

Patented quality product (Immersion sensor patent no. DE 10 2012 017 500.0)

THERMASGARD® TF 43-F is a resistance thermometer with a passive output, enclosure made from impact-resistant plastic with snap-on lid, with sensor sleeve and flexible cable length.

THERMASGARD® TF 65-F is a resistance thermometer with a passive output, enclosure made from impact-resistant plastic with quick-locking screws, with sensor sleeve and flexible cable length.

These built-in temperature sensors / immersion temperature sensors are electric contact thermometers for temperature measurement in liquids and gases, which are installed for example in piping systems and vessels. For aggressive media, stainless steel immersion sleeves must be used. Applications of these temperature sensors in piping systems, in heating technology, in storage tanks, in district heating compact stations, in hot and cold-water systems, in oil and lubricant circulation systems, in mechanical, apparatus and plant engineering as well as in the entire industrial sector.

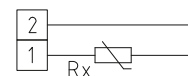
TECHNICAL DATA

Measuring range:	-50...+180 °C
Sensors / output:	see table, passive (Perfect Sensor Protection) (optional also with two sensors)
Connection type:	2-wire connection (4-wire connection optional)
Testing current:	< 0.6 mA (Pt1000) < 0.3 mA (Ni1000)
Insulating resistance:	≥ 100 MΩ, at +20 °C (500 V DC)
Ambient temperature:	-20...+100 °C
Enclosure:	plastic, UV-stabilised, material polyamide, 30 % glass-globe reinforced, colour traffic white (similar to RAL 9016) TF 43-F with snap-on lid TF 65-F with quick-locking screws (slotted / Phillips head combination)
Enclosure dimensions:	72 x 64 x 37,8 mm (Tyr 1 / Tyr 01)
Cable gland:	M 16 x 1,5; including strain relief, exchangeable, max. inner diameter 10,4 mm
Electrical connection:	0,14 - 1,5 mm², via terminal screws
Connecting cable:	silicone, SiHF, 2 x 0,25 mm², cable length (KL) = flexible, inserted length (EL) > 50 mm
Sensor sleeve:	stainless steel V4A (1.4571), Ø = 6 mm, nominal length = 50 mm, cable entry stamped (rolled as an option)
Permissible humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	TF 43-F IP 43 (according to EN 60 529) in the built-in state TF 65-F IP 65 (according to EN 60 529) in the built-in state

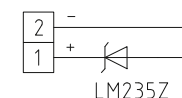
ACCESSORIES

TH08-ms/xx	Immersion sleeve , brass, nickel-plated, Ø = 8 mm, T _{max} = +150 °C, p _{max} = 10 bar
TH08-VA/xx	Immersion sleeve , stainless steel, V4A (1.4571), Ø = 8 mm, T _{max} = +600 °C, p _{max} = 40 bar
TH08-VA/xx/90	Immersion sleeve , stainless steel, V4A (1.4571), with neck tube (90 mm), Ø = 8 mm, T _{max} = +600 °C, p _{max} = 40 bar

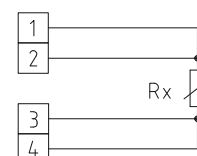
1x two-wire connection
Standard



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



1x four-wire connection
(optional)



Sensor sleeve
humidity-tight
stamped
(standard)



Sensor sleeve
watertight
compound-filled,
rolled (optional)

High-performance encapsulation against
vibration, mechanical stress and humidity



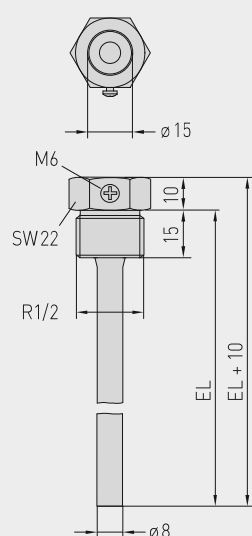
A basic unit with flexible cable length in three variants...



**TFxx-F +
TH08-ms/xx**

Immersion / screw-in
 temperature sensor
 with immersion sleeve,
 brass, nickel-plated

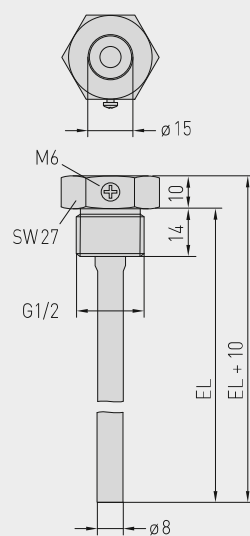
Dimensional drawing
TH08-ms/xx



**TFxx-F +
TH08-VA/xx**

Immersion / screw-in
 temperature sensor
 with immersion sleeve,
 stainless steel, V4A

