

## Screw-in temperature sensors / smoke gas temperature sensors with neck tube and passive output

Screw-in resistance thermometer / smoke gas temperature sensor **THERMASGARD® RGTF 2** with neck tube, passive output, exchangeable measuring insert, straight protective tube and connecting head made of aluminium for measuring relatively high temperatures in gaseous or liquid media, e.g. for exhaust air or flue gas temperature measurement.

### TECHNICAL DATA

|                        |                                                                                                                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measuring range:       | -35...+600 °C<br>(extended range limits from<br>-100...+750 °C optional)                                                                                                                                                                  |
| Sensor / output:       | see table, passive, glass sensing resistor<br><b>(Perfect Sensor Protection)</b>                                                                                                                                                          |
| Accuracy class:        | class B, DIN EN 60751                                                                                                                                                                                                                     |
| Connection type:       | 2-wire connection<br>(3- or 4-wire connection optional)                                                                                                                                                                                   |
| Testing current:       | approx. 1 mA                                                                                                                                                                                                                              |
| Process connection:    | screwed socket with G ½" straight pipe thread                                                                                                                                                                                             |
| Protective tube:       | stainless steel <b>V4A</b> (1.4571),<br>G ½" straight pipe thread, wrench size 27 mm,<br>$p_{max} = 40 \text{ bar}$ , $\varnothing = 8 \text{ mm}$<br>length of neck tube (HL) = 80 mm<br>inserted length (EL) = 100 - 500 mm (see table) |
| Connecting head:       | form B, material aluminium,<br>colour white aluminium (similar to RAL 9006),<br>ambient temperature -20...+100 °C,<br>M 20 x 1.5                                                                                                          |
| Electrical connection: | 0.14 - 2.5 mm <sup>2</sup> via terminal screws on ceramic base                                                                                                                                                                            |
| Insulating resistance: | $\geq 100 \text{ M}\Omega$ , at +20 °C (500 V DC)                                                                                                                                                                                         |
| Humidity:              | < 95 % r. H., non-precipitating air                                                                                                                                                                                                       |
| Protection class:      | III (according to EN 60 730)                                                                                                                                                                                                              |
| Protection type:       | IP 54 (according to EN 60 529),<br>IP 65 (optional)                                                                                                                                                                                       |

**RGTF 2**  
Top view



2-wire connection  
(standard)



4-wire connection  
(optional)

