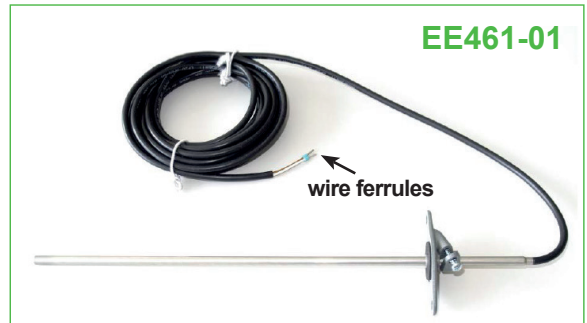


EE461-01

Cable Temperature Sensor with flange

Cable sensors for passive temperature measurement are used in heating, ventilation and air conditioning systems as well as for process control.

Several types of sensing elements are available. Due to an innovative production concept (star pressing of the sensor sleeve) a high protection class IP67 is provided. Product-specific information is printed all along the cable.



Typical Applications

Building automation
 Process and climate control

Features

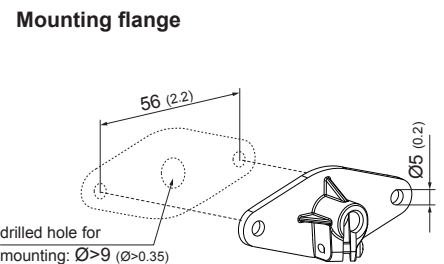
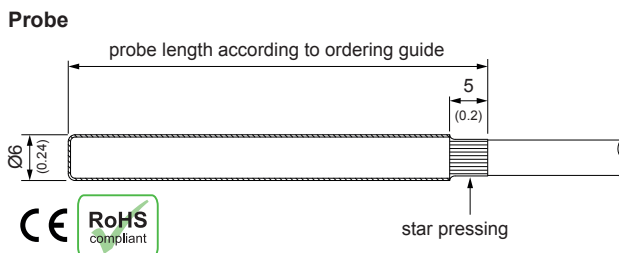
High protection class
 Cable labeling
 Various sensing elements and cable lengths

Technical Data

Operating temperature	PVC -30 °C...+105 °C (-22 °F...+221 °F)			
Types of T-Sensors	Sensor Type	Nominal Resistance	Sensitivity	Standard
	Pt100 DIN B	R ₀ : 100 Ω	TC: 3.850 x 10 ⁻³ /°C	DIN EN 60751
	Pt1000 DIN B	R ₀ : 1000 Ω	TC: 3.850 x 10 ⁻³ /°C	DIN EN 60751
	Ni1000 TK5000 DIN B	R ₀ : 1000 Ω	TC: 5000 ppm/K	DIN 43760
Measurement current	typ. < 1 mA ¹⁾			
T-Sensor connection	two-wire, wire resistance see additional information below			
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	stainless steel (1.4571 / 316Ti)			
Cable	PVC; 2x0.22 mm ²			
Protection class	IP67 / NEMA 4			
Storage temperature	-30 °C...+70 °C (-22 °F...+158 °F)			
Working and storage humidity range	5 % RH...95 % RH, no condensation			

1) according technical data of the specific T-sensors

Dimensions in mm (inch)



Ordering Guide

MODEL	T-SENSOR ¹⁾	CABLE MATERIAL	CABLE LENGTH	PROBE LENGTH
Temperature (T)	Pt100 DIN B (B) Pt1000 DIN B (D) Ni1000 TK5000 DIN B (T)	PVC (105 °C (221 °F)) (A)	5 m (G)	160 mm (E) 310 mm (G)
EE461-01-				

1) T-Sensor Details siehe www.epluse.com/R-T_Characteristics

Order example

EE461-01-TDAGE

Model: Temperature
 T-Sensor: Pt1000 DIN B
 Cable material: PVC (105 °C (221 °F))
 Cable length: 5 m
 Probe length: 106 mm

EE461-01-TBAGG

Model: Temperature
 T-Sensor: Pt100 DIN B
 Cable material: PVC (105 °C (221 °F))
 Cable length: 5 m
 Probe length: 310 mm

Additional Information

Wire Resistance / Temperature Offset

Cable length	Wire resistance	Temperature offset for Pt100 ^{*)}
5 m (16.4 ft)	0.860 Ω	2.2 °C (3.96 °F)

*) For high-resistance T-sensors ($R \geq 1000 \Omega$) the temperature offset is negligible.