

## EPIC® SENSORS T-MAGN / W-MAGN

### Magnetic temperature sensor

#### Features

- temperature range -50...+350 °C
- quick installation
- Pt 100 or thermocouple as sensing element
- Pt 100 accuracy class A as standard delivery
- thermocouple accuracy class 1 as standard delivery
- AISI 316L as standard delivery material, other materials on request
- 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.

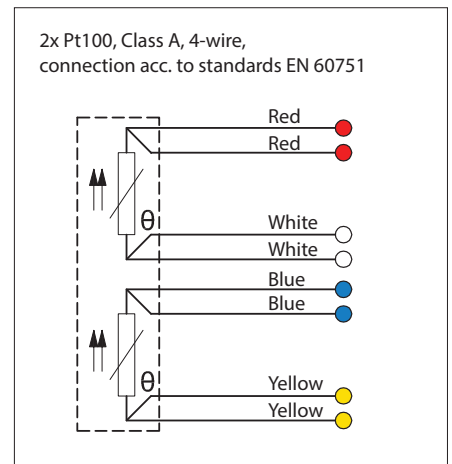
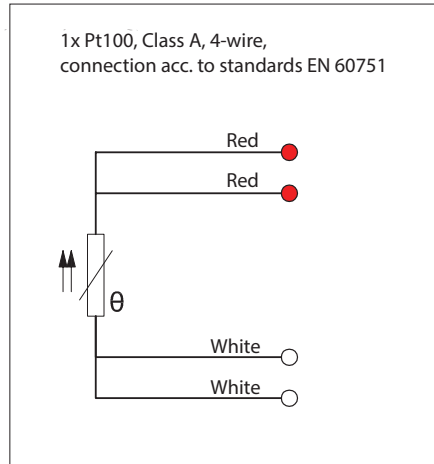
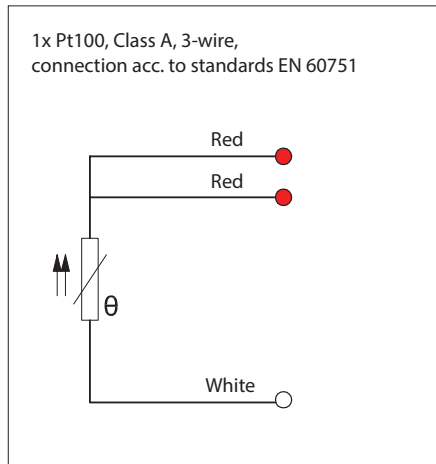


#### Technical data

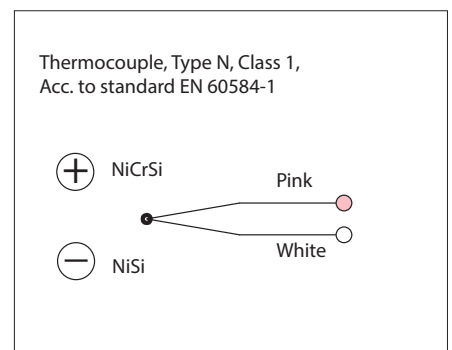
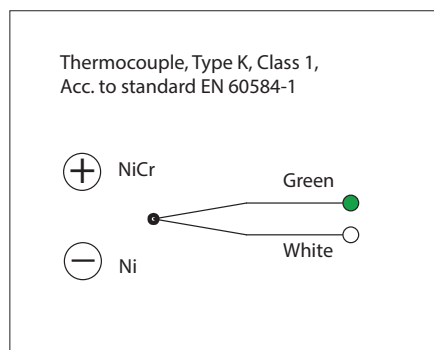
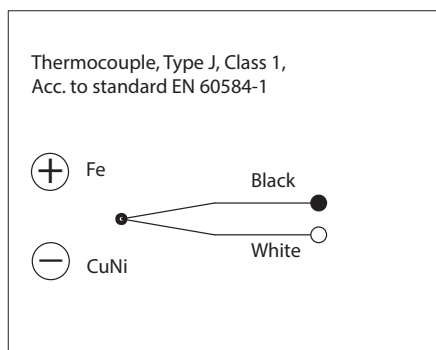
<b>Materials</b>	AISI 316L, max. temperature +250 °C, temporarily +350 °C, other materials on request
<b>Dimensions</b>	Small magnet, external Ø25 mm / height 7 mm, other dimensions on request Large magnet, external Ø60 mm / height 15 mm, other dimensions on request
<b>Cable materials</b>	SIL = silicone, max. +180 °C FEP = fluoropolymer, max. +205 °C GGD = glass silk cable/metal braid jacket, max. +350 °C FDF = FEP wire insulation/braid shield/FEP jacket, max. +205 °C SDS = silicone wire insulation/braid shield/silicone jacket, only available as 2 wire cable, max. +180 °C TDT = fluoropolymer wire insulation/braid shield/fluoropolymer jacket, max. +205 °C FDS = FEP wire insulation/braid shield/silicone jacket, max. +180 °C FS = FEP wire insulation/silicone jacket, max. +180 °C
<b>Tolerances Pt 100 (IEC 60751)</b>	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, tolerance $\pm 1/3 \times (0.3 + 0.005 \times t)$ , operating temperature -196...+600 °C B 1/10 DIN, tolerance $\pm 1/10 \times (0.3 + 0.005 \times t)$ , operating temperature -196...+600 °C
<b>Tolerances thermocouple (IEC 60584)</b>	Type J tolerance class 1 = -40...375 °C $\pm 1.5$ °C, 375...750 °C $\pm 0.004 \times t$ Type K and N tolerance class 1 = -40...375 °C $\pm 5$ °C, 375...1000 °C $\pm 0.004 \times t$
<b>Temperature range Pt 100</b>	-50...+350 °C for large magnet, depending on cable material -50...+200 °C for small magnet, depending on cable material
<b>Temperature range thermocouple</b>	-50...+350 °C for large magnet, depending on cable material -50...+200 °C for small magnet, depending on cable material
<b>Approvals</b>	ATEX, IECEx, METROLOGICAL PATTERN APPROVAL
<b>Quality certificate</b>	ISO 9001:2015 and ISO 14001:2015 issued by DNV

