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+ Datasheet EE441

Strap-on Temperature Sensor



EE441

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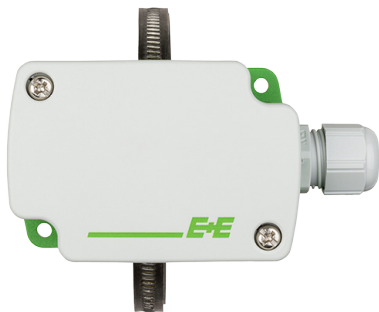
The EE441 strap-on sensor measures reliably the temperature (T) on round ducts and pipes and is optimized for heating systems (warm and cold water pipes) or solar collectors.

Passive Output

The EE441 features a wide choice of sensing elements for passive temperature measurement.

Easy Installation

The compact enclosure and the stainless steel hose clamp allows quick and easy installation on pipes with a diameter of 25 to 175 mm (0.98" ... 6.89").



EE441 with passive output

Features



Hose clamp

- Installation on pipes

External mounting holes

- Mounting with closed cover
- Protection against construction site pollution
- Easy and fast mounting

Bayonet screws

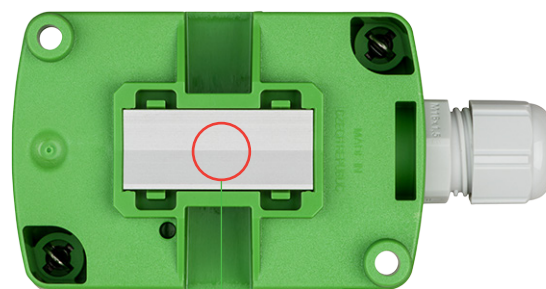
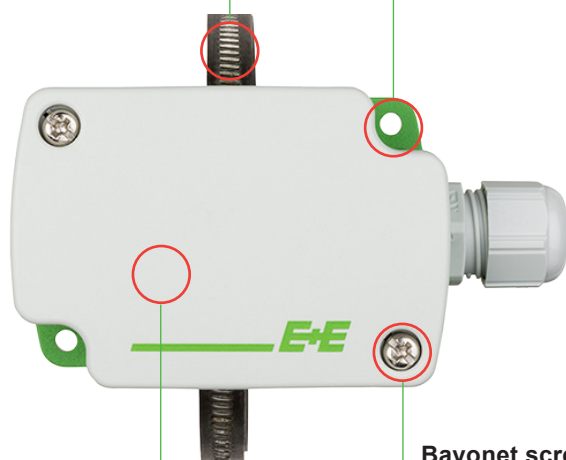
- Open/close with a ¼ rotation

Enclosure

- Protection rating: IP65/NEMA 4X
- Polycarbonate (PC)

Aluminium contact surface

- Very good thermal transfer
- Fast response time



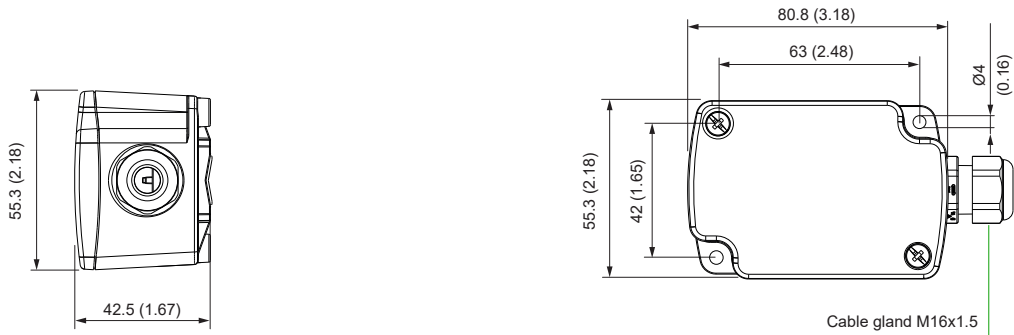
Test report

According to DIN EN 10204-2.2

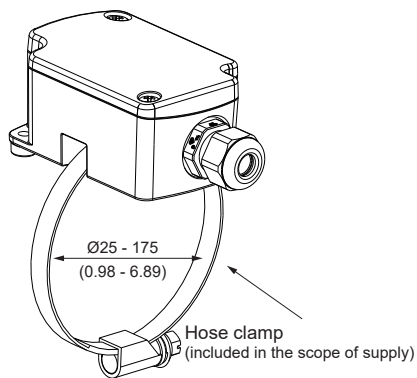
Dimensions

Values in mm (inch)

Enclosure



Mounting



Technical Data

Measurands

Temperature (T)

Measuring range	-40 °C...+110 °C (-40...+230 °F)		
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: 5 000 ppm/K DIN 43760
Ni1000 TK6180 DIN B	R ₀ : 1000 Ω	TC: 6 180 ppm/K DIN 43760	

