

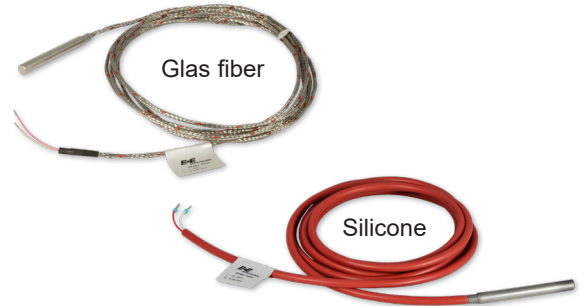
# EE462

## High-Temperature Cable Sensor

Cable sensors for passive measurement of high temperature in air and technical gases are used in process control.

For temperature measurement in liquids, the EE462 is mounted with an immersion well. Several types of sensing elements are available, such as Pt100, Pt1000 and Ni1000.

The operation temperature of EE462 depends on the choice of the cable material. The IP67 protection class is made possible by the innovative star pressing of the sensor sleeve.



### Typical Applications

Exhaust gas  
 Process control

### Features

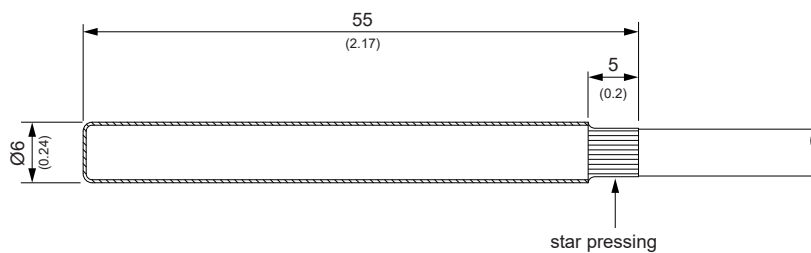
Protection class IP67  
 High chemical and medical resistance

### Technical Data

Operating temperature / Cable Material	0...+350 °C (32 °F...+662 °F)		Glass fiber		
	-60...+180 °C (-76 °F...+356 °F)		Silicone		
T-Sensors	Sensor Type	Nominal Resistance	Sensitivity	Standard	T_max [°C]
	Pt100 DIN B	R <sub>0</sub> : 100 Ω	TC: 3.850 x 10 <sup>-3</sup> /°C	DIN EN 60751	400
	Pt1000 DIN B	R <sub>0</sub> : 1000 Ω	TC: 3.850 x 10 <sup>-3</sup> /°C	DIN EN 60751	400
	Ni1000 TK5000 DIN B	R <sub>0</sub> : 1000 Ω	TC: 5000 ppm/K	DIN 43760	200
Measurement current typ.	< 1 mA				
T-Sensor connection	2-wire, 2x0.22 mm <sup>2</sup> , wire resistance 0.172 Ω/m (0.052 Ω/ft)				
Insulation resistance typ.	> 100 MΩ at 20 °C (68 °F)				
Response time τ <sub>63</sub>	< 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)				
Protection rating	IP67				
Storage temperature	-30 °C...+70 °C (-22 °F...+158 °F) (packaging)				
Working and storage humidity range	5...95 %RH (non-condensing)				

### Dimensions

Values in mm (inch)



## Ordering Guide

		EE462-
T Sensor passive <sup>1)</sup>	PT100 DIN B	TP2
	PT1000 DIN B	TP4
	NI1000 TK5000 DIN B	TP19
Cable material	Glass fiber <sup>2)</sup>	KM2
	Silicone	KM3
Cable length	2 m	K2
	3 m	K3

1) T-Sensor details see [www.epluse.com/R-T\\_Characteristics](http://www.epluse.com/R-T_Characteristics).

Other passive sensor types are available on request from a minimum order quantity of 100 pcs.

2) Only with T-sensor PT100 DIN B and Pt1000 DIN B

## Order Example

### EE462-TP4KM2K2

T Sensor: Pt1000 DIN B

Cable material: Glass fiber

Cable length: 2 m

## Mounting Accessories

### Immersion well - Thread: R 1/2" ISO

Length	50 mm (1.97")	100 mm (3.94")	135 mm (5.31")	285 mm (11.22")
Brass	HA400101	HA400104	HA400102	HA400103
Stainless steel	HA400201	HA400204	HA400202	HA400203

### Immersion well - Thread: 1/2" NPT

Length	50 mm (1.97")	100 mm (3.94")	135 mm (5.31")	285 mm (11.22")
Brass	HA400111	HA400114	HA400112	HA400113
Stainless steel	HA400211	HA400214	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 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 V-0) [HA403101](#)

**Hose clamp** (for pipe mounting) [HA402101](#)

For further information please see datasheet EE441.