

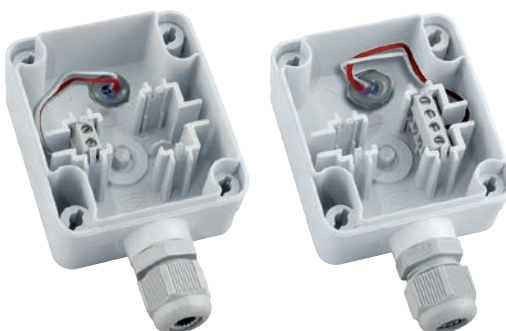
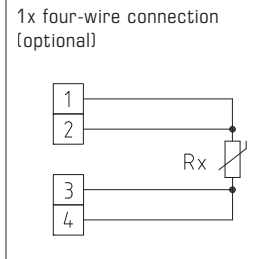
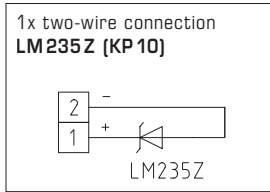
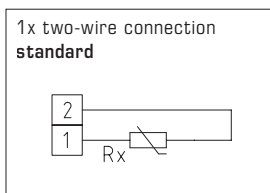
**Screw-in / immersion temperature sensors  
with neck tube (stepped once)  
with passive output**

ETF 7


Very quickly responding screw-in resistance thermometer / immersion temperature sensor **THERMASGARD® ETF 7** with passive output, neck tube and a single-tapered stainless steel protective tube, housing cover with quick-locking screws, very short reaction time, particularly suitable for very quick temperature changes and control operations, e.g. in hydraulic systems.

**TECHNICAL DATA**

|                        |  |
|------------------------|--|
| Measuring range:       | -35...+150 °C  |
| Sensors / output:      | see table, passive<br><b>(Perfect Sensor Protection)</b>   |
| Response times:        | $t_{0.5} = 2.8 \text{ s}$<br>$t_{0.9} = 10 \text{ s}$<br>(for water at a flow rate of 2 m/s)   |
| Connection type:       | 2-wire connection<br>(4-wire connection on PT100,<br>optional on other sensors)  |
| Testing current:       | < 0.6 mA (Pt1000)<br>< 1.0 mA (Pt100)<br>< 0.3 mA (Ni1000, Ni1000 TK5000)  |
| Insulating resistance: | $\geq 100 \text{ M}\Omega$ , at +20 °C (500 V DC)  |
| Electrical connection: | 0.14 - 1.5 mm <sup>2</sup> via terminal screws   |
| Cable connection:      | <b>cable gland</b> , plastic<br>(M 16 x 1.5; with strain relief, exchangeable,<br>inner diameter 10.4 mm) <b>or</b><br><b>M12 connector</b> according to DIN EN 61076-2-101  |
| Housing:               | plastic, UV-resistant,<br>material polyamide, 30 % glass-globe reinforced,<br>with quick-locking screws<br>(slotted / Phillips head combination),<br>colour traffic white (similar to RAL 9016)  |
| Housing dimensions:    | 72 x 64 x 37.8 mm (Tyr 1)  |
| Protective tube:       | stainless steel <b>V4A</b> (1.4571),<br>G ½ " straight pipe thread, wrench size 27 mm,<br>$p_{\text{max}} = 6 \text{ bar}$ , $\varnothing = 6 \text{ mm}$ ,<br>single-tapered to $\varnothing = 4 \text{ mm}$ (see dimensional drawing)<br>length of neck tube (HL) = 25 mm<br>inserted length (EL) = 100 - 250 mm (see table) |
| Process connection:    | screwed socket with G ½ " straight pipe thread   |
| Humidity:              | < 95 % RH, non-precipitating air   |
| Protection class:      | III (according to EN 60 730)   |
| Protection type:       | <b>IP65</b> (according to EN 60 529) Housing tested,<br>TÜV SÜD, Report No. 713139052 (Tyr 1)  |



High-performance encapsulation against  
vibration, mechanical stress and humidity



