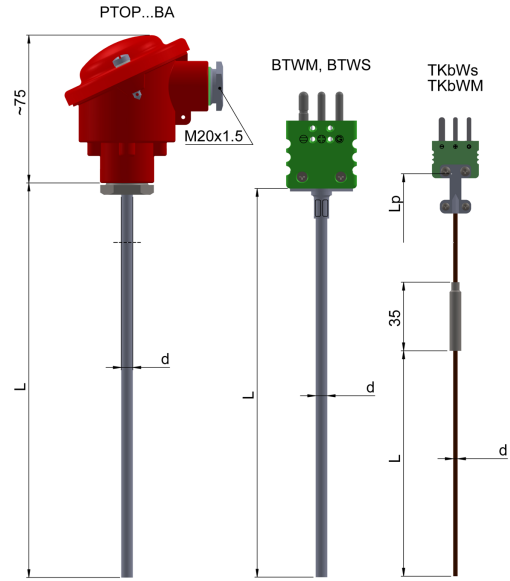


Czujniki płaszczowe rezystancyjne **PTOP**

Technical description

Measuring range / sensing element		
(-200 ÷ 600) °C	Pt100	class B ø6 mm
(-50 ÷ 500) °C	Pt100	class B ø3 mm
(-50 ÷ 500) °C	2xPt100	class B ø3, ø6 mm
3-wire connection as standard design		
Thermowell		
– material: steel 1.4571		
– diameter d [mm]: ø3, ø6		
– length L [mm]: acc. to requirements (min. 50 mm)		
– min. bending radius [mm]: 3xd (above L=50 mm)		
Construction version		
– with head mounted transmitter	type AP	
– with connection head	type BA IP55, (-40 ÷ 100) °C	
– with exposed wire ends 20 mm	type BT	
– with sleeve and stranded wires 50 mm	type T	
– with M-type plug (miniature) ¹	type BTWM	
– with S-type plug (standard) ²	type BTWS	
– with LEMO socket ³	type BTL	
– with lead wire	type TKb	
– with lead wire and M-type plug	type TKbWM	
– with lead wire and S-type plug	type TKbWS	
– with lead wire and LEMO plug ⁴	type TKbL	
Wire		
– wire: 3, 4, 6x0,22 mm ² in double silicone insulation		
– wire: 3, 4x0,22 mm ² in double metal fiberglass insulation		
– length L _p [m]: to order		
Options		
– head connection: aluminium NA, IP65; NA with snap lock – p. 217		
– 4-wire connection for 1xPt100		
– Pt100: class A (-30 ÷ 300) °C, class AA (0 ÷ 150) °C - ø3 mm		
– Pt100: class A (-50 ÷ 450) °C, class AA (0 ÷ 150) °C - ø6 mm		
Additional accessories		
– temperature transmitters – p. 225+241		
– version BTW, TKbW, BTL, TKbL: socket or plug acc. to requirements		
– mounting brackets: UG-1, UG-3, UG-8, UZK-1 – p. 215+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

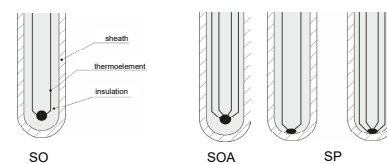
Resistors tolerance acc. to PN-EN 60751

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	...	PTOP	-
Single											
Double for d>2 mm	no sign										
With transmitter (only BA)	2										
	AP										
Construction version		BA, BT, T, BTWM, BTWS, TKb*									
Mineral insulated diameter dx10 [mm]						30*					
Resistor class							A, B*				
Measuring circuit								3, 4			
Sheath length L [mm]									to order		
Cable length L _p [m]										to order	
Cable insulation: silicone											Si
Cable insulation: braided fiberglass											Ws
Type of transmitter and temperature settings											RT-01-(0 ÷ 400) °C*
Additional accessories											UG-3-3*

* or others acc. to requirements

Ordering example

PTOP-TKb-60-A-3-500-3m-Si