

# Temperature sensor W3M

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



W3M



## Highlights

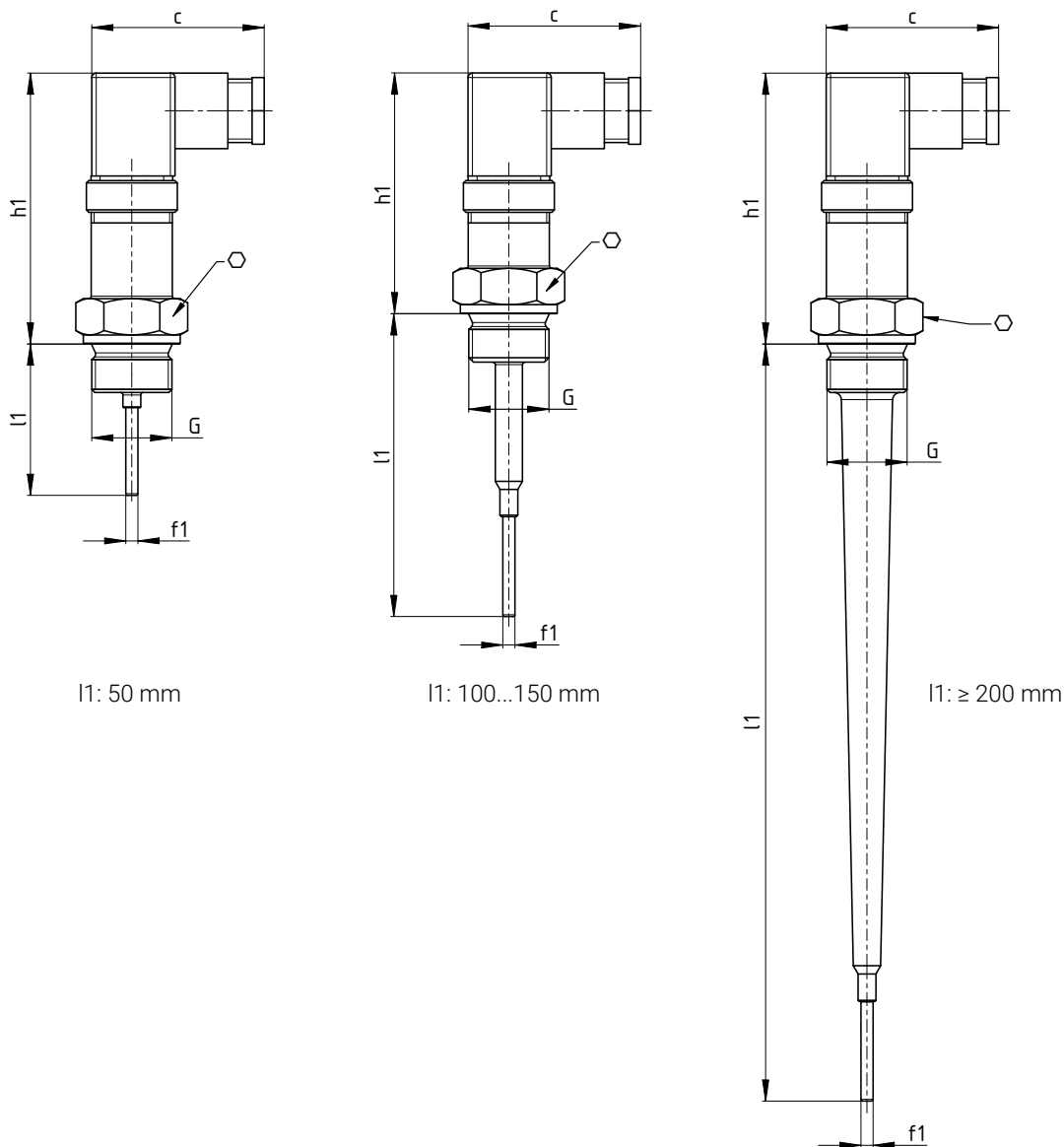
- For measurement of cooling water, lubricating oil and hydraulic oil temperature
- Application in industrial and marine applications
- Efficient control due to very short response times (Version with 4 mm Immersion tube diameter / T90=<5 s)
- Safe and compact electrical connection due to DIN angle plug
- 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	
<b>Type</b>	Temperature sensor with integrated transmitter
<b>Measuring range</b>	-20...200 °C
<b>Measuring medium</b>	Water and aqueous liquids, non-aggressive gases
<b>Immersion tube length</b>	50...250 mm (≥ 200 mm conical)
<b>Immersion tube diameter</b>	4, 6 or 8 mm
<b>Process connection</b>	G½, G¼ or G¾
<b>Nominal pressure</b>	PN 25
<b>Medium temperature</b>	-20...200 °C
<b>Ambient temperature</b>	-20...85 °C
<b>Storage temperature</b>	-20...70 °C
<b>Degree of protection according to EN 60529</b>	IP65
<b>Approvals</b>	
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	
<b>Measuring element</b>	1 x Pt100 / Class B
<b>Measuring insert</b>	Interchangeable
<b>Accuracy</b>	±1 % of range
<b>Electrical connection</b>	Angled plug, DIN EN 175 301-803, Form A
<b>Analogue output</b>	
<b>Current signal</b>	4...20 mA
<b>Supply voltage</b>	10...35 VDC
<b>Scaling</b>	Programmable
<b>Signal error</b>	NAMUR NE43

# 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	∅ 4, ∅ 6 or ∅ 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 ∅ 4 mm

# Article numbers

## Standard version

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

# Article numbers

## Marine version

Order code						
<b>Type</b>						
Resistance thermometer		W				
<b>Diameter f1</b>						
4 mm (stepped from 9 mm)		04				
<b>Material</b>						
Stainless steel 1.4571			3			
<b>Sensor element</b>						
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
<b>Example order number</b>		<b>W</b>	<b>04</b>	<b>3</b>	<b>P21</b>	<b>050-6369</b>
						<b>M</b>