

# EuroSeries

Outdoor Humidity Temperature Transmitters

## PRODUCT INSTALLATION DATA



## GENERAL

The EuroSeries humidity temperature transmitter combines a capacitance-type relative humidity sensor and a temperature sensor in one IP65/NEMA4X housing, both with 0...10V or 4...20mA fixed outputs.

The EuroSeries humidity temperature transmitter is additionally equipped with a passive temperature sensor, cable gland and 1/2" NPT conduit adapter.

These transmitters can be used:

- for checking and monitoring temperature and humidity in outdoor air applications;
- to avoid condensation in various applications;
- for humidification control.

## FEATURES

- **Wide sensing range**
- **Capacitance-type sensing element for rel. humidity**
- **Available with Passive Temperature Sensor**

## SPECIFICATION

### Measured Values

#### Relative humidity (0...10 V) or (4...20mA)

Working range 10...90% %RH (non-condensing)  
Accuracy (active sensor)  $\pm$ %RH (30...70% RH) at 20 °C,  
otherwise  $\pm$ 5% RH  
Temperature dependency typically  $\pm$ 0.05% RH / °C  
Typical response time < 180 s

#### Temperature (0...10 V) or (4...20mA)

Working range -40...+70 °C (-40...+158 °F)  
Accuracy  $\pm$ 0.3 °C at 20 °C  
Typical response time < 180 s

## General Specifications

Power supply (Class III)	15...35 VDC or 24 VAC $\pm$ 20%
Current consumption	DC power supply: typ. 5 mA AC power supply: typ. 13 mA <sub>eff</sub> Screw terminals, max. 1.5 mm <sup>2</sup>
Connection	PC/ABS, UL94 V-0 appr.
Housing material	IP65 / NEMA 4 for enclosure; IP40 for sensing part (cap filter)
Protection class	M16 x 1.5 / UL94-V0
Cable gland	M16 x 1/2" NPT / UL94 V-0
Conduit fitting	PE filter, non-removable
Sensor protection	EN61326-1, EN61326-2-3; FCC
EMC	Part 15, Class B; ind. environment: ICES-003 Issue 5 Class B
Working conditions	-40...+70 °C (-40...+158 °F), 0...95% RH (non-condensing)
Storage conditions	-25...+60 °C (-13...+140 °F), 20...80% RH
Dimensions	See Fig 1.
Mounting	Duct
Approvals	CE / RoHS

## Outputs

Analog output RH	0...10 V or 4...20mA $\equiv$ 0...100%
Analog output Temp	-40...+70 °C (-40...158°F) default; *other ranges specified by part number
Passive temp. sensor	2-wire, passive sensor; wire resistance (terminal-sensor), typ. 0.5 W; temp. unit: °C

## WIRING

wiring run	maximum length
sensor to controller	200 m (660 ft)

**NOTE:** Installation of the sensor near high EMI-emitting devices may lead to faulty measurements.

Use shielded wiring in areas with high EMI.

Keep 15 cm (5.9") min. distance between sensor lines and 230 Vac power lines.

Use two transformers: one for sensors and actuators and one for the controller.

## MOUNTING

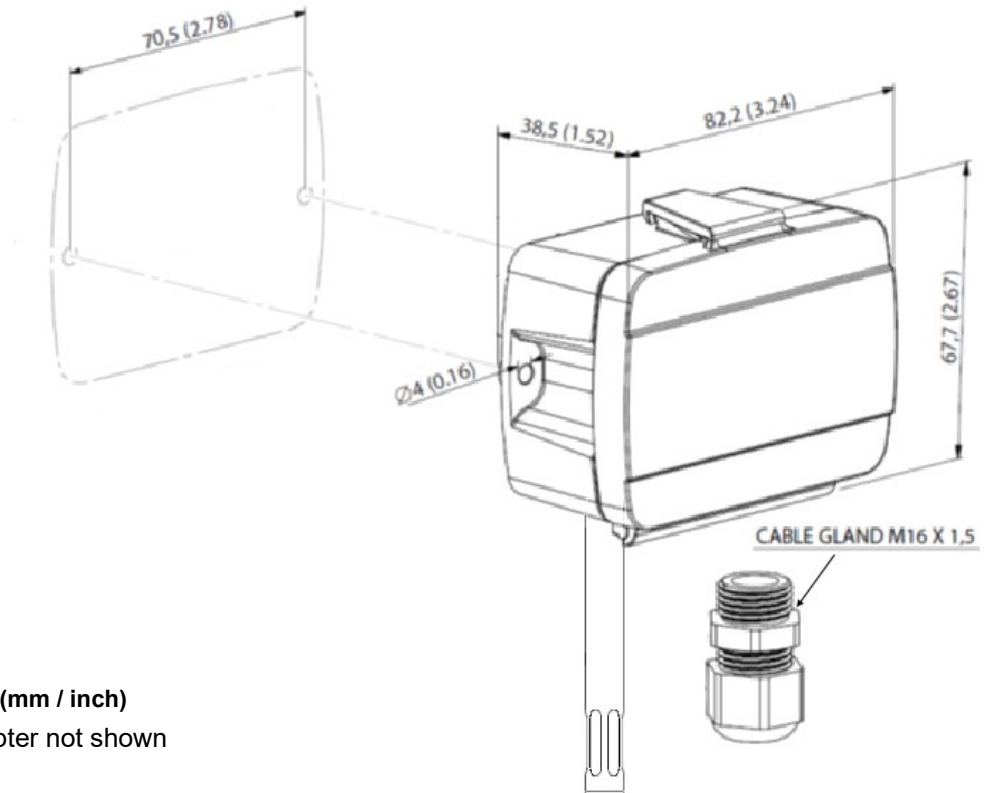


Fig. 1. Dimensions (mm / inch)  
1/2" NPT conduit adapter not shown

## TERMINAL ASSIGNMENT

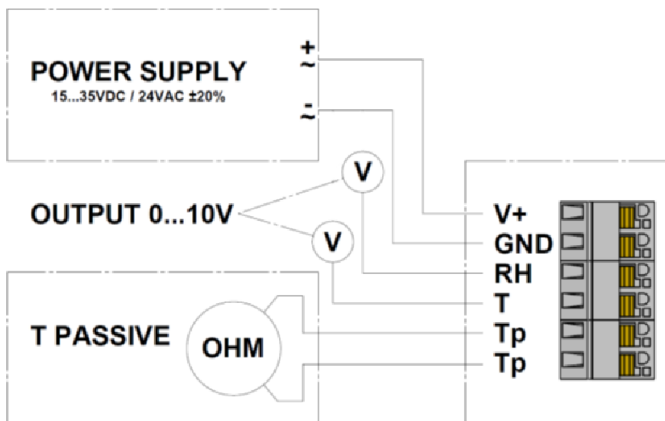


Fig. 2. Connection diagram, voltage output

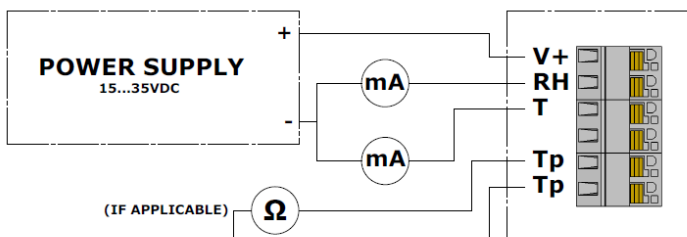


Fig. 3. Connection diagram, current output