**EPIC® SENSORS T-MAGN / W-MAGN**  
**Magnetic temperature sensor**

**Pt100 connections**



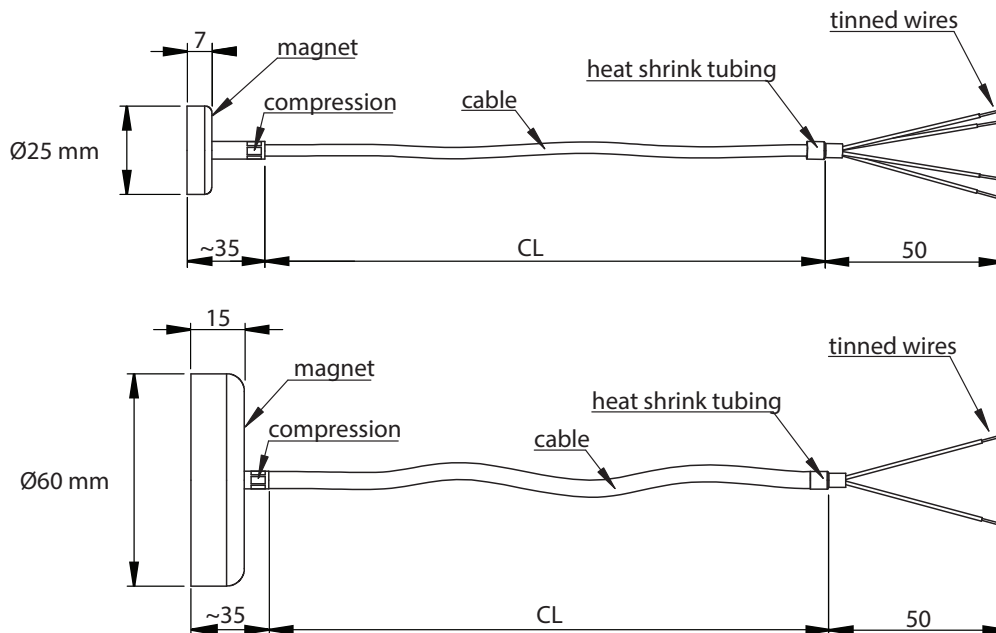
**Thermoelement connections**



**EPIC® SENSORS T-MAGN / W-MAGN**

Magnetic temperature sensor

**Drawing**



**Product code key**

Example code: W — MAGN — D25 — 5000 / SIL — 4 — A — X

W	= Pt100 resistance thermometer
2xW	= 2 x Pt100 resistance thermometer
T	= thermocouple
2xT	= 2 x thermocouple
MAGN	= magnetic sensor (constant in code)
D25	= magnet diameter
D60	
5000	= cable length, CL [mm]
SIL, FEP, GGD, FDF, TDT, SDS, FDS, FS	= cable material (for more information, look technical data on first page of the datasheet)
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)
EXI	= Ex i certified sensor
X	= additional details on the text line

