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Datasheet EE462

High-Temperature Cable Sensor



EE462

High-Temperature Cable Sensor

The EE462 high temperature cable sensor is used in heating, ventilation and air conditioning systems as well as for process control. In addition, the EE462 is suitable for environments with higher demands on the chemical and mechanical resistance of the cable.

The EE462 measures the temperature (T) of gaseous media and can be conveniently used in conjunction with an E+E immersion well to get the temperature of liquid media.

With the innovative star pressing of the sensor sleeve, the protection rating IP67/NEMA 4 is achieved.

The cable sensor is available in 2-wire versions and with different passive sensor elements.

The product-specific information on the cable label enables clear identification of the respective sensor.



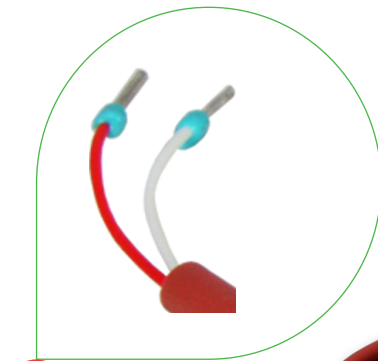
High-temperature cable sensor glass fibre



High-temperature cable sensor silicone

Features

Wire ferrules



Measuring probe

- Working range (glass fibre):
0 °C...+350 °C (+32 °F...+662 °F)
- Working range (silicone):
-60 °C...+180 °C (-76 °F...+356 °F)
- High chemical and mechanical resistance
- Stainless steel sensor sleeve (1.4571 / 316Ti)

Star pressing

- Protection rating IP67 / NEMA 4

Cable material

- Glass fibre or silicone

Label

- Product specific information

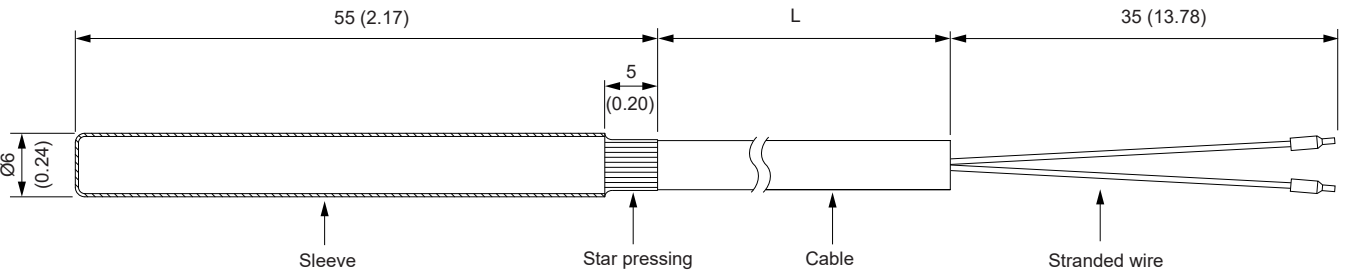
Wiring

- 2-wire connection



Dimensions

Values in mm (inch)



L in m	L in ft
0.5	1.6
2	6.6
3	9.8
5	16.4
6	19.7

Technical Data

Measurands

Temperature (T)

Working range	0...+350 °C (+32 °F...+662 °F) (glass fibre) -60...+180 °C (-76 °F...+356 °F) (silicone)				
Response time t_{63} @ 3 m/s (590 ft/min) air velocity With immersion well in liquid water bath	<1 min <30 s				
Insulation resistance @ 20 °C (68 °F)	>100 MΩ				
Sensor types	Nominal resistance	Sensitivity	Standard	T_max [°C]	
Pt100 DIN B	R ₀ : 100 Ω	TC: 3,850 x 10 ⁻³ /°C	DIN EN 60751	400	
Pt1000 DIN B	R ₀ : 1000 Ω	TC: 3,850 x 10 ⁻³ /°C	DIN EN 60751	400	
Ni1000 TK5000 DIN B	R ₀ : 1000 Ω	TC: 5000 ppm/K	DIN 43760	200	

Outputs

T Sensor Passive

Temperature sensor connection	2-wire, 2x 0.22 mm ² , wire resistance 0.172 Ω/m (0.052 Ω/ft)
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Technical Data

General

Measuring current, typ.		<1 mA
Humidity range	Operation and storage	5...95 %RH, non-condensing
Temperature range	Operation Storage	0...+350 °C (+32 °F...+662 °F) (glass fibre) -60...+180 °C (-76 °F...+356 °F) (silicone) -30...+70 °C (-22...+158 °F)
Material	Sleeve Cable	Stainless steel (1.4571 / 316Ti) Glass fibre or silicone
Protection rating		IP67 / NEMA 4
Conformity		CE

Ordering Guide

Feature		Description	Code	
Hardware Configuration			EE462-	
	T sensor passive¹⁾ (R-T-characteristics see www.epluse.com/ee462)	Pt100 DIN B	TP2	TP2
		Pt1000 DIN B	TP4	TP4
		Ni1000, TK5000 DIN B		TP19
	Cable material	Glass fibre	KM2	
		Silicone		KM3
	Probe cable length	2 m (6.56 ft)	K2	K2
		3 m (9.84 ft)	K3	K3

1) Other passive sensor types are available on request from a minimum order quantity of 500 pcs.

