THERMASGARD® HTF 50
THERMASGARD® HTF 200

Sleeve temperature sensors / cable temperature sensors with passive output

S+S REGELTECHNIK

The sleeve sensor / cable temperature sensor THERMASGARD® HTF is used for the detection of temperatures in liquid and gaseous media, e.g. by installing it in an immersion sleeve. The cable sensor can be implemented as immersion or duct sensor, with silicone, glass fibre, or PVC leads, for two-wire, three-wire, or four-wire connection, depending on the application. The sleeve length varies, depending on request, from 30 ... 500 mm (standard is 50 mm respectively 200 mm), the cable length is arbitrary (standard is 1.5 m).

HTF 200
(NL = 200 mm, including mounting flange)
as duct temperature sensor

TECHNICAL DATA:

Measuring ranges: .... -35 ...+105 °C PVC, LiYY, 2 x 0.25 mm²
-50 ...+180 °C Silicone, SiHF, 2 x 0.25 mm²
-50 ...+250 °C Teflon, SiHF, 2 x 0.25 mm²
-50 ...+350 °C glass fibre, 2 x 0.25 mm²
ends stripped with wire end sleeves
(extended measuring range limits optional,
depending on connection leads,
T_{max} NTC = 150 °C, T_{max} LM235Z = 125 °C, T_{max} Ni1000 = 180 °C)

Sensors / output: .... see table, passive
(optional also with 2 sensors)

Connection type: .... 2-wire connection
(4-wire connection optional)

Testing current: .... ca. 1 mA

Protective tube: .... stainless steel, 1.4571, V4A
(sensor sleeve) Ø = 6 mm, nominal length NL = 50 mm (HTF 50)
respectively 200 mm (HTF 200)
(optional also other dimensions, NL = 30 ... 500 mm)

Sensor cable: .... length KL = 1.5 m
(other lengths and diverse materials see table)

Insulating resistance: .... ≥ 100 MΩ, at 20 °C (500 V DC)

Process connection: .... by mounting flange, plastic
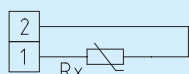(for HTF 200 included in the scope of delivery)
(galvanised steel optional, see accessories)

Protection class: .... III (according to EN 60 730)

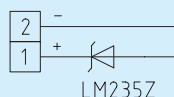Protection type: .... IP 65 (according to EN 60529) rolled / stamped humidity-tight
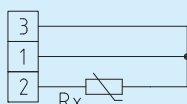IP 68 (optional) sensor sleeve compound-filled

1x two-wire connection **standard**

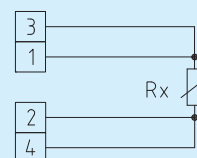1x two-wire connection **LM 235 Z (KP 10)**

1x three-wire connection (optional)
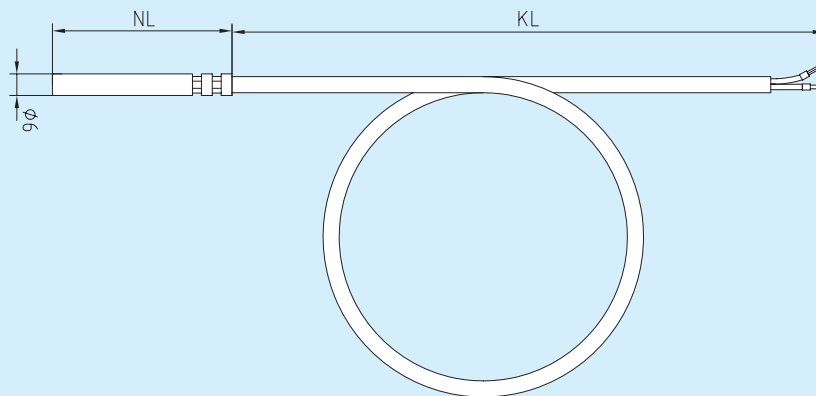
1x four-wire connection (optional)

