

**Surface-contact temperature measuring transducer / pipe surface-contact sensor, with detached sensor, incl. strap, Bluetooth-enabled, with EtherCAT P port**

Networkable surface-contact temperature measuring transducer (detached version) THERMASGARD® ALTM2 - EtherCAT P with M8 plug-in connector (EtherCATP-encoded), Bluetooth-enabled, in an impact-resistant plastic housing with quick-locking screws, optionally with /without display and bar graph, cable sensor with pipe feeder, incl. strap.

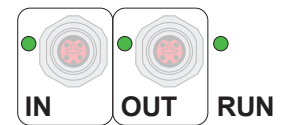
The pipe surface-contact sensor is used to detect the temperature on lines, pipes (e.g., cold and warm water) or on heating sections for heating control. The sensor is factory-calibrated.

**EtherCATP-enabled measuring transducer** for industrial requirements with maximum reliability: includes easy PLC integration using the device's ESI configuration file, diagnostics (such as communication failure counter), advanced settings options, access to historical data (min / max) and establishing the sensor's service interval. Optionally with large illuminated display (3-line, customised programming in the 7-segment and dot-matrix range) and bar graph (7-digit, LEDs freely configurable) for graphical display, e.g., as a traffic light indicator.

ALTM2 - EtherCAT P



**EtherCAT P**  
Cable connection and LED status display



**TECHNICAL DATA**

Power supply:	24 V DC via EtherCAT P (U <sub>S</sub> )
Power consumption:	< 3 W
Bus protocol:	<b>EtherCAT</b>
Radio technology:	<b>Bluetooth</b> (LE)
Sensor:	Pt1000, DIN EN 60751, class B ( <b>Perfect Sensor Protection</b> at IP68)
Measuring range:	-50...+150 °C
Deviation in temperature:	typically ±0.2 K at +25 °C
Medium:	clean air and non-aggressive, non-combustible gases
Sensor protection:	pipe feeder made of stainless steel <b>V4A</b> (1.4571), Ø = 6 mm, L = 50 mm
Sensor cable:	silicone, SiHF, 2 x 0.25 mm <sup>2</sup> ; cable length (KL) = 1.5 m (other lengths and jacket materials, e.g. PTFE or glass fibre with steel mesh, available on request)
Housing:	Plastic, UV-resistant, polyamide material, 30% glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Dimensions:	126 x 90 x 50 mm (Tyr 2)
Cable connection:	<b>M8 plug-in connector</b> , EtherCATP-encoded
Process connection:	endless strap with metal tightener (included in delivery scope), Ø = 13 - 92 mm (¼ - 3"), L = 300 mm
Ambient temperature:	Measuring transducer -30...+70 °C
Permitted humidity:	< 95% RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type housing:	<b>IP54</b> (according to EN 60 529)
Protection type sensor:	<b>IP65</b> (according to EN 60 529) <b>sleeve</b> humidity-tight (standard) <b>IP68</b> (according to EN 60 529) <b>sleeve</b> water-tight (optional)
Standards:	CE conformity, according to EMC Directive 2014 / 30 / EU, according to RED 2014 / 53 / EU
Equipment:	<b>Display with illumination</b> , 3-line, customised programming, cutout approx. W51 x H29mm, to display the actual temperature or a customised display value. <b>Bar graph</b> , 7-digit, LEDs freely configurable, to graphically display the reading.

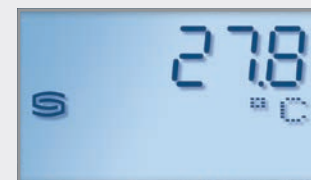
**ACCESSORIES** see table

**EtherCAT P** LED status display

1. LED	"IN"
off	no connection to upstream EtherCAT module
illuminated	LINK: connection to upstream EtherCAT module
blinking	ACT: communication with upstream EtherCAT module
2. LED	"OUT"
off	no connection to downstream EtherCAT module
illuminated	LINK: connection to downstream EtherCAT module
blinking	ACT: communication with downstream EtherCAT module
3. LED	"RUN"
off	EtherCAT module is in "Init" state
quickly blinking	EtherCAT module is in "Pre-Operational" state
slowly blinking	EtherCAT module is in "Safe-Operational" state
illuminated	EtherCAT module is in "Operational" state

