

Temperature sensors with ceramic protection tubes TTSC-42, TTRC-42, TTBC-42

Dane techniczne

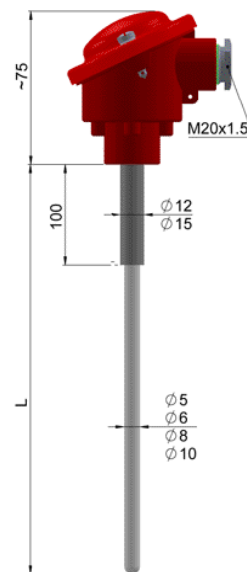
Measuring range / sensing element		
(0 ÷ 1300) °C	S, R	class 2
(600 ÷ 1600) °C	B	class 3
Sheath		
– sheath material: steel 1.4541		
– protection tube material: corundum 799, d [mm]: ø5, ø6, ø8, ø10; mullite 610, d [mm]: ø10		
– length $L_{min.}$ [mm]=300, $L_{max.}$ acc. to table		
Connection head		
– BA, IP53, (-40 ÷ 100) °C		
Options		
– thermocouple R, S: class 1; B: class 2		
Additional accessories		
– temperature transmitters – p. 225+241		
– 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	≤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)

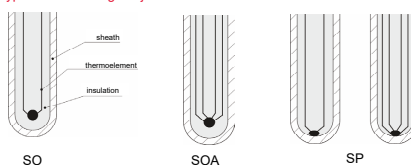


Sheath diameter d [mm]	Supporting sheath diameter d _n [mm]	Max. length L _{max.} [mm]	Wire diameter [mm]
ø5	ø12	500	ø0,35
ø6	ø12	1000	ø0,35
ø8	ø12	1000	ø0,35 or 0,5
ø10	ø15	1400	ø0,35 or 0,5

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	...	TT	...	C-42
With transmitter		AP											
Thermocouple PtRh10-Pt													S
Thermocouple PtRh13-Pt													R
Thermocouple PtRh30-PtRh6													B
Material of the ceramic thermowell													610, 799
Outer sheath diameter d [mm]													5, 6, 8, 10
Sensor sheath length L [mm]													300*
Thermocouple class for S, R													1, 2
Thermocouple class for B													2, 3
Diameter of platinum wire [mm]													0,35; 0,5
Type of transmitter													Tx*
Setting of transmitter temperature													(0 ÷ 1200) °C*

* or others acc. to requirements

Ordering example

TTSC-42-799-5-300-1-0,35*