

# Temperature & humidity sensor WHS

## MultiSensor with M12 connector // -40...85 °C // 0...100 % RH



WHS

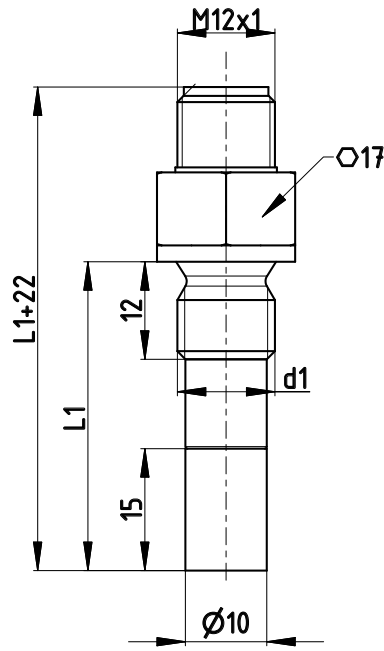
### Your advantages

| Type | WHS  |
|------|--|
|      | <ul style="list-style-type: none"> <li>• The sensor is designed to measure temperature and humidity in air supply channels and air conditioning systems</li> <li>• Low heat dissipation through process connection made of glass fibre reinforced plastic → clearly smaller measuring error</li> <li>• Digital 1-wire bus interface with integrated protection circuit → Lower wiring cost</li> <li>• Exchangeable filter protects against dust and dirt</li> <li>• Safe and compact electrical connection through M12 connector</li> <li>• Short response time → Ideal for controlling rapidly changing process parameters</li> <li>• Very high vibration resistance → Reliable and durable operation</li> <li>• Type approved according to DIN EN 50155</li> </ul> |

| Technical data                             |   |
|--|---|
| Type                                       | MultiSensor for temperature and humidity with M12 connector |
| Measuring range<br>→ Temperature           | -40...85 °C   |
| → Humidity                                 | 0...100 % RH  |
| Measuring medium                           | Ambient air<br>(non-aggressive gases)                       |
| Immersion tube length                      | 38 mm   |
| Immersion tube diameter                    | 10 mm   |
| Process connection                         | M12 x 1.5   |
| Nominal pressure                           | n.a. (atmospheric pressure)                                 |
| Medium temperature                         | -40...85 °C   |
| Ambient temperature                        | -40...85 °C   |
| Storage temperature                        | -40...85 °C   |
| Degree of protection according to EN 60529 | IP40 (IP65 connector side, connected)                       |

| Elektrische Daten         |   |
|---------------------------|---|
| Sensor element            | 1 x digital sensor for temperature and<br>1 x digital sensor for humidity |
| Measuring insert          | Not interchangeable /<br>Replaceable filter cap                           |
| Accuracy<br>→ Temperature | ±0.5 K  |
| → Humidity                | ±3 % RH @ 80 % RH (typ.)  |
| Electrical Connection     | Flange plug M12 x 1,<br>4-pole, nickel-plated brass                       |

WHS



All dimensions in mm

**Materials**

**In contact with media**

**Process connection**

Plastic nipple made of glass fibre reinforced plastic (Ultramid A3X2G5)

**Immersion tube**

Brass CW508L

**Filter cap**

Sintered bronze (filter size CA5)

**Order code**

**Type WHS**

MultiSensor

W

**Diameter**

10 mm

10

**Material**

Messing CW508L

1

**Sensor element**

2 x Digital sensors for humidity and pressure

E02

**Sensor length L1**

38 mm

038

**Filter**

Sintered bronze (interchangeable)

0

**Electrical connection**

Flange plug M12 x 1

X0

**Process connection d1**

M12 x 1.5

R

**Example order number**

W 10 1 E01 038 0 X0 R