

### MEASURING INSERTS

#### Type XI-..W, XI-AP..W

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

- intrinsically safe for mines MI, 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	1.4541	450°C	550°C	700°C	-
TC Type K	INCONEL 600	900°C	1000°C	1200°C	1200°C
RTD Pt100	1.4541	550°C	600°C	600°C	-
Length Lw [mm] :	custom				

#### Temperature transmitter (option)

PR5333D, PR5334A3B, PR5335D (HART®), PR5350B (Profibus®PA), FlexTop221I, FlexTop222I (HART®), FlexTop223I (Profibus®PA),

#### Remarks

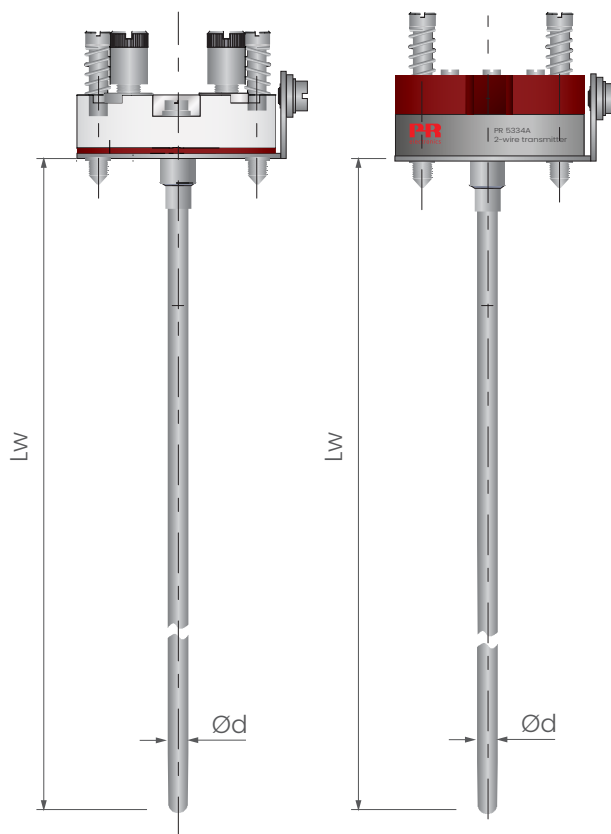
\* other parameters on request

#### ATEX Marking:

- ☉ I MI Ex ia I Ma
- ☉ II 1/2 G Ex ia II C T... Ga/Gb
- ☉ II 1/2 D Ex ia IIIC T... Da/Db

#### EAC Ex Marking:

- PO Ex ia I Ma X
- 0Ex ia IIC T..Ga X
- 0Ex ia IIIC T..Da X



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		XI - <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">2</span> W <span style="border: 1px solid black; padding: 2px;">3</span> <span style="border: 1px solid black; padding: 2px;">4</span> - <span style="border: 1px solid black; padding: 2px;">5</span> - <span style="border: 1px solid black; padding: 2px;">6</span> - <span style="border: 1px solid black; padding: 2px;">7</span> - <span style="border: 1px solid black; padding: 2px;">8</span> - <span style="border: 1px solid black; padding: 2px;">9</span> - <span style="border: 1px solid black; padding: 2px;">10</span>									
without transmitter:	AP										
without mark with transmitter:											
single:	without mark										
double:	2										
with mineral insulated insert:	2										
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 XI-W2P-6-315-A-3 3 4 5 6 7 8

Measuring insert XI-APW2P-6-525-A-3-(0-150)°C-PR5333D 1 3 4 5 6 7 8 9 10