

**ETF1
ETF2**

**Immersion temperature
sensor**



Summary

The ETF1/ETF2 temperature sensor is a screw-in immersion sensor for use in HVAC plants.

Applications

- HVAC systems – water and brine temperature measuring and controls

Functions

The sensor uses a sensing element, the signal of which is available at the screw terminals. Default sensor type provided is Pt1000, other sensor types see table below. Temperature range is -30 to +150 °C.

The sensors are intended for operating in an outdoor or industry environment. They do not need any servicing or maintenance.

The sensors are mounted into pockets which are part of delivery.

Technical data

Recommended measuring circuit	appr. 1 mA
Measuring range	max. -30 ÷ +150 °C
Ambient temperature	max. -20 ÷ +100 °C
Protection class	IP65 (according to EN 60529)
Sensor accuracy	see table below
Terminals	screw terminals for wires 0,14 – 1,5 mm ²
Cover	polyamide, 30% glass fibre
Pocket	ETF1 TH08-ms/xx Brass immersion sleeve, T _{max} = 150 °C, p _{max} = 10 bar
	ETF2 TH08-VA/xx Stainless steel immersion sleeve, T _{max} = 600 °C, p _{max} = 40 bar
	optional TH08-VA/xx/90 Stainless steel immersion sleeve, T _{max} = 600 °C, p _{max} = 40 bar
	Dimensions see below (xx Inserted Length = EL)
Insulation resistance	> 100 MOhm at 20°C, 500 VDC
Connection	screw fittings G1/2"
Dimensions	see below

Sensor types

Pt100	on request	DIN EN 60751
Pt1000	default sensor type	DIN EN 60751
Ni1000 TK6180 (Sauter)	on request	DIN EN 43760
Ni1000 TK5000 (L&G)	on request	
NTC 1,8 kOhm	on request	DIN EN 44070

Pocket lengths

50 mm	on request
100 mm	on request
150 mm	default pocket length
200 mm	on request
250 mm	on request
300 mm	on request
400 mm	on request

Ordering

Immersion temperature sensor:

ETF1 is delivered as set of the sensor (TF65) and the brass immersion sleeve (TH08-ms/150).

ETF2 is delivered as set of the sensor (TF65) and the stainless steel immersion sleeve (TH08-VA/150).

It is possible to order these parts separately.

Terminals



Dimensions



