

Screw-in transmitter G1/2 " M12 connector 4-20 mA

Article number: 807004 0X12

The precise Pt1000 screw-in transmitter reliably measures temperatures in pipes and vessels. The screw-in thread allows you to insert it safely and easily into the process. It is connected via an M12 connector. The output provides a standardized 4-20 mA output signal. This allows measured values to be transmitted error-free even over long distances. You can select the length of the protection sleeve. Accessories such as immersion sleeves, compression fittings and connection cables are available in our online store.



Special features	
Inputs and outputs	<p>Input: Pt1000 resistance sensor, permanently installed Output: 4 to 20 mA</p>
Accuracy and Long-term stability	<p>Accuracy: high measuring accuracy Long-term stability: long service life with flexible application possibilities</p>
Alarm function	<p>Sensor break monitoring Sensor short-circuit monitoring Measuring range monitoring</p>
Design	<p>compact, robust, vibration and shock resistant design</p>
Process safety	<p>pressure resistant up to screw cap insertion in the process</p>

kompakte und robuste Bauweise
Compact and robust design

Messelement: Pt 1000
Measuring element: Pt 1000

Ausgang: 4 - 20 mA
Output: 4 - 20 mA

Einbaulängen konfigurierbar
Mounting length configurable

Anschluss über M12 Stecker
Connection via M12 plug

einfache und sicher Installation
easy and safe installation

Input			
Measuring element	Norm	Configurable measuring range	Accuracy
Pt1000	IEC 60751	-200 °C to +850 °C -328 °F to +1562 °F	±0.3 °C + 0.1 % of the measuring span
Connection type	2-wire (permanently installed)		

Output		Circuit diagram Output
Output type	analog, temperature linear for RTD	<p>Frontansicht M12 Stecker Front view M12 connector</p>
Output signal	4 to 20 mA	
Parametrization / Scaling	Configurable via DIP-Switch	
Resolution	16 bit dac	
Accuracy (°C)	0,1	
Load	500 Ω at 24 VDC	
Connection type	2-wire	

Sensor monitoring & sensor error		Measured values outside the measuring range	
Sensor failure effects	according to NAMUR NE43	Sensor Status	4 - 20 mA
Alarms		Min. measured value	4 mA
Sensor error	4 - 20 mA	Max. measured value	20 mA
Sensor Status	3,6 mA	Underrange	3,8 mA
Sensor short circuit	21 mA	Overrange	20,5 mA

MWA / KS / 21.06.2024

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You can find our standard portfolio in our
webshop at: www.testo-sensor.shop

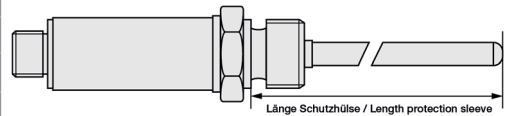
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Time response		Accuracy and stability	
Closing time (s)	≤ 5	Cold junction compensation	
Signal attenuation (s)	0 – 30	Cold Junction Compensation	±0,3 – 0,5 °C (NTC 5K)
Measuring cycle (s)	<0,25 (<4 Hz)	Temperature influence	±0,01 °C per °C
Response time	Depending on sensor type		

Ambient conditions	
Ambient Temperatur	Storage: -30 °C to +70 °C -22 °F to +158 °C Operating: -50 °C to +150 °C -58 °F to +302 °F
Humidity (%rH)	0 to 98 (non-condensing)
Protection	IP65

EMC	
Standard	Directive: 2014/30/EU Harmonized standards: EN 61326-1:2013

Type, Protection sleeve, Thread				
Type		Thread		
Dimensions	See drawing	Material	Stainless steel 1.4404 316L	
Material Flammability	Stainless steel 1.4404 316L	Length (mm)	14	
Mounting	via process connection	Thread	G1/2 "	
Connection	M12	Wrench size	27	
Weight (g)	min. 75 (depending on sleeve length)			
Protection sleeve				
Material	Stainless steel 1.4404 316L			
Diameter (mm)	6			
Please select the appropriate length of the protection sleeve				
Mounting length (mm)	50	100	150	200
Article number	807004 0112	807004 0212	807004 0312	807004 0412



Matching accessories	
DIN rail power supply	On request
Table power supply	On request
Matching connection cables	in the Webshop: testo-sensor.shop
Suitable mounting flanges	in the Webshop: testo-sensor.shop
Matching immersion sleeves	in the Webshop: testo-sensor.shop
Suitable compression fittings	in the Webshop: testo-sensor.shop

Factory configuration	
Input	Pt1000 fixed
Scaling	0 °C to +100 °C

General data	
Isolation	none
Supply Voltage (VDC)	12 to 36, polarity protected

Delivery	
Transmitter, Instruction manual, individually packed in PE bag	

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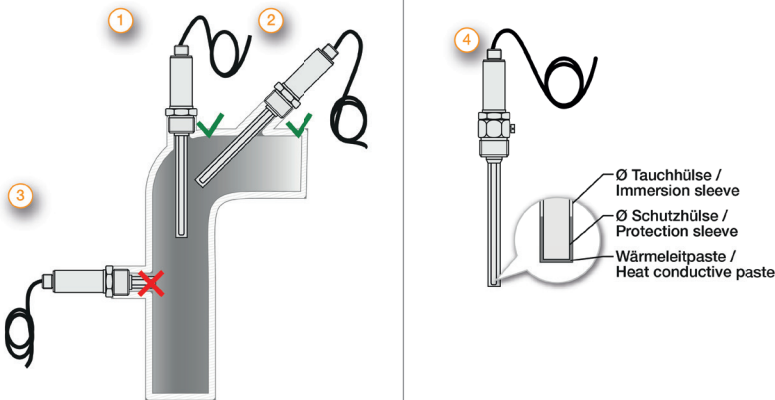
Technical drawing	All dimensions in mm
Side view	Connector

All dimensions in mm

Pin assignment input and output

Input	Pt1000 fest verbaut	Output	rt rd
	Pt1000 fixed mounted		ws wt

Mounting



Measurement errors can occur due to heat dissipation to the environment. To keep these as small as possible, we recommend immersing the protection sleeve of your temperature probe as deeply as possible in the medium to be measured during installation. The optimum installation depth should be 10-15 times the \varnothing of the protection sleeve. Please make sure that you have sufficient space so that you can remove the probe again if necessary.

Mounting by using an immersion sleeve (4): Please make sure that the \varnothing and the length of the immersion sleeve are chosen according to the installation situation, so that the minimum immersion depth can be reached. Since the probe is not inserted directly into the medium, but via the immersion sleeve, the response times are somewhat slower. The probe should be selected in such a way that the protection sleeve touches the bottom of the immersion sleeve and that the air cushion around the protection sleeve is as small as possible. The use of thermal conduction paste can improve the response times.

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