Temperature sensor W3M

With integrated transmitter // -20...200 °C



W3M

Highlights

- For measurement of cooling water, lubricating oil and hydraulic oil temperature
- Application in industrial and marine applications
- Efficient control due to very short response times (Version with 4 mm Immersion tube diameter / T90=<5 s)
- Safe and compact electrical connection due to DIN angle plug
- High protection class against moisture, dust and dirt ingress
- Very high vibration resistance → Reliable and long-lasting operation
- Customer-specific variant possible → Simple integration into plants / systems

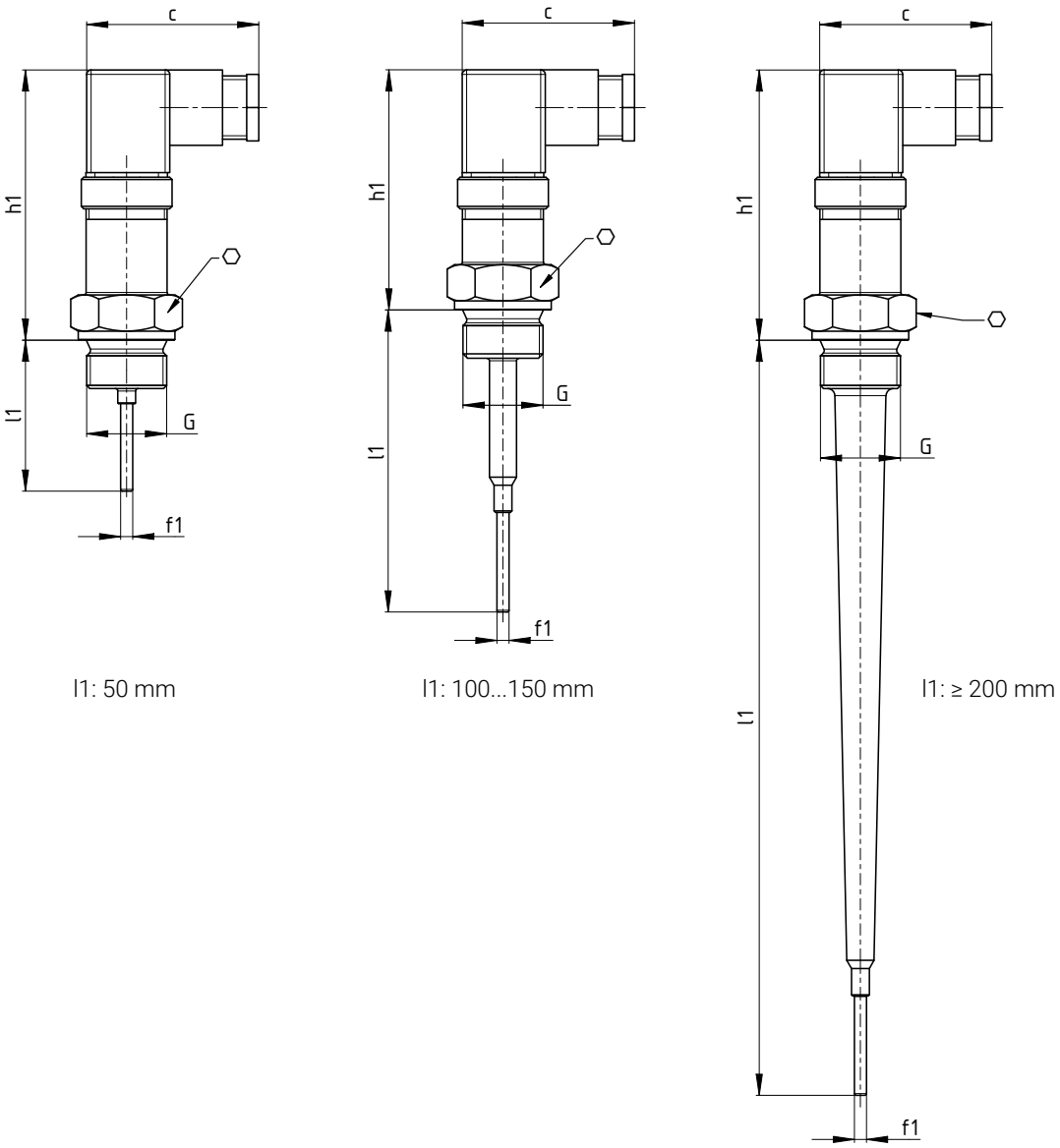
Technical data	
Type	Temperature sensor with integrated transmitter
Measuring range	-20...200 °C
Measuring medium	Water and aqueous liquids, non-aggressive gases
Immersion tube length	50...250 mm (≥ 200 mm conical)
Immersion tube diameter	4, 6 or 8 mm
Process connection	G½, G¼ or G¾
Nominal pressure	PN 25
Medium temperature	-20...200 °C
Ambient temperature	-20...85 °C
Storage temperature	-20...70 °C
Degree of protection according to EN 60529	IP65
Approvals	
EU RO Mutual Recognition Type Approval Certificate (Marine version only). Covers: ABS, BV, CCS, CRS, DNV, IRS, KR, LR, ClassNK, PRS, RINA, RS	

