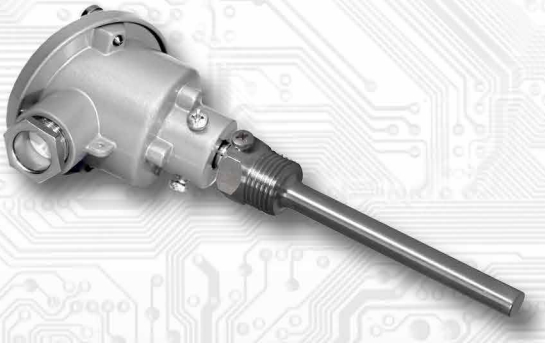
Temperature sensors with thermowel - output 4 ÷ 20 mA or 0 ÷ 10V, metal head A13I and A13U

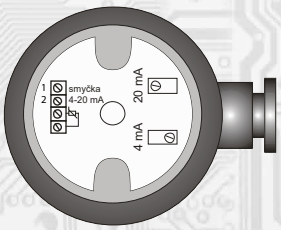


These temperature sensors are designed for general-purpose application in control and regulation systems for the temperature measurement in the pipeline. The temperature element (Pt1000) is located in the stem. The head of the sensor is made of aluminium, the stem is made of stainless steel (DIN 1.4601). The converter temperature - current or temperature - voltage, which is positioned in the transducer head, is not provided with a galvanic separation.

Basic technical parameters

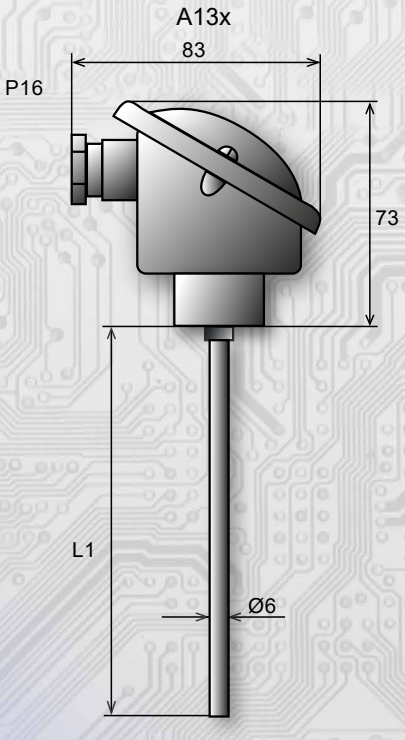
Sensor	Pt1000	
Measurement error	< 0,6 %	
Output signal	4 ÷ 20 mA (sensors A13I)	0 ÷ 10 V (sensors A13U)
Power supply Ucc	11÷ 35 VDC	18 ÷ 30 VDC
Load resistance	Rz < (Ucc-11) x 50 [Ω]	Rz > 50 kΩ
Sensing element break	Iz > 24 mA	Uv > 12 V
Sensing element short	Iz < 3 mA	Uv ~ 0 V
Output impedance		100 Ω
Power consumption		max 5 mA
Ambient temperature	-30 ÷ 80 ºC	
Relative humidity	< 80%	
Head	material aluminium, colour grey	
Protection type	IP 54 (EN 60529)	
Terminal board	wire diameter 0,35 ÷ 1,5 mm^2	
Cable gland	P16, wire diameter 5 ÷ 7 mm	

Wiring diagram - A13I



1,2: current loop
arbitrary polarity

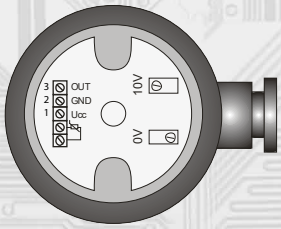
Dimensions:



Standard lengths L1 and L2

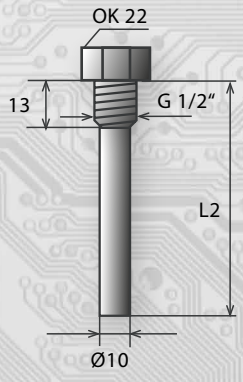
L1 (mm)	L2 (mm)
120	100
180	160
240	220
300	280
360	340
420	400

Wiring diagram - A13U



1: positive pole of the supply source
2: negative pole of the supply source
3: 0 to 10 V output

Thermowell



Temperature ranges

-30 ÷ 60°C
0 ÷ 35°C
0 ÷ 50°C
0 ÷ 100°C
0 ÷ 150°C
0 ÷ 250°C

Max. temperature 250°C

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