



## 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 <sup>2</sup>
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

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



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



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



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

## Accessories



DT/G  
Digital display



KV/E  
Compression Clamp



ZT/E  
Immersion sleeve



MFL/E  
Mounting flange



## Accessories

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MUD/E

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

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SWS/A

Radiation and weather protection

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TH3/Z

Immersion sleeve with compression clamp



### Dimensional Drawing

