Temperature sensor WGF

With M12 plug // -40...120 °C



WGF

Highlights

- Air temperature measurement in ventilation and air conditioning systems
- Low heat dissipation by process connection made of glass fibre reinforced plastic → significantly lower measurement error
- Clearly identifiable through different coloured plastics → no danger of mistakes during installation
- Safe and compact electrical connection via M12 connector
- High protection class against moisture, dust and dirt ingress
- Short response time → Ideal for controlling rapidly changing process parameters
- Very high vibration resistance → Reliable and long-life operation
- Also available with digital 1-wire bus interface → Low cabling effort
- Type-tested according to DIN EN 50155

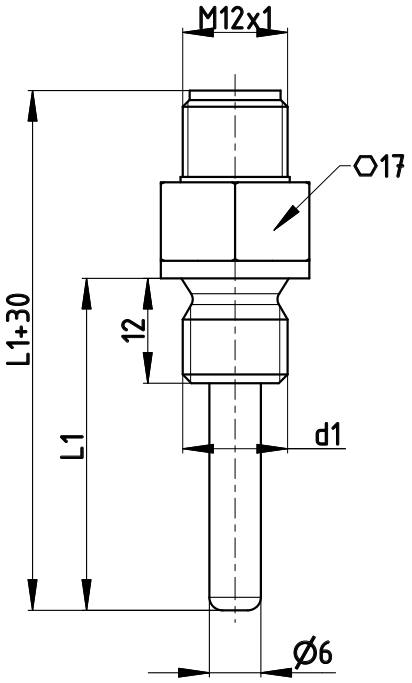
Technical data	
Type	Temperature sensor with M12 plug
Measuring range	-40…120 °C
Measuring medium	Ambient air (non-aggressive gases)
Immersion tube length	38 or 100 mm
Immersion tube diameter	6 mm
Process connection	M12 x 1.5
Nominal pressure	n.a. (atmospheric pressure)
Medium temperature	-40...120 °C
Ambient temperature	-40...80 °C
Storage temperature	-25...70 °C
Degree of protection according to EN 60529	IP65

Electrical data	
Sensor element	1 x Pt100 / 3-wire 1 x Pt1000 / 2-wire 1 x 1-wire bus sensor with integrated protection circuit or 1 x NTC 5k
Measuring insert	Not interchangeable
Accuracy	Class A / ±(0.15 K + 0.002 x T) Class B / ±(0.30 K + 0.005 x T) 1-wire bus temperature sensor ±0.5 °C (-10…85 °C) Temperature sensor NTC 5k ±0.5 °C (Beta 1 %)
Electrical connection	Flange plug M12 x 1, 4-pole, nickel-plated brass

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Technical drawing

WGF



All dimensions in mm

Materials

Materials	
In contact with media	
Process connection	Plastic nipple made of glass fibre reinforced plastic (Ultramid A3X2G5)
Immersion tube	Stainless steel 1.4571

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Article numbers

Order code								
Type WGF								
Resistance thermometer	W							
Diameter								
6 mm		06						
Material								
Stainless steel 1.4571			3					
Sensor element								
1 x Pt100 3-wire / class B				P31				
1 x Pt1000 2-wire / Class B				P12				
1 x 1-wire bus sensor with integrated protective circuit				E01				
1 x NTC 5k				N01				
Resistance thermometer / Class A				A . .				
Nominal length L1								
38 mm					038			
100 mm					100			
Measuring insert								
Not interchangeable						0		
Electrical connection								
Flange plug M12 x 1							R0	
Process connection d1								
M12 x 1.5								RGF
Example order number	**W**	**06**	**3**	**P31**	**038**	**0**	**R0**	**RGF**

Note: The plastic nipple is customer-specific, there are proportionate tool costs.

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