

Outside temperature / wet room temperature measuring transducers, calibratable, with multi-range switching and active output

Calibratable outside temperature measuring transducer **THERMASGARD® ATM 2** with eight switchable measuring ranges, external sensor, continuous output, housing made from impact-resistant plastic with quick-release screws, optionally **with/without display**, with **cable gland** or **M12 connector** according to DIN EN 61076-2-101.

It is used to detect outside temperatures, temperatures in wet rooms, e.g. for installation on outside walls, in cold storage buildings and greenhouses, in the industrial sector and in agriculture. Installation in outdoor areas preferably at the north side of a building or in a protected place. In case of direct solar irradiation, we recommend the use of our sun and ball-impact protection hood **WS01** or **WS04** (accessories) or the device version with the installed sun protection hood **SS02** (on request).

The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

ATM 2
with cable gland
and SS-02



ATM 2 - Q
with M12 connector



TECHNICAL DATA

Power supply:	24 V AC / DC (± 10%) for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ± 0.3 V
Working resistance:	$R_a \text{ (ohm)} = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant, see load resistance diagram
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	< 1.0 VA / 24 V DC; < 2.2 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B, (Perfect Sensor Protection) Sensor external
Measuring ranges:	multi-range switching with 8 switchable measuring ranges see table (other measuring ranges optional) operating range -30...+70 °C with manual zero point correction (± 10K)
Deviation in temperature:	typically ± 0.2 K at +25 °C
Output:	0 - 10 V or 4...20 mA
Connection type:	2- or 3-wire connection
Electrical connection:	0.14 - 1.5 mm ² , via screw terminals
Cable connection:	 cable gland, stainless steel V2A (1.4305) (M20 x 1.5; with strain relief, exchangeable, inner diameter 6 - 12 mm) or M12 connector (male, 5-pin, A-code) according to DIN EN 61076-2-101
Housing:	plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, with quick-release screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), cover for display is transparent!
Housing dimensions:	72 x 64 x 37.8 mm (Tyr 1 without display) 72 x 64 x 43.3 mm (Tyr 1 with display)
Protective tube:	made from stainless steel V4A (1.4571) , Ø 6 mm, NL = 65 mm
Process connection:	by means of screws (on the housing base)
Ambient temperature:	measuring transducer -30...+70 °C
Permissible humidity:	< 95 % r.H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529) Housing tested, TÜV SÜD, Report No.713139052 (Tyr 1)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC Directive 2014 / 30 / EU
Optional:	display with illumination , two-line, cut-out approx. 36 x 15 mm (B x H), to display the actual temperature and internal diagnostics (measuring range exceeded, measuring range not reached, sensor breakage, sensor short circuit)

ACCESSORIES (see table)

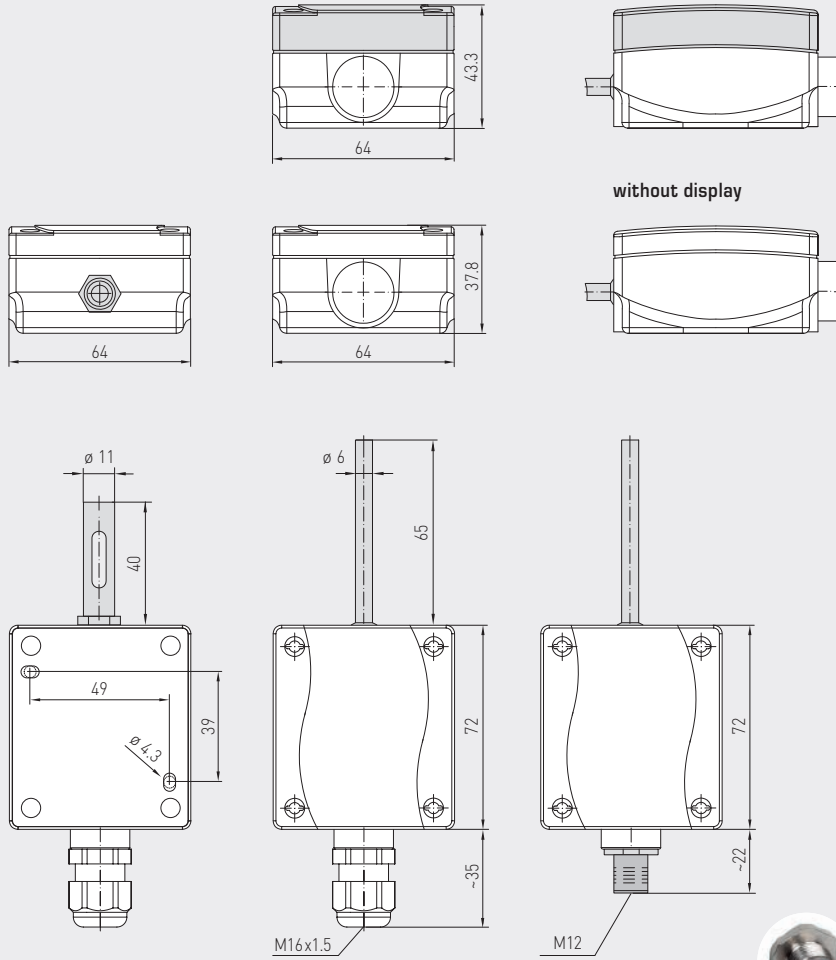


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Dimensional drawing

ATM 2



Housing with SS-02 (on request)