THERMASGARD® HTF 200 (NL = 200 mm, KL = 1.5 m), including mounting flange

Type / WG1 - Sensor / Output Features	PVC Rolled/ Stamped	Silicone up to +180 °C	Teflon up to +250 °C	Silicone Humidity-Tight	Glass Fibre up to +350 °C
HTF 200 Pt100	●	●	–	–	–
HTF 200 Pt1000	●	●	–	–	–
HTF 200 Ni1000	●	●	–	–	–
HTF 200 Ni1000 TK5000, LG-Ni1000	●	●	–	–	–
HTF 200 NTC 1.8 kOhm	●	●	–	–	–
HTF 200 KTY 81-210, NTC 10k, 20k, 30k, 50k, 10k Precon	●	●	–	–	–
HTF 200 LM235Z (TCR = 10 mV / K, 2.73 V at 0 °C), KP10	●	●	–	–	–

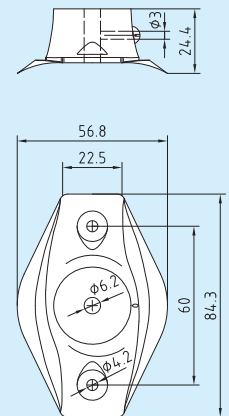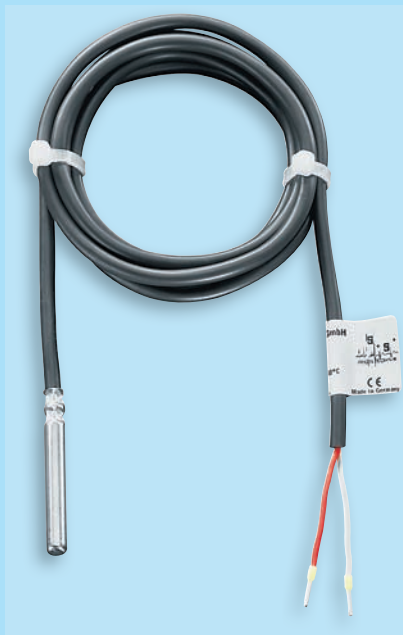| Extra charge:	2-wire connecting leads, PVC, per running meter 2-wire connecting leads, silicone, per running meter
Accessories:	**MF-06-K** Mounting flange, plastic (included in the scope of delivery) **TH** Immersion sleeves see last chapter
For special orders please specify:	Type, sensor length (NL), material of leads, connection type, cable length (KL) e.g. HTF-300mm, Pt1000, PVC, 3-wire, 1.5 m; HTF-500mm, Pt100, silicone, 2-wire, 6 m

Dimensional drawing — HTF

Dimensional drawing — MF-06-K

HTF 50
(NL = 50 mm)

HTF 50
(NL = 50 mm, with glass fibre cable)

MF-06-K
Mounting flange,
plastic

THERMASGARD® HTF 50   (NL = 50 mm, KL = 1.5 m)

Type/WG1 - Sensor/Output Features	PVC Rolled/ Stamped	Silicone up to +180 °C	Teflon up to +250 °C	Silicone Humidity- Tight	Glass Fibre up to +350 °C
HTF 50 Pt100	●	●	●	●	●
HTF 50 Pt1000	●	●	●	●	●
HTF 50 Ni1000	●	●	–	●	–
HTF 50 Ni1000 TK5000, LG-Ni1000	●	●	–	●	–
HTF 50 NTC 1.8 kOhm	●	●	–	●	–
HTF 50 KTY 81-210, NTC 10k, 20k, 30k, 50k, 10k Precon	●	●	–	●	–
HTF 50 LM235Z (TCR = 10 mV/K, 2.73 V at 0 °C), KP10	●	●	–	●	–
Extra charge:	2-wire connecting leads, PVC, per running meter 2-wire connecting leads, silicone, per running meter 2-wire connecting leads, Teflon, per running meter 2-wire connecting leads, glass fibre, per running meter				
Accessories:	**MF-06-K** Mounting flange, plastic **TH** Immersion sleeves see last chapter				
For special orders please specify:	Type, sensor length (NL), material of leads, connection type, cable length (KL) e.g. HTF-30mm, Pt1000, PVC, 3–wire, 1.5 m; HTF-40mm, Pt100, glass fibre, 2-wire, 6 m				