

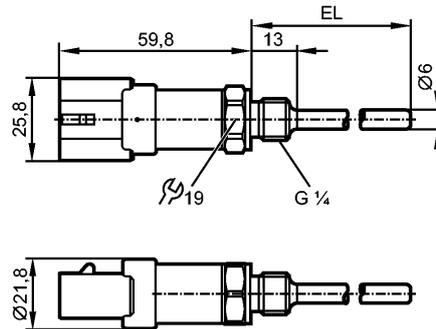


TU5105

TU-025CLEM14-A-ZVG/AM



Temperature sensors



Product characteristics

Temperature transmitter

AMP plug

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]: ± 0.3 + (± 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



TU5105

TU-025CLEM14-A-ZVG/AM

Temperature sensors

| | | |
|---------------------|------|----------------|
| Storage temperature | [°C] | -40...100 |
| Protection | | IP 68 / IP 69K |

Tests / approvals

| | | |
|----------------------|---------|---|
| 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 | | K010 |

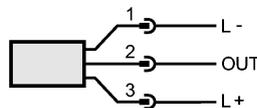
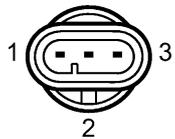
Mechanical data

| | | |
|--------------------------|------|---|
| 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); PPS; FKM |
| Weight | [kg] | 0.09 |

Electrical connection

| | | |
|------------|--|---------------|
| Connection | | AMP Superseal |
|------------|--|---------------|

Wiring



OUT: Analog output 0.5...4.5 V

Remarks

| | |
|---------|---|
| Remarks | <p>*) according to DIN EN 60751</p> <p>**) In case of deviation from the reference condition $25 \pm 5 \text{ °C}$ 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> |
|---------|---|

| | | |
|---------------|---------|---|
| Pack quantity | [piece] | 1 |
|---------------|---------|---|