

EE471

Temperature Sensor with Remote Probe

EE471 sensors are used for temperature measurement in applications where a separate housing with remote probe is required for installation.

Various types of sensing elements such as Pt1000, NTC10k or Ni1000 are available.

Due to an innovative production and housing concept a high protection class IP65 can be provided. All product-specific information for the remote probe is printed all along the cable.



Features



External mounting holes

- » Mounting with closed cover
- » Protection against construction site pollution

Bayonet screws

- » Open/closed with a ¼ rotation



Product-specific information

IP65 cable outlet

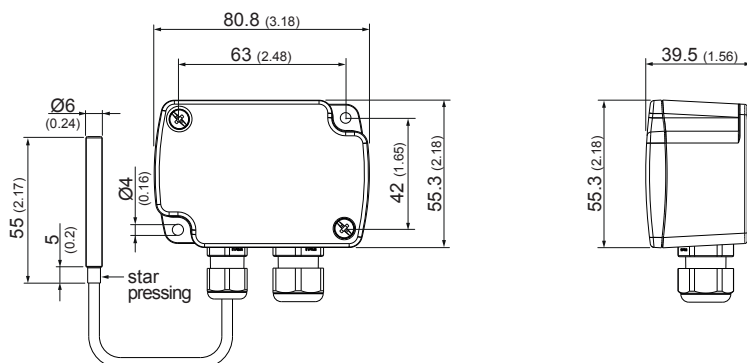


Technical Data

Operating temperature	-30 °C...+105 °C (-22 °F...+221 °F)
Sensing element types	see ordering guide
Measurement current	typ. < 1 mA ¹⁾
T-Sensor connection	two-wire
Electrical connection	screw terminal, 2x max. 2.5 mm ² (0.004 in ²)
Insulation resistance	> 100 MΩ at 20 °C (68 °F)
Response time τ ₆₃	< 1 min, at 3 m/s (590 ft/min) air velocity < 30 s, with immersion well in liquid water bath
Sensor sleeve material	stainless steel (1.4571 / 316Ti)
Cable material	PVC
Enclosure material	polycarbonate, UL94-V0 approved
Protection class	IP65 / NEMA 4 (enclosure and probe)
Cable gland	M16x1.5, UL94-V2
Storage temperature	-30 °C...+70 °C (-22 °F...+158 °F)
Working and storage humidity range	5 % rh...95 % rh, no condensation

1) see technical information on T-sensors

Dimensions in mm (inch)



Ordering Guide

MODEL	ANALOGUE OUTPUT		DIGITAL OUTPUT		T-SENSOR	CABLE MATERIAL	CABLE LENGTH	HOUSING		DESIGN
Temperature (T)	none	(x)	none	(x)	Pt100 DIN B (B) Pt1000 DIN B (D) NTC10k (L) NTC1.8k (G) Ni1000 TK6180 DIN B (J) Ni1000 TK5000 DIN B (T)	PVC (A)	0.5 m (1.6 ft) (A) 2 m (6.6 ft) (D) 3 m (9.8 ft) (E)	Standard (P)	Standard (O)	
EE471-										

Order Example

EE471-TxxDADPO

Model:	Temperature	Cable Length:	2 m (6.6 ft)
T-Sensor:	Pt1000 DIN B	Housing:	Standard
Cable Material:	PVC	Design:	Standard

Mounting Accessories

Immersion well - Thread: R 1/2" ISO

Length	50 mm (1.97 ")	135 mm (5.31 ")	285 mm (11.22 ")
brass	HA400101	HA400102	HA400103
stainless steel	HA400201	HA400202	HA400203

Immersion well - Thread: 1/2" NPT

Length	50 mm (1.97 ")	135 mm (5.31 ")	285 mm (11.22 ")
brass	HA400111	HA400112	HA400113
stainless steel	HA400211	HA400212	HA400213

For further information please see datasheet EE431.

Mounting with immersion well:



1. The spring inside the well must be removed and replaced by a standard M12x1.5 cable gland (not included in the scope of supply).
2. Insert the remote cable sensor and fix it by fastening the cable gland.

Please observe the operating temperature range of the cable gland!

Cable gland (M12x1.5, -40 °C...+100 °C / -40 °F... +212 °F, UL94-V0) **HA403101**

Hose clamp (for pipe mounting of remote probe) **HA402101**
For further information please see datasheet EE441.

Conduit adapter (M16x1.5 to 1/2") **HA011110**

Additional Information

Wire Resistance / Temperature Offset

Cable length	Wire resistance	Temperature offset for Pt100 ^{*)}
0.5 m (1.64 ft)	0.124 Ω	0.32 °C (32.576 °F)
2 m (6.56 ft)	0.364 Ω	0.93 °C (33.674 °F)
3 m (9.84 ft)	0.520 Ω	1.33 °C (34.394 °F)

^{*)} For high-resistance T-sensors (R ≥ 1000 Ω) the temperature offset is negligible.