

**EPIC® SENSORS T-F / W-F**

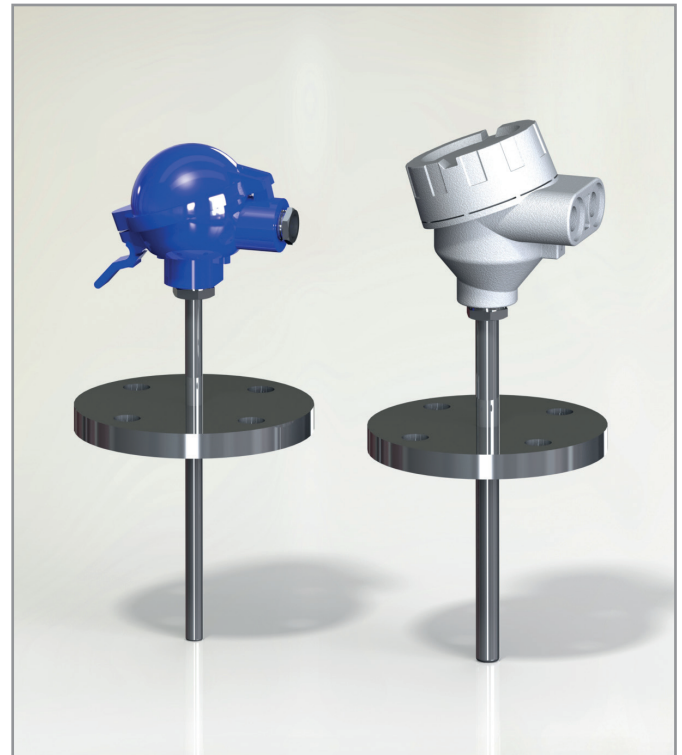
**Flanged temperature sensor**

**Features**

- according to DIN 43772 form 2F
- temperature range -200...+1200 °C
- neck pipe for heat source clearance
- AISI 316L as standard delivery material, other materials on request
- 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
- flange size and type according to customer application
- tailored solutions according to customer specific needs
- ATEX compatible Ex db version also available
- typical neck pipe length 145 mm, other lengths on request.

**Typical applications**

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

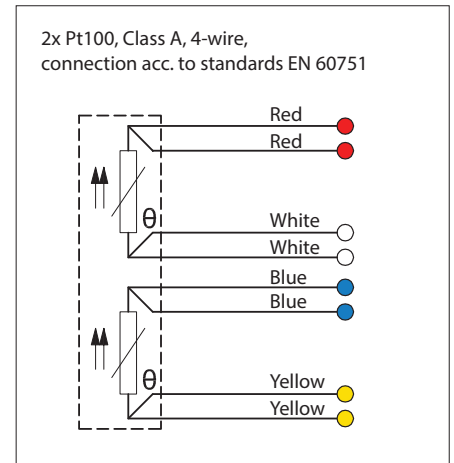
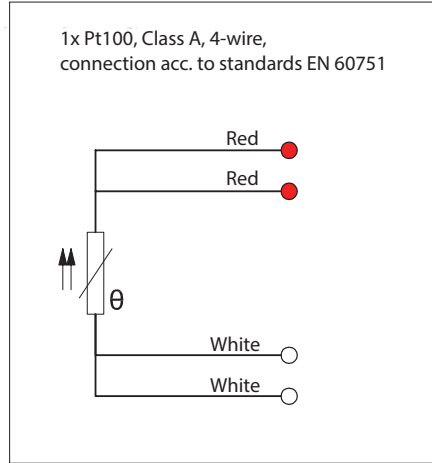
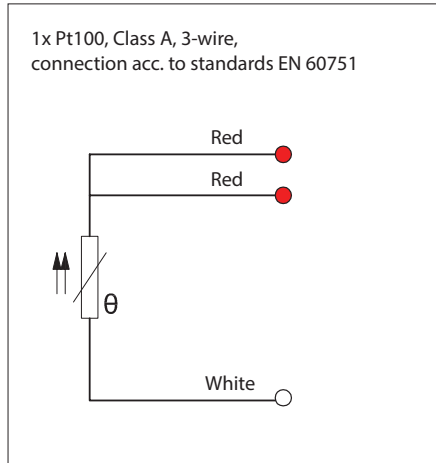


