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# + Datasheet EE441

Strap-on Temperature Sensor



# EE441

## Strap-on Temperature Sensor

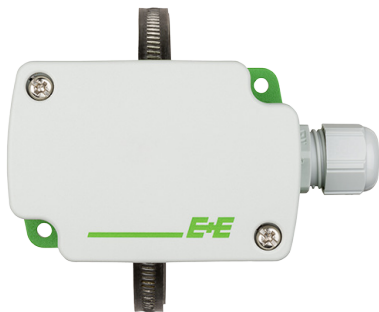
The EE441 strap-on sensor measures reliably the temperature (T) on round ducts and pipes and is optimized for heating systems (warm and cold water pipes) or solar collectors.

### 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").



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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

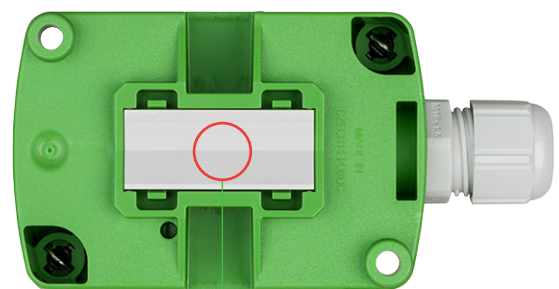
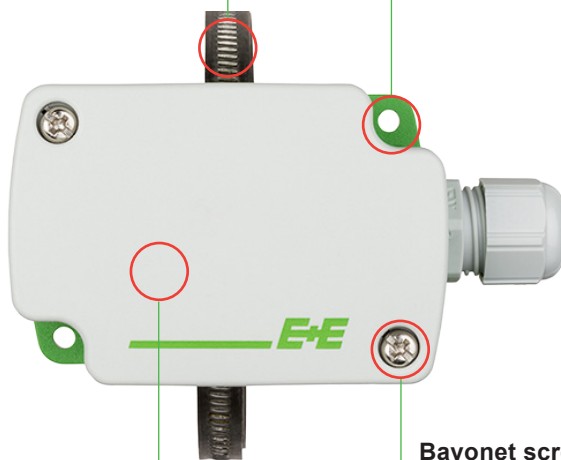
- Open/close with a ¼ rotation

## Enclosure

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

## Aluminium contact surface

- Very good thermal transfer
- Fast response time



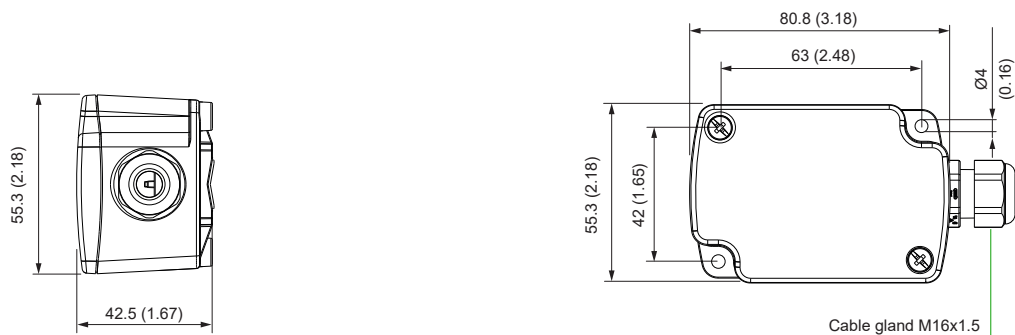
## Test report

According to DIN EN 10204-2.2

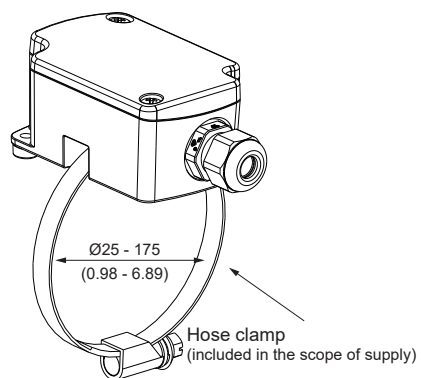
# Dimensions

Values in mm (inch)

