

THERMOCOUPLE

Type XD-TT..NT, XD-APTT..NT

The sensor consists of an exchangeable measuring insert, outer protective tube (thermowell) with neck and aluminum connection head where mounting a temperature transmitter with 4-20 mA/HART® output signal is possible.

The measuring insert represents the replaceable element of the complete sensor which reduces time and costs of maintenance of the measuring apparatus installed in the object. Spring fixation of the measuring insert provides perfect pressure to the bottom of the protecting tube, reduces time of reaction to changes of temperature and increases accuracy of measurement as well as reduces natural vibration thus mechanical and electrical defects can be avoided.

TECHNICAL DATA

Description

- flameproof for mines M2, gas G and dust D atmospheres
- single and double TC
- exchangeable mineral insulated measuring insert
- connection head types: XD-AD (**GW1, GW2**); XD-ADwin (**GW3, GW4**); XD-SD (**S1, S2**); IP65, ATEX II 2 GD (see technical information)
- flange DN20, DN25 with raised face acc. to PN-ISO 7005-1*
- cable gland ATEX I M2, II GD, IP65; (cable dia. 3.8mm)*
- output signal: TC or 4-20mA (option)
- local display LPI-02 (option)

Design temperature range

- 40 .. +800°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

Thermowell

- Material stainless steel 1.4541*
- Diameter D [mm] Ø9, Ø12 mm
- Length L [mm] 160, 200, 250, 400, 500 or other*

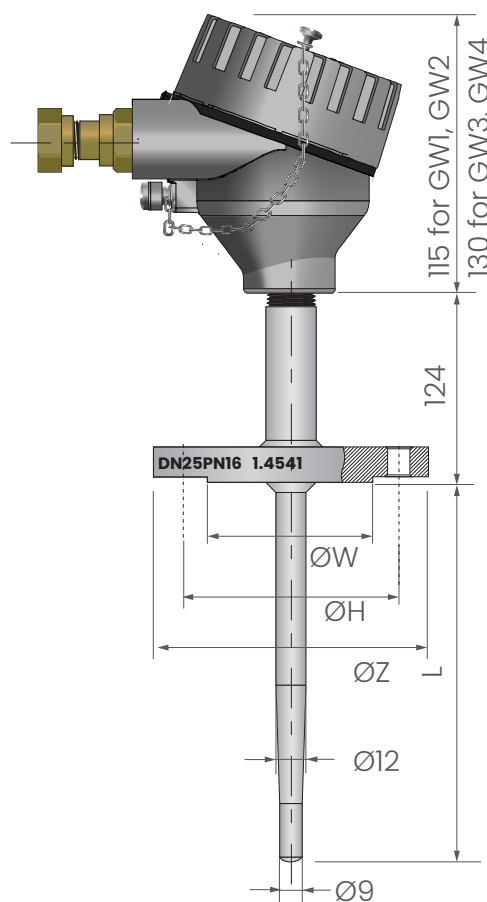
Temperature transmitter (option)

- PR5334A3B, PR5335A (HART®), FlexTop2202, FlexTop2212, FlexTop2222 (HART®)

Remarks

- * other parameters on request
- * local display LPI-02 (see technical information)

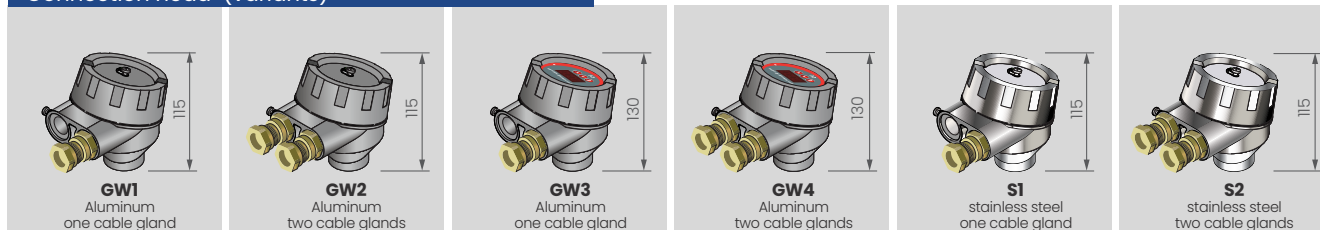
Flange	ØW [mm]	ØH[mm]	ØZ[mm]
DN 20	58	75	105
DN 25	68	85	115
DN 32	78	100	140
DN 40	88	110	150
DN 50	102	125	165



