

RESISTANCE THERMOMETER

Type XD-TOPSW, XD-APTOSW

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
- 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: 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 - 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)

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

Remarks

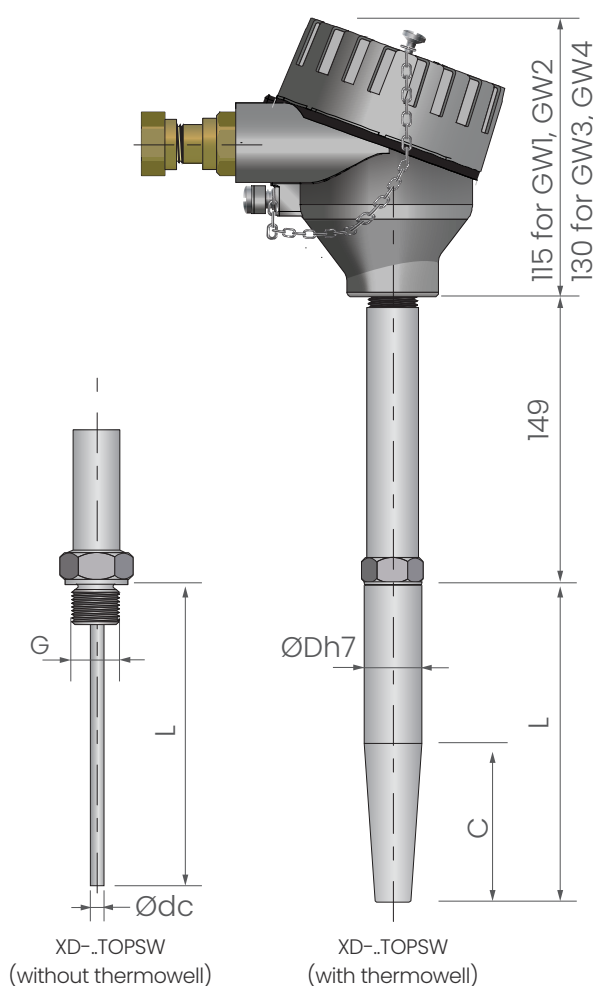
- * other parameters on request
- * local display LPI-02 (see technical information)

ATEX Marking:

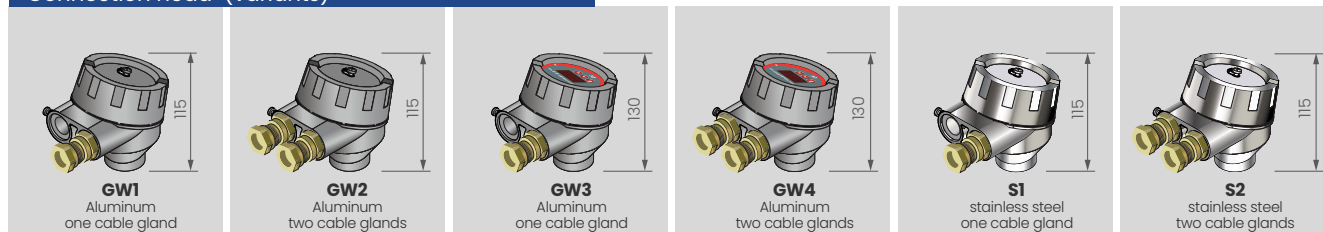
CE M2 Ex db I Mb
CE II 1/2 G Ex db II C T... Ga/Gb
CE II 1/2 D Ex ta/tb IIIC T... Da/Db

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											
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]:	100/35, 140/65, 200/65, 260/125 or other*											
diameter D [mm]:	18 (SW1), 24 (SW2) or other*											
thermowell material:	1.7335, 1.7380 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-TOPSW- GWI- 140/65- 18- 1.7335-A- 4

3 4 5 6 7 8

Temperature sensor XD-APTOSW-GWI-200/65-24-1.7380-A-3-(0-400)°C-PR5333A

1 3 4 5 6 7 8 9 10