Order Example

EE462-TP4KM2K2

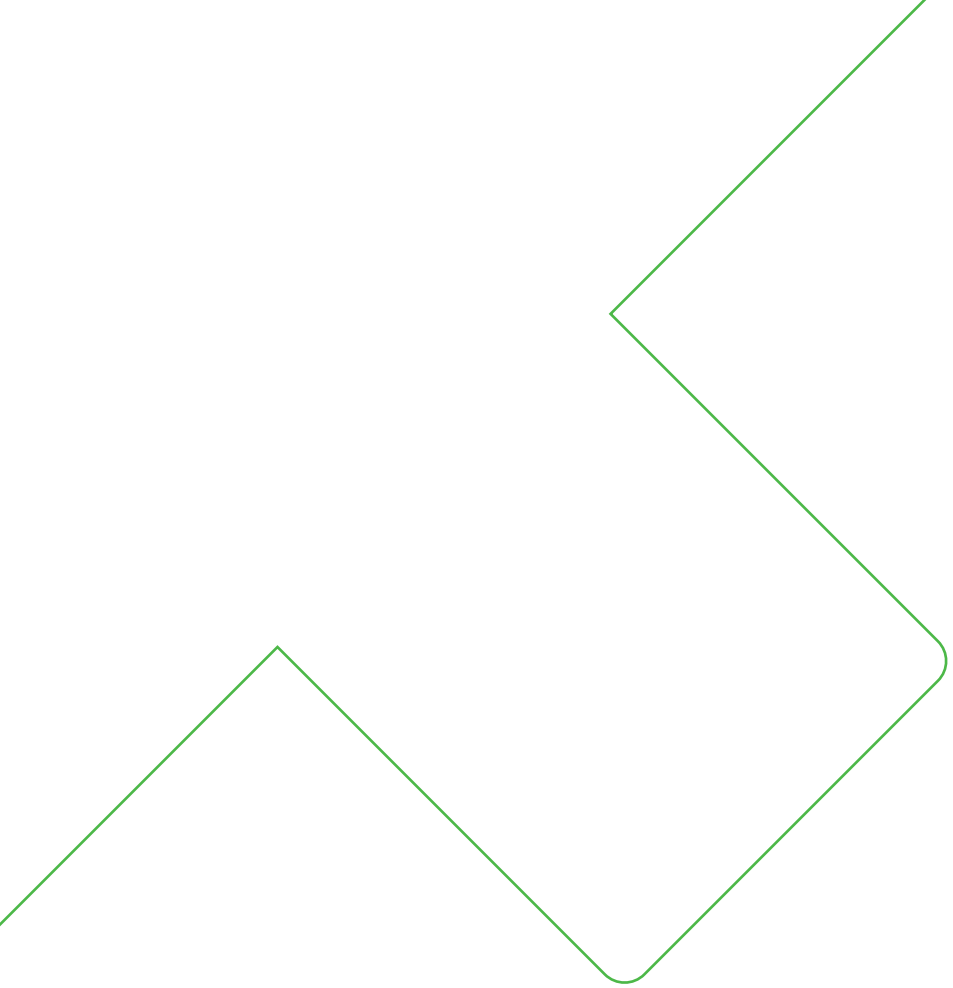
Feature	Code	Description
T sensor passive	TP4	Pt1000 DIN B
Cable material	KM2	Glass fibre
Probe cable length	K2	2 m (6.56 ft)

Mounting Accessories

For further information see datasheet [Accessories](#).

Description		Code			
Immersion well - thread R ½" ISO ¹⁾	Length in mm (inch)	50 (1.97")	100 (3.94")	135 (5.31")	285 (11.22")
	Brass	HA400101	HA400104	HA400102	HA400103
	Stainless steel	HA400201	HA400204	HA400202	HA400203
Immersion well - thread ½" NPT ¹⁾	Length in mm (inch)	50 (1.97")	100 (3.94")	135 (5.31")	285 (11.22")
	Brass	HA400111	HA400114	HA400112	HA400113
	Stainless steel	HA400211	HA400214	HA400212	HA400213
Cable gland (M12x1.5; -40...+100 °C (-40... +212 °F); UL94-V0)		HA403101			
Hose clamp (for pipe mounting)		HA402101			
Mounting flange		HA401101			

1) For further information see datasheet www.epluse.com/ee431.



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