

Duct temperature sensors / smoke gas temperature sensors, including mounting flange, with passive output

Resistance thermometer / smoke gas temperature sensor **THERMASGARD® RGTF 1** with passive output, with connecting head made from aluminium (optionally with **cable gland** or **M12 connector** according to DIN EN 61076-2-101) and straight protective tube, incl. mounting flange.

The duct sensor is used to detect relatively high temperatures in gaseous media, eg, for exhaust air and smoke gas temperature measurement.

RGTF 1
standard

TECHNICAL DATA

Measuring range:	–35...+600 °C (extended range limits from –100...+750 °C optional)
Sensor / output:	Pt100/Pt1000 (according to DIN EN 60 751, class B) (Perfect Sensor Protection)
Connection type:	2-wire connection (Pt1000) 4-wire connection (Pt100; optional Pt1000)
Testing current:	< 0.6 mA (Pt1000) < 1.0 mA (Pt100)
Insulating resistance:	≥ 100 MΩ, at +20 °C (500 V DC)
Electrical connection:	0.14 - 2.5 mm ² via terminal screws on ceramic base
Cable connection:	RGTF 1 (standard) adjusting screw made of metal (M20 x 1.5); RGTF 1-KV (optional) cable gland, brass, nickel-plated (M20 x 1.5; with strain relief, exchangeable, inner diameter 6 - 12 mm) RGTF 1-Q (optional) M12 connector according to DIN EN 61076-2-101 (male, 5-pin, A-code)
Dimensions:	see dimensional drawing
Connecting head:	form B, material aluminium, colour white aluminium (similar to RAL 9006), ambient temperature –20...+100 °C
Protective tube:	stainless steel V4A (1.4571), Ø = 8 mm inserted length (EL) = 200 - 500 mm (see table)
Process connection:	by mounting flange, stainless steel V2A (1.4305) (included in the scope of delivery)
Humidity:	< 95 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 54 (according to EN 60 529) RGTF 1 IP 65 (according to EN 60 529) RGTF1-KV / RGTF1-Q



RGTF 1
Measuring insert with
ceramic tubelet



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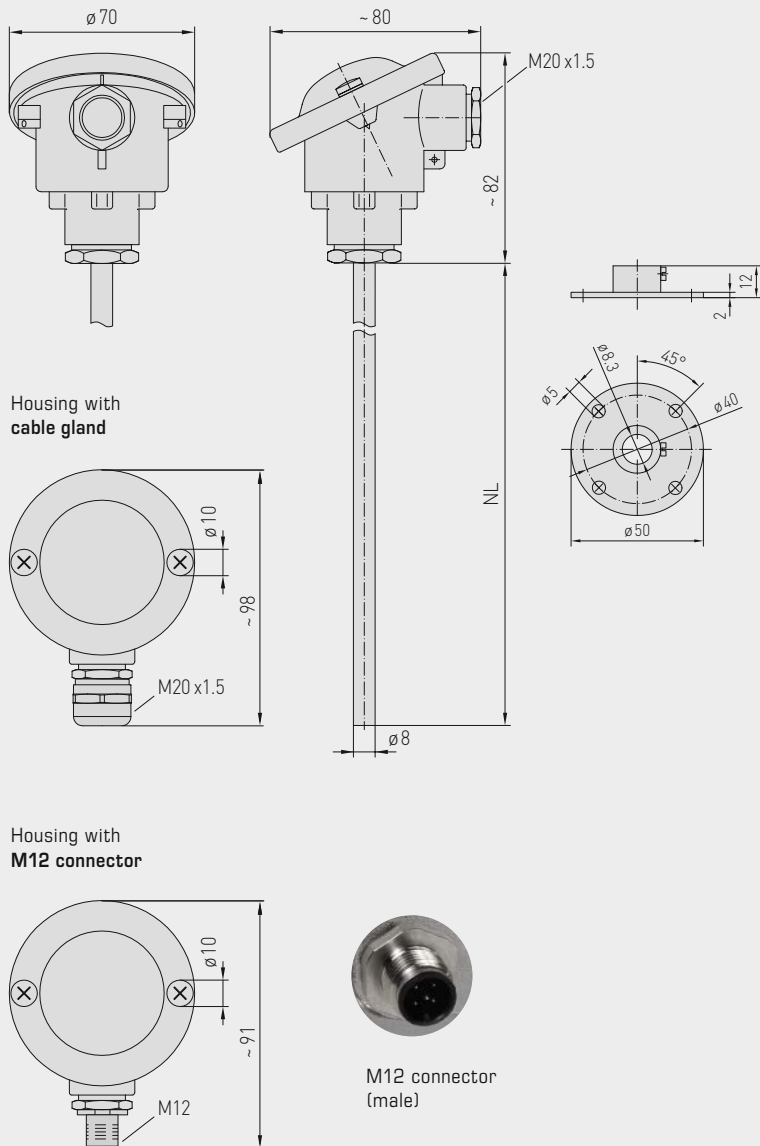
THERMASGARD® RGTF 1

Duct temperature sensors / smoke gas temperature sensors,
including mounting flange, with passive output



Dimensional drawing

RGTF 1



RGTF 1
standard
(IP 54)



RGTF 1 - KV
with cable gland
(IP 65)



RGTF 1 - Q
with M12 connector
(IP 65)



High-performance encapsulation against
vibration, mechanical stress and humidity

PS-PROTECTION
PERFECT SENSOR PROTECTION

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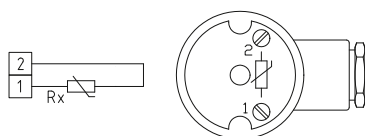
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2-wire connection
(Pt1000)

