



TF1/E

Immersion Temperature Sensor with Housing

Measuring size: temperature

Output: passive sensor

Highlights: quick an easy mounting



Description

The TF1/E immersion sensor measures the temperature in the range of -30 up to +150°C in gasiform medium and is with all current sensors available. With an optional mounting flange, immersion sleeve or compression clamp the temperature sensor can be mounted directly e.g. on ducts or pipes and replaced quickly and easily in case of service.

Technical Specifications

Measurement range temp.	-30...+150°C
Sensor	Pt100, Pt500, Pt1000, Ni1000, KTY, NTC, LM235Z (other on request)
Circuit type	2-wire connection
Measurement current	approx. 1 mA
Electrical connection	screw terminals max. 1,5 mm ²
Leakage resistance	> 100 MOhm, at +20°C (500 V DC)
Housing	polyamide with snap closing screws, colour white like RAL 9010
Cable gland	PG11 high-strength cable gland with strain relief
Installation length	50-400 mm
Material	Protection sleeve: stainless steel VA 1.4571
Dimensions	Housing: L 64 x W 58 x H 34,5 mm, Protection sleeve: Ø 6 mm
Protection type	IP65
Storage temperature	-20...+70°C
Installation	immersion sleeve, mounting flange, compression fitting (not in scope of delivery)
Approvals	CE, EAC, RoHS



Variants

Article Number	
Sensor	Installation length
TF1/E-10/050	
Pt100 (DIN EN 60751 Cl. B)	50 mm
TF1/E-10/100	
Pt100 (DIN EN 60751 Cl. B)	100 mm
TF1/E-10/150	
Pt100 (DIN EN 60751 Cl. B)	150 mm
TF1/E-10/200	
Pt100 (DIN EN 60751 Cl. B)	200 mm
TF1/E-10/250	
Pt100 (DIN EN 60751 Cl. B)	250 mm
TF1/E-10/300	
Pt100 (DIN EN 60751 Cl. B)	300 mm
TF1/E-10/350	
Pt100 (DIN EN 60751 Cl. B)	350 mm
TF1/E-10/400	
Pt100 (DIN EN 60751 Cl. B)	400 mm
TF1/E-20/050	
Pt1000 (DIN EN 60751 Cl. B)	50 mm
TF1/E-20/100	
Pt1000 (DIN EN 60751 Cl. B)	100 mm
TF1/E-20/150	
Pt1000 (DIN EN 60751 Cl. B)	150 mm
TF1/E-20/200	
Pt1000 (DIN EN 60751 Cl. B)	200 mm
TF1/E-20/250	
Pt1000 (DIN EN 60751 Cl. B)	250 mm
TF1/E-20/300	
Pt1000 (DIN EN 60751 Cl. B)	300 mm
TF1/E-20/350	
Pt1000 (DIN EN 60751 Cl. B)	350 mm
TF1/E-20/400	
Pt1000 (DIN EN 60751 Cl. B)	400 mm



Article Number	
Sensor	Installation length
TF1/E-30/050	
Ni1000 (whirl-sintered)	50 mm
TF1/E-30/100	
Ni1000 (whirl-sintered)	100 mm
TF1/E-30/150	
Ni1000 (whirl-sintered)	150 mm
TF1/E-30/200	
Ni1000 (whirl-sintered)	200 mm
TF1/E-30/250	
Ni1000 (whirl-sintered)	250 mm
TF1/E-30/300	
Ni1000 (whirl-sintered)	300 mm
TF1/E-30/350	
Ni1000 (whirl-sintered)	350 mm
TF1/E-30/400	
Ni1000 (whirl-sintered)	400 mm
TF1/E-40/050	
Ni1000TK5000 (whirl-sintered)	50 mm
TF1/E-40/100	
Ni1000TK5000 (whirl-sintered)	100 mm
TF1/E-40/150	
Ni1000TK5000 (whirl-sintered)	150 mm
TF1/E-40/200	
Ni1000TK5000 (whirl-sintered)	200 mm
TF1/E-40/250	
Ni1000TK5000 (whirl-sintered)	250 mm
TF1/E-40/300	
Ni1000TK5000 (whirl-sintered)	300 mm
TF1/E-40/350	
Ni1000TK5000 (whirl-sintered)	350 mm
TF1/E-40/400	
Ni1000TK5000 (whirl-sintered)	400 mm
TF1/E-60/050	
LM235Z (±1%)	50 mm



Article Number	
Sensor	Installation length
TF1/E-60/100	
LM235Z ($\pm 1\%$)	100 mm
TF1/E-60/150	
LM235Z ($\pm 1\%$)	150 mm
TF1/E-60/200	
LM235Z ($\pm 1\%$)	200 mm
TF1/E-60/250	
LM235Z ($\pm 1\%$)	250 mm
TF1/E-60/300	
LM235Z ($\pm 1\%$)	300 mm
TF1/E-60/350	
LM235Z ($\pm 1\%$)	350 mm
TF1/E-60/400	
LM235Z ($\pm 1\%$)	400 mm
TF1/E-70/050	
NTC20k ($\pm 1\%$)	50 mm
TF1/E-70/100	
NTC20k ($\pm 1\%$)	100 mm
TF1/E-70/150	
NTC20k ($\pm 1\%$)	150 mm
TF1/E-70/200	
NTC20k ($\pm 1\%$)	200 mm
TF1/E-70/250	
NTC20k ($\pm 1\%$)	250 mm
TF1/E-70/300	
NTC20k ($\pm 1\%$)	300 mm
TF1/E-70/350	
NTC20k ($\pm 1\%$)	350 mm
TF1/E-70/400	
NTC20k ($\pm 1\%$)	400 mm
TF1/E-80/050	
NTC10k ($\pm 1\%$)	50 mm
TF1/E-80/100	
NTC10k ($\pm 1\%$)	100 mm



Article Number	
Sensor	Installation length
TF1/E-80/150	
NTC10k ($\pm 1\%$)	150 mm
TF1/E-80/200	
NTC10k ($\pm 1\%$)	200 mm
TF1/E-80/250	
NTC10k ($\pm 1\%$)	250 mm
TF1/E-80/300	
NTC10k ($\pm 1\%$)	300 mm
TF1/E-80/350	
NTC10k ($\pm 1\%$)	350 mm
TF1/E-80/400	
NTC10k ($\pm 1\%$)	400 mm

Accessories



DT/G
Digital display



HR/G
Digital controller for DIN rail with change-over contact



KV/E
Compression Clamp



ZT/E
Immersion sleeve



Accessories



MFL/E
Mounting flange



MUD/E
Pt100 temperature transformer 0-10 V / 4-20 mA with double-PG housing



SWS/A
Radiation and weather protection



TH3/Z
Immersion sleeve with compression clamp



Dimensional Drawing