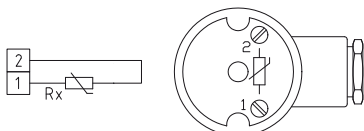


**RGTF 2**  
standard  
(IP 54)

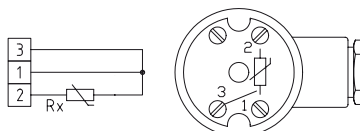


**RGTF 2**  
optional  
(IP 65)

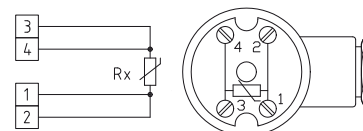
1x two-wire connection  
standard



1x three-wire connection



1x four-wire connection

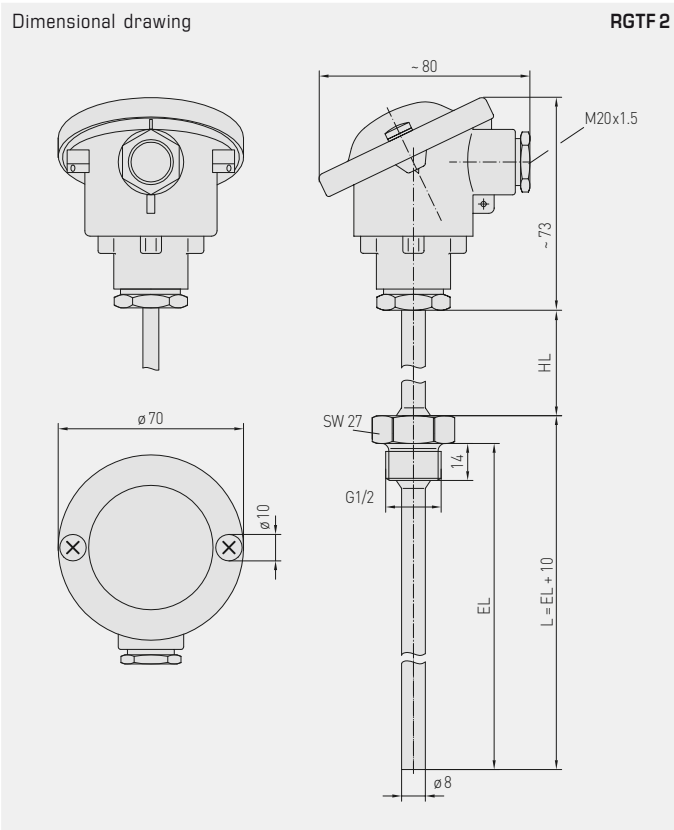
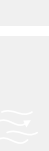
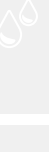




S+S REGELTECHNIK

THERMASGARD® RGTF 2

Screw-in temperature sensors / flue gas temperature sensors  
with neck tube and passive output



High-performance encapsulation against  
vibration, mechanical stress and humidity

**PS-PROTECTION**  
PERFECT SENSOR PROTECTION



RGTF 2  
Measuring insert  
with ceramic tubelet

| THERMASGARD® RGTF 2 – Screw-in temperature sensors / flue gas temperature sensors with neck tube |                                                                                                                |                      |                    |          |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------|--------------------|----------|
| Type / WG03                                                                                      | Sensor / Output                                                                                                | Inserted Length (EL) | Item No.           | Price    |
| <b>RGTF2 PT100 xx</b>                                                                            | <b>Pt100</b>                                                                                                   |                      | <b>IP54</b>        |          |
| RGTF2 PT100 100/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 100 mm               | 1101-2090-1021-000 | 167,50 € |
| RGTF2 PT100 150/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 150 mm               | 1101-2090-1031-000 | 168,58 € |
| RGTF2 PT100 200/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 200 mm               | 1101-2090-1041-000 | 173,95 € |
| RGTF2 PT100 250/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 250 mm               | 1101-2090-1051-000 | 175,02 € |
| RGTF2 PT100 300/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 300 mm               | 1101-2090-1061-000 | 182,53 € |
| RGTF2 PT100 500/80MM                                                                             | Pt100 (according to DIN EN 60 751, class B)                                                                    | 500 mm               | 1101-2090-1101-000 | 194,35 € |
| <b>RGTF2 PT1000 xx</b>                                                                           | <b>Pt1000</b>                                                                                                  |                      | <b>IP54</b>        |          |
| RGTF2 PT1000 100/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 100 mm               | 1101-2090-5021-000 | 167,50 € |
| RGTF2 PT1000 150/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 150 mm               | 1101-2090-5031-000 | 168,58 € |
| RGTF2 PT1000 200/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 200 mm               | 1101-2090-5041-000 | 173,95 € |
| RGTF2 PT1000 250/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 250 mm               | 1101-2090-5051-000 | 175,02 € |
| RGTF2 PT1000 300/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 300 mm               | 1101-2090-5061-000 | 182,53 € |
| RGTF2 PT1000 500/80MM                                                                            | Pt1000 (according to DIN EN 60 751, class B)                                                                   | 500 mm               | 1101-2090-5101-000 | 194,35 € |
| Extra charge:                                                                                    | Protection type <b>IP65</b> (B-Head)                                                                           |                      |                    | 7,96 €   |
|                                                                                                  | Other ranges optional                                                                                          |                      |                    | 21,42 €  |
| For special orders<br>please specify:                                                            | Type, sensor, measuring range, connection type, process connection,<br>Length of neck tube and inserted length |                      |                    |          |