

Replaceable measuring inserts for temperature sensors **W1P, W1J, W1K**

Technical description

Measuring range / sensing element		
(-200 ÷ 550) °C	Pt100	class B
(-40 ÷ 700) °C	J, K	class 2
Sheath		
– material: steel 1.4541		
– length:		
L_w [mm]: 145, 205, 275, 315, 405, 555 for $\phi 6$	L_{max} [mm]: 1500	
L_w [mm]: 525, 735, 1025, 1425, 2025 for $\phi 8$	L_{max} [mm]: 2025	
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; TC: class 1		
Additional accessories		
– temperature transmitters – p. 225+241		
– process protection tubes and thermowells – p. 200+214		
– compensation cables – p. 197		

Response time T05/T09

Sensor type	$\phi 9$	$\phi 11$
Pt	$\leq 33/\leq 95$	$\leq 40/\leq 120$
J, K insulated junction	$\leq 22/\leq 62$	$\leq 27/\leq 90$
J, K grounded junction	$\leq 3/\leq 8$	$\leq 6/\leq 15$

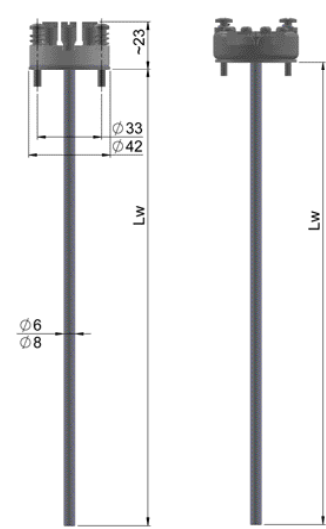
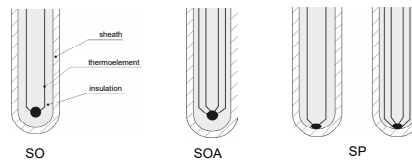
Resistors tolerance acc. to PN-EN 60751

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

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)	$\pm 1,5$ $\pm 0,004 t $	(-40÷333) (333÷750)	$\pm 2,5$ $\pm 0,0075 t $
K NiCr-NiAl	(-40÷375) (375÷1000)	$\pm 1,5$ $\pm 0,004 t $	from (-40÷333) (333÷1200)	$\pm 2,5$ $\pm 0,0075 t $

Types of measuring hot junction



Ordering code

Measuring insert	...	W1	...	/	...	-	...	-	...	-	...	-	...	-	...
Single															
Double		no sign													
With transmitter		2													
Resistor Pt		AP													
Thermocouple Fe-CuNi			P												
Thermocouple NiCr-NiAl			J												
Thermocouple NiCr-NiAl			K												
Thermowell diameter d [mm]				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]											315*				
Resistor class															A, B*
Thermocouple class															1, 2
Measuring circuit for RTD															2, 3, 4
Type of transmitter															RT-01*
Setting of transmitter temperature															(0 ÷ 400) °C*

* or others acc. to requirements

Ordering example

2W1P/6-315-A-3