

### RESISTANCE THERMOMETER

#### Type XD-TOPFT, XD-APTOPFT

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 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)
- thermowell of pressure with flange welded
- 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

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

#### Thermowell

Material 1.4541, 1.4571 or other\*  
 Diameter D [mm] custom  
 Length L [mm] custom

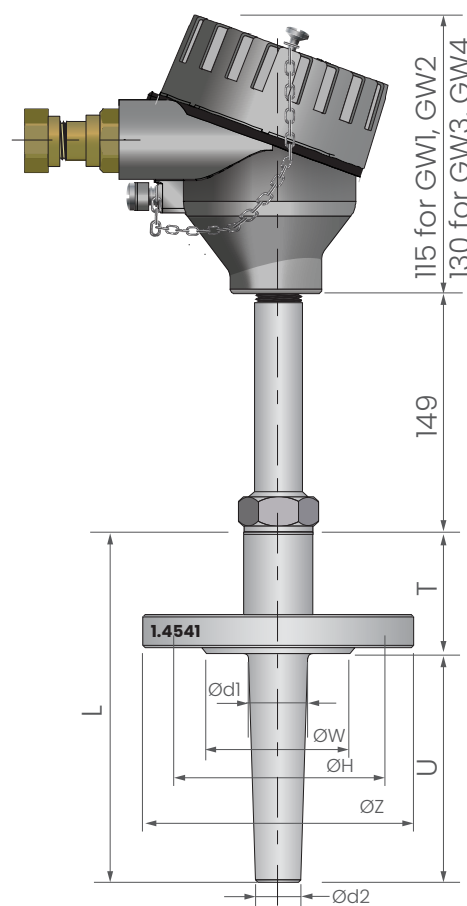
#### Temperature transmitter (option)

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



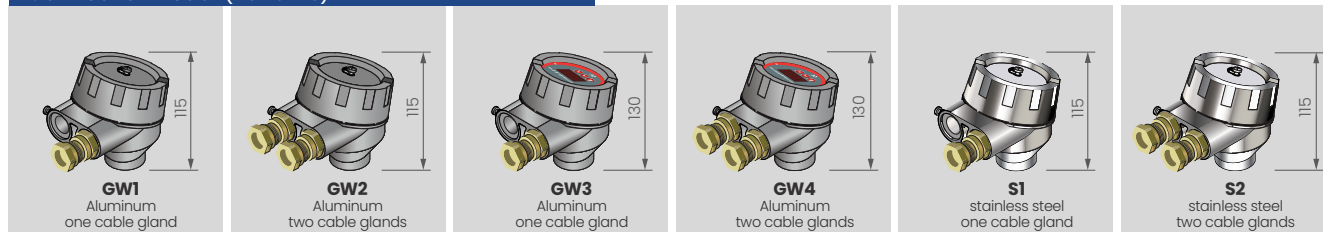
#### ATEX Marking:

- 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

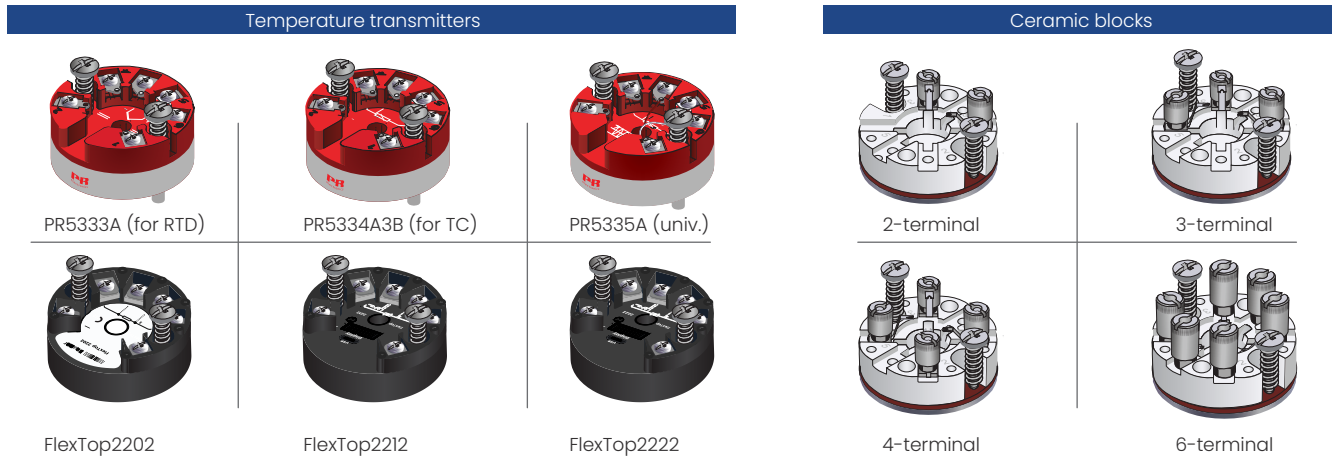
#### EAC Ex Marking:

- 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		1	2	3	4	5	6	7	8	9	10	11
without transmitter: without mark		XD - [ ] [ ] TOPFT - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]										
with transmitter: AP												
with two transmitters: 2AP												
single:	without mark											
double:	2											
connection head type:	GW1, GW 2, GW 3, GW4, S1, S2											
length U [mm]:	250, 400 or other*											
diameter D [mm]:												
flange type:	DN20, DN25 or other*											
RTD class:	A, B											
connection line	2, 3, 4 wire for 1xPt100; 2, 3wire 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-TOPFT-GW1-200-DN20-1.4541-A-4

3 4 5 6 7 8

Temperature sensor XD-APTOPFT-GW1-400-DN25-1.4571-A-3-(0-400)°C-PR5333A

1 3 4 5 6 7 8 9 10