

# Plug-in transmitter 4-20 mA

Article number: 803312 1012

Our plug-in transmitter with 4-20 mA current output comes with matching immersion sleeves (stainless steel immersion sleeve for aggressive media) and mounting flanges for quick and easy installation. The 4-20 mA plug-in transmitter measures the temperature in liquid or gaseous media, has eight switchable measuring ranges and a housing with snap-on cover and IP 54.



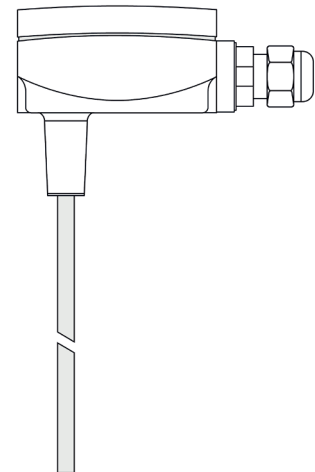
Supply and output	
Output	4 - 20 mA
Power consumption	< 1,0 VA / 24 V DC
Voltage supply	15 - 36 V DC
Connection type	2-Wire

General information	
Measuring range	multi-range switching with 8 switchable measuring ranges with manual zero point correction ( $\pm 10$ K)
Sensor	Pt1000, DIN EN 60751, Class B
Temperature deviation	typically $\pm 0.2$ K at $+25$ °C
Load	$R_a$ (Ohm) = $(U_b - 14 \text{ V}) / 0,02 \text{ A}$
Process connection	by using an immersion sleeve or mounting flange

Gehäuse	
Material	Plastic, UV-resistant Material polyamide, 30 % glass bead reinforced
Dimensions (L/W/H) (mm)	72 x 64 x 37,8
Color	Traffic white (similar to RAL9016)
Electrical connection	0.14 - 1.5 mm <sup>2</sup> , via screw terminals on circuit board
Closure	with snap cap

**Configurable options**

C - Mounting length



Protection sleeve		Technical drawing	
Material	Stainless steel 1.4571   316TI		
Ø (mm)	6		
Your order code		C -Mounting length	
Article number	Mounting length	code	Length (mm)
803312 1012	C_____	C0050	50
Delivery and Packing		C0100	100
Delivery	Transmitter, Operating instructions	C0150	150
		C0200	200
Packing	individually packed in PE bag	C0250	250
		C0300	300
		C0400	400

MW / KS / 12.12.2023

**Testo Sensor GmbH**

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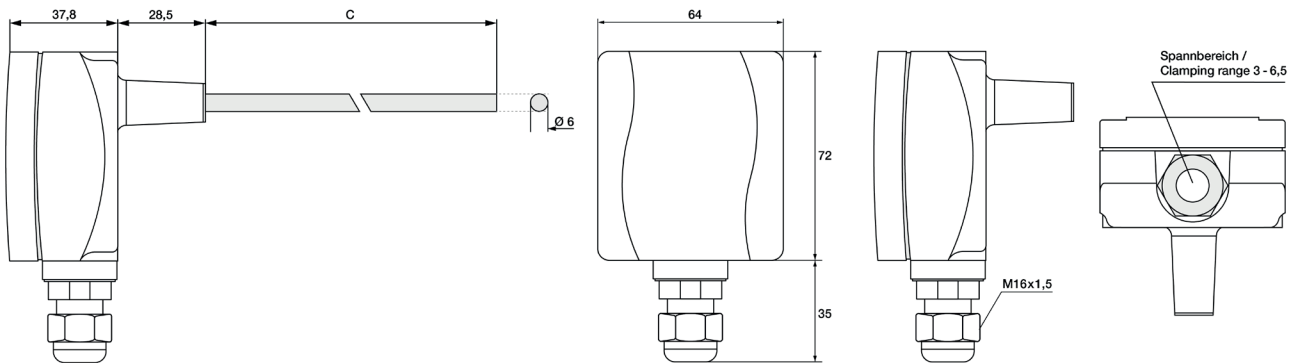
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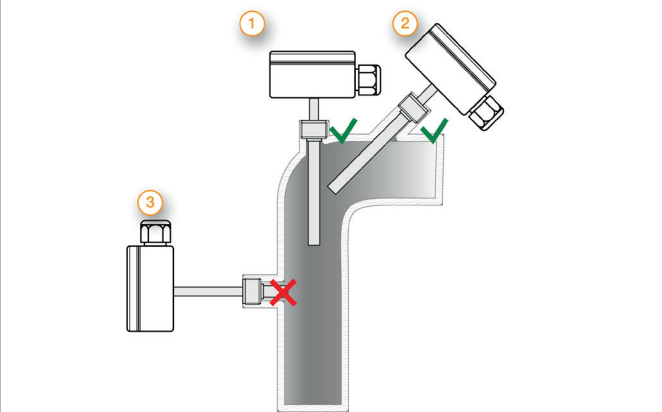
Ambient conditions			
Ambient temperature	-30 °C to +70 °C	Permissible air humidity	< 95 % r. H., non-precipitating air
Certifications / Standards			
Protection class	III (nach EN 60 730)	Standards	CE conformity electromagnetic compatibility according to EN 61326 according to EMC Directive 2014/ 30/ EU
Protection type	IP 54 according to EN 60 529		

