Surface-contacting temperature sensor/tube contacting temperature sensor with passive output

S+S REGELTECHNIK

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## **APPLICATION:**

Surface-contacting sensors are electric contact thermometers, which are used for measuring surface temperatures of solids, having at least one so-called contact area that is brought into contact with the surface to be measured. A surface-contacting temperature sensor determines the temperature of a medium flowing inside a pipe (e.g. the water temperature) via the surface temperature.

ALTF2 is a tube-contacting resistance thermometer with strap and terminal box enclosure made of impact-resistant plastic. It is used for temperature detection on piping and tubes (e.g. coldwater and hot-water), or on heating systems 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 (3- or 4-wire connection optional)
Testing current:	. ca. 1 mA
Process connection:	. endless strap and metal tightener (included in the scope of delivery)
Strap dimensions:	.Ø=13-92mm (1/4-3"), length 300mm
Connecting head:	plastic, material polyamide, 30% glass-globe-reinforced, <b>with quick-locking screws,</b> colour pure white (similar RAL9010)
Dimensions:	. 72x64x39.4mm
Electrical connection:	. 0.14-1.5 mm² via terminal screws on circuit board
Cable union:	. M16, including strain relief
Insulating resistance:	. ≥100MΩ, at 20°C (500V DC)
Humidity:	. <95% r.H.
Protection class:	. III (according to EN 60730)
Protection type:	. <b>IP 65</b> (according to EN 60529)



ALTF2

## THERMASGARD® ALTF2, including strap:

Connecting diagram 1x two-wire connection

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Type/WG1	Sensor/output
ALTF2 Pt100	Pt100 (according to DIN EN 60751, class B)
ALTF2 Pt1000	Pt1000 (according to DIN EN 60751, class B)
ALTF2 Ni1000	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)
ALTF2 Ni1000 TK5000	Ni1000 TK5000 (TCR = 5000 ppm/K)
ALTF2 NTC 1,8kOhm	NTC 1.8 kOhm
ALTF2 KTY81-210, NTC10k, 20k, 30k, 50k, 10k Precon	KTY81-210, NTC10k, 20k, 30k, 50k, 10k Precon
ALTF2 LM235Z	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C)
Accessories:	Heat-conductive paste, set
For special orders please specify:	Type, sensor type, and clamping range or tube diameter, 2-wire connection e.g. ALTF2 Pt100 $1/3$ DIN, 10"; ALTF2 KTY81-121, 7"

Dimensional drawing

M16x1