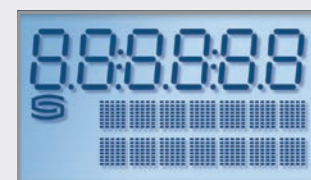
**The status LEDs are next to the cable connection.**

Display screen Reading **xx-ECATP Tyr 2**



Temperature

Programmable display screen **xx-ECATP Tyr 2**





S+S REGELTECHNIK

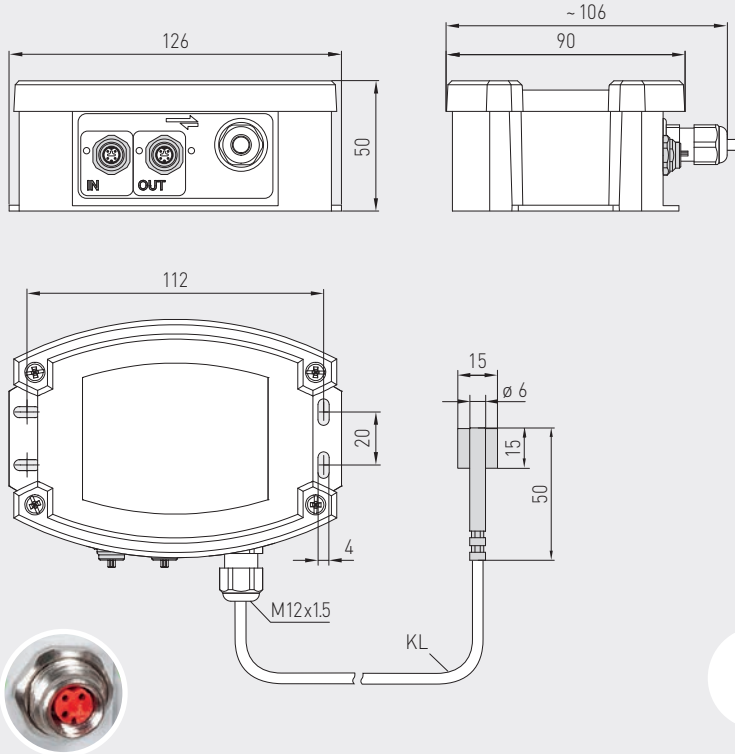
THERMASGARD® ALTM2-EtherCAT P

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with detached sensor, incl. strap, Bluetooth-enabled,  
with EtherCAT P port

Dimensional drawing

ALTM2-EtherCAT P

ALTM2-EtherCAT P  
with display and bar graph



M8-plug-in connector  
EtherCAT P-encoded



IP65 (standard)  
humidity-tight

IP68 (optional)  
watertight  
**Perfect Sensor Protection**

IP54 (optional)  
with glass fibre cable

High-performance encapsulation against  
vibration, mechanical stress and humidity

**PS-PROTECTION**  
PERFECT SENSOR PROTECTION

THERMASGARD®  
ALTM2-EtherCAT P Surface-contact temperature measuring transducer with detached sensor,  
with EtherCAT P port

Type / WG02	Measuring Range Temperature	Sensor	Output	Bar graph Display	Item No.	Price
<b>ALTM2-ECATP xx</b>						
ALTM2-ECATP	-50...+150 °C	Pt1000	EtherCAT P		2001-2171-9100-001	<b>357,68 €</b>
ALTM2-ECATP LCD	-50...+150 °C	Pt1000	EtherCAT P	☐ ■	2001-2172-9100-001	<b>403,95 €</b>
<b>Note:</b> Cable connection with <b>M8 plug-in connector</b> (EtherCAT P-encoded)						
Extra charge:	Protection type <b>IP68</b> (sensor sleeve watertight compound-filled) per running metre of connecting lead ( <b>silicone/PTFE/glass fibre</b> )					<b>3,40 €</b> on request

**ACCESSORIES**

<b>WLP-1</b>	Heat-conductive paste, silicone-free	7100-0060-1000-000	<b>3,38 €</b>
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For further information, see last chapter Accessories!