**Technical data**

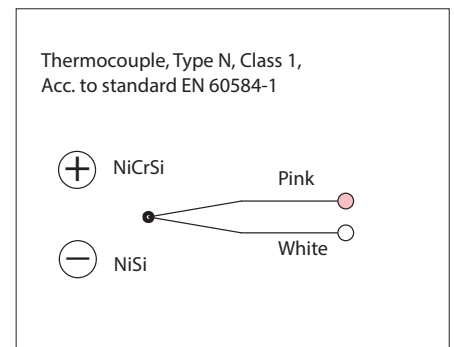
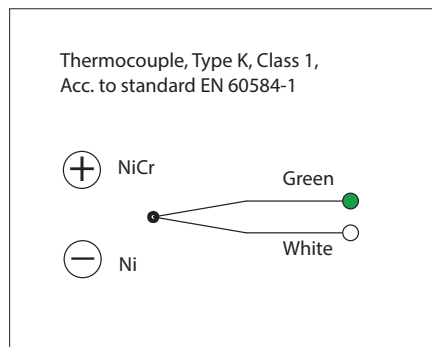
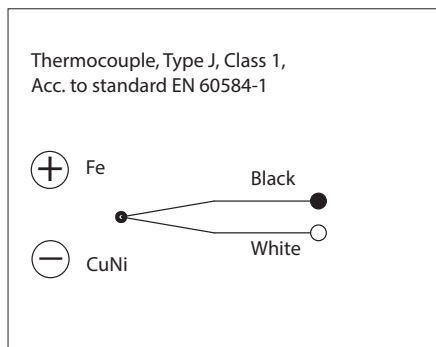
<b>Thermowell materials</b>	AISI 316L, maximum temperature +550 °C, temporarily +600 °C, Other materials on request
<b>Flange</b>	Flat face DIN EN 1092 -1, type 05A, other flange types on request
<b>Tolerances Pt 100 (IEC 60751)</b>	A tolerance $\pm 0.15 + 0.002 \times t$ , operating temperature -100...+450 °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 $\pm 1.5$ °C, 375...1000 °C $\pm 0.004 \times t$
<b>Temperature range Pt100</b>	-200...+550 °C
<b>Temperature range thermocouple</b>	-200...+1200 °C, depending on thermocouple type and cooling neck length Neck pipe length = 250 mm → temp. max. +750 °C Neck pipe length = 300 mm → temp. max. +1000 °C Neck pipe length = 350 mm → temp. max. +1200 °C
<b>Approvals</b>	ATEX, IECEx, EAC Ex, EAC EMC, METROLOGICAL PATTERN APPROVAL
<b>Quality certificate</b>	ISO 9001:2015 issued by DNV-GL
<b>IP rating</b>	IP65, higher IP rating on request

