

Surface contact temperature sensors /  
 tube contact temperature sensors, including strap,  
 with passive output

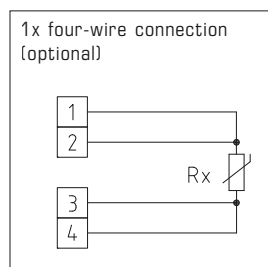
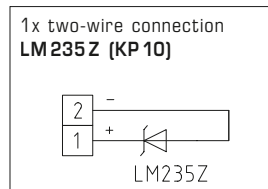
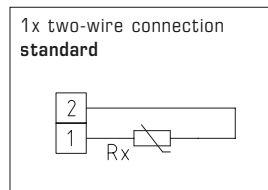
**THERMASGARD® ALTF 2** is a tube contact resistance thermometer with passive output, strap and terminal box enclosure made of impact-resistant plastic and enclosure cover with quick-locking screws.

**THERMASGARD® ALTF 02** is a cost-saving tube contact resistance thermometer with passive output, strap, and terminal box enclosure made of impact-resistant plastic with snap-on lid.

ALTF 2 / ALTF 02 surface contact sensors are electric contact thermometers used for surface temperature measurement on solids, having at least one so-called contact area that is brought into contact with the surface to be measured. This surface contact temperature sensor measures the temperature of a medium flowing inside a pipe (e.g. the water temperature). This tube surface sensor is used for measuring temperature on piping and tubes (e.g. cold-water and hot-water), work on heating sections for heating system control.

**TECHNICAL DATA**

Measuring range:	-30...+110 °C (other ranges optional)
Sensors / output:	see table, passive (optional also with two sensors)
Connection type:	2-wire connection (4-wire connection optional)
Testing current:	approx. 1 mA
Process connection:	endless strap and metal tightener (included in the scope of delivery)
Strap dimensions:	Ø = 13 - 92 mm (1/4 - 3"), length L = 300 mm
Enclosure:	plastic, material polyamide, 30% glass-globe-reinforced colour traffic white (similar to RAL 9016) <b>ALTF 02 with snap-on lid,</b> <b>ALTF 2 with quick-locking screws</b> (slotted / Phillips head combination)
Dimensions:	72 x 64 x 37.8 mm (Tyr 1 / Tyr 01)
Electrical connection:	0.14 - 1.5 mm <sup>2</sup> via terminal screws on circuit board
Cable gland:	M 16 x 1.5; including strain relief, exchangeable, max. inner diameter 10.4 mm
Insulating resistance:	≥ 100 MΩ, at +20 °C (500 V DC)
Humidity:	< 95% r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	<b>ALTF 02 IP 43</b> (according to EN 60 529) <b>ALTF 2 IP 65</b> (according to EN 60 529)



**THERMASGARD® ALTF 02 – Surface contact temperature sensors / tube contact temperature sensors, Standard**

Type / WG03	Sensor / Output	Item No.	Price
<b>ALTF 02</b>	<b>Pt, Ni, LM235Z</b>	<b>IP 43</b>	
ALTF02 PT100	Pt100 (according to DIN EN 60 751, class B)	1101-1010-1003-000	<b>18,26 €</b>
ALTF02 PT1000	Pt1000 (according to DIN EN 60 751, class B)	1101-1010-5001-000	<b>18,26 €</b>
ALTF02 Ni1000	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-1010-9001-000	<b>18,58 €</b>
ALTF02 Ni1000TK5000	Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000	1101-1011-0001-000	<b>21,26 €</b>
ALTF02 LM235Z	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-1012-1001-000	<b>18,79 €</b>
<b>ALTF 02</b>	<b>NTC</b>	<b>IP 43</b>	
ALTF02 NTC1,8K	NTC 1.8K	1101-1011-2001-000	<b>17,72 €</b>
ALTF02 NTC10K	NTC 10K	1101-1011-5001-000	<b>17,72 €</b>
ALTF02 NTC20K	NTC 20K	1101-1011-6001-000	<b>17,72 €</b>
Note:	ALTF 02 including strap, with snap-on lid Other sensors optional		on request

