

Outdoor temperature transmitter with display 4-20 mA

Article number: 801012 2012

Our outdoor transmitter with 4-20 mA current output and display has the sensor in an external protective tube. The outdoor temperature transmitter with display 4-20 mA with the plastic housing with quick-locking screws has eight switchable measuring ranges, a two-line display and either a cable gland or an M12 connector in accordance with DIN EN 61076-2-101.

Supply and output	
Output	4 - 20 mA
Power consumption	< 1,0 VA / 24 V DC
Voltage supply	15 - 36 V DC
Connection type	2- or 3-wire connection (with/without display light)

General information	
Measuring range	multi-range switching with 8 switchable measuring ranges Operating range: -30 °C to 70 °C with manual zero point correction (± 10 K)
Sensor	Pt1000, DIN EN 60751, Class B
Temperature deviation	typically ± 0.2 K at +25 °C
Load	R_a (Ohm) = $(U_b - 14 \text{ V}) / 0,02 \text{ A}$
Process connection	by screws

Gehäuse	
Material	Plastic, UV-resistant 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 ² , via screw terminals on circuit board
Closure	with quick release screws

Protection sleeve	
Material	Stainless steel 1.4571 316TI
Ø (mm)	6
Length (mm)	65

Display	
Display	Two lines, lighted For display of actual temperature and self-diagnostics (overrange, underrange, probe break, probe short-circuit)
Cut-out Display (B/H) (mm)	ca. 36 x 15

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 65 according to EN 60 529		



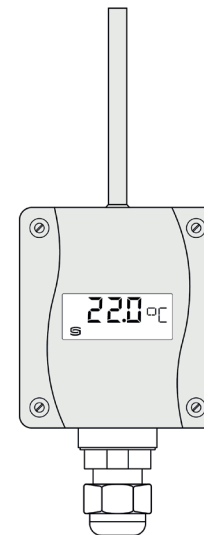
Kabelverschraubung
Cable gland



M12 Verbinder
M12 Plug connector

Configurable options

K - Screw connection



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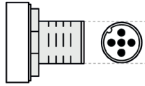
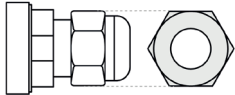
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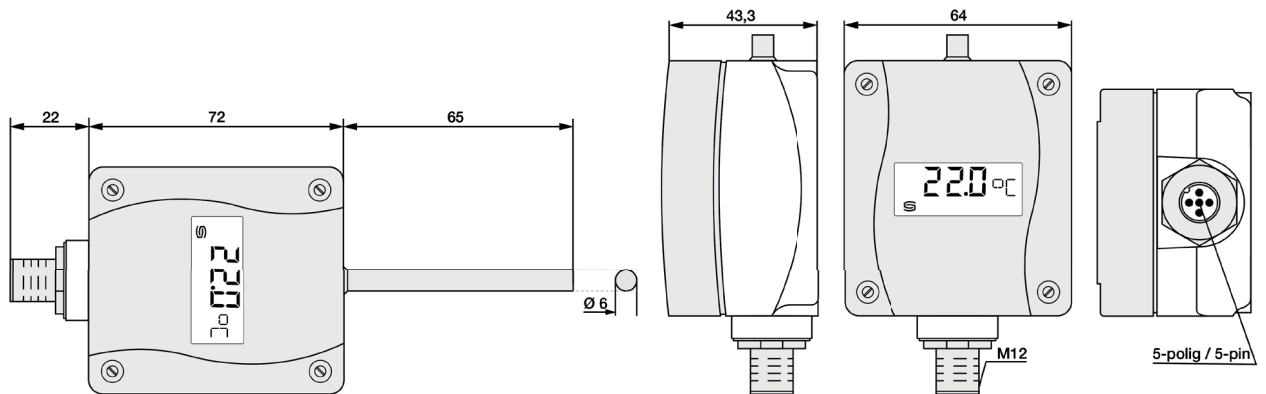
www.testo-sensor.de

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Webshop unter: www.testo-sensor.shop

