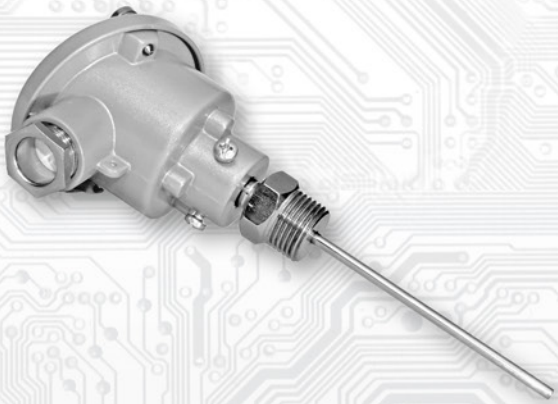
The quick-acting temperature sensors - output 4 ÷ 20 mA or 0 ÷ 10V, metal head; A16I and A16U

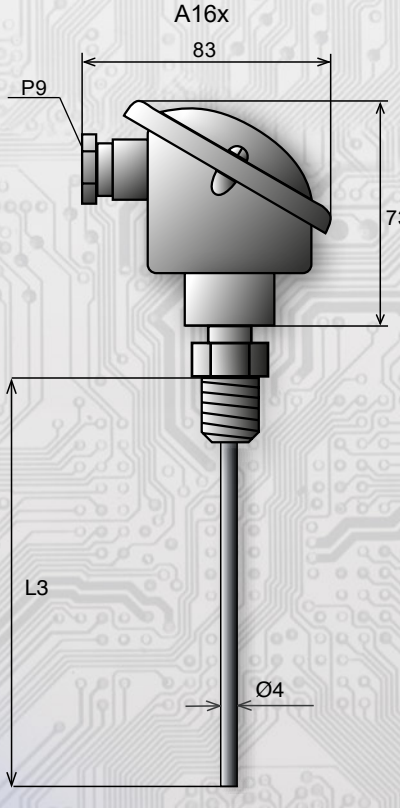


These temperature sensors are designed for general-purpose application in control and regulation systems for the temperature measurement in the pipeline in systems with high demands on speed of response. The temperature element (Pt1000) is located in the stem. The head of the sensor is made of aluminium, 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 A16I)	0 ÷ 10 V (sensors A16U)
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 °C	
Relative humidity	< 80%	
Response rate	τ63 < 8 s	
Maximum operating pressure	2 MPa	
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	

Dimension:

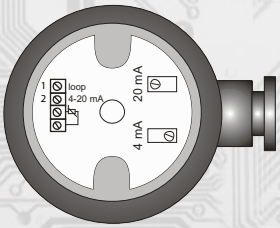


Temperature range

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

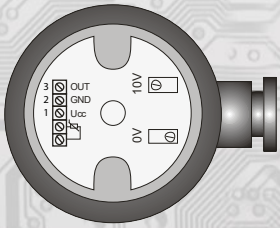
L3 = 100 or 160 mm

Wiring diagram for A16I



1,2: current loop
arbitrary polarity

Wiring diagram for A16U



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

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