

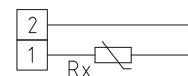
**Surface contact temperature sensors /
surface temperature sensors,
with passive output**

Small surface contact resistance thermometer in aluminium enclosure (cable sensor).
The surface sensor **THERMASGARD® OUTF** is used for temperature detection on flat or slightly convex surfaces, for instance for surface temperature measurement at windows, for monitoring formation of condensate, or as heating surface sensor, e.g. at windows or walls.

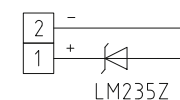
TECHNICAL DATA

Measuring range:	−30...+105 °C
Sensors / output:	see table, passive (Perfect Sensor Protection with IP68)
Connection type:	2-wire connection
Testing current:	< 0,6 mA (Pt1000) < 1,0 mA (Pt100) < 0,3 mA (Ni1000, Ni1000 TK5000) < 2,0 mW (NTC xx) < 2,0 mA (KTY 81-210) 400 µA...5 mA (LM235Z)
Process connection:	attachment to the surface to be measured through fixing hole in the sensor head or by suitable adhesive
Protective sleeve:	aluminium
Dimensions:	8 x 8 x 50 mm
Connecting cable:	PVC; 1,5 m, LiYY, 2 x 0,25 mm², ends stripped with wire end sleeves (optional with silicone cable SiHF, up to +180 °C)
Insulating resistance:	≥ 100 MΩ, at +20 °C (500 V DC)
Permissible air humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP65 (according to EN 60 529) humidity-tight stamped IP68 (optional sensor sleeve watertight compound-filled*)

1x two-wire connection
standard



1x two-wire connection
LM 235 Z (KP 10)

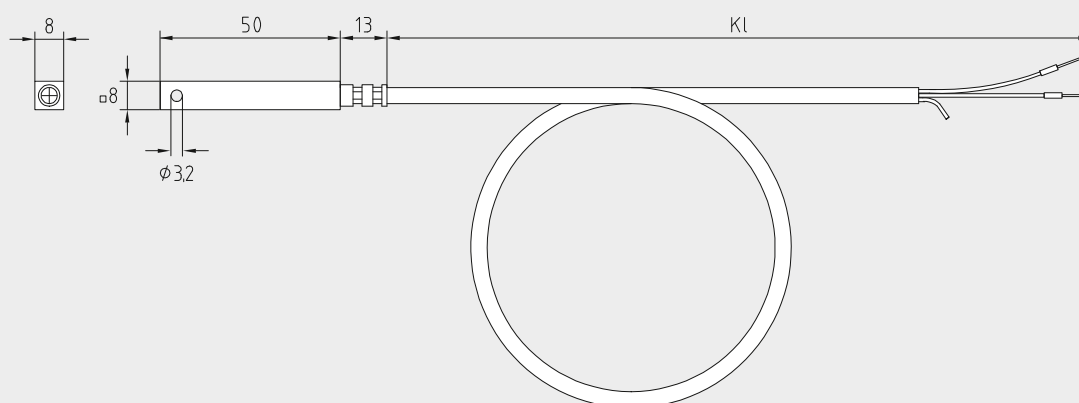


* High-performance encapsulation against
vibration, mechanical stress and humidity



Dimensional drawing

OUTF





S+S REGELTECHNIK

THERMASGARD® OUTF

Surface contact temperature sensors /
surface temperature sensors,
with passive output

OUTF



THERMASGARD® OUTF Surface contact temperature sensors / surface temperature sensors			
Type / WG03	Sensor / output	Art. no.	Price
OUTF	Pt, Ni, LM235Z	IP65	
OUTF PT100	Pt100 (according to DIN EN 60 751, class B)	1101-6010-1211-110	31,20 €
OUTF PT1000	Pt1000 (according to DIN EN 60 751, class B)	1101-6010-5211-110	31,20 €
OUTF NI1000	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-6010-9211-110	33,00 €
OUTF NITK	Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000	1101-6011-0211-110	36,50 €
OUTF LM235Z	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-6012-1211-110	31,80 €
OUTF	NTC	IP65	
OUTF NTC1,8K	NTC 1,8 K	1101-6011-2211-110	30,00 €
OUTF NTC10K	NTC 10K	1101-6011-5211-110	30,00 €
OUTF PRECON	NTC 10K Precon	1101-6011-9211-110	30,00 €
OUTF NTC20K	NTC 20K	1101-6011-6211-110	30,00 €
OUTF NTC30K	NTC 30K	1101-6011-7211-110	30,00 €
OUTF	KTY	IP65	
OUTF KTY81-210	KTY 81-210	1101-6012-0211-110	23,78 €
Extra charge:	Protection type IP68 (sensor sleeve watertight compound-filled) 2-wire connecting leads (PVC/silicone) per running metre 4-wire connecting leads (PVC/silicone) per running metre	on request on request	2,86 €
For special orders please specify:	Type, sensor type, cable length e.g. OUTF Pt100, 3 m; OUTF Pt100 1 / 3 DIN, 4 m; OUTF KTY 81-210, 6 m		