EPIC® SENSORS T-CABLE or W-CABLE
Temperature sensor with cable

Features

- temperature range –200...+350 °C
- Pt100 or thermocouple as sensing element
- AISI 316L as standard delivery material, other materials on request
- Pt100 accuracy class A as standard delivery
- thermocouple accuracy class 1 as standard delivery
- ATEX and IECEx compatible Ex e and Ex i versions available
- tailored solutions according to customer specific needs
- 3D step models available on request.

Typical applications

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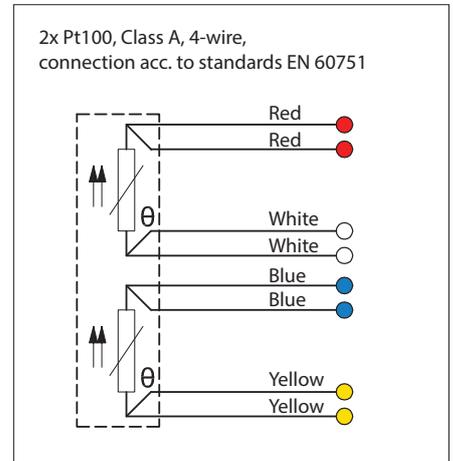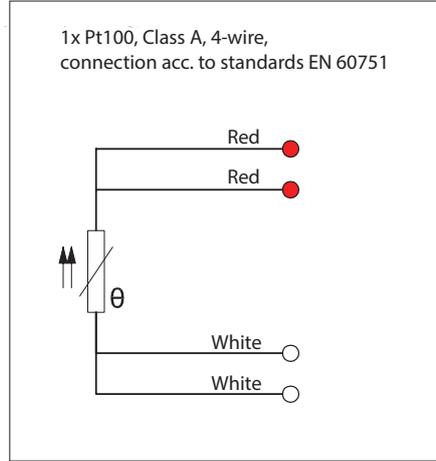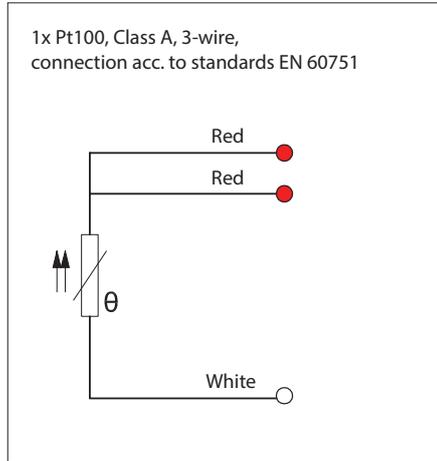- machinery and vessel construction
- manufacturing industry.

Technical data

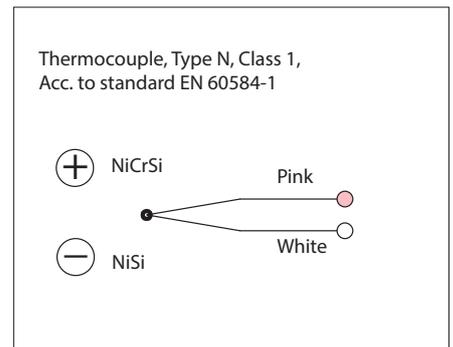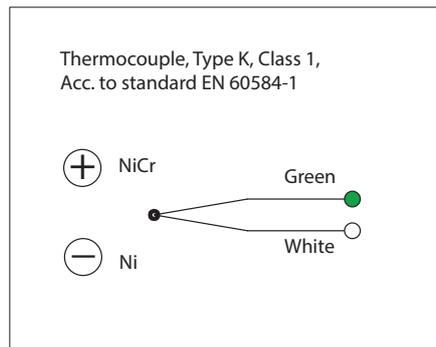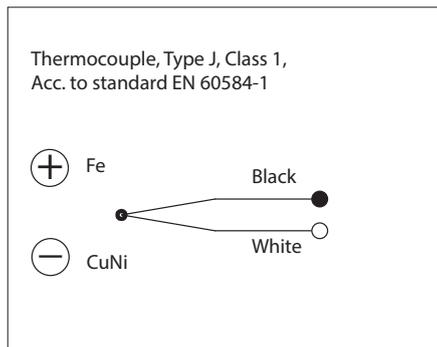| Materials	AISI 316L, maximum temperature +300 °C, temporarily +350 °C, other materials on request
Diameter	3, 4, 5, 6, 8 mm, other diameters on request
Cable materials	SIL = silicone, max. +180 °C FEP = fluoropolymer, max. +205 °C GGD = glass silk cable/metal braid jacket, max. +350 °C FDF = FEP wire 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
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...+350 °C, depending on cable material
Temperature range thermocouple	–200...+350 °C, depending on thermocouple type and cable material
Approvals	ATEX, IECEx, EAC Ex, METROLOGICAL PATTERN APPROVAL
Quality certificate	ISO 9001:2015 and ISO 14001:2015 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
Red ●	Red ●	Red ●
Red ●	Red ●	Red ●
θ	θ	White ○
White ○	White ○	White ○
	White ○	Blue ●
		Blue ●
		θ
		Yellow ●
		Yellow ●