Electrical data	
Measuring element	1 x Pt100 / Class B
Measuring insert	Interchangeable
Accuracy	±1 % of range
Electrical connection	Angled plug, DIN EN 175 301-803, Form A
Analogue output	
Current signal	4...20 mA
Supply voltage	10...35 VDC
Scaling	Programmable
Signal error	NAMUR NE43

Grubatec AG - Gewerbehaus Ergolz, Wölferstrasse 5 - 4414 Füllinsdorf
Telefon: +41 (0)55 617 00 80 - www.grubatec.ch - sales@grubatec.ch

Technical drawings / Dimensions

W3M



Dimensions [mm]						
Type	**l1**	**h1**	**c**	⬡	**G**	**f1**
W3M	50, 100, 150, 200 or 250	max. 90	57	27 / 32	G½, G¼ or G¾	Ø 4, Ø 6 or Ø 8

Materials

Materials	
Not in contact with media	
Connection head	Plastic PA66 (Max. 125 °C)
In contact with media	
Process connection	Stainless steel 1.4571
Protection tube	Stainless steel 1.4571 / 1.4303 for Ø 4 mm

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Article numbers

Standard version

Order code									
Type									
Resistance thermometer	W								
Diameter f1									
4 mm (stepped from 9 mm)		04							
6 mm		06							
8 mm		08							
Material									
Stainless steel 1.4571			3						
Sensor element									
1 x Pt100 / Class B				P21					
Immersion tube length l1									
50 mm					050				
100 mm					100				
150 mm					150				
200 mm					200				
250 mm					250				
Measuring insert									
Interchangeable						2			
Electrical connection									
Angled plug type A							90		
Process connection G									
G½								2	
G¼								L	
G¾								3	
Measuring range analogue output									
0...100 °C									10
0...150 °C									15
0...200 °C									20
Example order number	**W**	**04**	**3**	**P21**	**050**	**2**	**90**	**2**	**10**

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Article numbers

Marine version

Order code						
Type						
Resistance thermometer	W					
Diameter f1						
4 mm (stepped from 9 mm)		04				
Material						
Stainless steel 1.4571			3			
Sensor element						
1 x Pt100 / Class B				P21		
Nominal length l1	**Process connection G**	**Measuring range analog output**				
50 mm	G3/4 A	0…100 °C			050-6369	
100 mm	G3/4 A	0…100 °C			100-7352	
100 mm	G3/4 A	0…150 °C			100-8741	
100 mm	G1/4 A	0…200 °C			100-2786	
100 mm	G1/2 A	0…200 °C			100-0176	
100 mm	G3/4 A	0…200 °C			100-0211	
140 mm	G1/4 A	0…200 °C			140-2798	
140 mm	G1/2 A	0…200 °C			140-0188	
140 mm	G3/4 A	0…200 °C			140-0223	
150 mm	G3/4 A	0…100 °C			150-7364	
150 mm	G3/4 A	0…150 °C			150-8728	
200 mm	G3/4 A	0…100 °C			200-7388	
200 mm	G3/4 A	0…150 °C			200-8704	
250 mm	G3/4 A	0…100 °C			250-7411	
Approvals						
EU RO Type Approval Certificate						M
Example order number	**W**	**04**	**3**	**P21**	**050-6369**	**M**