

Description:

The quick-acting 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 is located in the stem. The head of sensor is made of polycarbonate, cover is provided with quick-locking screws, material of the stem is 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

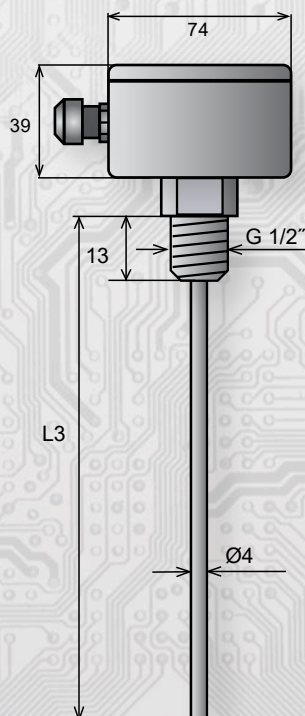
Sensing element	Pt1000	
Measurement error	< 0,6 %	
	(P16I)	(P16U)
Output signal	$4 \div 20 \text{ mA}$	$0 \div 10 \text{ V}$
Power supply U_{cc}	$11 \div 35 \text{ VDC}$	$18 \div 30 \text{ VDC}$
Load resistance	$R_z < (U_{cc}-11) \times 50 [\Omega]$	$R_z > 50 \text{ k}\Omega$
Sensing element break	$I_z > 24 \text{ mA}$	$U_v > 12 \text{ V}$
Sensing element short	$I_z < 3 \text{ mA}$	$U_v \sim 0 \text{ V}$
Ambient temperature	$-30 \div 80 \text{ }^\circ\text{C}$	
Response velocity	$\tau_{63} < 8 \text{ s}$	
Relative humidity	< 80%	
Material	material polycarbonat, blue colour (grey on request)	
Protection type	IP 30	
Terminal board	COB 5/2, wire cross section $0,35 \div 2,5 \text{ mm}^2$	

Temperature range

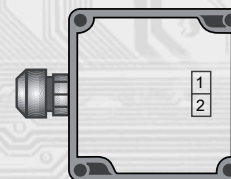
$-30 \div 60 \text{ }^\circ\text{C}$
$0 \div 35 \text{ }^\circ\text{C}$
$0 \div 50 \text{ }^\circ\text{C}$
$0 \div 100 \text{ }^\circ\text{C}$
$0 \div 150 \text{ }^\circ\text{C}$

L3 = 100 or 160 mm

Dimensions

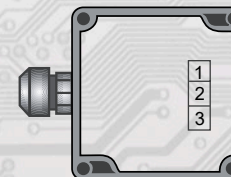


Wiring diagram for P13I



1,2: current loop
arbitrary polarity

Wiring diagram for P13U



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