Thermoelement connections

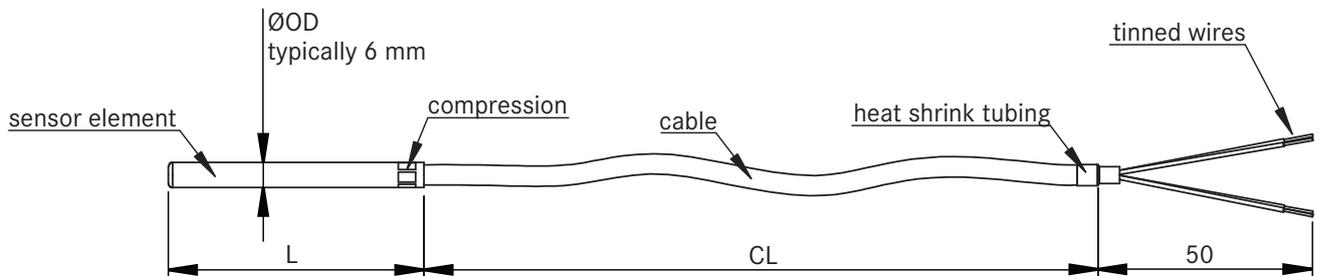| Thermocouple, Type J, Class 1, Acc. to standard EN 60584-1	Thermocouple, Type K, Class 1, Acc. to standard EN 60584-1	Thermocouple, Type N, Class 1, Acc. to standard EN 60584-1
⊕ Fe	⊕ NiCr	⊕ NiCrSi
Black ●	Green ●	Pink ●
White ○	White ○	White ○
⊖ CuNi	⊖ Ni	⊖ NiSi

Installation examples
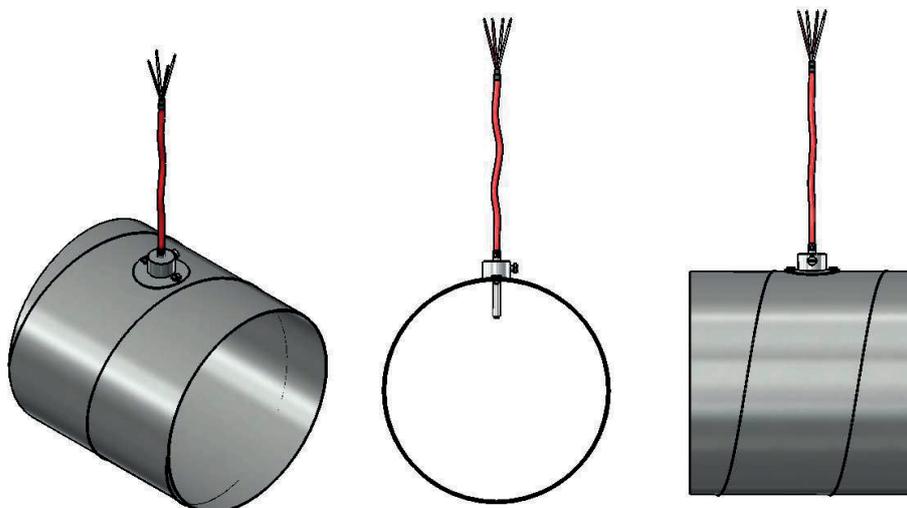
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Drawing

Product code key

Example code: W — CABLE — 6 / 100 — 5000 / SIL — 4 — A — X

W	= Pt100 resistance thermometer
2xW	= 2 x Pt100 resistance thermometer
T	= thermocouple
2xT	= 2 x thermocouple
CABLE	= cable sensor (constant in code)
3, 4, 5, 6, 8	= outer diameter of sensor element (ØOD) [mm] (other diameters on request)
100	= sensor element length, L [mm]
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)
EX	= Ex e certified sensor
EXI	= Ex i certified sensor
X	= additional details on the text line