

Contact Temperature Sensor

Active surface contact temperature sensor (4 to 20 mA) for pipe applications. Spring loaded brass contact to ensure fast response and accurate readings. NEMA 4X / IP65 rated enclosure. [Pipe clamp included.]



Type Overview

| Type    | Output Signal<br>Active<br>Temperature |
|---------|--|
| 22HT-54 | 4...20 mA                              |

Technical Data

|                        |                             |   |                |                |   |
|------------------------|-----------------------------|---|----------------|----------------|---|
| <b>Electrical Data</b> | Power Supply DC             | 15...24 V, ±10%, 0.5 W  |                |                |   |
|                        | Electrical Connection       | removable spring loaded terminal block max. 11 GA [2.5 mm <sup>2</sup> ]  |                |                |   |
|                        | Cable Entry                 | cable gland PG11 Ø6 to 10 mm, with strain relief Ø6 to 8 mm, 1/2" conduit adapter included  |                |                |   |
| <b>Functional Data</b> | Multirange                  | 8 fields selectable   |                |                |   |
|                        | Output Signal Active Note   | current output: max. 500 Ω load   |                |                |   |
|                        | Media                       | water   |                |                |   |
| <b>Measuring Data</b>  | Measured Values             | temperature   |                |                |   |
|                        | Measuring range temperature | Active sensor: range selectable<br>Attention: max. measuring temperature is restricted by max. medium temperature (see Safety data)<br>Setting    range [°C]    range [°F]    Factory setting |                |                |   |
|                        |                             | S0  | -50°C to 50°C  | -30°F to 130°F |   |
|                        |                             | S1  | -10°C to 120°C | 0°F to 250°F   |   |
|                        |                             | S2  | 0°C to 50°C    | 40°F to 140°F  |   |
|                        |                             | S3  | 0°C to 250°C   | 30°F to 480°F  |   |
|                        |                             | S4  | -15°C to 35°C  | 0°F to 100°F   |   |
|                        |                             | S5  | 0°C to 100°C   | 40°F to 240°F  | ✓ |
|                        |                             | S6  | -20°C to 80°C  | 40°F to 90°F   |   |
|                        |                             | S7  | 0°C to 160°C   | 0°F to 150°F   |   |
|                        | Accuracy temperature active | ±0.5 °C @ 21 °C   |                |                |   |
| <b>Materials</b>       | Cable Gland                 | PA6, black  |                |                |   |
|                        | Housing                     | cover: lexan, Belimo orange NCS S0580-Y6OR<br>base: lexan, Belimo orange NCS S0580-Y6OR<br>seal: 0467 NBR70, black  |                |                |   |

|                    |                                     |   |
|--------------------|-------------------------------------|---|
| <b>Safety Data</b> | Ambient Humidity                    | 85% RH non-condensing   |
|                    | Ambient Temperature                 | -30°F to 120°F [-35°C to 50°C]  |
|                    | Medium Temperature                  | -30°F to 160°F [-35°C to 70°C]  |
|                    | Housing Surface Temperature (Tsurf) | max. 160°F [70°C]   |
|                    | Protection Class IEC/EN             | III protective extra-low voltage (pelv)   |
|                    | Protection Class UL                 | UL Class 2 Supply   |
|                    | EU Conformity                       | CE Marking  |
|                    | Certification IEC/EN                | IEC/EN 60730-1 and IEC/EN 60730-2-9   |
|                    | Certification UL                    | cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9, CE acc. to 2004/108/EC and 2006/95/EC, NEMA 4X, IP65 |
|                    | Degree of Protection IEC/EN         | IP65  |
|                    | Degree of Protection NEMA/ UL       | NEMA 4X   |
|                    | Quality Standard                    | ISO 9001  |
|                    | Weight                              | 0.11 lbs  |

**Safety Notes**


The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorized modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

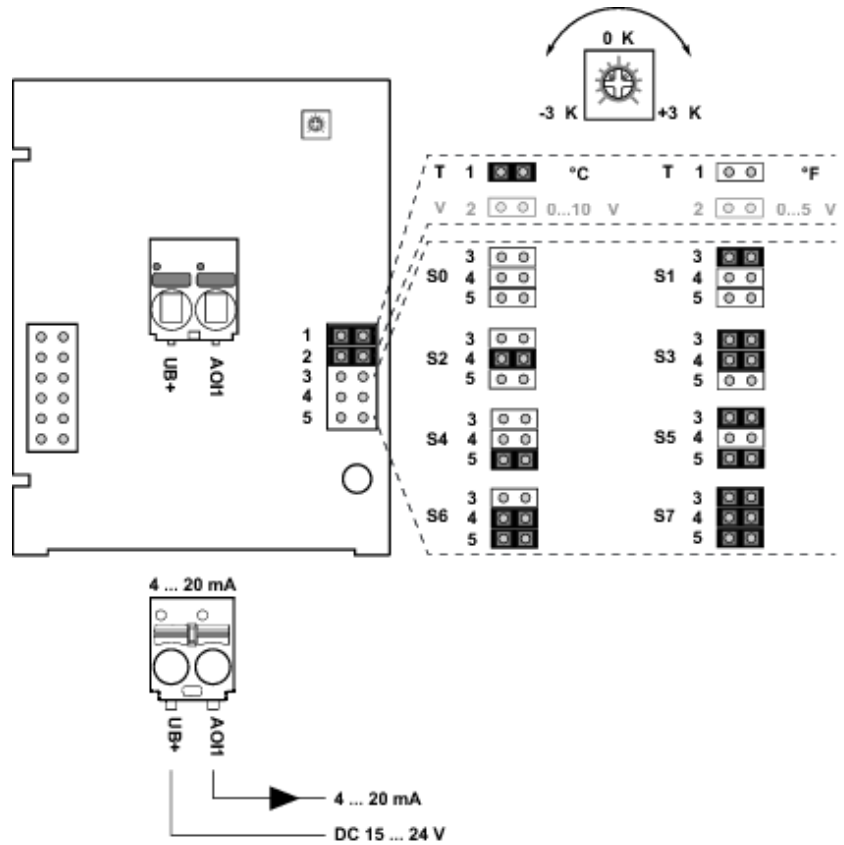
Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

**Accessories**

| Scope of Delivery    | cable gland nut conduit 1/2" NPT  |           |
|----------------------|---|-----------|
| Optional Accessories | Description   | Type      |
|                      | tightening strap for pipe diameter up to 4.3" [110 mm] with thermal contact fluid | A-22P-A40 |
|                      | tightening strap for pipe diameter up to 35" [900 mm] with thermal contact fluid  | A-22P-A42 |
|                      | syringe thermal contact fluid   | A-22P-A44 |

Wiring Diagram



the adjustment of the measuring ranges is made by changing the bonding jumpers  
 the output value in the new measuring range is available after 2 seconds

| Setting | range [°C]     | range [°F]     | Factory setting |
|---------|----------------|----------------|-----------------|
| S0      | -50°C to 50°C  | -30°F to 130°F |                 |
| S1      | -10°C to 120°C | 0°F to 250°F   |                 |
| S2      | 0°C to 50°C    | 40°F to 140°F  |                 |
| S3      | 0°C to 250°C   | 30°F to 480°F  |                 |
| S4      | -15°C to 35°C  | 0°F to 100°F   |                 |
| S5      | 0°C to 100°C   | 40°F to 240°F  | ✓               |
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| S7      | 0°C to 160°C   | 0°F to 150°F   |                 |

## Dimensions

