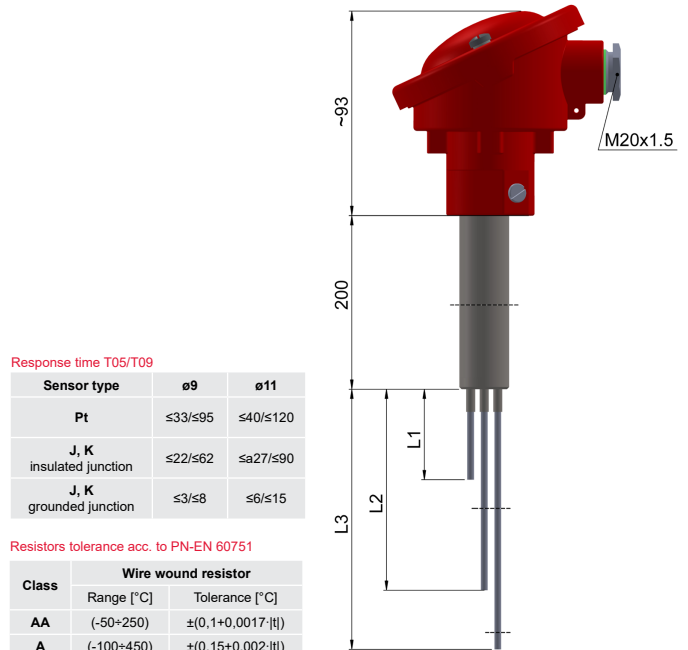


Czujniki płaszczowe **PTOP-533, PTTJ-533, PTTK-533**

Technical description

Measuring range / sensing element		
(-50 ÷ 500) °C	Pt100	class B, 3-wire
(-40 ÷ 450) °C	J	class 2
(-40 ÷ 900) °C	K	class 2
Thermowell		
– number of measuring elements: 2		
– mineral insulated material: steel 1.4541 for J, steel 1.4571 for Pt100, Inconel 600 for K		
– mineral insulated diameter ø3 mm		
– długości $L_1/L_2/L_3$ [mm]: to order		
– min. bending radius [mm]: 3xd for length $L_1/L_2/L_3$		
– supporting sheath ø22 mm, material: steel 1.4841		
Connection head		
– AA, IP53 (-40 ÷ 100) °C		
Options		
– number of measuring elements for TC: 3		
– measuring junction for TC: insulated SO, grounded SP		
– 4-wire connection for RTD		
– Pt100: class A (-30 ÷ 200) °C, class AA (0 ÷ 150) °C; TC: class 1		
Additional accessories		
– compensation cables – p. 197		
– mounting brackets: UZ-11 or UZ-21 – p. 216		



Response time T05/T09

Sensor type	ø9	ø11
Pt	≤33/≤95	≤40/≤120
J, K insulated junction	≤22/≤62	≤a27/≤90
J, K grounded junction	≤3/≤8	≤6/≤15

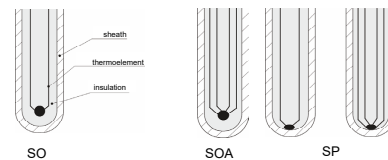
Resistors tolerance acc. to PN-EN 60751

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, Na 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

Temperature sensor		PT	...	533	-
Resistor Pt		OP								
Thermocouple Fe-CuNi		TJ								
Thermocouple NiCr-NiAl		TK								
Number of measuring elements									2, 3	
Sensors length $L_1/L_2/L_3$ [mm]										to order
Resistor type										Pt100*
Junction insulated from the sheath	for									SO
Junction grounded	TC									SP
Resistor class										A, B*
Thermocouple class										1, 2
Measuring circuit for RTD										3, 4

* or others acc. to requirements

Ordering example

PTTK-533-3-1000/1500/2000-SO-1 thermocouple sensor with three mineral insulated thermocouples NiCr-NiAl, class 1, isolated junction, length $L_1=1000$ mm/ $L_2=1500$ mm/ $L_3=2000$ mm

PTTJ-533-2-500/1500-SP-2 thermocouple sensor with two mineral insulated thermocouples FeCu-Ni, class 2, grounded junction, length $L_1=500$ mm/ $L_2=1500$ mm