**Technical drawing**  
Configurable options C - Mounting length All dimensions in mm



**Important assembly instructions**

Measurement errors can occur due to heat dissipation to the environment. To keep these as small as possible, we recommend immersing the protective sleeve of your temperature sensor as deeply as possible in the medium to be measured when installing it. The optimum installation depth should be 10-15 times the Ø of the protective sleeve. Please make sure that you have enough space so that you can remove the sensor again if necessary. Mounting by means of a mounting flange: Please ensure that the Ø of the mounting flange matches the Ø of the protective sleeve. Mounting with immersion sleeve: Please make sure that the Ø and the length of the immersion sleeve match the installation situation so that the minimum immersion depth can be reached. Since the sensor is not inserted directly into the medium, but via the immersion sleeve, the response times are somewhat slower. The sensor should be selected so that the protective sleeve touches the bottom of the immersion sleeve and the air cushion around the protective tube is as small as possible. The use of thermal paste can improve the response times.



**Circuit diagrams and assignment (Please also read the operating instructions before connecting the transmitter)**

Wiring diagram	Default configuration	Set scaling via DIP switch																																				
<p>DIP-Schalter Messbereichumschaltung DIP switches Measuring range changeover</p>	<p>Werkseinstellungen: Skalierung: 0 .. 50 °C</p> <p><b>Assignment</b></p> <ul style="list-style-type: none"> <li>1 = +UB 24 V DC</li> <li>2 = Output temperature 4-20 mA (°C)</li> <li>3 = -UB GND</li> </ul>	<p>Messbereichumschaltung via DIP-Schalter Changing measuring range via DIP switches</p> <table border="1"> <thead> <tr> <th>DIP 1</th> <th>DIP 2</th> <th>DIP 3</th> <th>Scaling Range</th> </tr> </thead> <tbody> <tr> <td>on</td> <td>on</td> <td>on</td> <td>-20 .. +150°C</td> </tr> <tr> <td>off</td> <td>on</td> <td>on</td> <td>-50 .. +50°C</td> </tr> <tr> <td>on</td> <td>off</td> <td>on</td> <td>-20 .. +80°C</td> </tr> <tr> <td>off</td> <td>off</td> <td>on</td> <td>-30 .. +60°C</td> </tr> <tr> <td>on</td> <td>on</td> <td>off</td> <td>0 .. +40°C</td> </tr> <tr> <td>off</td> <td>on</td> <td>off</td> <td>0 .. +50°C</td> </tr> <tr> <td>on</td> <td>off</td> <td>off</td> <td>0 .. +100°C</td> </tr> <tr> <td>off</td> <td>off</td> <td>off</td> <td>0 .. +150°C</td> </tr> </tbody> </table>	DIP 1	DIP 2	DIP 3	Scaling Range	on	on	on	-20 .. +150°C	off	on	on	-50 .. +50°C	on	off	on	-20 .. +80°C	off	off	on	-30 .. +60°C	on	on	off	0 .. +40°C	off	on	off	0 .. +50°C	on	off	off	0 .. +100°C	off	off	off	0 .. +150°C
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# Matching accessoires: Immersion sleeves

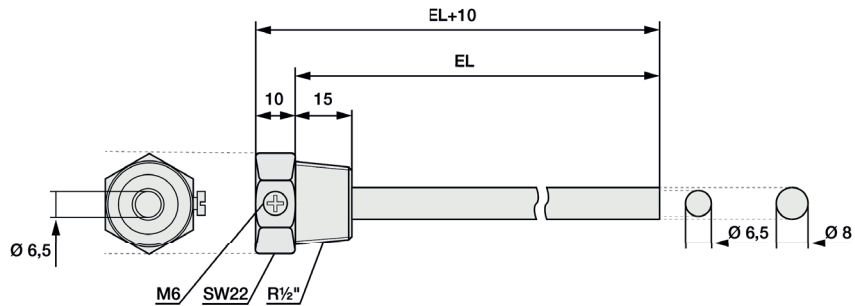
## Brass immersion sleeve R1/2 " TH08-MS



Article no.	809521 00XX	code	Length (mm)
Temp. max	+150 °C	05	50
Pressure proof up to	10 bar (statisch)	10	100
Material	Nickel plated	15	150
Process connection	R1/2 "	20	200
Wrench size	22	25	250
Ø Inside / Outside (mm)	6,5 / 8	30	300
Scope of delivery	Brass immersion sleeve R1/2 " TH-MS	40	400
Order code	809521 00		

Please attach the code for the mounting length.

