

Temperature sensors with non-replaceable measuring inserts **TOPI-3, TTJI-3, TTKI-3**

Dane techniczne

Measuring range* / sensing element		
(-200 ÷ 550) °C	Pt100	class B
(-40 ÷ 700) °C	J, K	class 2
Measuring insert		
– non-replaceable		
Sheath		
– material: steel 1.4541		
– length L [mm]: 50+2000		
Connection head		
– MA, IP54, (-40 ÷ 100) °C		
Options		
– Pt500, Pt1000, Ni100, Ni1000, N, T		
– measuring junction types – p. 13		
– connection head - stainless MBEG – p. 218		
– Pt100: class A (-100 ÷ 450) °C, class AA (-50 ÷ 250) °C; TC: class 1		
Additional accessories		
– temperature transmitters (only Pt100, 2-wire connection) – p. 237		
– process protection tubes and thermowells – p. 200+214		
– compensation cables – p. 197		
– mounting brackets: UG-1, UG-3, UG-8, UZK-1 – p. 215+216		

* for clean air

Response time T05/T09

Sensor type	ø9	ø11
Pt	≤33/≤95	≤40/≤120
J, K insulated junction	≤22/≤62	≤27/≤90
J, K grounded junction	≤3/≤8	≤6/≤15

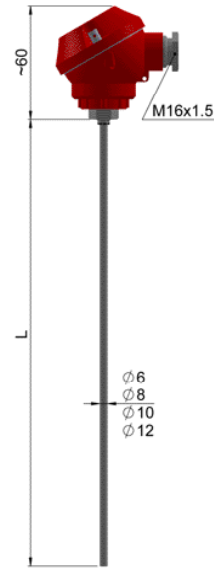
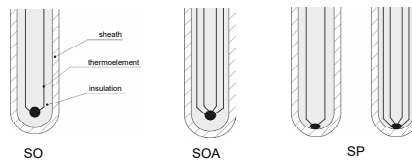
Resistors tolerance acc. to PN-EN 60751

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 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	...	I-3
Single		no sign									
Double (only 2-wire connection)		2									
With transmitter (for Pt100)		AP									
Resistor Pt				OP							
Thermocouple Fe-CuNi				TJ							
Thermocouple NiCr-NiAl				TK							
Junction isolated from the sheath						SO					
Double junction isolated from the sheath		for				SOA					
Grounded junction		TC				SP					
Sheath length L [mm]							300*				
Thermowell diameter [mm]								6, 8, 10, 11, 12*			
Resistor class									A, B*		
Thermocouple class									1, 2*		
Measuring circuit for RTD (Single)										2, 3, 4*	
Measuring circuit for RTD (double)										2	
Type of transmitter (only Pt100, 2-wire connection)											LTT-03J
Setting of transmitter temperature											(0 ÷ 200) °C*

* or others acc. to requirements

Ordering example

TTJI-3-SO-500-8-1