Temperature sensor W12

Head type B // -40...200 °C



W12

Highlights

- For measurement of cooling water, lubricating oil and hydraulic oil temperature
  → Application in industrial and marine applications
- Very high vibration resistance → Reliable and long-lasting operation
- Customer-specific variant possible → Simple integration into plants / systems
- Available as single and double resistance thermometers
- Optionally integrable transmitter → Simple integration into process control systems

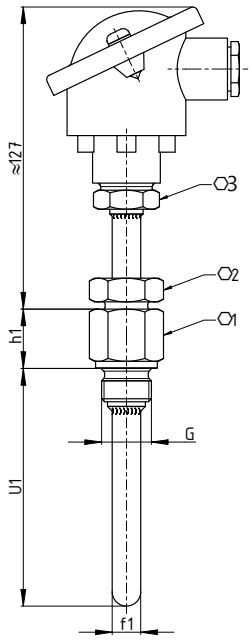
Technical data	
Type	Temperature sensor with connection head type B
Measuring range	-40...200 °C
Measuring medium	Water and aqueous liquids, non-aggressive gases
Immersion tube length	80...250 mm
Immersion tube diameter	12 or 14 mm
Process connection	G¼, G½, M27 x 2, M33 x 2
Nominal pressure	PN 25
Ambient temperature	-40...85 °C
Storage temperature	-25...70 °C
Degree of protection according to EN 60529	IP54

Electrical data	
Measuring element	2 x Pt100 / 2-wire 1 x Pt100 / 3-wire 1 x Pt100 / 4-wire
Measuring insert	Interchangeable
Accuracy	Class B / ±(0.30 K + 0.005 x T)
Electrical connection	Head type B with ceramic socket Head type B with transmitter
Analogue output	
Current signal	4...20 mA
Supply voltage	8...35 VDC
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 drawing // Dimensions

W12



Dimensions [mm]							
Type	**U1**	**h1**	**⬡1**	**⬡2**	**⬡3**	**G**	**f1**
W12	80 up to 250	25	27, 32 or 41	27	24	G½A, G¾A, M27x2 or M33x2	Ø 12 or Ø 14

Materials

Materials	
Not in contact with media	
Connection head	Die-cast aluminium, silver painted
In contact with media	
Process connection	Stainless steel 1.4571
Protection tube	Stainless steel 1.4571

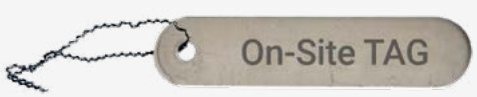
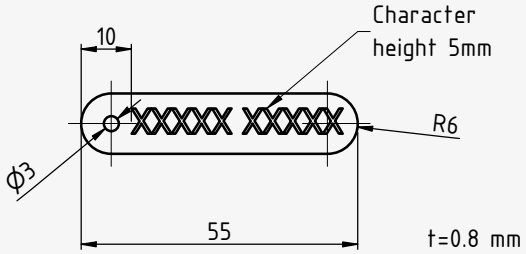
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Article numbers

Order code								
Type								
Resistance thermometer	W							
Diameter F1								
12 mm		12						
14 mm		14						
Material								
Stainless steel 1.4571			3					
Sensor element								
1 x Pt100 3-wire / Class B				P31				
2 x Pt100 3-wire / Class B				P32				
1 x Pt100 4-wire / Class B				P41				
Protection tube length U1								
80 mm					080			
100 mm					100			
120 mm					120			
150 mm					150			
200 mm					200			
250 mm					250			
Measuring insert								
Interchangeable						2		
Electrical connection								
Head type B with ceramic socket							B0	
Head type B with transmitter (only with sensor element 1 x Pt100 3-wire)							BT	
Process connection d1								
G½								2T2
G¾								3T2
M27 x 2								HT2
M33 x 2								FT2
Example order number	**W**	**12**	**3**	**P31**	**080**	**2**	**B0**	**2T2**

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Accessories

Accessories	Order number
Measuring point designation Laser-inscribed stainless steel plate with fixing wire for easy attachment to measuring points → **Scope of delivery:** Designation plate inscribed according to specification and enclosed fixing wire (sealing wire) → **Fastening:** Wire (included in delivery), alternatively sealing, cable ties or similar (not included in delivery) → **Materials:** Plate stainless steel 1.4571, wire stainless steel → **Dimensions:** Plate 55 x 10 x 0.8 mm, wire length 180 mm → **Inscription:** one-sided, single-line, max. 11 characters, character height 5 mm, designation width max. 40 mm, letters, numbers, symbols, barcodes, QR codes → **Transmission of designations:** digital list, file formats Excel, Word or CSV  	**ONSITETAG**