

### MEASURING INSERTS

#### Type XD-..W2L, XD-AP..W2L

The measuring inserts for resistance thermometers and thermocouples described here are designed for installation in a protection assembly. Operation without thermowell is not recommended. These measuring inserts are made from flexible, mineral insulated sheathed cable. Apart from being flexible this model has outstanding resistance to vibration. Screwed-in nut placed on ceramic block provides comfortable connection with connecting cable.

This model is spring loaded to ensure that the measuring insert is firmly pressed down to the thermowell bottom, which provides quick response time and decrease of vibrations inside the thermowell.

### TECHNICAL DATA

#### Description

- flameproof for mines M2, gas G and dust D atmospheres
- single and double RTD and TC
- mineral insulated inserts
- output signal: RTD, TC or 4-20mA (option)

#### Design temperature range

-200 .. +600°C	for Pt100	<b>RTD</b>
-40 .. +1200°C	for NiCr-NiAl (K)	<b>K</b>
-40 .. +700°C	for Fe-CuNi (J)	<b>J</b>

#### Sensing element

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

#### Insert type, mineral insulated

	Material	Ø3	Ø4,5	Ø6	Ø8
TC Type J	1.454I	450°C	550°C	700°C	-
TC Type K	INCONEL 600	900°C	1000°C	1200°C	1200°C
RTD Pt100	1.454I	550°C	600°C	600°C	-
Length Lw [mm] :	custom				

#### Temperature transmitter (option)

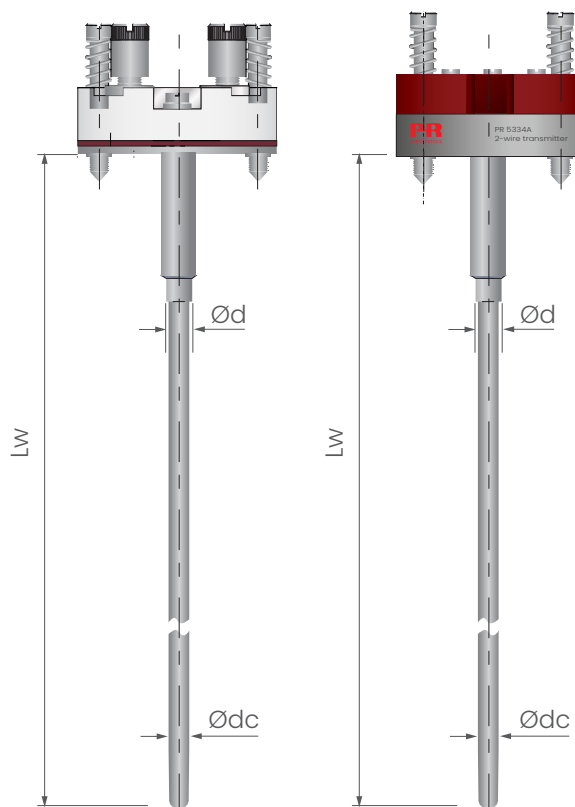
PR5333A, PR5334A3B, PR5335A (HART®),  
FlexTop2202, FlexTop2212, FlexTop2222 (HART®)

#### 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



Remarks  
\* other parameters on request

dc [mm]	d [mm]	
Ø3	Ø6	+0.06 -0.03
Ø4.5	Ø6	+0.06 -0.03
Ø6	Ø8	+0.06 -0.02
Ø8	Ø10	+0.06 -0.03

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**

Measuring insert		XD -	1	2	W2L	3	4	5	6	7	8	9
without transmitter:	AP											
without mark with transmitter:												
single:	2											
without mark double:												
RTD Pt: P	P											
Thermocouple NiCr-NiAl	K											
Thermocouple Fe-CuNi	J											
diameter dc [mm]	3; 4,5; 6; 8											
length L [mm]	see specification											
RTD class / TC class	A, B / 1, 2											
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											

**EXAMPLE** Measuring insert XD -W2L P- 6 - 315- A - 3

Measuring insert XD-APW2L P-6-525-A-3-(0-150)°C-PR5333A