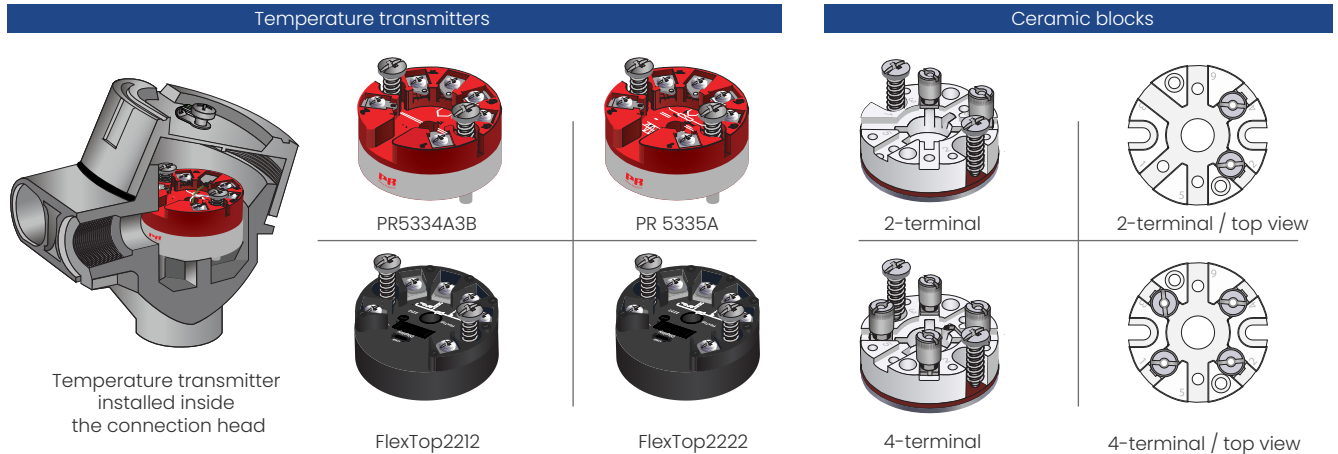
ATEX Marking: EAC Ex Marking:

- CE II M2 Ex db I Mb PB Ex d I Mb X
- CE II 1/2 G Ex db II C T... Ga/Gb Ga/Gb Ex d IIC T..X
- CE II 1/2 D Ex ta/tb IIIC T... Da/Db Ex ta/tb IIIC T..Da/Db X

Connection head (variants)



A transmitter can be built upon the measuring insert. In this case, the transmitter replaces the terminal block and is directly attached to the terminal plate of the measuring insert. The temperature transmitter should be protected from temperatures over +85 °C.



ORDERING CODE

Temperature sensor	XD -	1	2	3	TT	4	5	6	7	8	9	10	11	NT-
without transmitter: with transmitter: with two transmitters:	without mark AP 2AP													
single: double:	without mark 2													
thermocouple Fe-CuNi thermocouple NiCr-NiAl	J K													
connection head type:	GW1, GW 2, GW 3, GW4, S1, S2													
length L [mm]:	100, 160, 250, 400, 500 or other*													
diameter D [mm]:	9, 12													
flange type:	DN20, DN25 or other*													
TC Class	class 1 class 2													
measuring range for transmitter output 4-20 mA	(...)°C													
transmitter type	see specification													
diameter of supply cable (for cable other than)	3...8mm (...)													

EXAMPLE Temperature sensor XD-2TTKNT-GW1-400-12-DN20-1

3 4 5 6 7 8 9

Temperature sensor XD-APTJNT-GW2-200-9-DN25-2-(0-100)°C-PR5334A3B

1 3 4 5 6 7 8 9 10