

# Plug-in transmitter High with display 0-10 V

# Article number: 803312 3013

Our High plug-in transmitter with display and 0-10 V voltage output comes with matching immersion sleeves (stainless steel immersion sleeve for aggressive media) and mounting flanges for quick and easy installation. The High plug-in transmitter with 0-10 V display measures the temperature in liquid or gaseous media, has eight switchable measuring ranges and a housing with a two-way display and IP 65.

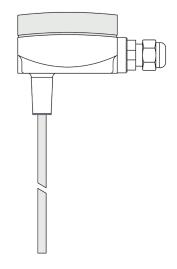
| Supply and output |  |  |
|-------------------|--|--|
| Output            | 0 - 10 V                               |  |
| Power consumption | < 1,0 VA / 24 V DC; < 2,2 VA / 24 V AC |  |
| Voltage supply    | 24 V AC / DC (± 10 %)                  |  |
| Connection type   | 3-Wire                                 |  |



### 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 ± 0.2 K at +25 °C  |  |
| Load resistance       | RI > 5 kOhm  |  |
| Process connection    | by using an immersion sleeve or mounting flange  |  |
|                       |  |  |

**Configurable options** C - Mounting length



P<sub>Ø6</sub>

| Gehäuse                    |   |  |  |
|----------------------------|---|--|--|
| Material                   | Plastic, UV-resistant<br>Material polyamide, 30 % glass bead reinforced   |  |  |
| Dimensions (L/W/H) (mm)    | Aluminum die casting  |  |  |
| Color                      | Traffic white (similar to RAL9016)  |  |  |
| Electrical connection      | 0.14 - 1.5 mm <sup>2</sup> , via screw terminals on circuit board   |  |  |
| Closure                    | with quick release screws   |  |  |
| Display                    |   |  |  |
| Display                    | Two lines, lighted<br>For display of actual temperature and self-diagnostics<br>(overrange, underrange, probe break, probe short-circuit) |  |  |
| Cut-out Display (B/H) (mm) | ca. 36 x 15   |  |  |

#### **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 3013 C0050 50 С **Delivery and Packing** C0100 100 KS / 12.12.2023 150 C0150 Transmitter, Operating Delivery instructions 200 C0200 C0250 250 individually packed in Packing PE bag C0300 300 MM C0400 400

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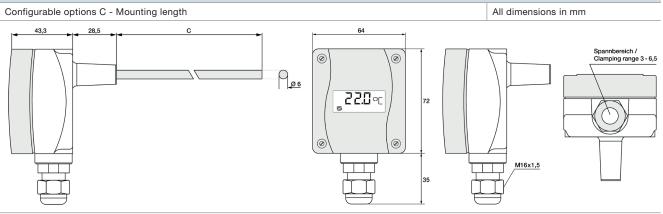
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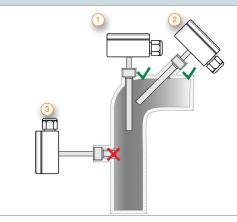
| Ambient conditions         |   |           |  |  |
|----------------------------|---|-----------|--|--|
| Ambient temperature        | -30 °C to +70 °C Permissible air humidity < 95 % r. H., non-precipitating air |           |  |  |
| Certifications / Standards |   |           |  |  |
| Protection class           | III (nach EN 60 730)  |           | CE conformity  |  |
| Protection type            | IP 65 according to EN<br>60 529   | Standards | electromagnetic compatibility according to EN 61326<br>according to EMC Directive 2014/ 30/ EU |  |

### **Technical drawing**



#### 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 protection sleeve of your temperature probe as deeply as possible in the medium to be measured when installing it. The optimum installation depth should be 10-15 times the  $\ensuremath{\varnothing}$  of the protection sleeve. Please make sure that you have enough space so that you can remove the probe again if necessary. Mounting by means of a mounting flange: Please ensure that the  $\ensuremath{\mathcal{Q}}$  of the mounting flange matches the  $\ensuremath{\mathcal{Q}}$  of the protection sleeve. Mounting by using an immersion sleeve: Please make sure that the  $\ensuremath{\mathcal{Q}}$  and the length of the immersion sleeve match 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 so that the protection sleeve touches the bottom of the immersion sleeve and the air cushion around the protection tube is as small as possible. The use of thermal conduction paste can improve the response times.



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

| Wiring d | iagram  | Default configuration                      | Set sca | aling v | ia DIP s | switch   |  |
|----------|---|--|---------|---------|----------|--|--|
|          | DIP-Schalter Messbereichsumschaltung<br>DIP switches Measuring range changeover | Werkseinstellungen:<br>Skalierung: 0 50 °C |         |         |          | tung via DIP-Schalter<br>ange via DIP switches<br>Scaling Range<br>-20 +150°C<br>-50 +50°C |  |
| 52       |   |  | on      | off     | on       | -20 +80°C  |  |
| .12.2023 | ±10K Offset   | Assignment                                 | off     | off     | on       | -30 +60°C  |  |
| N        |   | 1 = +UB 24 V AC/DC                         | on      | on      | off      | 0 +40°C  |  |
|          |   | 2 = Output temperature                     | off     | on      | off      | 0 +50°C  |  |
| 2 Y 2    |   | 0-10 V(°C)                                 | on      | off     | off      | 0 +100°C   |  |
|          |   | 3 = -UB GND                                | off     | off     | off      | 0 +150°C   |  |

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# Matching accessoires: Immersion sleeves

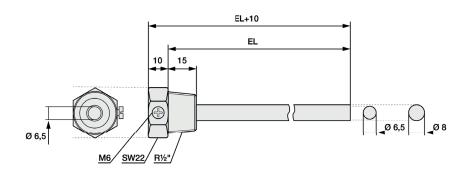
Brass immersion sleeve R1/2 " TH08-MS



| 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<br>(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** 



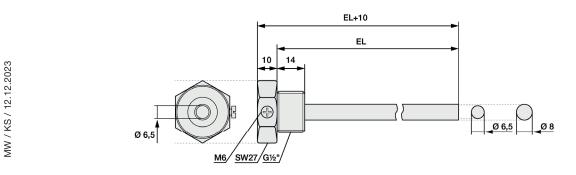
### Stainless steel immersion sleeve G1/2 " TH08-VA



| 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<br>(mm) | 6,5 / 8  | 30   | 300         |
| Scope of delivery          | Stainless steel immersion sleeve G1/2<br>" TH-VA | 40   | 400         |
| Your order code            | 809521 10  |      |             |

Please attach the code for the mounting length.

### **Technical drawing**



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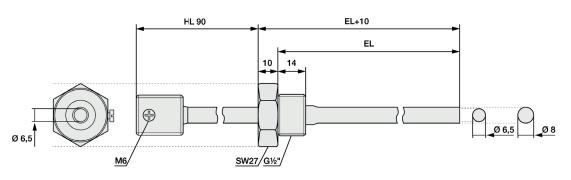
## Stainless steel immersion sleeve G1/2 " with neck tube TH08-VA



| 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<br>(mm) | 6,5 / 8   | 30   | 300         |
| Length neck tube<br>(mm)   | 90  |      |             |
| Scope of delivery          | Stainless steel immersion sleeve G1/2<br>" with neck tube TH-VA |      |             |
| Your order code            | 809521 20   |      |             |

Please attach the code for the mounting length.

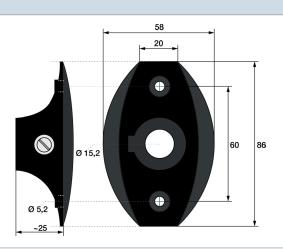
## **Technical drawing**



# 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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