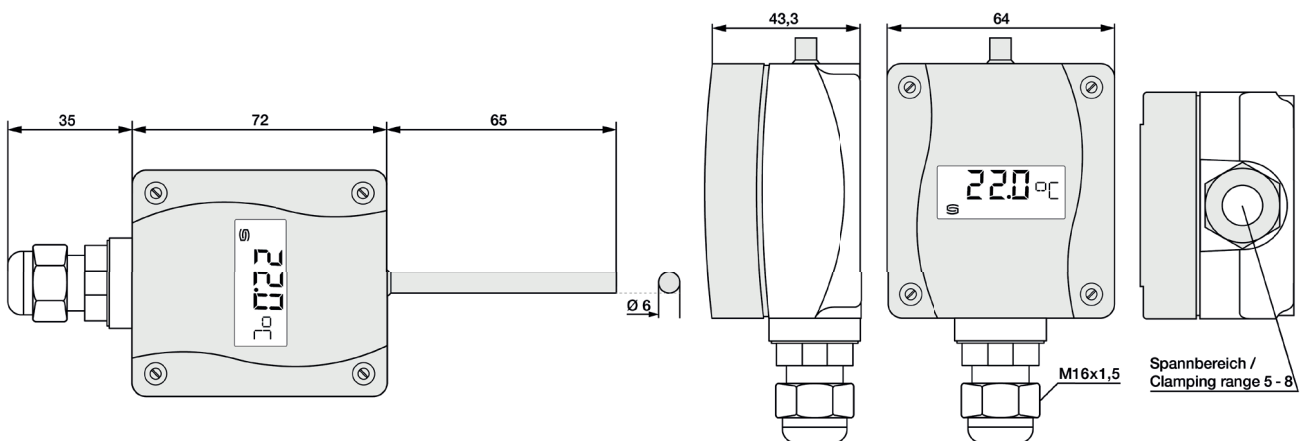
Delivery and Packing	
Delivery	Transmitter, Operating instructions
Packing	individually packed in PE bag

Your order code		K - Screw connection		
Article number	Screw connection	code	Screw connection	Technical drawing
801012 2012	K_____	K1	M12 plug connector, Acc. DIN EN 617076-2-101	
		K3	Cable gland, Plastic, M16x1,5, Strain relief, replaceable, max. 10,4 mm Ø Inner	

Technical drawing	
Configurable options K - Screw connection	All dimensions in mm
K1 - M12 plug connector	



K3 - Cable gland	
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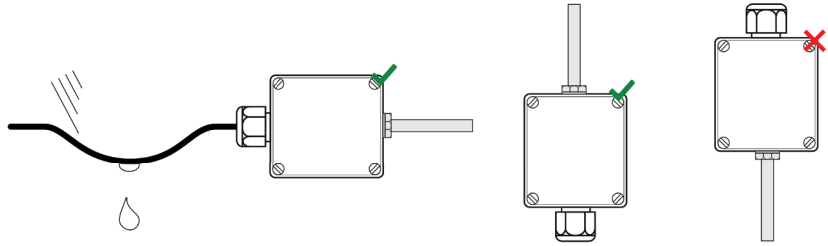
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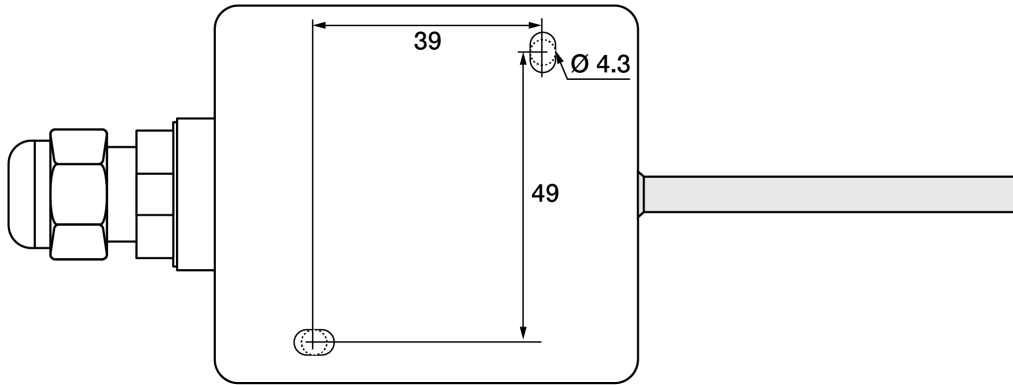
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Important assembly instructions

Mount your outdoor transmitter with sufficient distance to vents, windows or doors and preferably on the north wall, alternatively on west or east wall of the building. Avoid direct sunlight and rain. Use Sun Protection if necessary. Please lay the cables downwards so that rainwater can drip off in a defined manner. Please take the permissible ambient conditions into account during installation.



