Metallic protection tube resistance temperature detector
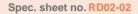## Model : R210 series

Service intended

Among temperature sensors, it is the most stable and accurate sensor.
It has a better repeatability, and shows more dependable outputs than thermocouple.
It is possible to perform an area measuring, and has a better resistance against the containment .
However, it has a slow response time due to its complexity of the resistance element and its big size.
It is constructed with an insulated lead wire and with protection tube which is designed to protect the insulated lead wire.
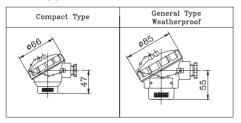
Standard features

Element
Pt 100Ω at 0℃

Head type

Compact Type	General Type Weatherproof
⌀66 / 47	⌀85 / 55

Tolerances on temperature reading
Class A : ± (0.15 + 0.002 l t l)
Class B : ± (0.3 + 0.005 l t l)

Head material
ALDC (Standard)
304SS (Not available compact type)
316SS (Not available compact type)

Temperature range
-200 ~ 250℃ (Mica type element)
-200 ~ 600℃ (Film type element)

Protecting tube material
304SS and 316SS

Protecting tube outer diameter
6.4, 8.0 and 10 mm

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1. Base model

R211   Metallic protection tube resistance temperature detector (Single element)

R212   Metallic protection tube resistance temperature detector (Double (Duplex) element)

2. Head type

A   General (Weatherproof)

L   Compact (Small)

3. Element

P   Pt 100Ω (B)

9   Pt 100Ω (A)

4. Tube material

0   304SS

1   316SS

9   Other

5. Protecting tube and sheath outer diameter (mm)

F9   6.4 (Double elements is not available)

G9   8.0

J9   10.0

6. Conduit connection

1   ½" PF

2   ½" PT

3   ½" NPT

4   ¾" PF

5   ¾" PT

6   ¾" NPT

9   Other

A   None (Extended lead wire type only)

7. Mounting type

X   Refer to mounting table (11th character)

8. Connection type

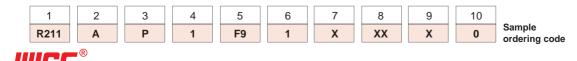**XX**   Refer to mounting table (12th and 13th character)

9. Insert length

X   Refer to insert length table (14th character)

10. Option

0   None

1   Accessories

4   Epoxy coated ALDC head

5   Head material : 304SS (Only for weatherproof head)

6   Head material : 316SS (Only for weatherproof head)

7   Accessories and epoxy coated ALDC head

8   Accessories and head material : 304SS (Only for weatherproof head)

9   Accessories and head material : 316SS (Only for weatherproof head)

1	2	3	4	5	6	7	8	9	10	
R211	A	P	1	F9	1	X	XX	X	0	**Sample ordering code**

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Mounting, connection type and insert length table - 11th thru 14th characters

11th character		12th character		13th character		14th character	
Code	Mounting	Code	Connection size and connector material	Code	Connection type	Code	Insert length (mm)
A	None	A	None	A	None	A	100 mm
	Fixed thread lag length						
B	80 mm	B	⅛" and 304SS	B	PT	B	200 mm
C	100 mm	C	¼" and 304SS	C	NPT	C	300 mm
D	150 mm	D	⅜" and 304SS	D	PF	D	400 mm
E	200 mm	E	½" and 304SS	E	NPS	E	500 mm
F	Other	F	¾" and 304SS	F	UNF	F	600 mm
	Fixed flange lag length						
G	80 mm	G	1" and 304SS	G	BSPT	G	700 mm
H	100 mm	H	1¼" and 304SS	H	BSPF	H	800 mm
J	150 mm	J	1½" and 304SS	J	MM	J	900 mm
	Fixed flange lag length						
K	200 mm	K	2" and 304SS	K	ANSI 150 Lb RF	K	1,000 mm
L	Other	L	3" and 304SS	L	ANSI 150 Lb FF	L	1,500 mm
M	Movable thread	M	⁷⁄₁₆" and 304SS	M	ANSI 300 Lb RF	M	2,000 mm
N	Movable flange	N	⅛" and 316SS	N	ANSI 300 Lb FF	N	2,500 mm
P	Compression fitting	P	¼" and 316SS	O	Sanitary	P	3,000 mm
				P	ANSI 600 Lb RF		
	Union and nipple length						
Q	100 mm length	Q	⅜" and 316SS	Q	ANSI 600 Lb FF	Q	3,500 mm
R	150 mm length	R	½" and 316SS	R	JIS 5K RF	R	4,000 mm
S	Other	S	¾" and 316SS	S	JIS 5K FF	S	4,500 mm
	Nipple length						
T	50 mm	T	1" and 316SS	T	JIS 10K RF	T	5,000 mm
U	100 mm	U	1¼" and 316SS	U	JIS 10K FF	U	6,000 mm
V	150 mm	V	1½" and 316SS	V	JIS 20K RF	V	7,000 mm
W	Other	W	2" and 316SS	W	JIS 20K FF	W	8,000 mm
X	Fixed thread	X	3" and 316SS	X	ANSI 1,500 Lb RTJ	X	9,000 mm
		Y	⁷⁄₁₆" and 316SS	Y	ANSI 2,500 Lb RTJ	Y	10,000 mm
Z	Other	Z	Other	Z	Other	Z	Other

Note for 14th character, please choose a code of next higher length if applicable length is not.
Actual length shall be specified.