

THERMOCOUPLE

Type XD-TT..SW, XD-APTT..SW

The sensor consists of an exchangeable measuring insert, drilled thermowell, 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)
- thermowell to weld-in, to high pressures Ø18h7, Ø24h7*
- 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 – standard DIN43772 form 4

Material steel 15HM (1.7335) or other*

Diameter D [mm]	Length L [mm]
Ø18 mm – SW1 ;	100/35, 140/65, 200/65
Ø24 mm – SW2	140/65, 200/65, 260/125

Temperature transmitter (option)

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

Remarks

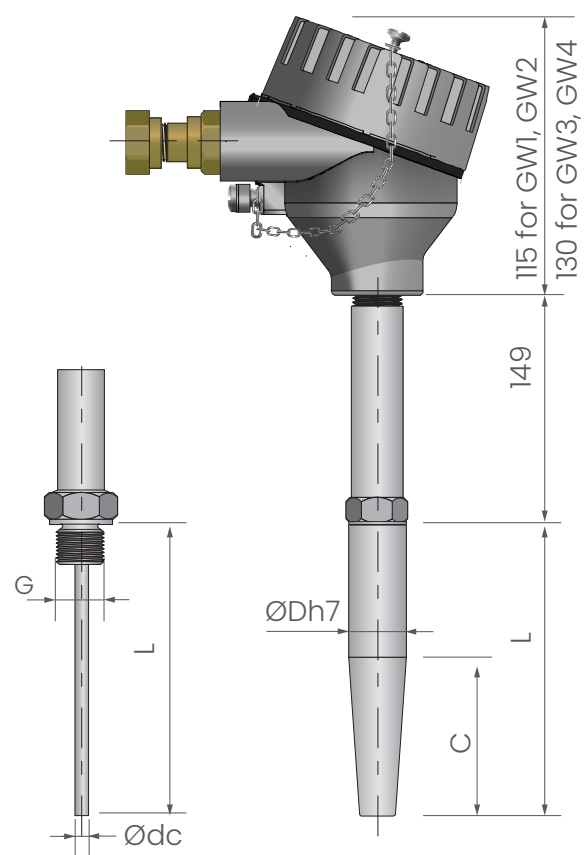
- * other parameters on request
- * local display LPI-02 (see technical information)

ATEX Marking:

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

EAC Ex Marking:

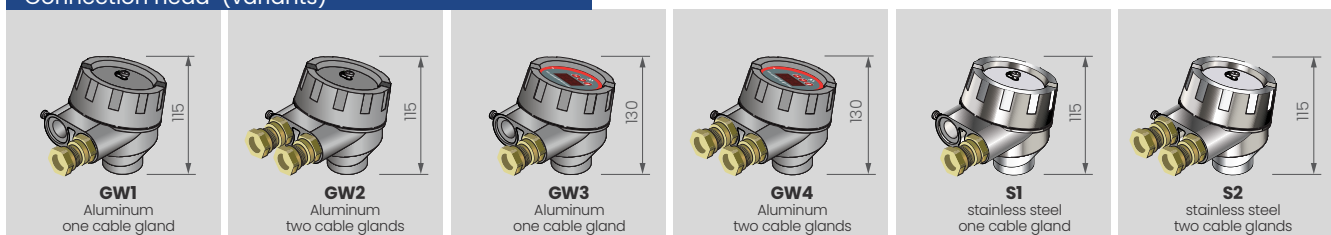
- PB Ex d I Mb X
- Ga/Gb Ex d IIC T..X
- Ex ta/tb IIIC T..Da/Db X



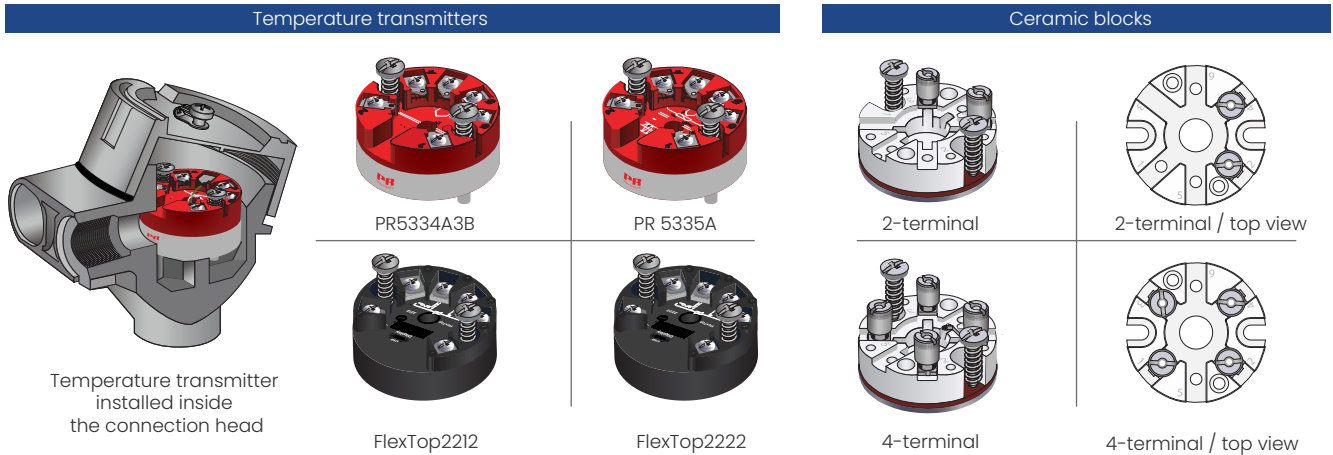
XD-TT..SW
(without thermowell)

XD-TT..SW
(with thermowell)

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	3	SW -	4	5	6	7	8	9	10	11
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: GW1, GW 2, GW 3, GW4, S1, S2															
length L [mm]: 100/35, 140/65, 200/65, 260/125 or other*															
diameter [mm]: 18 (SW1), 24 (SW2) or other*															
thermowell material: 1.7335, 1.7380 or other*															
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): 3..8mm (...)															

EXAMPLE

Temperature sensor XD-2TTKSW-GW1-260/65-24-1.7335-1

2 3 4 5 6 7

Temperature sensor XD-APTTKSW-GW2-200/65-18-1.7335-1-(0-500)^oC-PR5334A3B

1 3 4 5 6 7 8 9 10