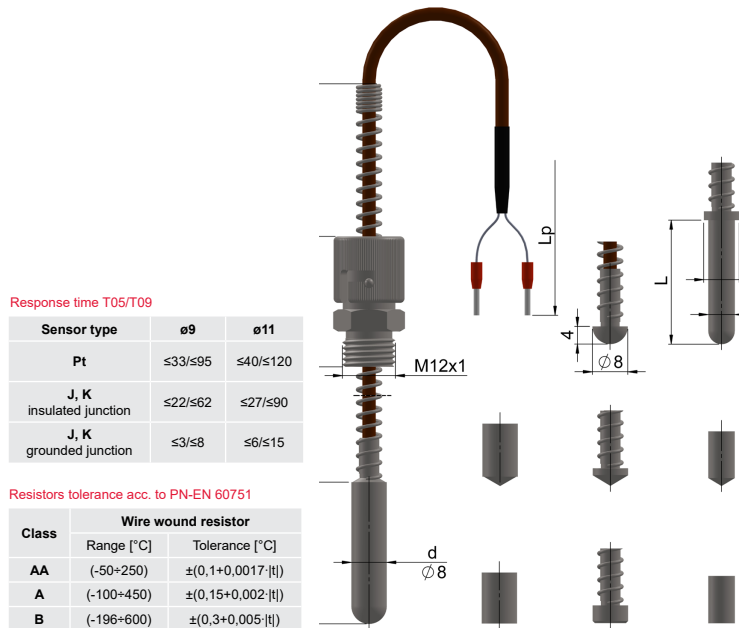


Temperature sensors of machinery and device parts TOPE-28, TTJE-28, TTKE-28

Dane techniczne

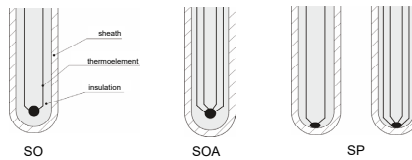
Measuring range / sensing element		
(-50 ÷ 400) °C	Pt100	class B
(-40 ÷ 400) °C	J, K	class 2
Sheath		
– material: steel 1.4541		
– diameter d [mm]: ø6, ø8		
– length L [mm]: 0÷100		
– spring diameter: ø8 mm		
– tip: spherical (K), flat (P) or conical (S)		
– bayonet handle with connector - nickel-plated brass		
– standard length of spherical sheath L [mm]: 13		
Lead wire		
– Cu wire or thermocouple wire: 2x0,22 mm ²		
– fiberglass insulation with metal braid		
– measuring junction for TC: insulated SO		
– length L _p = 1,5m (standard)		
– wires resistance Cu ~0,14 Ω/m ≈ 0,36 °C		
Options		
– Pt500, Pt1000, Ni100, Ni1000, T		
– other cable insulations PVC, silicone, acc. to requirements		
– measuring junction for TC: grounded SP		
– 3-, 4-wire connection for RTD		
– Pt100: class A (-30 ÷ 300) °C, class AA (0 ÷ 150) °C; TC: class 1		
– other threads - inch: G¼; G¾		
metric: M12x1,25; M12x1,5; M14x1,5; M16x1,5		



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-28	...	...	...	...	...	...	...	...	...	...
Resistor Pt	OP												
Thermocouple Fe-CuNi	TJ												
Thermocouple NiCr-NiAl	TK												
With tip: flat			P										
With tip: spherical			K										
With tip: conical			S										
Sheath length L [mm]						13*							
Tip diameter d [mm]							6, 8						
Thread dimension								M12x1,5*					
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													2, 3, 4
Cable length L _p [m]													1,5m*

* or others acc. to requirements

Ordering example

TOPE-28-K-10-6-M14x1,5-Pt100-B-2-2m