

Temperature sensors with non-replaceable measuring inserts **TOPGB-1, TTJGB-1, TTKGB-1**

Dane techniczne

Measuring range / sensing element		
(-200 ÷ 150) °C	Pt100	class B
(-40 ÷ 150) °C	J, K	class 2
Measuring insert		
– non-replaceable		
Sheath		
– material: steel 1.4541		
– length L [mm]: 50÷1000		
Connection head		
– BA, IP55, (-40 ÷ 100) °C		
Options		
– local display built into the DANAWwin head connection – p. 220		
– Pt500, Pt1000, Ni100, Ni1000, N, T		
– other threads (inch and metric) acc. to requirements		
– measuring junction types – p. 13		
– connection head - stainless BEG; aluminium NA, IP65;		
aluminium NA with snap lock – p. 217÷218		
– Pt100: class A (-100 ÷ 150) °C, class AA (-50 ÷ 150) °C;		
TC: class 1		
Additional accessories		
– temperature transmitters – p. 225÷241		
– process protection tubes and thermowells – p. 200÷214		
– compensation cables – p. 197		

* 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

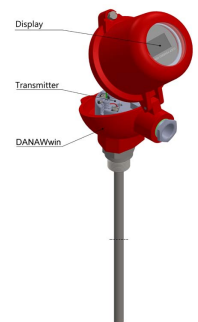
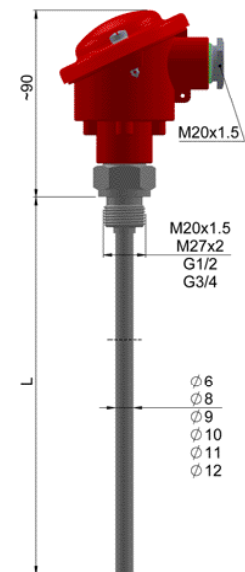
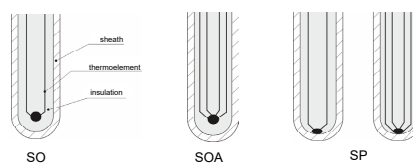
Resistors tolerance acc. to PN-EN 60751

Class	Wire wound resistor	
	Range [°C]	Tolerance [°C]
AA	(-50÷150)	±(0,1+0,0017· t)
A	(-100÷150)	±(0,15+0,002· 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	...	GB-1
Single		no sign										
Double		2										
Single with transmitter		AP										
Double with transmitter (only one circuit)		AP2										
Double with two transmitters		2AP2										
With local display (single)		APW										
Resistor Pt												
Resistor Ni												
Thermocouple Fe-CuNi												
Thermocouple NiCr-NiAl												
Junction isolated from the sheath												
Double junction isolated from the sheath												
Grounded junction												
Sheath length L [mm]												
Thermowell diameter [mm]												
Thread dimension												
Resistor class												
Thermocouple class												
Measuring circuit for RTD												
Type of transmitter												
Setting of transmitter temperature												

Ordering example

* or others acc. to requirements