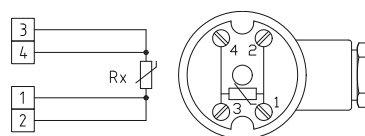
4-wire connection
(Pt100 / Pt1000 optional)



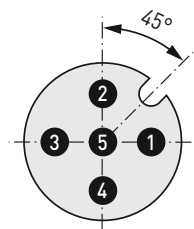
1x two-wire connection
(Pt1000)



1x four-wire connection
(Pt100 / Pt1000 optional)

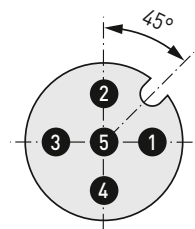


1x two-wire connection
pin assignment (M12)



- 1 Rx
- 2 Rx
- 3 frei / free
- 4 frei / free
- 5 frei / free

1x four-wire connection
pin assignment (M12)



- 1 Rx
- 2 Rx
- 3 Rx
- 4 Rx
- 5 frei / free



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THERMASGARD® RGTF 1

Duct temperature sensors / smoke gas temperature sensors,
including mounting flange, with passive output

RGTF 1
standard
(IP 54)



THERMASGARD® RGTF 1		Duct temperature sensors / smoke gas temperature sensors, including mounting flange (Standard)	
Type / WG01	Sensor / Output	Installation length (EL)	Item No.
RGTF1 Pt100 xx	Pt100 (according to DIN EN 60751, class B)		IP 54, 4-wire
RGTF1 Pt100 200mm	Pt100	200 mm	1101-3040-1043-000
RGTF1 Pt100 250mm	Pt100	250 mm	1101-3040-1053-000
RGTF1 Pt100 300mm	Pt100	300 mm	1101-3040-1063-000
RGTF1 Pt100 500mm	Pt100	500 mm	1101-3040-1103-000
RGTF1 Pt1000 xx	Pt1000 (according to DIN EN 60751, class B)		IP 54, 2-wire
RGTF1 Pt1000 200mm	Pt1000	200 mm	1101-3040-5041-000
RGTF1 Pt1000 250mm	Pt1000	250 mm	1101-3040-5051-000
RGTF1 Pt1000 300mm	Pt1000	300 mm	1101-3040-5061-000
RGTF1 Pt1000 500mm	Pt1000	500 mm	1101-3040-5101-000
Housing variant:	equipped as standard with pressure screw (IP54), optional housing variants with cable gland (IP65) or M12 connector (IP65) see the next page!		
Extra charge:	other measuring ranges optional		on request

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RGTF 1 - Q
with M12 connector
(IP65)



THERMASGARD® RGTF 1 - Q		Duct temperature sensors / smoke gas temperature sensors, including mounting flange (with M12 connector)			
Type / WG03	Sensor / Output	Installation length (EL)	Q ●	Item No.	
RGTF1 Pt100 xx Q	Pt100 (according to DIN EN 60751, class B)			IP65, 4-wire	
RGTF1 Pt100 200mm Q	Pt100	200 mm	●	2Z01-4131-0100-011	
RGTF1 Pt100 250mm Q	Pt100	250 mm	●	2Z01-4131-0100-021	
RGTF1 Pt100 300mm Q	Pt100	300 mm	●	2Z01-4131-0100-031	
RGTF1 Pt100 500mm Q	Pt100	500 mm	●	2Z01-4131-0100-041	
RGTF1 Pt1000 xx Q	Pt1000 (according to DIN EN 60751, class B)			IP65, 2-wire	
RGTF1 Pt1000 200mm Q	Pt1000	200 mm	●	2Z05-4131-0100-011	
RGTF1 Pt1000 250mm Q	Pt1000	250 mm	●	2Z05-4131-0100-021	
RGTF1 Pt1000 300mm Q	Pt1000	300 mm	●	2Z05-4131-0100-031	
RGTF1 Pt1000 500mm Q	Pt1000	500 mm	●	2Z05-4131-0100-041	
Housing variant "Q":	Cable connection with M12 connector (male, 5-pin, A-code)				
Extra charge:	other measuring ranges optional			on request	

ACCESSORIES	
Special accessories for M12 connector see chapter Accessories!	



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THERMASGARD® RGTF 1

Duct temperature sensors / smoke gas temperature sensors,
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RGTF 1 - KV
with cable gland
(IP 65)



THERMASGARD® RGTF 1 - KV		Duct temperature sensors / smoke gas temperature sensors, including mounting flange (with cable gland)		
Type / WG01	Sensor / Output	Installation length (EL)	Item No.	
RGTF1 Pt100 xx KV	Pt100 (according to DIN EN 60751, class B)		IP65, 4-wire	
RGTF1 Pt100 200mm KV	Pt100	200 mm	1101-30D0-1043-000	
RGTF1 Pt100 250mm KV	Pt100	250 mm	1101-30D0-1053-000	
RGTF1 Pt100 300mm KV	Pt100	300 mm	1101-30D0-1063-000	
RGTF1 Pt100 500mm KV	Pt100	500 mm	1101-30D0-1103-000	
RGTF1 Pt1000 xx KV	Pt1000 (according to DIN EN 60751, class B)		IP65, 2-wire	
RGTF1 Pt1000 200mm KV	Pt1000	200 mm	1101-30D0-5041-000	
RGTF1 Pt1000 250mm KV	Pt1000	250 mm	1101-30D0-5051-000	
RGTF1 Pt1000 300mm KV	Pt1000	300 mm	1101-30D0-5061-000	
RGTF1 Pt1000 500mm KV	Pt1000	500 mm	1101-30D0-5101-000	
Housing variant "KV":	Cable connection with cable gland			
Extra charge:	other measuring ranges optional		on request	