

# Temperature sensor IOM

With integrated IO-Link transmitter // -50...200 °C // -58...392 °F



## Highlights

- Designed for measuring the temperature of cooling water, lubricating and hydraulic oil in machines and systems
- Multi-talent → Communication via IO-Link and digital switching output
- Compact design → Mounting even in limited space conditions
- Simple connection with standardized M12 connector and unshielded connection cable → significant cost and time savings
- Remote access to sensor parameters → Easy configuration, easy setup, fast sensor replacement
- IO-Link transmits data purely digital → Exact, no conversion failures, interference proof
- Digital point-to-point communication, can be integrated into almost any infrastructure of fieldbus and control systems → Independent of controller and fieldbus
- Diagnostics including remote diagnostics down to the field device level → Ensuring higher plant uptime

## Technical data

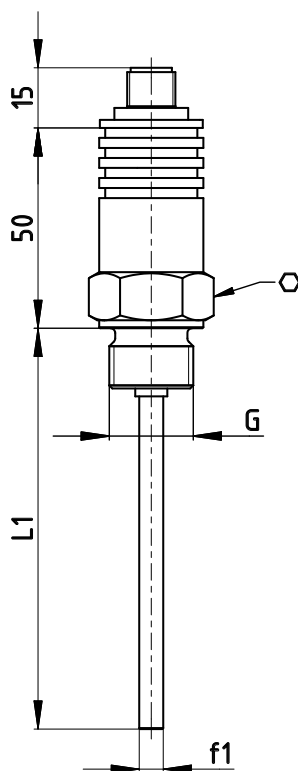
<b>Type</b>	Temperature sensor with integrated IO-Link transmitter	
<b>Measuring range</b>	-50...200 °C	-58...392 °F
<b>Measuring medium</b>	Water and aqueous liquids, non-aggressive gases	
<b>Immersion tube length</b>	50...150 mm	1.969...5.906"
<b>Immersion tube diameter</b>	6 mm	0.236"
<b>Process connection</b>	G½, G¼	
<b>Nominal pressure</b>	PN 25	
<b>Medium temperature</b>	-50...200 °C	-58...392 °F
<b>Ambient temperature</b>	-20...80 °C	-4...176 °F
<b>Storage temperature</b>	-40...85 °C	-40...185 °F
<b>Degree of protection according to EN 60529</b>	IP65	

# Electrical data

Electrical data	
<b>Measuring element</b>	1 x Pt100 / Class B
<b>Measuring insert</b>	Not interchangeable
<b>Accuracy</b>	Max. $\pm 0.02\%$ of range + measuring element error
<b>Electrical connection</b>	Flange plug M12 x 1, 4-pole
<b>Supply voltage</b>	18...32 VDC
<b>Output</b>	
<b>Output</b>	IO-Link or standard I/O operation (SIO mode)
<b>IO-Link</b>	
<b>Communication interface</b>	IO-Link
<b>Data transfer rate</b>	COM3 (230.4 kBaud)
<b>IO-Link specification</b>	V1.1
<b>Switching output</b>	
<b>Communication interface</b>	IO-Link
<b>Output function</b>	digital switching signal according to IEC 61131-2 type 1
<b>Rated operational current</b>	0.1 A

# Dimensions // Materials

IOM



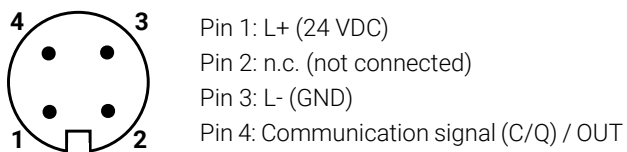
Dimensions [mm]				
Type	L1	f1	G	⊘
IOM	50, 100 or 150	∅ 6	G½ or G¼	27

Dimensions [inch]				
Type	L1	f1	G	⊘
IOM	1.969, 3.937 or 5.906	∅ 0.236	G½ or G¼	∅ 1.063

Materials	
<b>Not in contact with media</b>	
Connection head	PBT GF30
<b>In contact with media</b>	
Process connection	Stainless steel 1.4571
Protection tube	Stainless steel 1.4571

## Pin assignment

Pin assignment (specified according to IEC 60974-5-2):



# Article numbers

Order code									
<b>Type</b>									
Resistance thermometer		W							
<b>Diameter f1</b>									
6 mm (0.236")			06						
<b>Material</b>									
Stainless steel 1.4571				3					
<b>Sensor element</b>									
1 x Pt100 / Class B					P31				
<b>Immersion tube length L1</b>									
50 mm (1.969")						050			
100 mm (3.937")						100			
150 mm (5.906")						150			
<b>Measuring insert</b>									
Not interchangeable							0		
<b>Electrical connection</b>									
Flange plug M12 x 1, 4-pole, with IO-Link transmitter								RI	
<b>Process connection G</b>									
G <sup>1</sup> / <sub>4</sub>								L	
G <sup>1</sup> / <sub>2</sub>								2	
<b>Example order number</b>		<b>W</b>	<b>06</b>	<b>3</b>	<b>P31</b>	<b>050</b>	<b>0</b>	<b>RI</b>	<b>2</b>