Temperature sensor WDM

With integrated transmitter // -50...150 °C



WDM

Highlights

- For measurement of cooling water, lubricating oil and hydraulic oil temperature
- Application in railroad technology, mobile machines, engines and compressors
- Efficient control due to very short response times (Version with 4 mm Immersion tube diameter / T90=<5 s)
- Miniature design → Installation even in confined spaces
- Safe and compact electrical connection due to M12 plug
- High protection class against moisture, dust and dirt ingress
- Very high vibration resistance → Reliable and long-lasting operation
- Meets the standards and specifications for use in rail vehicles according to DIN EN 50155, DIN EN 50121 and DIN EN 61373

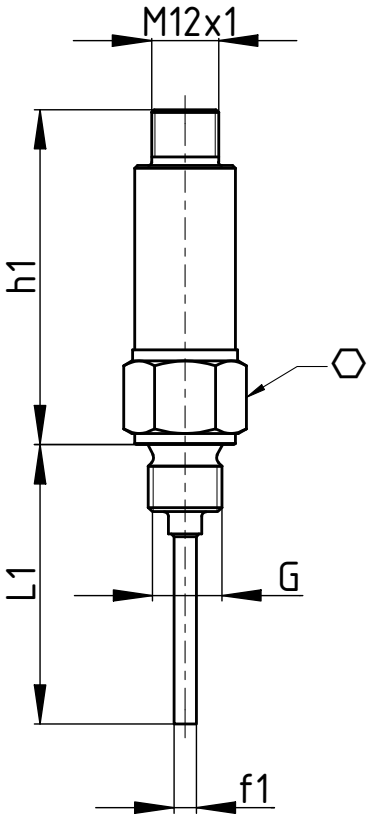
Technical data	
Type	Temperature sensor with integrated transmitter
Measuring range	-50...150 °C
Measuring medium	Water and aqueous liquids, non-aggressive gases
Immersion tube length	25...100 mm
Immersion tube diameter	4 or 6
Process connection	G½ or G¼
Nominal pressure	PN 25
Ambient temperature	-40...85 °C
Storage temperature	-20...70 °C
Degree of protection according to EN 60529	IP65

Electrical data	
Measuring element	1 x Pt100 / Class A
Measuring insert	Not interchangeable
Electrical connection	Flange plug M12 x 1, 4-pin
Analogue output	
Current signal	4...20 mA
Supply voltage	8...35 VDC
Accuracy analog output	0.4°C + (±0.1% of the measuring span)
Temperature coefficient	0.01% of the measuring span / °C
Scaling	Programmable
Signal error	NAMUR NE43
Max. burden	≤ (Vsupply - 8) / 0.023 [Ω]
Power consumption	25 mW...0.8 W

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Technical drawings / Dimensions

WDM

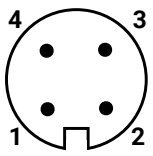


Dimensions [mm]					
Type	**L1**	**h1**	⬡	**G**	**f1**
WDM	25, 50 or 100	approx. 60	27 or 19	G½ or G¼	Ø 4 or Ø 6

Materials

Materials	
In contact with media	
Process connection	Stainless steel 1.4571
Protection tube	Stainless steel 1.4571 / 1.4303 for Ø 4 mm

Pin assignment



Pin 1: +
Pin 2: -
Pin 3: n.c. (not connected)
Pin 4: n.c. (not connected)

Article numbers

Order code									
Type									
Resistance thermometer	W								
Diameter f1									
4 mm		04							
6 mm		06							
Material									
Stainless steel 1.4571			3						
Sensor element									
1 x Pt100 / Class A				A31					
Immersion tube length L1									
25 mm					025				
50 mm					050				
100 mm					100				
Measuring insert									
Not interchangeable						0			
Electrical connection									
Flange plug M12 x 1							R0		
Process connection G									
G½								2	
G¼								L	
Measuring range analogue output									
-50...+150 °C									59
0...100 °C									10
0...150 °C									15
Example order number	**W**	**04**	**3**	**A31**	**025**	**0**	**R0**	**2**	**10**

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