### Technical drawing



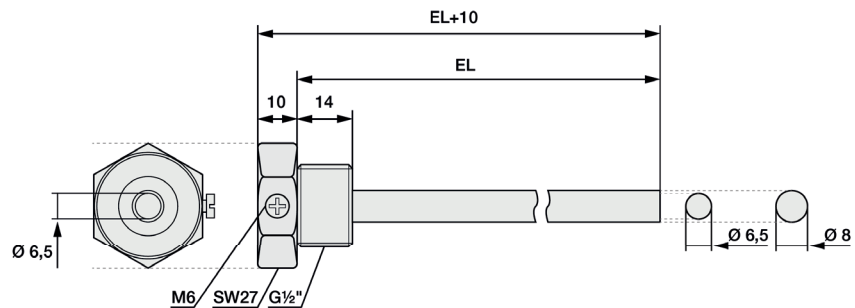
## Stainless steel immersion sleeve G1/2 " TH08-VA



Article no.	809521 10XX	code	Length (mm)
Temp. max	+600 °C	05	50
Pressure proof up to	40 bar (statisch)	10	100
Material	1.4571 (316Ti)	15	150
Process connection	G1/2 "	20	200
Wrench size	27	25	250
Ø Inside / Outside (mm)	6,5 / 8	30	300
Scope of delivery	Stainless steel immersion sleeve G1/2 " TH-VA	40	400
Your order code	809521 10		

Please attach the code for the mounting length.

### Technical drawing



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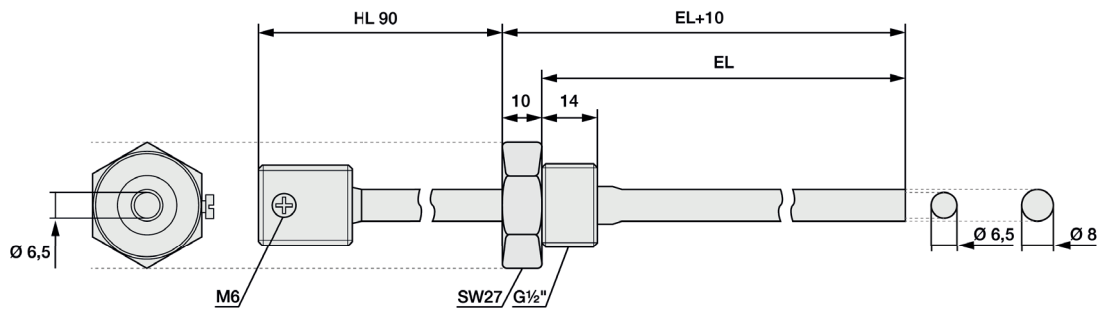
**Stainless steel immersion sleeve G1/2 " with neck tube TH08-VA**



Article no.	809521 20XX	code	Length (mm)
Temp. max	+600 °C	05	50
Pressure proof up to	40 bar (statisch)	10	100
Material	1.4571 (316TI)	15	150
Process connection	G1/2 "	20	200
Wrench size	27	25	250
Ø Inside / Outside (mm)	6,5 / 8	30	300
Length neck tube (mm)	90		
Scope of delivery	Stainless steel immersion sleeve G1/2 " with neck tube TH-VA		
Your order code	809521 20		

Please attach the code for the mounting length.

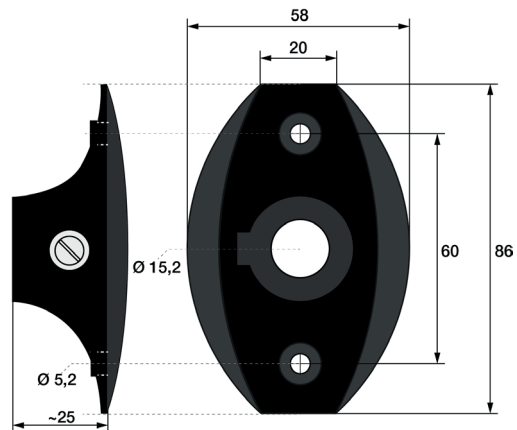
**Technical drawing**



# Mounting flange

**Plastic flange MF-15-K**

Article number	809500 6150
Material	Plastic
Fastening	2 x Ø 5,2 mm drill holes
Hole (mm)	15,2



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