Housing with cable gland

Housing with M12 connector

ATM 2 with cable gland and display



ATM 2-Q with M12 connector and display



Display and internal diagnostics

THERMASGARD® Measuring transducer with display



Standard



Measuring range exceeded



Measuring range not reached



Sensor breakage

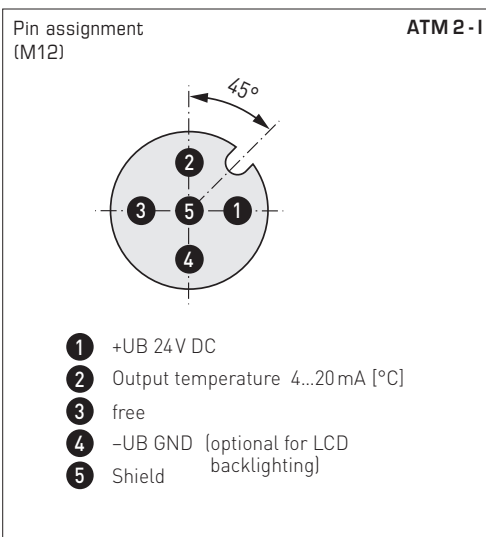
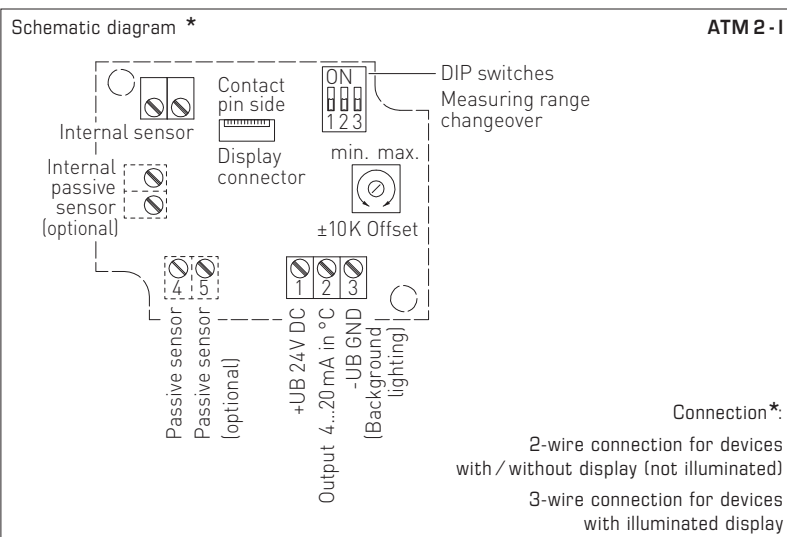
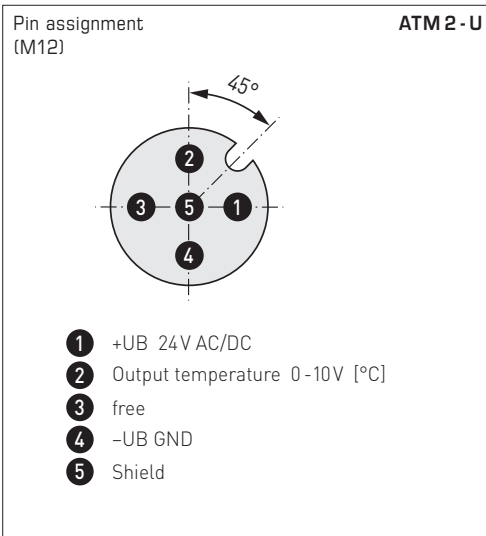
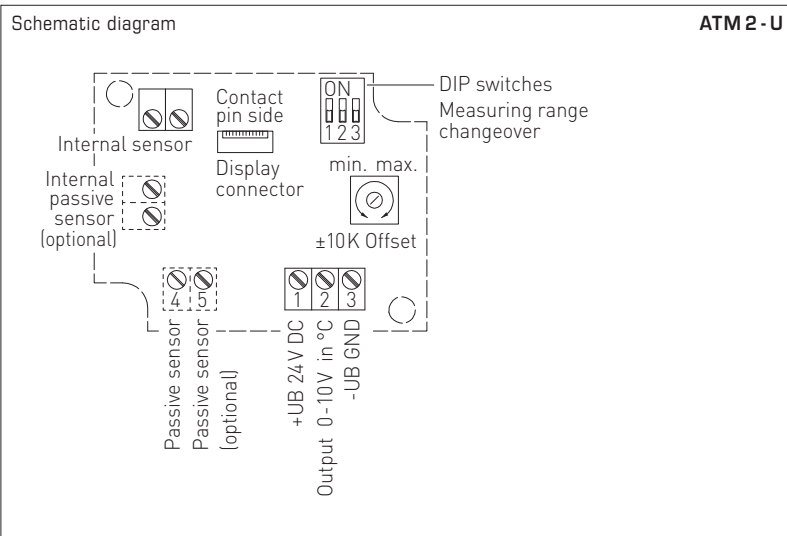


