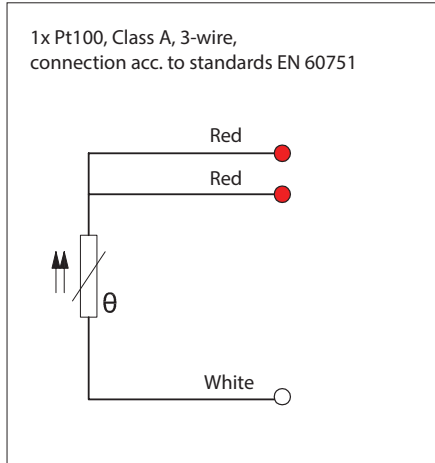
Technical data

| | |
|--|---|
| Thermowell material | AISI 316L/EN1.4044 max. temperature +550 °C, temporarily +600 °C, AISI 446-1/EN1.4749 max. temperature +1100 °C, temporarily +1200 °C Other materials on request |
| Thermowell tip material | AISI 316L/EN1.4044 max. temperature +550 °C, temporarily +600 °C AISI 446-1/EN1.4749 max. temperature +1100 °C, temporarily +1200 °C Other materials on request |
| Tolerances Pt100 (IEC 60751) | AA tolerance $\pm 0.1 + 0.0017 \times t$, operating temperature -50...+250 °C A tolerance $\pm 0.15 + 0.002 \times t$, operating temperature -100...+450 °C B tolerance $\pm 0.3 + 0.005 \times t$, operating temperature -196...+600 °C B 1/3 DIN, 0.1 °C +0.5%, B1/10 DIN 0.03 °C +0.5%, operating temperature -196...+250 °C |
| Tolerances thermocouple (IEC 60584) | Type J tolerance class 1 = -40...375 °C ± 1.5 °C, 375...750 °C $\pm 0.004 \times t$ Type K and N tolerance class 1 = -40...375 °C ± 1.5 °C, 375...1000 °C $\pm 0.004 \times t$ |
| *) Temperature range Pt100 | -200...+550 °C, depending on housing and thermowell materials |
| *) Temperature range thermocouple | -200...+1200 °C, depending on thermocouple type and thermowell materials |
| Approvals | ATEX, IECEx |
| Quality certificate | ISO 9001:2015 and ISO 14001:2015 issued by DNV |
| IP rating | IP65, higher IP rating on request |

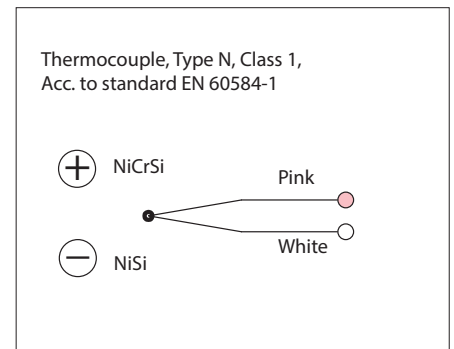
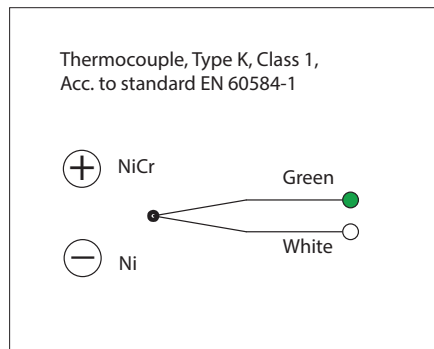
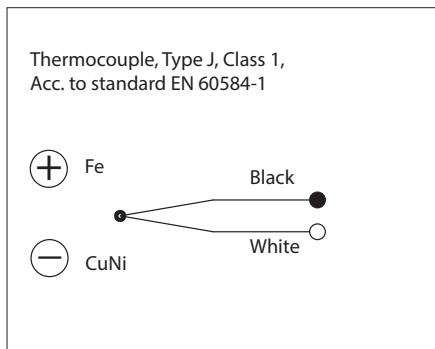
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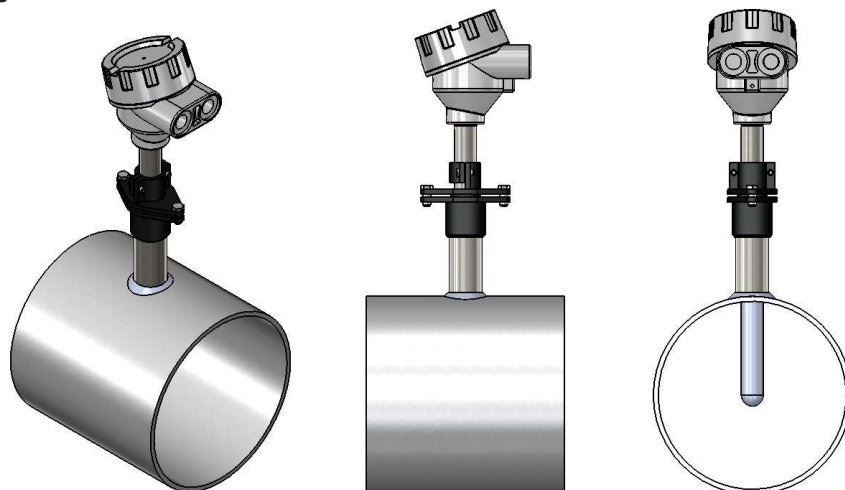
Pt100 connections