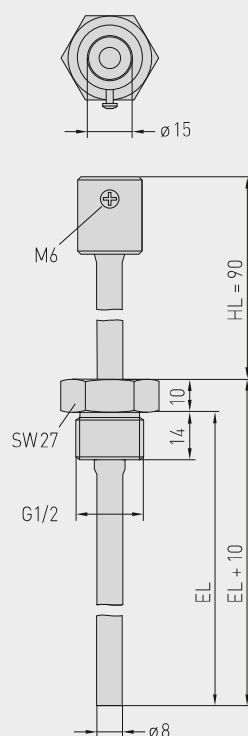
Dimensional drawing
TH08-VA/xx



**TFxx-F +
TH08-VA/xx/90**

Immersion / screw-in
 temperature sensor with
 immersion sleeve with neck
 tube, stainless steel, V4A

Dimensional drawing
TH08-VA/xx/90



**TFxx-F
Basic unit**

Flexible cable length
 through cable entry
 in the enclosure





S+S REGELTECHNIK

THERMASGARD® TF 43-F
THERMASGARD® TF 65-F

Flexible sleeve / cable temperature sensors,
immersion / screw-in temperature sensors,
with passive output

...through combination with accessories:



TH08-ms/xx

Immersion sleeve,
brass, nickel-plated,
thread-sealing, conical,
according to DIN 10226



TH08-VA/xx

Immersion sleeve,
stainless steel, V4A,
flat-sealing, cylindrical,
according to DIN 228



TH08-VA/xx/90

Immersion sleeve with neck tube,
stainless steel, V4A,
flat-sealing, cylindrical,
according to DIN 228

THERMASGARD® TH08 Immersion sleeve Ø 8 mm (Accessories)					
Type / WG01B	p _{max} (static)	T _{max}	Inserted Length (EL)	Item No.	Price
TH08-ms/xx	Brass, nickel-plated			without neck tube	
TH08-MS 50MM	10 bar	+150 °C	50 mm	7100-0011-0010-132	7,85 €
TH08-MS 100MM	10 bar	+150 °C	100 mm	7100-0011-0020-132	8,95 €
TH08-MS 150MM	10 bar	+150 °C	150 mm	7100-0011-0030-132	9,45 €
TH08-MS 200MM	10 bar	+150 °C	200 mm	7100-0011-0040-132	9,75 €
TH08-MS 250MM	10 bar	+150 °C	250 mm	7100-0011-0050-132	11,30 €
TH08-MS 300MM	10 bar	+150 °C	300 mm	7100-0011-0060-132	11,60 €
TH08-MS 350MM	10 bar	+150 °C	350 mm	7100-0011-0070-132	11,70 €
TH08-MS 400MM	10 bar	+150 °C	400 mm	7100-0011-0080-132	11,80 €
TH08-VA/xx	Stainless steel, V4A (1.4571)			without neck tube	
TH08-VA 50MM	40 bar	+600 °C	50 mm	7100-0012-0010-132	17,10 €
TH08-VA 100MM	40 bar	+600 °C	100 mm	7100-0012-0020-132	18,90 €
TH08-VA 150MM	40 bar	+600 °C	150 mm	7100-0012-0030-132	20,30 €
TH08-VA 200MM	40 bar	+600 °C	200 mm	7100-0012-0040-132	21,40 €
TH08-VA 250MM	40 bar	+600 °C	250 mm	7100-0012-0050-132	26,60 €
TH08-VA 300MM	40 bar	+600 °C	300 mm	7100-0012-0060-132	27,80 €
TH08-VA 350MM	40 bar	+600 °C	350 mm	7100-0012-0070-132	28,00 €
TH08-VA 400MM	40 bar	+600 °C	400 mm	7100-0012-0080-132	28,50 €
TH08-VA/xx/90	Stainless steel, V4A (1.4571)			with neck tube (90 mm)	
TH08-VA 50/90MM	40 bar	+600 °C	50 mm	7100-0012-0012-132	24,50 €
TH08-VA 100/90MM	40 bar	+600 °C	100 mm	7100-0012-0022-132	25,60 €
TH08-VA 150/90MM	40 bar	+600 °C	150 mm	7100-0012-0032-132	26,85 €
TH08-VA 200/90MM	40 bar	+600 °C	200 mm	7100-0012-0042-132	28,00 €
TH08-VA 250/90MM	40 bar	+600 °C	250 mm	7100-0012-0052-132	29,35 €
TH08-VA 300/90MM	40 bar	+600 °C	300 mm	7100-0012-0062-132	31,80 €
Note: inner diameter of socket 15.0 mm For further information see last chapter!					