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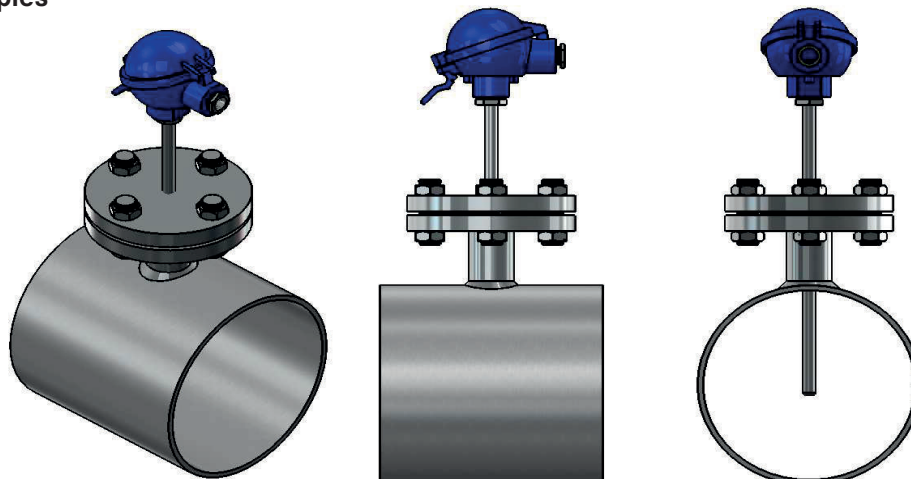
**Pt 100 connections**



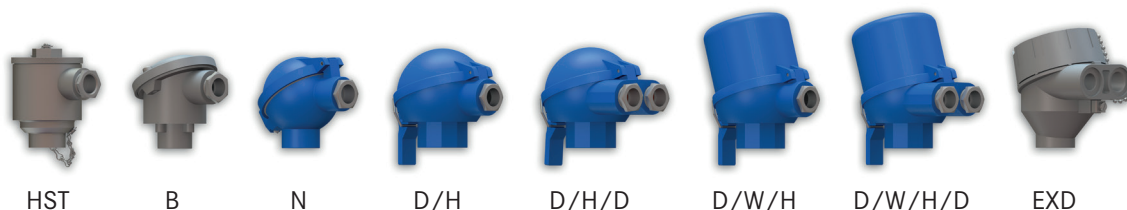
**Thermoelement connections**



**Installation examples**

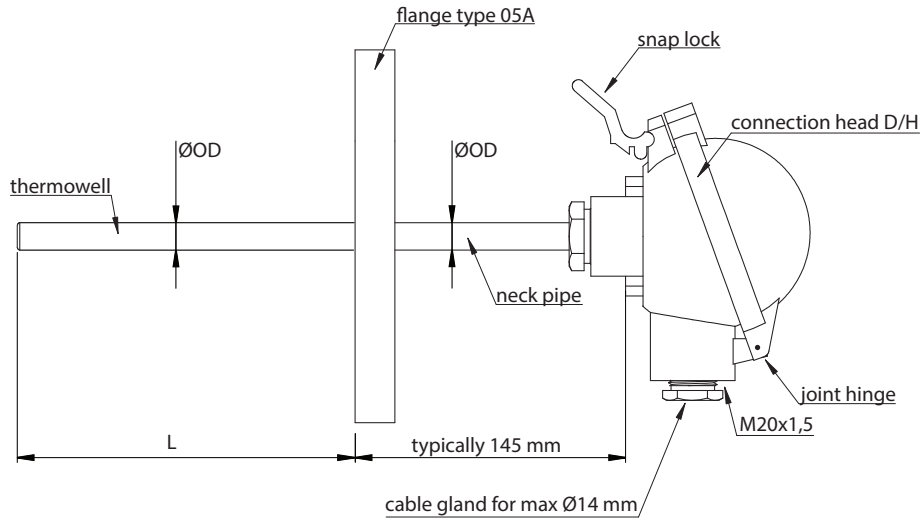


**Connection heads**



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**Drawing**



**Product code key**

Example code: W – F – 11 – D/W/H – 160 – DN50/PN40 – 4 – A – TR – X

W	= Pt100 resistance thermometer
2xW	= 2 x Pt100 resistance thermometer
T	= thermocouple
2xT	= 2 x thermocouple
F	= sensor with flange (constant in code)
11, 15, 22	= thermowell outer diameter (ØOD) [mm] (other diameters 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
160	= length, L [mm]
DN25/PN40	= flange size / flange thickness
DN50/PN40	(only typical stocked values listed)
DN80/PN40	(all flange sizes available)
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
X	= additional details on the text line