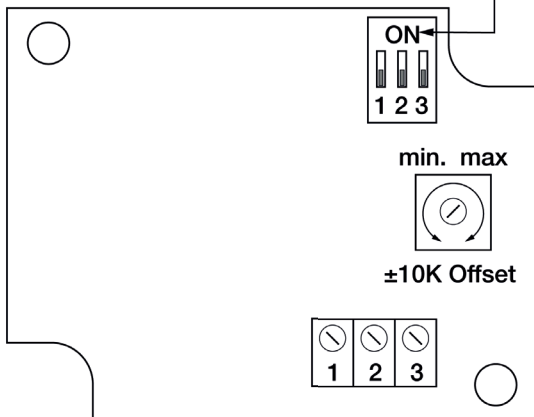
Drilling template



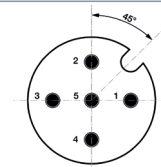
Circuit diagrams and assignment (Please also read the operating instructions before connecting the transmitter)

Wiring diagram

DIP-Schalter Messbereichumschaltung
DIP switches Measuring range changeover



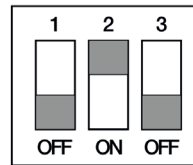
Pin assignment (M12)



- 1 = +UB 15-36 V DC
- 2 = Output temperature 4-20 mA (°C)
- 3 = free
- 4 = UB GND (for display lighting)
- 5 = Shield

Default configuration

Werkseinstellungen:
Skalierung: 0 .. 50 °C



Set scaling via DIP switch

Messbereichumschaltung via DIP-Schalter
Changing measuring range via DIP switches

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

Assignment


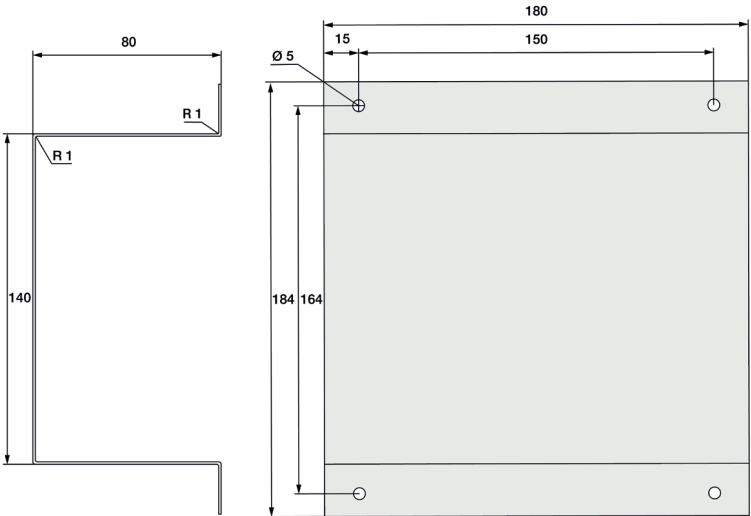
- 1 = +UB 24 V DC
- 2 = Output temperature 4-20 mA (°C)
- 3 = -UB GND


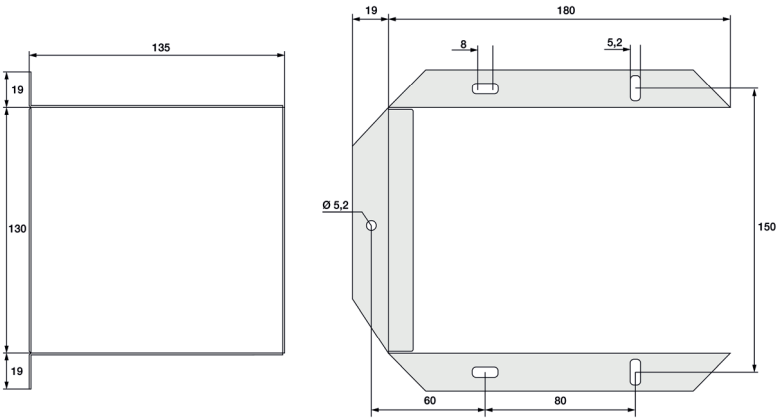
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Accessories

Sun Protection

Sun Protection WS-01	
Article image	Technical drawing
	
Your order code	
Article number	809510 3000
Material	Stainless steel 1.4301 SUS 304
Dimension (L/W/H) (mm)	184 x 180 x 80
Material thickness (mm)	1
Fastening	4 x Ø 5 mm drill holes

Sun Protection WS-04	
Article image	Technical drawing
	
Your order code	
Article number	809510 4000
Material	Stainless steel 1.4301 SUS 304
Dimension (L/W/H) (mm)	130 x 180 x 135
Material thickness (mm)	1
Fastening	5 x Ø 5,2 mm drill holes

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