

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

**RGTF 1**  
standard

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.

**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) <b>(Perfect Sensor Protection)</b>
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 <sup>2</sup> via terminal screws on ceramic base
Cable connection:	<b>RGTF 1</b> (standard) adjusting screw made of metal (M20 x 1.5); <b>RGTF 1-KV</b> (optional) cable gland, brass, nickel-plated (M20 x 1.5; with strain relief, exchangeable, inner diameter 6 - 12 mm) <b>RGTF 1-Q</b> (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 <b>V4A</b> (1.4571), Ø = 8 mm inserted length (EL) = 200 - 500 mm (see table)
Process connection:	by mounting flange, stainless steel <b>V2A</b> (1.4305) (included in the scope of delivery)
Humidity:	< 95 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	<b>IP 54</b> (according to EN 60 529) <b>RGTF 1</b> <b>IP 65</b> (according to EN 60 529) <b>RGTF1-KV / RGTF1-Q</b>



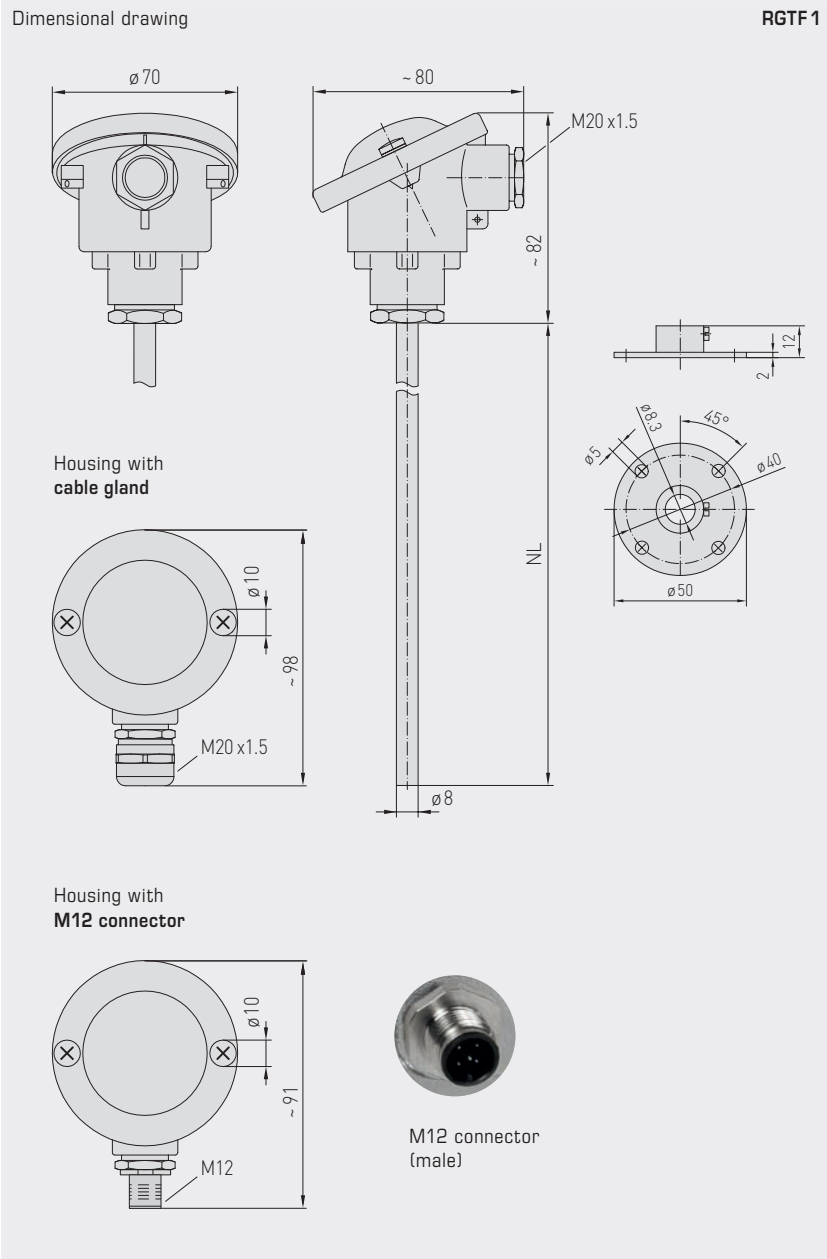
**RGTF 1**  
Measuring insert with ceramic tubelet



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THERMASGARD® RGTF 1

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



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

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

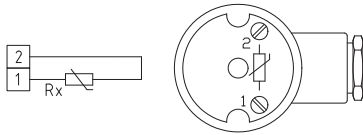
2-wire connection  
(Pt1000)



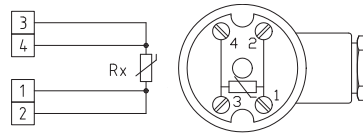
4-wire connection  
(Pt100 / Pt1000 optional)



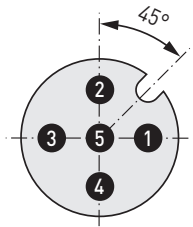
1x two-wire connection  
(Pt1000)



