

Mineral insulated replaceable measuring inserts for temperature sensors **W2P, W2J, W2K**

Technical description

Measuring range / sensing element		
(-50 ÷ 500) °C	Pt100	class B; ø3
(-200 ÷ 550) °C	Pt100	class B; ø6
(-40 ÷ 700) °C	J	class 2
(-40 ÷ 900) °C	K	class 2; ø3
(-40 ÷ 1200) °C	K	class 2; ø6, 8

Sheath	
– material: steel 1.4571 for W2P, d [mm]: ø3, ø6	
– material: steel 1.4541 for W2J, d [mm]: ø3, ø6	
– material: 2.4816 (Inconel 600) for W2K, d [mm]: ø3, ø6, ø8	
– length $L_{w\ min}$ [mm]: 100	

Options	
– Pt500, Pt1000, Ni100, Ni1000, N, T	
– 2-, 3-, 4-wire connection (for Pt100)	
– 2-, 3-wire connection (for 2xPt100)	
– measuring junction types – p. 13	
– Pt100: class A (-100 ÷ 450) °C, class AA (-50 ÷ 250) °C; (for ø6) TC: class 1	

Additional accessories	
– temperature transmitters (only Pt100, 2-wire connection) p. 225+241	
– compensation cables – p. 197	

Response time T05/T09

Sensor type	ø9	ø11
Pt	≤33/≤95	≤40/≤120
J, K insulated junction	≤22/≤62	≤27/≤90
J, K grounded junction	≤3/≤8	≤6/≤15

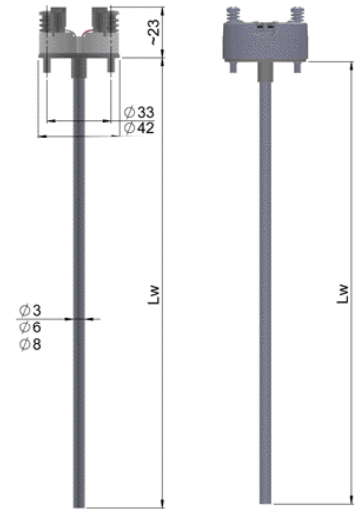
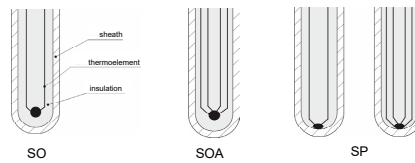
Resistors tolerance acc. to PN-EN 60751

Class	Wire wound resistor	
	Range [°C]	Tolerance [°C]
AA	(-50+250)	±(0,1+0,0017 t)
A	(-100+450)	±(0,15+0,002 t)
B	(-196+600)	±(0,3+0,005 t)

Tolerance for thermocouples class acc. to PN-EN 60584

Thermocouple	Class 1		Class 2	
	Range [°C]	Tolerance [°C]	Range [°C]	Tolerance [°C]
J Fe-CuNi	(-40+375) (375+750)	±1,5 ±0,004 t	(-40+333) (333+750)	±2,5 ±0,0075 t
K NiCr-NiAl	(-40+375) (375+1000)	±1,5 ±0,004 t	from (-40+333) (333+1200)	±2,5 ±0,0075 t

Types of measuring hot junction



Ordering code

Measuring insert	...	W2	...	/
Single		no sign											
Double		2											
With transmitter		AP											
Resistor Pt					P								
Thermocouple Fe-CuNi					J								
Thermocouple NiCr-NiAl					K								
Thermowell diameter d [mm]						3, 6, 8							
Junction isolated from the sheath										SO			
Double junction isolated from the sheath		for								SOA			
Grounded junction		TC								SP			
Insert length L_w [mm]										200*			
Resistor class												A, B*	
Thermocouple class												1, 2	
Measuring circuit for RTD												2, 3, 4	
Type of transmitter (only Pt100, 2-wire connection)													RT-01*
Setting of transmitter temperature													(0 ÷ 400) °C*

* or others acc. to requirements

Ordering example

W2K/3-SO-555-2