

## Duct temperature sensors - output 4 ÷ 20 mA or 0 ÷ 10V, plastic head

## **Description:**

The temperature sensors are designed for general-purpose application in control and regulation systems for the temperature measurement in airflows, and for the detection temperatures in gaseous media, e.g. in ventilation and in air conditioning ducts. The temperature sensor is located in the stem. The head of transducer is made of the plastic material, cover is provided with quick-locking screws, the stem is made of stainless steel (DIN 1.4301). The device is delivered with plastic console (central holder type A). The converter temperature - current or temperature - voltage, which is positioned in the transducer head, is not provided with a galvanic separation.

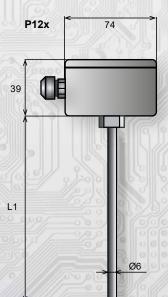
## **Basic technical parameters**

| Standard ler | nght L1 |  |
|--------------|---------|--|
|--------------|---------|--|

| 6 | L1 (mm) |
|---|---------|
| 8 | 120     |
| 1 | 180     |
| l | 240     |
| 2 | 300     |
| 1 | 360     |
| Ż | 420     |
|   |         |

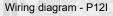
| Sensor                | Pt1000   |             |  |
|-----------------------|--|-------------|--|
| Measurement error     | < 0,6 %  |             |  |
|                       | (P12I)   | (P12U)      |  |
| Output signal         | 4 ÷ 20 mA  | 0 ÷ 10 V    |  |
| Power supply Ucc      | 11 ÷ 35 VDC  | 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    |  |
| Ambient temperature   | - 30 ÷ 80 °C   |             |  |
| Relative humidity     | < 80%  |             |  |
| Material              | polycarbonat, blue colour (grey on request)            |             |  |
| Protection type       | IP 30  |             |  |
| Terminal board        | COB 5/2, wire cross section 0,35 ÷ 2,5 mm <sup>2</sup> |             |  |

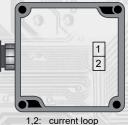
Dimensions



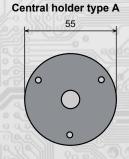
## **Temperature ranges**

| ſ | -30 ÷ | 60°C  |   |
|---|-------|-------|---|
|   | 0 ÷   | 35°C  | 1 |
|   | 0 ÷   | 50°C  | 1 |
| I | 0 ÷   | 100°C | 2 |
|   | 0 ÷   | 150°C |   |
| 2 | 0 ÷   | 250°C | 0 |





arbitrary polarity





Wiring diagram - P12U

positive pole of the supply source
negative pole of the supply source
0 to 10 V output

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