

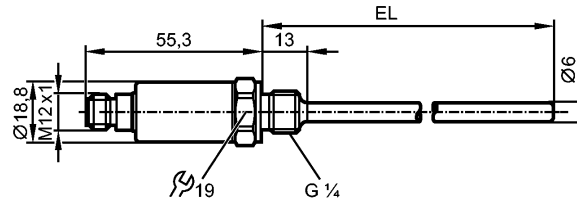


TU3105

TU-025CLEM14-A-ZVG/US



Temperature sensors



Product characteristics

Temperature transmitter

M12 connector

Process connection: G 1/4 A

Installation length EL: 25 mm

Analog output 0.5...4.5 V

Measuring range: -50...150 °C / -58...302 °F

Measuring element: 1 x Pt 1000, to DIN EN 60751, class A

Application

Application: liquids and gases

Pressure rating [bar]: 400

Electrical data

Electrical design: DC

Operating voltage [V]: 8...32 DC; cULus - Class 2 source required

Current consumption [mA]: < 30

Protection class: III

Reverse polarity protection: yes

Outputs

Output: Analog output 0.5...4.5 V

Short-circuit protection: yes

Overload protection: yes

Analog output: 0.5...4.5 V

Min. load [Ω]: 2000

Measuring / setting range

Measuring range: -50...150 °C / -58...302 °F

Resolution:

Analog output [K]: < 0.1

Accuracy / deviations

Analog output [K]: $\pm 0.3 + (\pm 0.1 \% MS)$

Temperature coefficients (in % of the span per 10 K): 0.1 **)

Reaction times

Dynamic response T05 / T09 [s]: 1 / 3 *)

Environment

Ambient temperature [°C]: -40...100

Storage temperature [°C]: -40...100

Protection: IP 68 / IP 69K

Tests / approvals



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EMC	DIN EN 61000-6-2 DIN EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF [Years]	849	
UL approval number	K008	

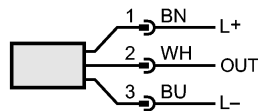
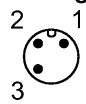
Mechanical data

Process connection	G ¼ A	
Materials (wetted parts)	stainless steel 316L / 1.4404; FKM	
Probe diameter [mm]	6	
Installation length EL [mm]	25	
Housing materials	stainless steel (316L / 1.4404); PEI; FKM	

Electrical connection

Connection	M12 connector	
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Wiring



OUT: Analog output 0.5...4.5 V
Colours to DIN EN 60947-5-2

Remarks

Remarks	<p>*) according to DIN EN 60751 **) In case of deviation from the reference condition $25 \pm 5 \text{ }^\circ\text{C}$ The values for accuracy apply to flowing water. Referring to UL: For use on a low voltage circuit with overcurrent protection in accordance with UL873 Tab. 28.1 or $I_{max} = 100/U_b$ (U_b = voltage of the circuit).</p>
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Pack quantity [piece]	1
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