Sensor short circuit

High-performance encapsulation against vibration, mechanical stress and humidity

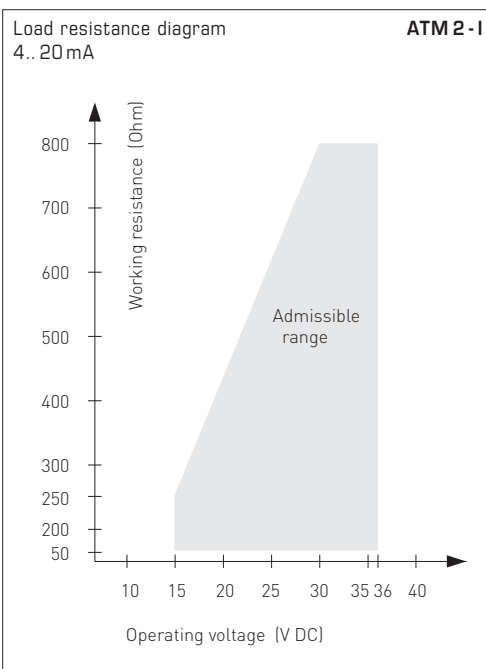
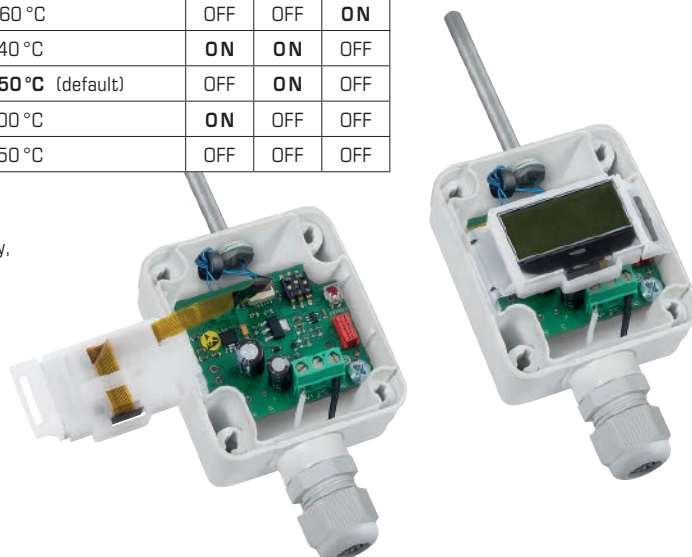


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Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20... +150 °C	ON	ON	ON
-50... +50 °C	OFF	ON	ON
-20... +80 °C	ON	OFF	ON
-30... +60 °C	OFF	OFF	ON
0... +40 °C	ON	ON	OFF
0... +50 °C (default)	OFF	ON	OFF
0... +100 °C	ON	OFF	OFF
0... +150 °C	OFF	OFF	OFF

ATM2-xx
with display, hinged





S+S REGELTECHNIK

THERMASGARD® ATM 2

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active output

ATM 2-Q
with M12 connector



ATM 2
with cable gland

THERMASGARD® ATM 2		Outside temperature / wet room temperature measuring transducers (with cable gland)				
Type / WG01	Sensor	Output	Display	Item No.	Price	
ATM 2						
ATM2-I	Pt1000	4...20 mA		1101-1142-0009-900	95,74 €	
ATM2-I LCD	Pt1000	4...20 mA	■	1101-1142-2009-900	144,23 €	
ATM2-U	Pt1000	0-10 V		1101-1141-0009-900	95,74 €	
ATM2-U LCD	Pt1000	0-10 V	■	1101-1141-2009-900	144,23 €	
Housing variant:		Cable connection with cable gland				
Extra charge:		other measuring ranges optional with sun protection hood SS02			24,19 € on request	

THERMASGARD® ATM 2-Q		Outside temperature / wet room temperature measuring transducers (with M12 connector)				
Type / WG01	Sensor	Output	Display ● = Q	Item No.	Price	
ATM 2-Q						
ATM2-I Q	Pt1000	4...20 mA	●	2001-6111-2100-001	135,66 €	
ATM2-I Q LCD	Pt1000	4...20 mA	● ■	2001-6112-2100-001	184,16 €	
ATM2-U Q	Pt1000	0-10 V	●	2001-6111-1100-001	135,66 €	
ATM2-U Q LCD	Pt1000	0-10 V	● ■	2001-6112-1100-001	184,16 €	
Housing variant "Q":		Cable connection with M12 connector (male, 5-pin, A-code)				
Extra charge:		see table above!				

ACCESSORIES					
WS-01	protection contre le soleil et pare-balle, 184 x 180 x 80 mm, en acier inox V2A (1.4301)			7100-0040-2000-000	30,26 €
WS-04	protection contre le soleil et les intempéries, 130 x 180 x 135 mm, en acier inox V2A (1.4301)			7100-0040-7000-000	35,70 €
Special accessories for M12 connector see chapter Accessories!					

