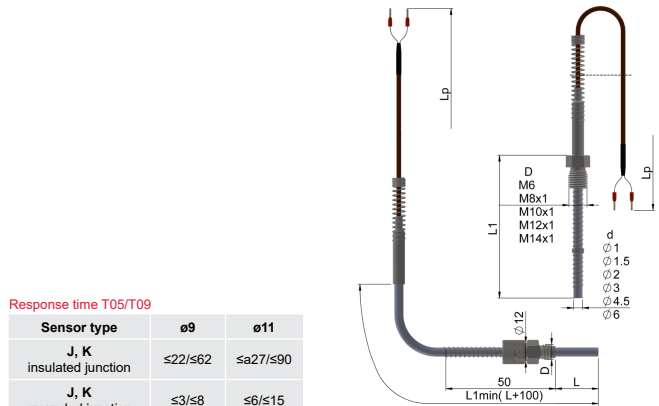


Czujniki płaszczowe **PTOP-186, PTTJ-186, PTTK-186**

Technical description

Measuring range / sensing element				
(-50 ÷ 400) °C	Pt100	class B, 3-wire		
(-40 ÷ 400) °C	J, K	class 2		
Thermowell				
– mineral insulated material:		steel 1.4571 for Pt100, steel 1.4541 for J steel 2.4816 for K		
– length L [mm]:		acc. to order (for Pt100, min. 30 mm)		
– fastening elements:		nickel-plated brass and stainless steel		
Dimensions				
D	M14x1,5; M12 M12x1; M12x1,5	M10; M10x1	M8x1; M8	M6
d	1; 1,5; 2; 3; 4,5; 6	1; 1,5; 2; 3; 4,5	1; 1,5; 2; 3	1; 1,5; 2
For Pt100 sheath diameter d [mm]=ø3, ø6				
Wire				
– wire: 2, 4x0,22 mm ² in double metal fiberglass insulation				
– measuring junction for TC: insulated SO				
– length L _p =1,5m (standard)				
Options				
– other lead wire insulation types: silicone				
– measuring junction for TC: grounded SP				
– 4-wire connection for RTD				
– Pt100: class A (-30 ÷ 200) °C, class AA (0 ÷ 150) °C;				
TC: class 1				



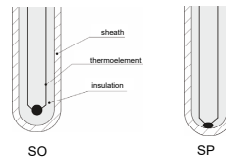
Response time T05/T09

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

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

Temperature sensor	PT	...	186
Resistor Pt	OP									
Thermocouple Fe-CuNi	TJ									
Thermocouple NiCr-NiAl	TK									
Construction version: straight										
angular									no sign	K
Mineral insulated diameter dx10 [mm]										30*
Sheath length L/L ₁ [mm]										60/160*
Resistor type										Pt100*
Junction insulated from the sheath	dla									SO
Junction grounded	TC									SP
Resistor class										A, B*
Thermocouple class										1, 2
Measuring circuit for RTD										3, 4
Threaded connector										M8*
Quick disconnect without connector, inner diameter ø12 mm										SZ12*
Quick disconnected with connector M12x1										SZM12x1*
Cable length L _p [m]										1,5m*

* or others acc. to requirements

Ordering example

PTOP-186K-30-60/160-B-3-SZM12x1-2m single angular sensor with Pt100, class B, sheath diameter 3 mm, length L=60 mm/L₁=160 mm with quick disconnected and connector M12x1 and lead wire length L_p= 2m