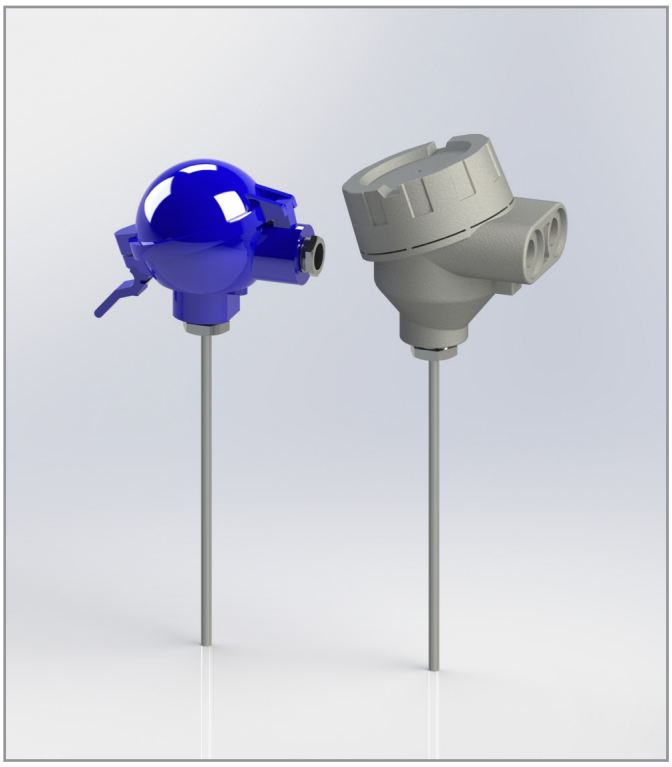
EPIC® SENSORS T-M-N / W-M-N

Mineral insulated insert with connection head

Features

- according to DIN 43721
- temperature range -200...+1200 °C
- AISI 316L or INCONEL 600 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
- bendable
- vibration proof
- typically used with compression fitting
- adjustable immersion length can be achieved
- 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

Materials	AISI 316L, maximum temperature +550 °C, temporarily +600 °C, INCONEL 600, maximum temperature +1100 °C, temporarily +1200 °C Other materials on request
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...+550 °C, depending on sensor element material and length
Temperature range thermocouple	-200...+1200 °C, depending on thermocouple type, sensor element material and length
Approvals	ATEX, IECEx, EAC Ex, EAC EMC, METROLOGICAL PATTERN APPROVAL
Quality certificate	ISO 9001:2015 and ISO 14001:2015 issued by DNV
IP rating	IP65, higher IP rating on request

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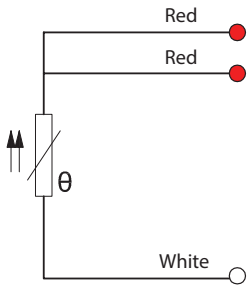
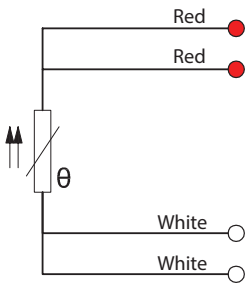
Pt100 connections

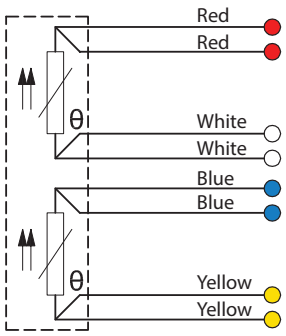
1x Pt100, Class A, 3-wire,
connection acc. to standards EN 60751



1x Pt100, Class A, 4-wire,
connection acc. to standards EN 60751

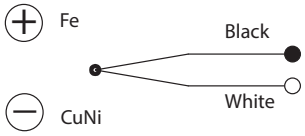


2x Pt100, Class A, 4-wire,
connection acc. to standards EN 60751

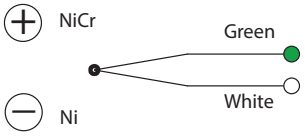


Thermoelement connections

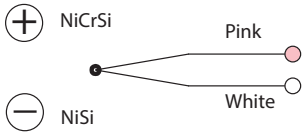
Thermocouple, Type J, Class 1,
Acc. to standard EN 60584-1



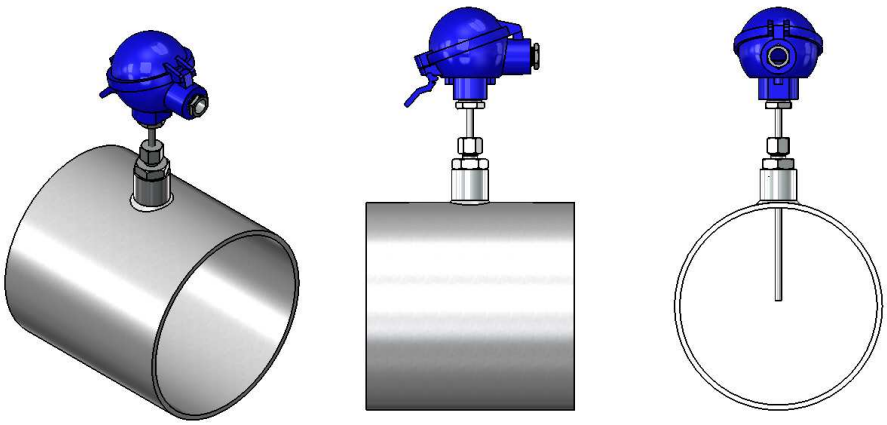
Thermocouple, Type K, Class 1,
Acc. to standard EN 60584-1



