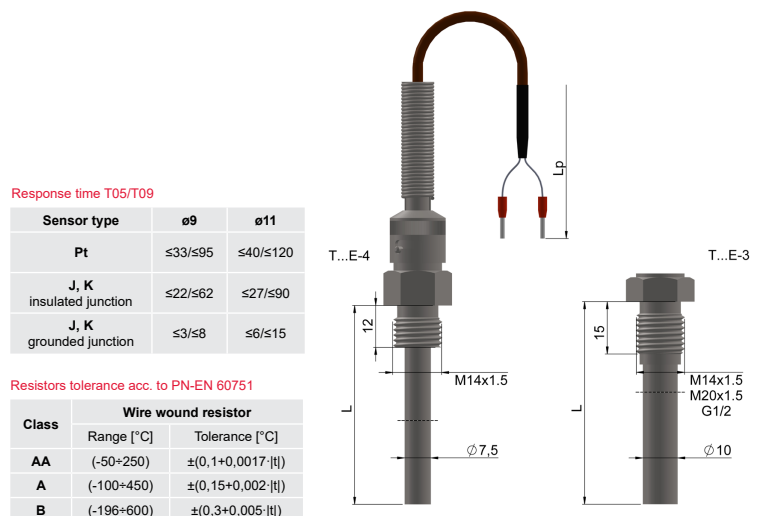


Temperature sensors of machinery and device parts TOPE-3, 4, TTJE-3, 4, TTKE-3, 4

Dane techniczne

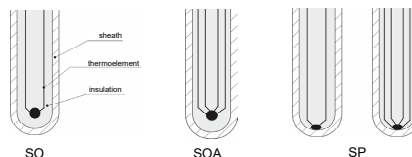
Measuring range / sensing element		
(-50 ÷ 250) °C	Pt100	class B
(-40 ÷ 400) °C	J, K	class 2
Sheath		
– material: brass, atmospheric pressure (T...E-4)		
– additional thermowell up to 1 MPa 1.4541 (T...E-3)		
– sheath length L [mm]: 80 or 100		
Lead wire		
– Cu wire or thermocouple wire: 2x0,22 mm ²		
– fiberglass insulation with metal braid		
– length L _p =1,5m (standard)		
– measuring junction for TC: insulated SO		
– wires resistance Cu ~0,14 Ω/m=~-0,36 °C for 0,22 mm ²		
Options		
– Pt500, Pt1000, Ni100, Ni1000, T		
– other lead wire insulation types: silicone, teflon, PVC		
silicone insulation: operating temperature up to 180 °C		
teflon insulation: operating temperature up to 200 °C		
PVC insulation, operating temperature up to 100 °C		
– measuring junction for TC: grounded SP		
– 3-, 4-wire connection for RTD		
– Pt100: class A (-30 ÷ 250) °C, class AA (0 ÷ 150) °C;		
TC: class 1		



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	...	T	...	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Single		no sign																		
Double		2																		
Resistor Pt				OP																
Thermocouple Fe-CuNi				TJ																
Thermocouple NiCr-NiAl				TK																
Version with additional sheath ø10								3												
Version without outer sheath								4												
Sheath length L [mm]								80 or 100												
Resistor type													Pt100*							
Junction insulated from the sheath													SO							
Junction grounded													SP							
Resistor class																				
Thermocouple class																				A, B*
Measuring circuit for RTD																				1, 2
Cable insulation: braided teflon																				2, 3, 4
Cable insulation: braided fiberglass																				Fu
Cable length L _p [m]																				Ws
																				1,5m*

* or others acc. to requirements

Ordering example

TTJE-4-100-SO-2-Ws-M14x1,5-2m