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

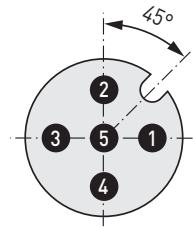


1x two-wire connection  
pin assignment (M12)



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

1x four-wire connection  
pin assignment (M12)



- 1
- 2 Rx
- 3
- 4
- 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.	Price
<b>RGTF1 Pt100 xx</b>	<b>Pt100</b> (according to DIN EN 60751, class B)		<b>IP 54, 4-wire</b>	
RGTF1 Pt100 200mm	Pt100	200 mm	1101-3040-1043-000	197,59 €
RGTF1 Pt100 250mm	Pt100	250 mm	1101-3040-1053-000	199,66 €
RGTF1 Pt100 300mm	Pt100	300 mm	1101-3040-1063-000	204,15 €
RGTF1 Pt100 500mm	Pt100	500 mm	1101-3040-1103-000	219,98 €
<b>RGTF1 Pt1000 xx</b>	<b>Pt1000</b> (according to DIN EN 60751, class B)		<b>IP 54, 2-wire</b>	
RGTF1 Pt1000 200mm	Pt1000	200 mm	1101-3040-5041-000	190,91 €
RGTF1 Pt1000 250mm	Pt1000	250 mm	1101-3040-5051-000	192,96 €
RGTF1 Pt1000 300mm	Pt1000	300 mm	1101-3040-5061-000	197,45 €
RGTF1 Pt1000 500mm	Pt1000	500 mm	1101-3040-5101-000	203,31 €
<b>Housing variant:</b>	equipped as standard with pressure screw (IP 54), optional housing variants with cable gland (IP 65) or M12 connector (IP 65) see the next page!			
Extra charge:	other measuring ranges optional			on request

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

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**RGTF 1 - Q**  
with M12 connector  
(IP 65)



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.	Price
<b>RGTF1 Pt100 xx Q</b>	<b>Pt100</b> (according to DIN EN 60751, class B)		●	<b>IP 65, 4-wire</b>	
RGTF1 Pt100 200mm Q	Pt100	200 mm	●	2Z01-4131-0100-011	235,71 €
RGTF1 Pt100 250mm Q	Pt100	250 mm	●	2Z01-4131-0100-021	237,87 €
RGTF1 Pt100 300mm Q	Pt100	300 mm	●	2Z01-4131-0100-031	242,35 €
RGTF1 Pt100 500mm Q	Pt100	500 mm	●	2Z01-4131-0100-041	248,24 €
<b>RGTF1 Pt1000 xx Q</b>	<b>Pt1000</b> (according to DIN EN 60751, class B)			<b>IP 65, 2-wire</b>	
RGTF1 Pt1000 200mm Q	Pt1000	200 mm	●	2Z05-4131-0100-011	235,71 €
RGTF1 Pt1000 250mm Q	Pt1000	250 mm	●	2Z05-4131-0100-021	237,87 €
RGTF1 Pt1000 300mm Q	Pt1000	300 mm	●	2Z05-4131-0100-031	242,35 €
RGTF1 Pt1000 500mm Q	Pt1000	500 mm	●	2Z05-4131-0100-041	248,24 €
<b>Housing variant "Q":</b>	Cable connection <b>with M12 connector</b> (male, <b>5-pin</b> , A-code)				
Extra charge:	other measuring ranges optional			on request	

**ACCESSORIES**

Special accessories for M12 connector  
see chapter Accessories!



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

RGTF 1 - KV  
with cable gland  
(IP 65)



**THERMASGARD®** Duct temperature sensors / smoke gas temperature sensors, including mounting flange (with cable gland)  
**RGTF 1 - KV**

Type / WG01	Sensor / Output	Installation length (EL)	Item No.	Price
<b>RGTF1 Pt100 xx KV</b>	<b>Pt100</b> (according to DIN EN 60751, class B)		<b>IP 65, 4-wire</b>	
RGTF1 Pt100 200mm KV	Pt100	200 mm	1101-30D0-1043-000	201,02 €
RGTF1 Pt100 250mm KV	Pt100	250 mm	1101-30D0-1053-000	203,08 €
RGTF1 Pt100 300mm KV	Pt100	300 mm	1101-30D0-1063-000	207,56 €
RGTF1 Pt100 500mm KV	Pt100	500 mm	1101-30D0-1103-000	213,44 €
<b>RGTF1 Pt1000 xx KV</b>	<b>Pt1000</b> (according to DIN EN 60751, class B)		<b>IP 65, 2-wire</b>	
RGTF1 Pt1000 200mm KV	Pt1000	200 mm	1101-30D0-5041-000	201,02 €
RGTF1 Pt1000 250mm KV	Pt1000	250 mm	1101-30D0-5051-000	203,08 €
RGTF1 Pt1000 300mm KV	Pt1000	300 mm	1101-30D0-5061-000	207,56 €
RGTF1 Pt1000 500mm KV	Pt1000	500 mm	1101-30D0-5101-000	213,44 €
<b>Housing variant "KV":</b>	<b>Cable connection with cable gland</b>			
Extra charge:	other measuring ranges optional			on request