# BELIMO®

**Cable Temperature Sensor**

Passive cable type temperature sensor for measuring the temperature in pipe and air applications. Incorporates a stainless steel probe and plenum rated cable.



## Type Overview

| Type | Output Signal Passive Temperature | Probe Length | Probe Diameter |
|---|---|---|---|
| 01CT-5AH | PT100 | 2" [50 mm] | 0.24" [6 mm] |
| 01CT-5BH | PT1000 | 2" [50 mm] | 0.24" [6 mm] |
| 01CT-5EH | Ni1000 (JCI) | 2" [50 mm] | 0.24" [6 mm] |
| 01CT-5LH | NTC10k2 | 2" [50 mm] | 0.24" [6 mm] |
| 01CT-5MH | NTC10k3 | 2" [50 mm] | 0.24" [6 mm] |
| 01CT-5QH | NTC20k | 2" [50 mm] | 0.24" [6 mm] |

## Technical Data

| | | |
|---|---|---|
| **Electrical Data** | Cable Specification | 1 pair shielded plenum cable, 22AWG tinned copper, green jacket, -40°F to 300°F (-40°C to 150°C), 300 V |
| **Functional Data** | Output Signal Passive Temperature | PT100<br>PT1000<br>Ni1000 (JCI)<br>NTC10k2<br>NTC10k3<br>NTC20k |
| | Media | air<br>water |
| **Measuring Data** | Measured Values | temperature |
| | Measuring Range Temperature Settings | -30°F to 210°F [-35°C to 100°C] |
| | Accuracy Temperature | passive sensors depending on used type<br>PT.. = ±0.5°F @ 32°F [±0.3°C @ 0°C]<br>Ni.. = ±0.7°F @ 32°F [±0.4°C @ 0°C]<br>NTC.. = ±0.3°F @ 77°F [±0.2°C @ 25°C] |
| **Safety Data** | Ambient Humidity | 85% RH non-condensing |
| | Ambient Temperature | -30°F to 210°F [-35°C to 100°C] |
| | Medium Temperature | -30°F to 210°F [-35°C to 100°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 | pending |
| | Degree of Protection IEC/EN | IP67 |
| | Degree of Protection NEMA/ UL | NEMA 4X |
| | Quality Standard | ISO 9001 |
| | Weight | 0.065 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.
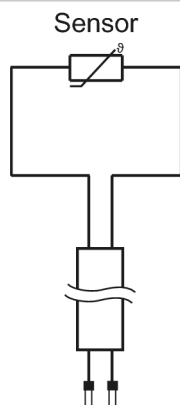
Please comply with
• Local laws, health & safety regulations, technical standards and regulations
• Condition of the device at the time of installation, to ensure safe installation
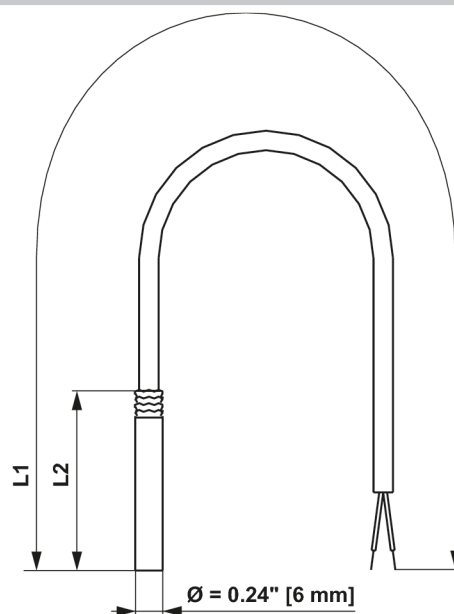• This data sheet and installation manual

## Accessories

| Optional accessories air | Description | Type |
|---|---|---|
| | mounting flange 0.24" [6 mm], plastic (adjustable), up to max. 248°F [120°C] | A-22D-A03 |
| | mounting flange mounting flange brass, up to max. 500°F [260°C] | A-22D-A05 |

| Recommended accessories water | Description | Type |
|---|---|---|
| | thermowell pocket stainless steel (fabricated), 2" [50 mm], 1/2" NPT, wrench size 3/4" | A-22P-A05 |
| | thermowell pocket brass (fabricated), 2" [50 mm], 1/2" NPT, wrench size 3/4" | A-22P-A17 |
| | thermowell pocket stainless steel (machined), 2" [50 mm], 1/2" NPT, wrench size 3/4" | A-22P-A36 |
| | thermowell pocket stainless steel (fabricated), 4" [100 mm], 1/2" NPT, wrench size 3/4" | A-22P-A07 |
| | thermowell pocket brass (fabricated), 4" [100 mm], 1/2" NPT, wrench size 3/4" | A-22P-A19 |
| | thermowell pocket stainless steel (machined), 4" [100 mm], 1/2" NPT, wrench size 3/4" | A-22P-A37 |
| | thermowell pocket stainless steel (fabricated), 6" [150 mm], 1/2" NPT, wrench size 3/4" | A-22P-A09 |
| | thermowell pocket brass (fabricated), 6" [150 mm], 1/2" NPT, wrench size 3/4" | A-22P-A21 |
| | thermowell pocket stainless steel (machined), 6" [150 mm], 1/2" NPT, wrench size 3/4" | A-22P-A38 |
| | thermowell pocket stainless steel (fabricated), 8" [200 mm], 1/2" NPT, wrench size 3/4" | A-22P-A11 |
| | thermowell pocket brass (fabricated), 8" [200 mm], 1/2" NPT, wrench size 3/4" | A-22P-A23 |
| | thermowell pocket stainless steel (machined), 8" [200 mm], 1/2" NPT, wrench size 3/4" | A-22P-A39 |
| | thermowell pocket stainless steel (fabricated), 12" [300 mm], 1/2" NPT, wrench size 3/4" | A-22P-A13 |
| | thermowell pocket brass (fabricated), 12" [300 mm], 1/2" NPT, wrench size 3/4" | A-22P-A25 |
| | thermowell pocket stainless steel (fabricated), 18" [450 mm], 1/2" NPT, wrench size 3/4" | A-22P-A15 |
| | thermowell pocket brass (fabricated), 18" [450 mm], 1/2" NPT, wrench size 3/4" | A-22P-A27 |
| | syringe thermal contact fluid | A-22P-A44 |
| | Compression fitting with cutting ring, stainless steel, G 1/4" (external thread) for 0.24" [6 mm] | A-22P-A45 |

## Wiring Diagram

Sensor

## Dimensions

Humidity seal rolling

L1: cable length
L2: pocket length

Ø = 0.24" [6 mm]

**L1 = 6.56 ft [2 m]**

**L2 = 1.97" [50 mm] / 3.94" [100 mm] / 7.87" [200 mm]**