

RESISTANCE THERMOMETER

Type XD-TOPT, XD-APTOPT

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 RTD
- exchangeable mineral insulated measuring insert
- without extra thermowell
- 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: RTD or 4-20mA (option)
- local display LPI-02 (option)

Design temperature range

-200 .. +550°C

Sensing element

1x or 2xPt100 acc. to EN 60751 class A, B

Thermowell

Material	stainless steel 1.4541*
Diameter D [mm]	Ø10, Ø11, Ø12, Ø14, Ø15
Length L [mm]	160, 200, 250, 400, 500 or other*

Temperature transmitter (option)

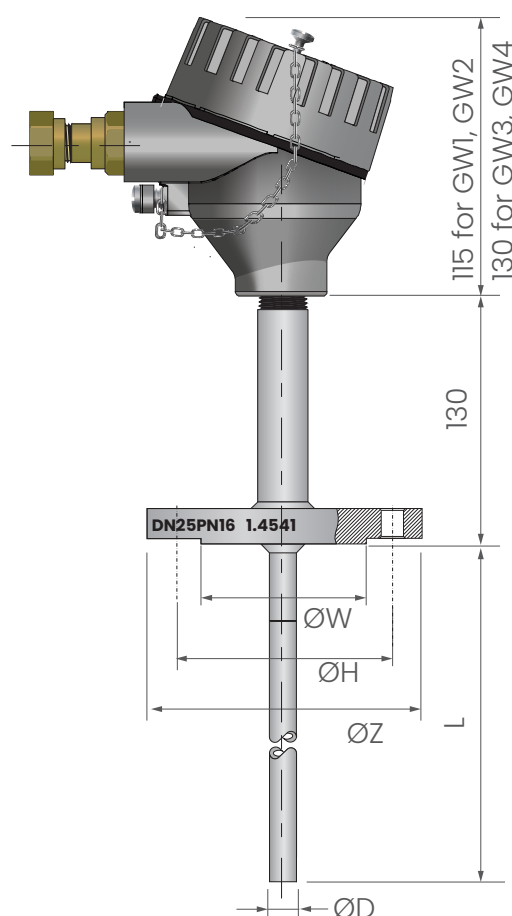
PR5333A, PR5335A (HART®),
FlexTop2202, FlexTop2212, FlexTop2222 (HART®)

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



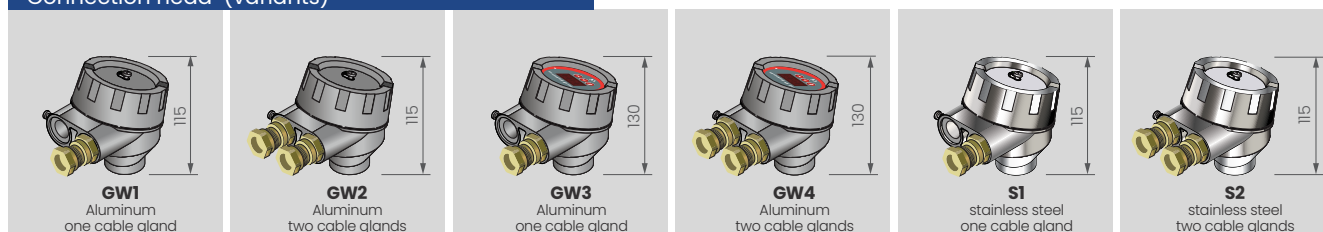
ATEX Marking:

- CE Ⓜ I 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

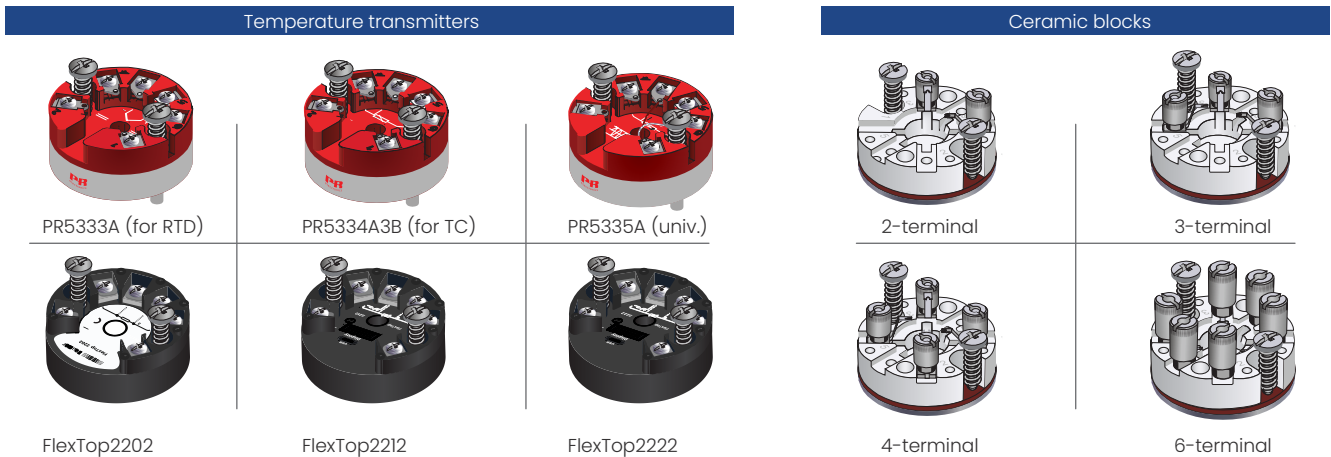
EAC Ex Marking:

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

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	TOPT -	3	4	5	6	7	8	9	10	11
without transmitter:	without mark													
with transmitter:	AP													
with two transmitters:	2AP													
single:	without mark													
double:	2													
connection head type:	GW1, GW 2, GW 3, GW4, S1, S2													
length L [mm]:	160, 200, 250, 400, 500 or other*													
diameter D [mm]:	10, 11, 12, 14, 15 or other*													
flange type:	DN20, DN25 or other*													
RTD class:	A, B													
connection line	2, 3, 4 wire for 1xPt100; 2, 3 wire for 2xPt100													
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-TOPT-GWI-250-12-DN20-A-4

3 4 5 6 7 8

Temperature sensor XD-APTOPT-GWI-500-14-DN25-A-3-(0-400)°C-PR5333A

1 3 4 5 6 7 8 9 10