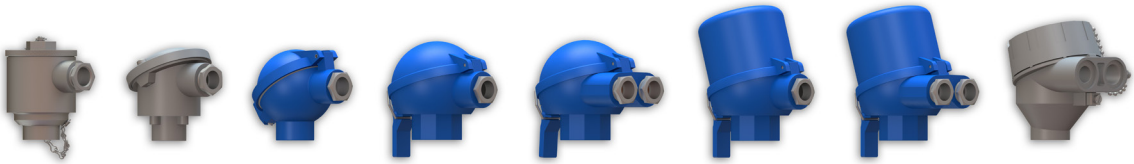
Thermocouple, Type N, Class 1,
Acc. to standard EN 60584-1



Installation examples



Connection heads



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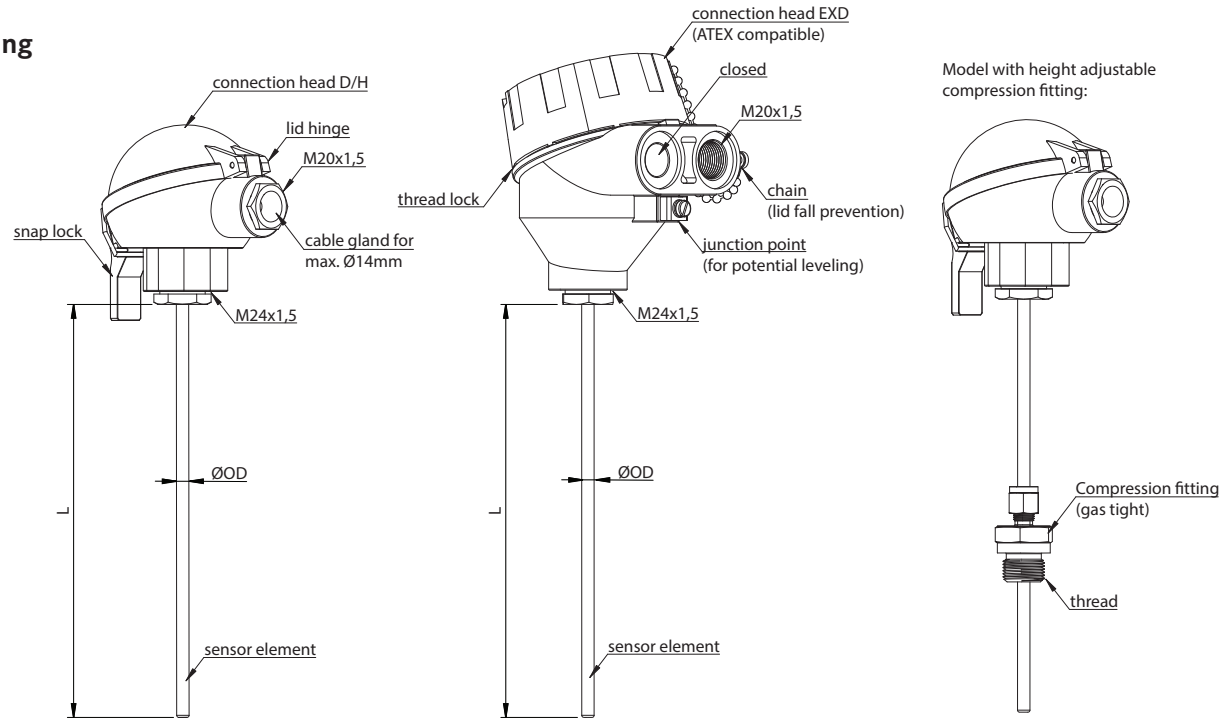
Drawing



Product code key

Example code: T — M — D/H — M18x1,5 — L / 6 / 1000 — K — 1 — CB — X

W	= Pt100 resistance thermometer
2xW	= 2 x Pt100 resistance thermometer
T	= thermocouple
2xT	= 2 x thermocouple
M	= mineral insulated sensor (constant in code)
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
M18x1,5	= thread of compression fitting
empty	= no compression fitting
L	= with height adjustable compression fitting
6, 8	= outer diameter of sensor element (ØOD) [mm] (other diameters on request)
1000	= length, L [mm]
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

T-M-D/W/H-6/5000-N-1-TR
Thermocouple, mineral insulated sensor type with connection head D/W/H, no thread between the sensor element and connection head, no compression fitting in the sensor element, the sensor element's diameter is 6 mm and length 5000 mm, thermocouple type N with accuracy class 1, connection head suitable for mA current transmitter housing.