

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

Screw-in resistance thermometer THERMASGARD® ETF6 with neck tube, exchangeable insert, straight protective tube, connecting head made of aluminium and passive output. This temperature sensor is used for temperature detection in liquid or gaseous media, in piping systems, in vessels or storage tanks, preferably in cases where pipes or vessels have to be insulated.

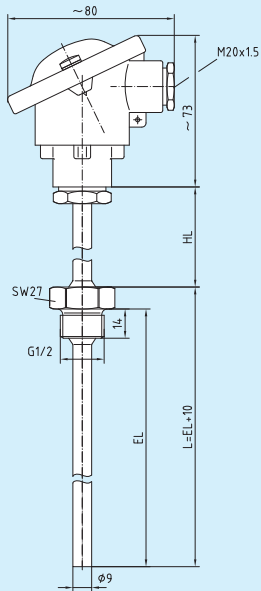
**TECHNICAL DATA:**

- Measuring range: ..... -35...+180°C  
( $T_{max}$  NTC = 150°C,  $T_{max}$  LM235Z = 125°C)
- Sensors / output: ..... see table, passive  
(optional also with two sensors)
- Connection type: ..... 2-wire connection  
(3- or 4-wire connection optional)
- Testing current: ..... ca. 1mA
- Process connection: ..... screwed socket with G 1 / 2" straight pipe thread
- Length of neck tube: ..... 80 mm (other lengths optional)
- Protective tube: ..... stainless steel, 1.4571, V4A, G 1 / 2" straight pipe thread,  
wrench size 27 mm,  $\varnothing$  = 9 mm, dimensions see dimensional drawing
- Connecting head: ..... form B, material aluminium,  
colour white aluminium (similar RAL 9006),  
ambient temperature -20 / +100°C,  
M 20 x 1.5
- Electrical connection: ..... 0.14-1.5 mm<sup>2</sup> via terminal screws on ceramic base
- Max. pressure: ..... stainless steel immersion sleeves 40 bar
- Insulating resistance: .....  $\geq$  100 M $\Omega$ , at 20°C (500V DC)
- Humidity: ..... < 95% r.H.
- Protection class: ..... III (according to EN 60730)
- Protection type: ..... IP 54 (according to EN 60529),  
IP 65 (optional)

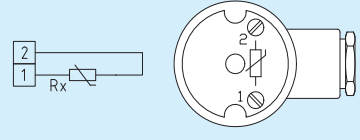


Dimensional drawing

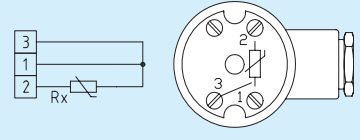
ETF 6



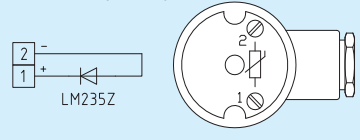
1x two-wire connection standard



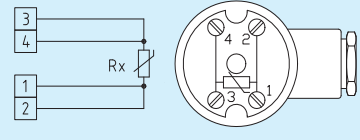
1x three-wire connection



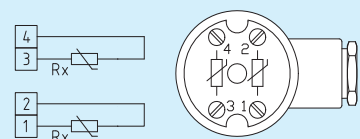
1x two-wire connection LM235Z (KP 10)



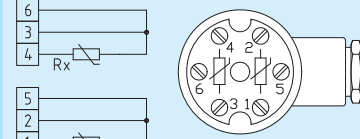
1x four-wire connection



2x two-wire connection



2x three-wire connection



THERMASGARD® ETF 6, including stainless steel protective tube

Type/WG1 - Sensor/Output/EL	100 mm	150 mm	200 mm	250 mm	400 mm
ETF 6 Pt100	•	•	•	•	•
ETF 6 Pt1000	•	•	•	•	•
ETF 6 Ni1000	•	•	•	•	•
ETF 6 Ni1000 TK5000, LG-Ni1000	•	•	•	•	•
ETF 6 NTC 1.8 kOhm	•	•	•	•	•
ETF 6 KTY 81-210, NTC 10k, 20k, 30k, 50k, 10k Pre	•	•	•	•	•
ETF 6 LM235Z (TCR = 10 mV/K), KP10	•	•	•	•	•