Output

T Sensor

Sensor connection	2-wire connection
Measuring current, typ.	<1 mA (according to technical data of the specific T sensing element)

General

Insulation resistance	>100 MΩ at 20 °C (68 °F)
Response time t ₆₃	<1 min
Electrical connection	Screw terminal, max. 2.5 mm ² (AWG14)
Cable glands	M16x1.5/UL94 V-2
Humidity working range	5...95 %RH, non-condensing
Temperature working range	-40 °C...+110 °C (-40...+230 °F)
Storage conditions	-30...+70 °C (-22...+158 °F) 5...95 %RH, non-condensing
Hose clamp material	Stainless steel (corr. 1.4301 / 304)
Enclosure	Material: Polycarbonate (PC), UL94 V-0 approved Protection rating: IP65/NEMA 4X

Ordering Guide

Feature	Description	Code	
Hardware Conf.		EE441-	
	Model	Passive	
	T sensor passive ¹⁾ (R-T-characteristics see www.epluse.com/ee441)	Pt100 DIN B	M7
		Pt1000 DIN B	TP2
		Ni1000, TK6180 DIN B	TP4
Ni1000, TK5000 DIN B		TP9	
		TP19	

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

Order Example

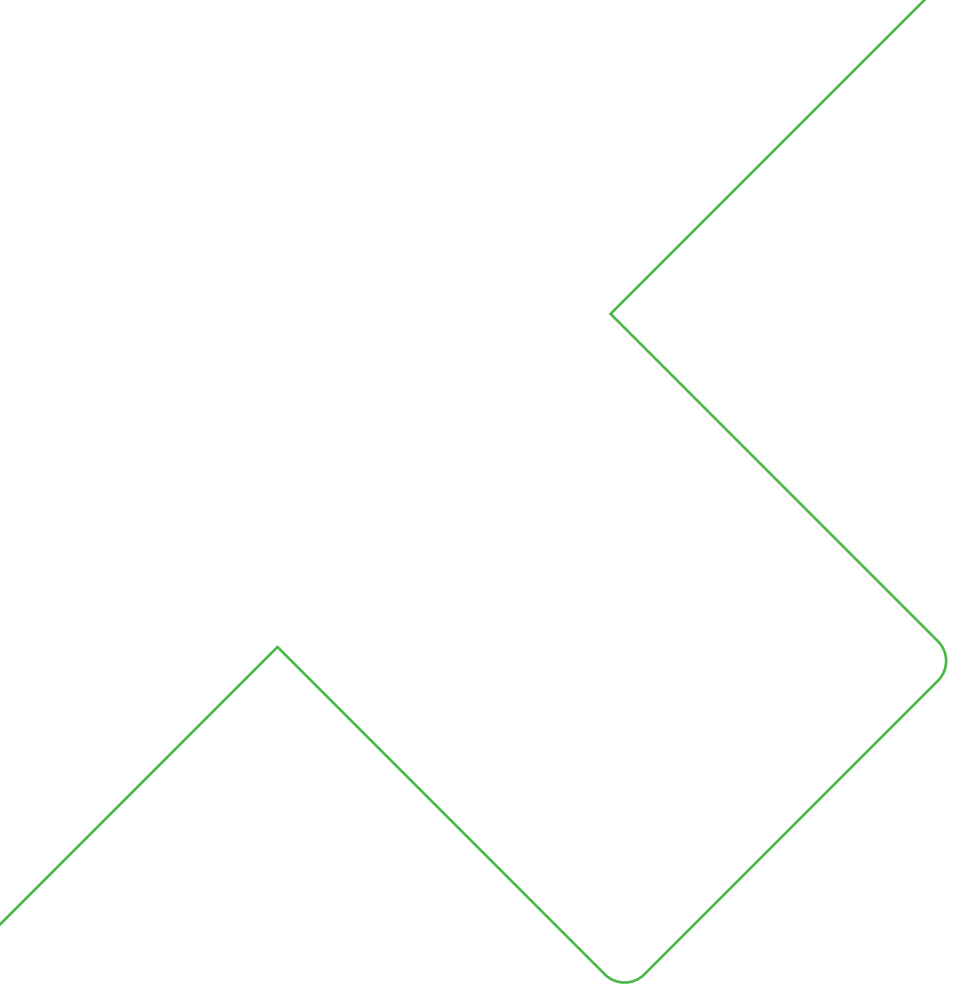
EE441-M7TP19

Feature	Code	Description
Model	M7	Passive
T sensor passive	TP19	Ni1000, TK5000 DIN B

Accessories

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

Description	Code
Conduit adapter, M16x1.5 to 1/2"	HA011110



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