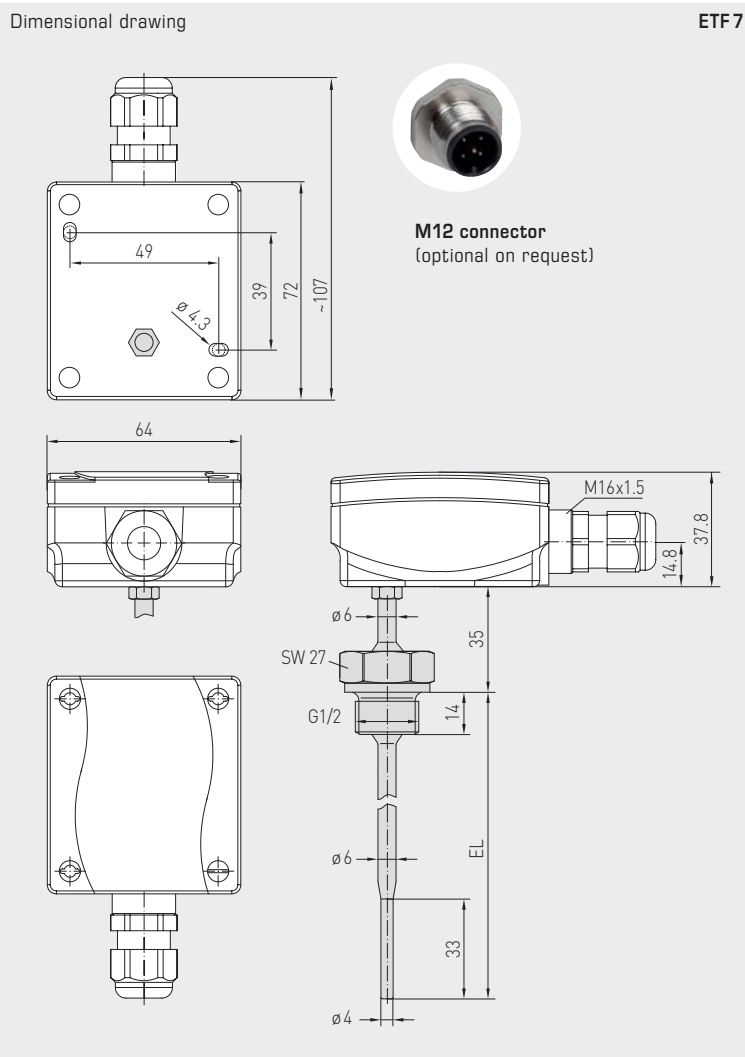
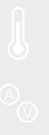
**PS-PROTECTION**  
PERFECT SENSOR PROTECTION



S+S REGELTECHNIK

THERMASGARD® ETF 7

Screw-in / immersion temperature sensors  
with neck tube (stepped once)  
with passive output



ETF 7

| THERMASGARD® ETF 7      |  | Screw-in / immersion temperature sensor with neck tube |          |
|-------------------------|--|--|----------|
| Type / WG01             | Sensor / Output  | Item No.   | Price    |
| <b>ETF7 Pt100 xx</b>    | <b>Pt100</b>   |  |          |
| ETF7 Pt100 100mm        | Pt100 (according to DIN EN 60 751, class B)                                | 1101-2080-1023-000                                     | 142,71 € |
| ETF7 Pt100 150mm        | Pt100 (according to DIN EN 60 751, class B)                                | 1101-2080-1033-000                                     | 144,12 € |
| ETF7 Pt100 250mm        | Pt100 (according to DIN EN 60 751, class B)                                | 1101-2080-1053-000                                     | 147,41 € |
| <b>ETF7 Pt1000 xx</b>   | <b>Pt1000</b>  |  |          |
| ETF7 Pt1000 100mm       | Pt1000 (according to DIN EN 60 751, class B)                               | 1101-2080-5021-000                                     | 144,24 € |
| ETF7 Pt1000 150mm       | Pt1000 (according to DIN EN 60 751, class B)                               | 1101-2080-5031-000                                     | 145,18 € |
| ETF7 Pt1000 250mm       | Pt1000 (according to DIN EN 60 751, class B)                               | 1101-2080-5051-000                                     | 148,11 € |
| <b>ETF7 Ni1000 xx</b>   | <b>Ni1000</b>  |  |          |
| ETF7 Ni1000 100mm       | Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)           | 1101-2084-2021-000                                     | 159,08 € |
| ETF7 Ni1000 150mm       | Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)           | 1101-2084-2031-000                                     | 160,61 € |
| ETF7 Ni1000 250mm       | Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)           | 1101-2084-2051-000                                     | 162,62 € |
| <b>ETF7 Ni1000TK xx</b> | <b>Ni1000 TK5000</b>   |  |          |
| ETF7 NiTK 100mm         | Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000                            | 1101-2081-0021-000                                     | 149,95 € |
| ETF7 NiTK 150mm         | Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000                            | 1101-2081-0031-000                                     | 150,35 € |
| ETF7 NiTK 250mm         | Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000                            | 1101-2081-0051-000                                     | 151,74 € |
| Optional:               | Cable connection with <b>M12 connector</b> according to DIN EN 61076-2-101 | on request   |          |