Temperature sensor WDS

With M12 plug // -40...150 °C



WDS

Highlights

- The sensor is intended for measuring media in heating and air-conditioning systems as well as cooling circuits of machines and systems
- Safe and compact electrical connection via M12 plug
- 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-lasting operation
- Also available with digital 1-wire bus interface → Low cabling effort

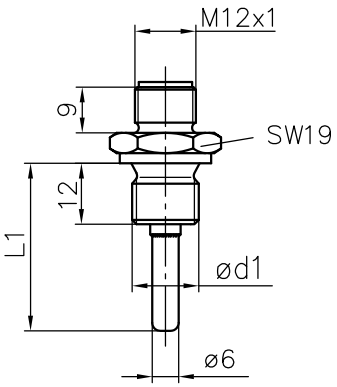
Technical data	
Type	Temperature sensor with M12 plug
Measuring range	-40…150 °C
Measuring medium	Water and aqueous liquids, non-aggressive gases
Immersion tube length	38 or 100 mm
Immersion tube diameter	6 mm
Process connection	G¼, G⅛, M12 x 1.5
Nominal pressure	PN 16
Medium temperature	-40...150 °C
Ambient temperature	-40...80 °C
Storage temperature	-25...70 °C
Degree of protection according to EN 60529	IP65

Electrical data	
Measuring element	1 x Pt100 / 3-wire 1 x Pt1000 / 2-wire 1 x DS18B20U+(digital) with integrated protection circuit 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) Temperature sensor NTC 5k ±0.5 °C (Beta 1 %) Digital 1-wire bus temperature sensor ±0.5 °C (-10…85 °C)
Electrical connection	Flange plug M12 x 1, 4-pole, nickel-plated brass

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Technical drawing

WDS



All dimensions in mm

Materials

Materials	
In contact with media	
Process connection	Stainless steel 1.4571
Protection tube	Stainless steel 1.4571

Article numbers

Order code								
Type								
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 DS18B20U+(digital) with integrated protection circuit				E01				
1 x NTC 5k				N01				
Resistance thermometer / Class A				AXX				
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								R
G¼								L
G⅛								M
Example order number	**W**	**06**	**3**	**P31**	**038**	**0**	**R0**	**R**

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