

Temperature & humidity sensor WHS

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



WHS



Highlights

- The sensor is designed to measure temperature and humidity in air supply channels and air conditioning systems
- Low heat dissipation through process connection made of glass fibre reinforced plastic → clearly smaller measuring error
- Digital 1-wire bus interface with integrated protection circuit → Lower wiring cost
- Exchangeable filter protects against dust and dirt
- Safe and compact electrical connection through M12 connector
- Short response time → Ideal for controlling rapidly changing process parameters
- Very high vibration resistance → Reliable and durable operation
- Type approved according to DIN EN 50155

Technical data	
Type	MultiSensor for temperature and humidity with M12 connector
Measuring range → Temperature → Humidity	-40...85 °C 0...100 % RH
Measuring medium	Ambient air (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)

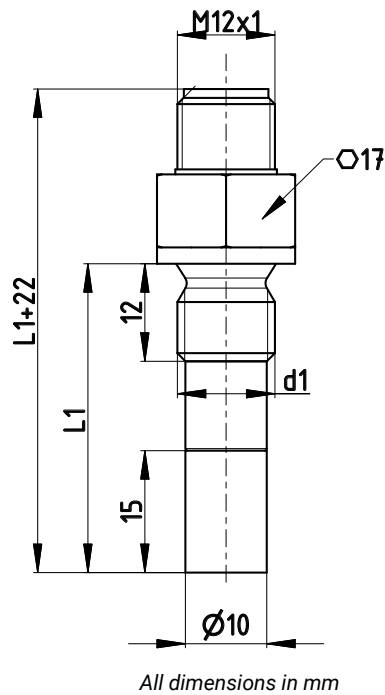
Elektrische Daten	
Sensor element	1 x digital sensor for temperature and 1 x digital sensor for humidity
Measuring insert	Not interchangeable / Replaceable filter cap
Accuracy → Temperature → Humidity	±0.5 K ±3 % RH @ 80 % RH (typ.)
Electrical Connection	Flange plug M12 x 1, 4-pole, nickel-plated brass

Technical datasheet

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Technical drawings

WHS



Materials

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)

Article numbers

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

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