

RH-200

Specially designed for heating, ventilation and air conditioning (HVAC) applications, the RH-200 sensor is a cost effective, highly accurate and a reliable solution for measuring relative air humidity and temperature.

The enclosure minimizes installation costs and provides outstanding protection against contamination and condensation, ensuring flawless operation.

In combination with a long calibration experience, the RH-200 provides a measurement accuracy of $\pm 2.5\%RH$ and is available for wall or duct-mounted with current, voltage or Modbus RTU output.

The configuration equipment allows user setup for the output scaling and for the interface parameters, as well as humidity and temperature adjustment of the sensor.



A. Appropriate for US mounting requirements

- Knockout for 1/2" conduit fitting

B. External mounting holes

- Mounting with closed cover
- Electronics protected against construction site pollution
- Easy and fast mounting

C. Electronics on the underside of the PCB

- Optimum protection against mechanical damage during installation

D. Bayonet Screws

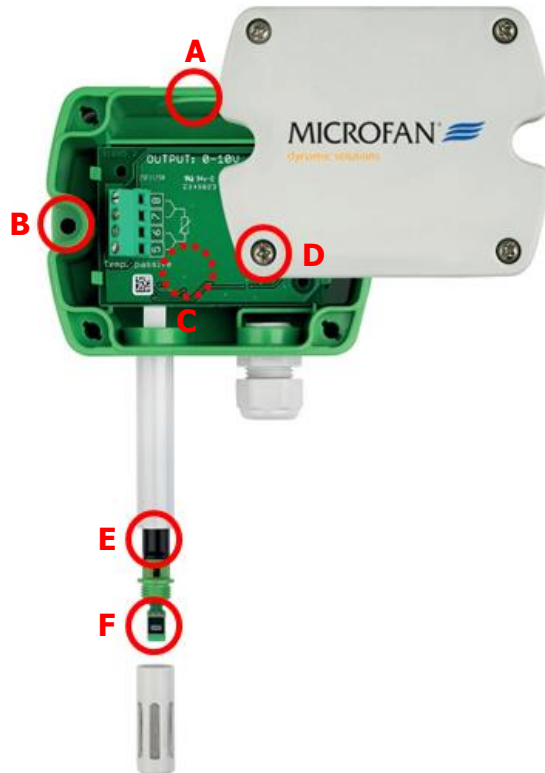
- Open/closed with a 1/4 rotation

E. Cast Electronics

- Mechanical protection
- Condensation-resistant

F. E+E Humidity sensor HCT01

- Long-term stability
- Protected RH sensor surface
- Protected solder pads
- Tested according to automotive standard AEC-Q200



Technical data

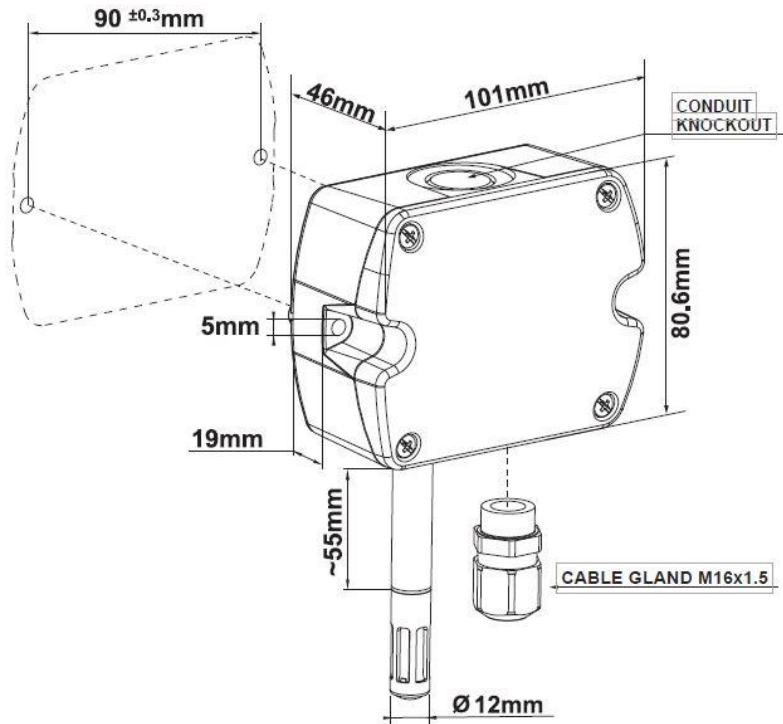
Measured values

Analog output 0...100% RH	0-10 V -1 mA < I < 1 mA oder 4-20mA (two-wire) R < 500 Ohm
Digital output	RS485
Working range	10...95% RH
Accuracy at 20°C	±2.5% RH
Temperature dependency	Typ. ±0.03% RH/°C
Temperature sensor	Pt1000 (tolerance class B. DIN EN 60751)
Analog output	0-10 V 4-20 mA
T-Accuracy at 20°C	±0.3°C

General

Power supply	15 - 35V DC or 24V AC ±20%
0 - 10 V / RS485	10V + R x 20 mA < U < 35V DC
4 - 20 mA	
Current consumption	
Analog	with DC power supply typ. 5mA with AC power supply typ. 15mA
Digital	with DC power supply typ. 15mA with AC power supply typ. 25mA
Connection	Screw terminals, max. 1.5 mm ²
Housing material	Polycarbonate, UL94V-0 approved
Protection class	IP65
Cable gland	M16 x 1.5
Sensor protection	Membrane filter
Electromagnetic compatibility	EN61326-1 EN61326-2-3
Temperature ranges	
Operating temperature	-15...60°C (5...140°F)
Storage temperature	-15...60°C (5...140°F)

Dimensions (mm)



Connection diagram