**Accessories**

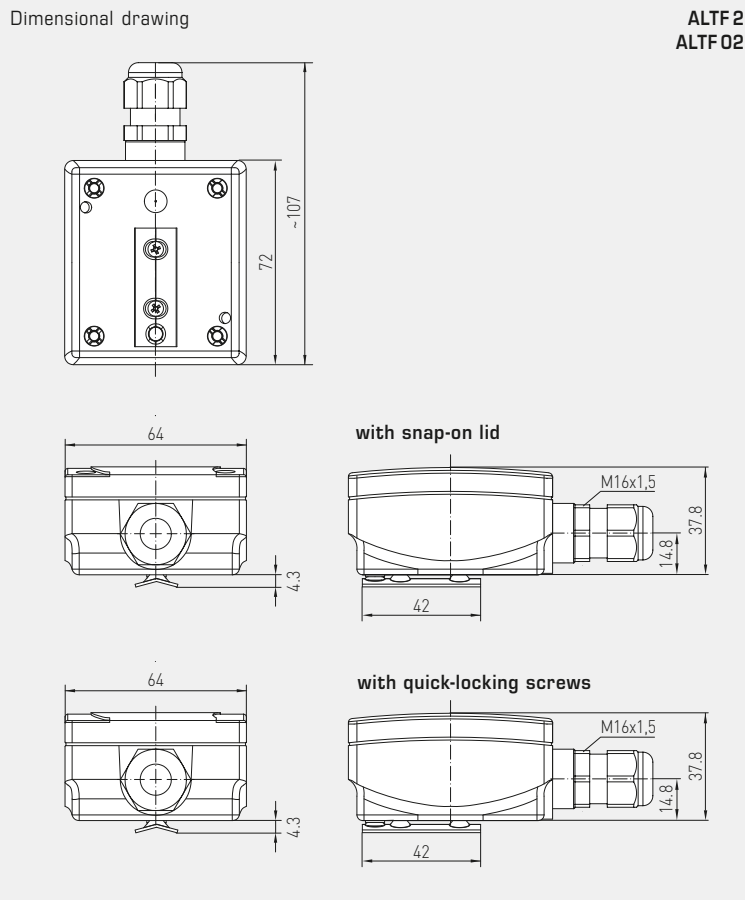
<b>WLP-1</b>	Heat-conductive paste set	7100-0060-1000-000	<b>2,85 €</b>
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S+S REGELTECHNIK

**THERMASGARD® ALTF 2**  
**THERMASGARD® ALTF 02**

Surface contact temperature sensors /  
tube contact temperature sensors, including strap,  
with passive output



**THERMASGARD® ALTF 2** – Surface contact temperature sensors / tube contact temperature sensors, *Premium*

Type / WG03	Sensor / Output	Item No.	Price
<b>ALTF 2</b>	<b>Pt, Ni, LM235Z</b>	<b>IP65</b>	
ALTF2 PT100	Pt100 (according to DIN EN 60 751, class B)	1101-1020-1003-000	<b>21,21 €</b>
ALTF2 PT1000	Pt1000 (according to DIN EN 60 751, class B)	1101-1020-5001-000	<b>21,21 €</b>
ALTF2 PT1000A	Pt1000 (according to VDI/VDE 3512, class A-TGA)	1101-1020-6003-000	<b>30,51 €</b>
ALTF2 Ni1000	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm/K)	1101-1020-9001-000	<b>21,26 €</b>
ALTF2 Ni1000TK5000	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-1021-0001-000	<b>24,27 €</b>
ALTF2 LM235Z	LM235Z (TCR = 10 mV/K; 2.73 V at 0°C), KP10	1101-1022-1001-000	<b>20,35 €</b>
<b>ALTF 2</b>	<b>NTC</b>	<b>IP65</b>	
ALTF2 NTC1,8K	NTC 1.8K	1101-1021-2001-000	<b>19,87 €</b>
ALTF2 NTC10K	NTC 10K	1101-1021-5001-000	<b>19,87 €</b>
ALTF2 NTC20K	NTC 20K	1101-1021-6001-000	<b>19,87 €</b>
Note:	ALTF2 including strap, with quick-locking screws Other sensors optional		on request

Accessories			
<b>WLP-1</b>	Heat-conductive paste set	7100-0060-1000-000	<b>2,85 €</b>