Temperature sensor W20

Head type B with protection tube // 0...600 °C



W20

Highlights

- For exhaust gas temperature measurement in diesel and gas engines → Up to 600 °C Media temperature
- Very high vibration resistance → Reliable and long-lasting operation
- Customer-specific variant possible → Simple integration into plants / systems
- Available as single and double resistance thermometer or thermocouple
- Optionally integrable transmitter → Simple integration into process control systems

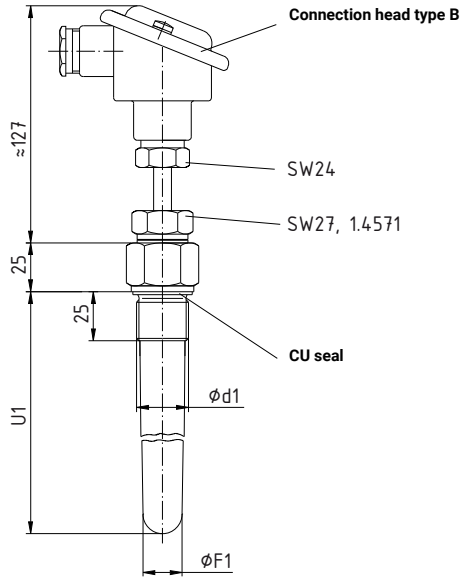
Technical data	
Type	Temperature sensor with protection tube type 2
Measuring range	0...600 °C
Measuring medium	Exhaust gases marine diesel engines
Protection tube length	100...300 mm
Protection tube diameter	14, 17 or 20 mm conical
Process connection	G½, G¾, M27 x 2, M33 x 2
Nominal pressure	PN 25
Medium temperature	0...600 °C
Ambient temperature	-50...85 °C
Storage temperature	-25...70 °C
Degree of protection according to EN 60529	IP54
Approvals	
DNV	

Electrical data	
Measuring element	1 x Pt100 / 3-wire / Class B 1 x Pt1000 / 2-wire / Class B 1 x NiCr-Ni (Type K) 2 x NiCr-Ni (Type K)
Measuring insert	Interchangeable
Accuracy	Class B / ±(0.30 K + 0.005 x T) Class 1 / ±1.5 °C or 0.004 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

W20



All dimensions in mm

Materials

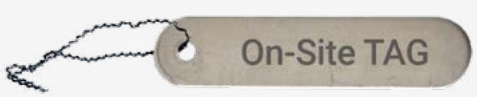
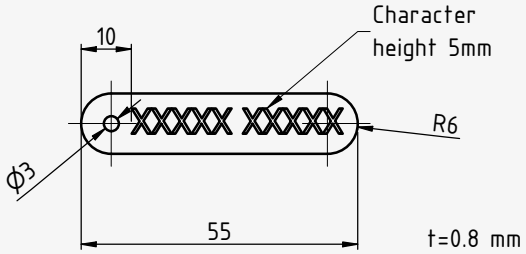
Materials	
Not in contact with media	
Connection head	Die-cast aluminium, silver painted
In contact with media	
Process connection	Stainless steel 1.4571 or steel 1.7335
Protection tube	Stainless steel 1.4571 or steel 1.7335

Article numbers

Order code								
Type								
Resistance thermometer	W							
Thermocouple	T							
Diameter F1								
14 / 17 mm (up to nominal length U1: 150 mm)		14						
17 / 23 mm (up to nominal length U1: 150 mm)		17						
20 / 23 mm (from nominal length U1: 200 mm)		20						
Material								
Stainless steel 1.4571 (max. 450 °C)			3					
Steel 1.7335, heat resistant (max. 600 °C)			5					
Sensor element								
1 x Pt100 3-wire / Class B				P31				
1 x Pt1000 2-wire / Class B				P12				
1 x NiCr-Ni (Type K)				1TK				
2 x NiCr-Ni (Type K)				2TK				
Nominal length U1								
100 mm					100			
120 mm					120			
150 mm					150			
200 mm					200			
250 mm					250			
300 mm					300			
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 (for Ø 14 / 17 mm)								2T6
G¾								3T6
M27 x 2								HT6
M33 x 2								FT6
Example order number	**W**	**17**	**3**	**P31**	**100**	**2**	**B0**	**3T6**

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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**