

THERMOCOUPLE

Type XI-TT..I, XI-APTT..I

The sensor consists of an exchangeable measuring insert and aluminum connection head where mounting a temperature transmitter with 4-20 mA/HART® output signal is possible.

TECHNICAL DATA

Description

- intrinsically safe for mines MI, gas G and dust D atmospheres
- single and double TC
- measuring insert: mineral insulated
- without additional thermowell
- connection head types: XE-DANA (**G1**); XE-DANAW (**G2**); XE-DAND (**G5**); XE-DANDW (**G6**); XE-BE (**E1**); XE-BED (**E2**); IP65; ATEX II 2 GD (see technical information)
- cable gland ATEX I MI, II GD, IP65; (cable dia. 5.10mm)*
- output signal: TC or 4-20mA (option)

Design temperature range

-40 .. +1200°C (K)	for NiCr-NiAl (K)	K
-40 .. +700°C (J)	for Fe-CuNi (J)	J

Sensing element

1x or 2xNiCr-NiAl (K)	acc. to EN 60584-2 class 1, 2
1x or 2xFe-CuNi (J)	acc. to EN 60584-2 class 1, 2

Measuring insert, mineral insulated

Diameter d	Material	Ø3	Ø4,5	Ø6	Ø8
TC Type J	1.4401	450°C	550°C	700°C	-
TC Type K	INCONEL 600	900°C	1000°C	1200°C	1200°C

Temperature transmitter (option)

PR5334B3B, PR5335D (HART®)
FlexTop2212, FlexTop2222 (HART®)

Remarks

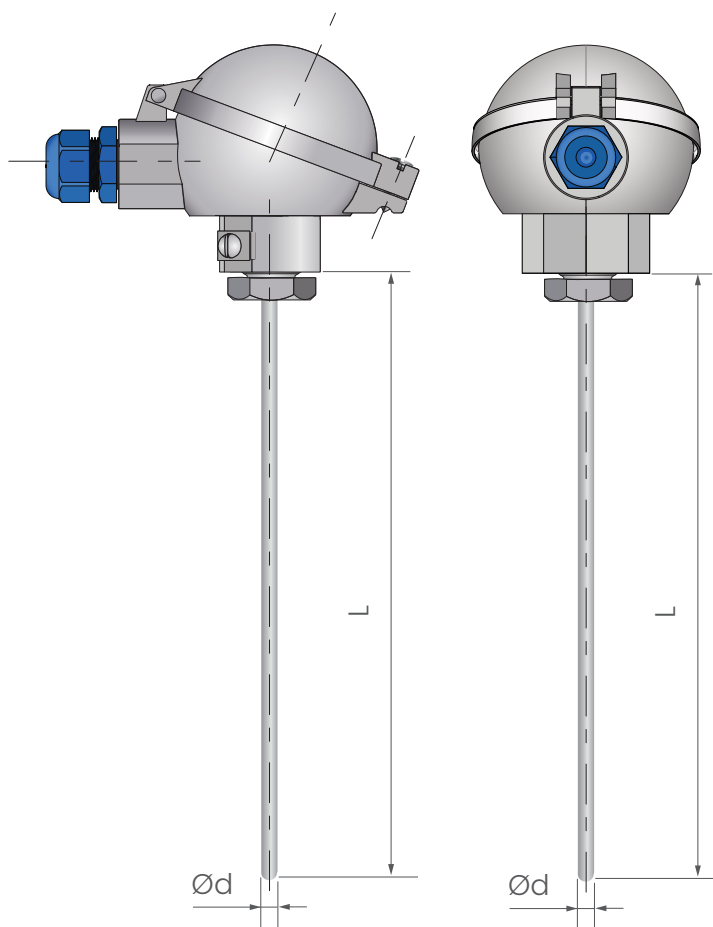
* other parameters on request

ATEX Marking:

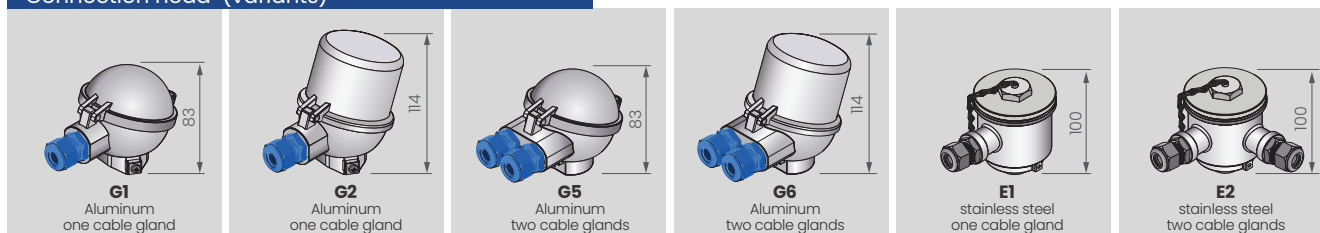
- CE MI Ex ia I Ma
- CE II 1/2 G Ex ia IIC T... Ga/Gb
- CE II 1/2 D Ex ia IIC T... Da/Db

EAC Ex Marking:

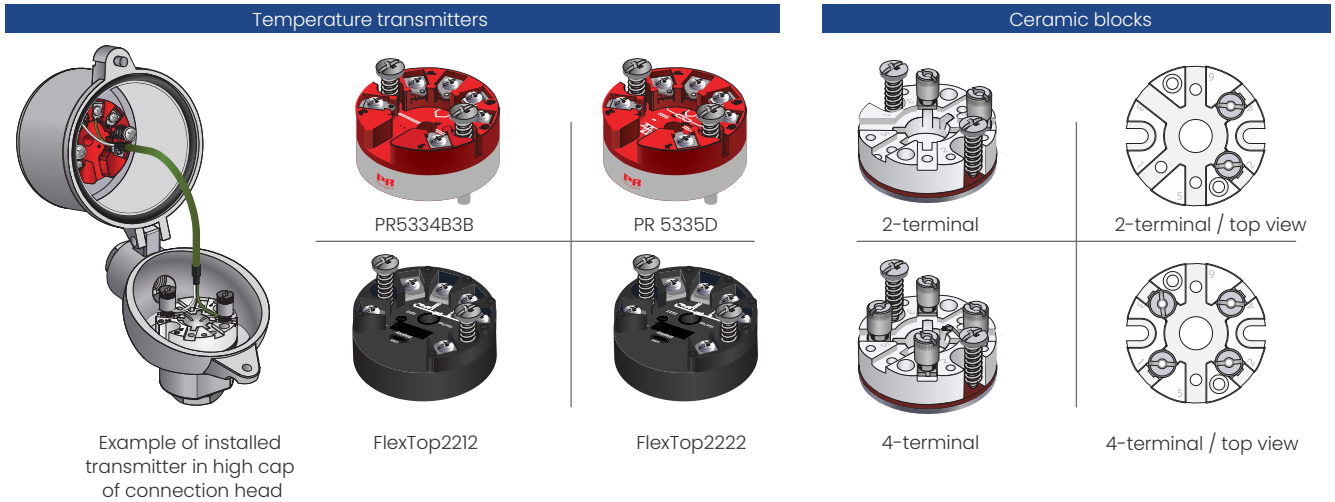
- PO Ex ia I Ma X
- 0Ex ia IIC T...Ga X
- 0Ex ia IIC T...Da X



Connection head (variants)



Temperature transmitter can be mounted inside a connection head of the sensor. There are two mounting options: directly on the measuring insert or in a high cap of the head. Advantage of the second solution is an easy replacement of the standard insert with a terminal block without need to dismantle the transmitter, which significantly reduces a time and cost of servicing the sensor and protects the connecting wires from damage. At the customer's request, it is possible to mount two transmitters. Temperature transmitter should be protected from temperatures over +85°C.



ORDERING CODE

Temperature sensor		XI -	1	2	3	TT	4	I	5	6	7	8	9	10	11	
with mineral insulated insert:	without mark															
without transmitter:	without mark															
with transmitter:	AP															
with two transmitters:	2AP															
single:	without mark															
double:	2															
thermocouple Fe-CuNi	J															
thermocouple NiCr-NiAl	K															
connection head type:	G1, G2, G 5, G6, E1, E2															
length L [mm]:	see specification															
diameter d [mm]:	3, 4.5, 6, 8															
TC Class	class 1 class 2															
measuring range for transmitter output 4-20 mA	(...) ^o C															
transmitter type	see specification															
diameter of supply cable (for cable other than)	5.10mm (...)															

EXAMPLE

Temperature sensor XI-TTKI-G1-500-6-1

3 5 6 7 8

Temperature sensor XI-APTTKI-G2-1000-4.5-1-(0-600)^oC-PR5334B3B

2 4 5 6 7 8 9 10