## Enclosure



## Mounting



# Technical Data

## Measurands

### Temperature (T)

Measuring range	-40 °C...+110 °C (-40...+230 °F)		
Sensor type	<b>Nominal resistance</b>	<b>Sensitivity</b>	<b>Standard</b>
	Pt100 DIN B	R <sub>0</sub> : 100 Ω	TC: 3.850 x 10 <sup>-3</sup> /°C DIN EN 60751
	Pt1000 DIN B	R <sub>0</sub> : 1000 Ω	TC: 3.850 x 10 <sup>-3</sup> /°C DIN EN 60751
	Ni1000 TK5000 DIN B	R <sub>0</sub> : 1000 Ω	TC: 5 000 ppm/K DIN 43760
Ni1000 TK6180 DIN B	R <sub>0</sub> : 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 <sub>63</sub>	<1 min
Electrical connection	Screw terminal, max. 2.5 mm <sup>2</sup> (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.		<b>EE441-</b>	
	Model	Passive	
	T sensor passive <sup>1)</sup> (R-T-characteristics see <a href="http://www.epluse.com/ee441">www.epluse.com/ee441</a> )	Pt100 DIN B	<b>M7</b>
		Pt1000 DIN B	<b>TP2</b>
		Ni1000, TK6180 DIN B	<b>TP4</b>
Ni1000, TK5000 DIN B		<b>TP9</b>	
		<b>TP19</b>	

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

## Order Example

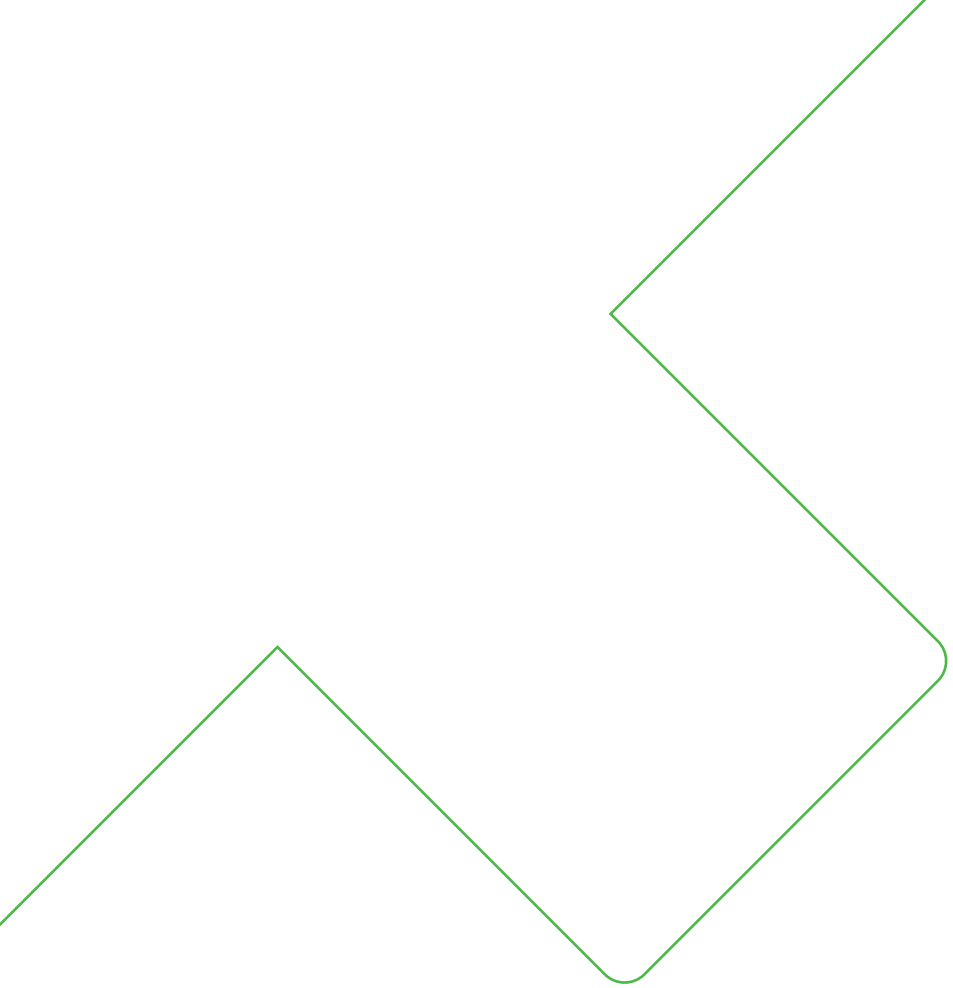
**EE441-M7TP19**

Feature	Code	Description
Model	<b>M7</b>	Passive
T sensor passive	<b>TP19</b>	Ni1000, TK5000 DIN B

## Accessories

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

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



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