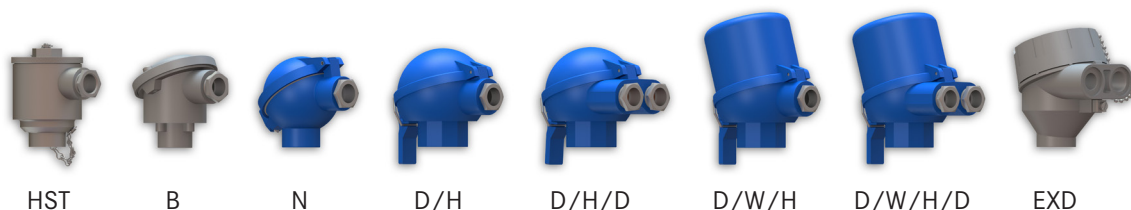
Thermoelement connections



Installation examples



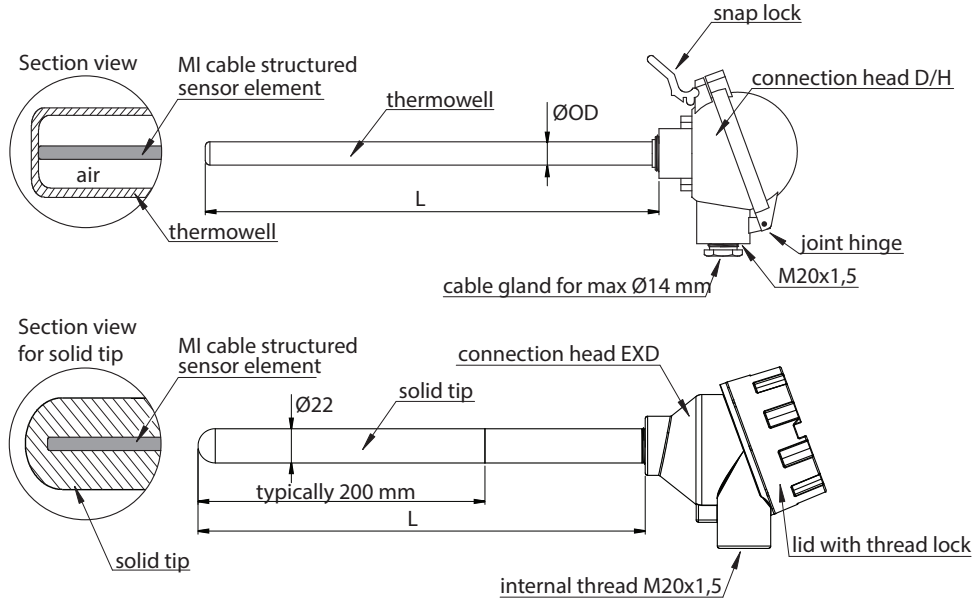
Connection heads



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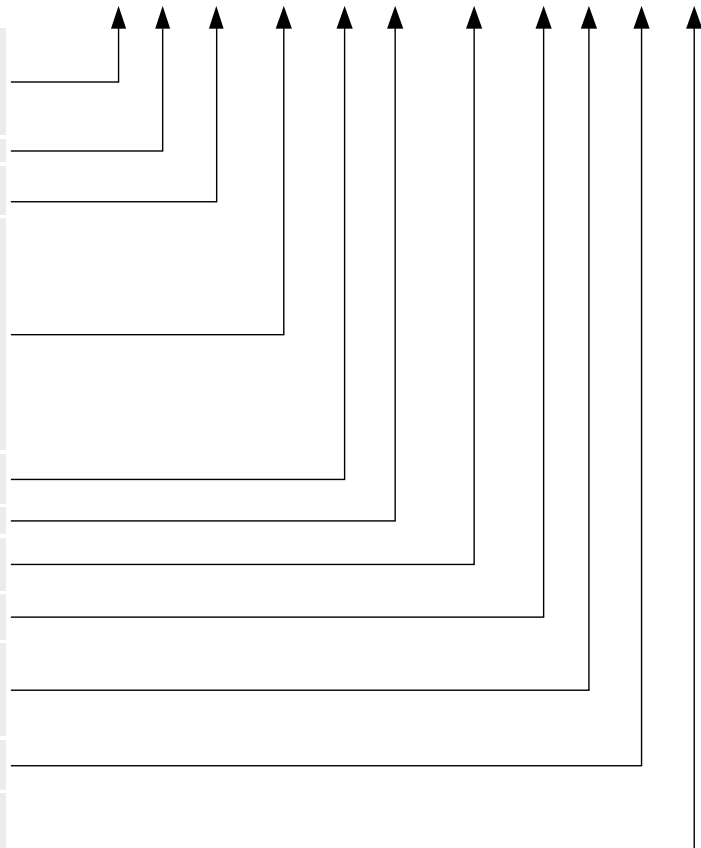
Drawing



Product code key

Example code: T — A — 22 — D/H — U / 1000 / 1.4749 — K — 1 — TR — X

| | |
|----------------|---|
| W | = Pt100 resistance thermometer |
| 2xW | = 2 x Pt100 resistance thermometer |
| T | = thermocouple |
| 2xT | = 2 x thermocouple |
| A | = immersible sensor type (constant in code) |
| 10, 22 | = outer diameter of sensor element (ØOD) [mm] (other diameters available on request) |
| B | = connection head B |
| D/H | = connection head with snap lock |
| D/H/D | = connection head with snap lock and double barrel (2x cable gland) |
| D/W/H | = high cover connection head with snap lock |
| D/W/H/D | = high cover connection head with snap lock and double barrel (2x cable gland) |
| EXD | = ATEX-compatible connection head |
| HST | = acid proof connection head |
| N | = connection head N |
| empty | = without solid tip |
| U | = with solid tip (tip length typically 200 mm) |
| 1000 | = length, L [mm] |
| 1.4404, 1.4749 | = thermowell or tip material, (other materials on request) |
| 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 |
| EXI | = Ex i certified sensor |
| X | = additional details on the text line |



W-A-22-EXD-500/1.4404-4-A-CB

Pt100 resistance thermometer for 4 wire measurement, Pt100 with accuracy class A, immersible sensor type, 22 mm diameter for sensor element, ATEX compatible housing, without solid tip, sensor length 500 mm, materials AISI316L/EN1.4404, with ceramic block for cable connection.