EuroSeries

Duct Humidity Temperature Transmitters

PRODUCT INSTALLATION DATA

General Specifications

Power supply (Class III)	15…35 VDC or 24 VAC ± 20%
Current consumption	DC power supply: typ. 5 mA
	AC power supply: typ. 13 mA$_{eff}$
Connection	Screw terminals, max. 1.5 mm^2
Housing material	PC/ABS, UL94 V-0 appr.
Protection class	IP65 / NEMA 4 for enclosure; IP40 for sensing part (cap filter)
Cable gland	M16 x 1.5 / UL94-V0
Conduit fitting	M16 x 1/2" NPT / UL94 V-0
Sensor protection	PE filter, non-removable
EMC	EN61326-1, EN61326-2-3; FCC 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

GENERAL

The EuroSeries humidity temperature duct 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 duct 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 air duct applications (fresh air / exhaust);

▪ to avoid condensation in air duct 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)	±%RH (30…70% RH) at 20 °C, otherwise ±5% RH
Temperature dependency	typically ±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	±0.3 °C at 20 °C
Typical response time	< 180 s

Outputs

Analog output RH	0…10 V or 4...20mA ≡ 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

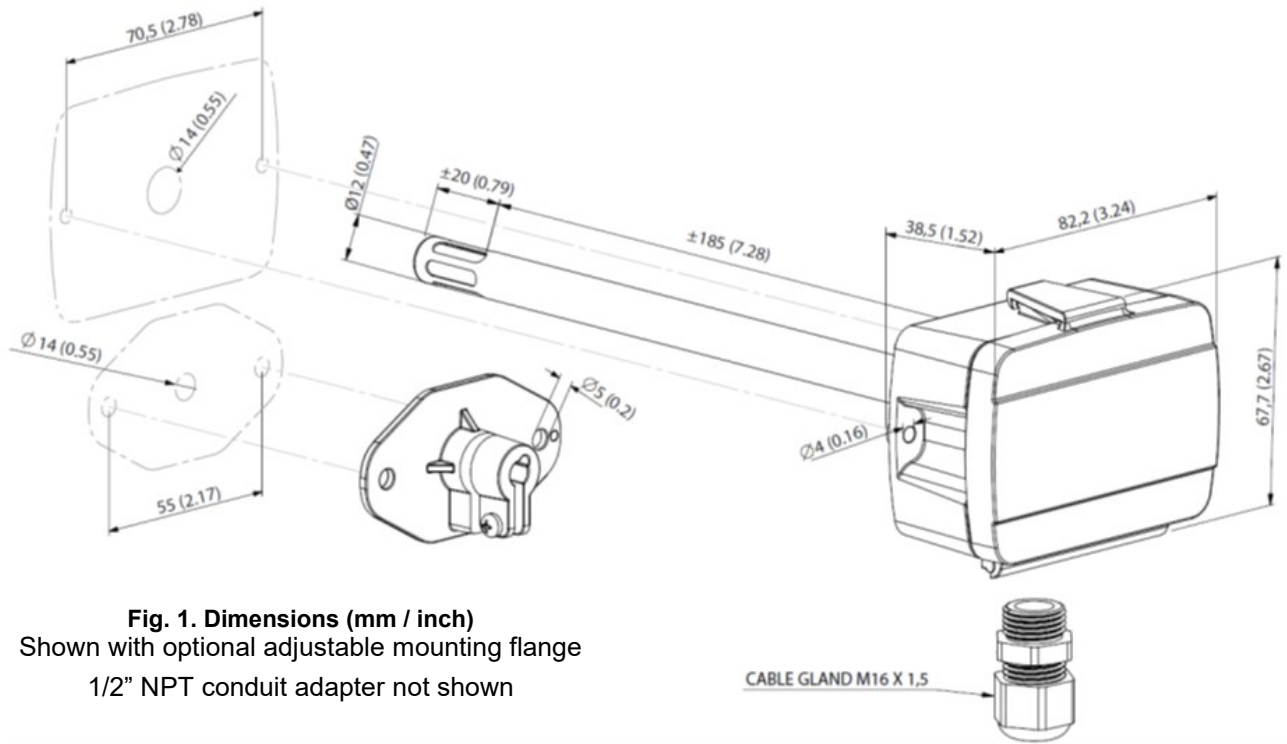| wiring run	maximum length
sensor to controller	200 m (660 ft)

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)
Shown with optional adjustable mounting flange

1/2" NPT conduit adapter not shown
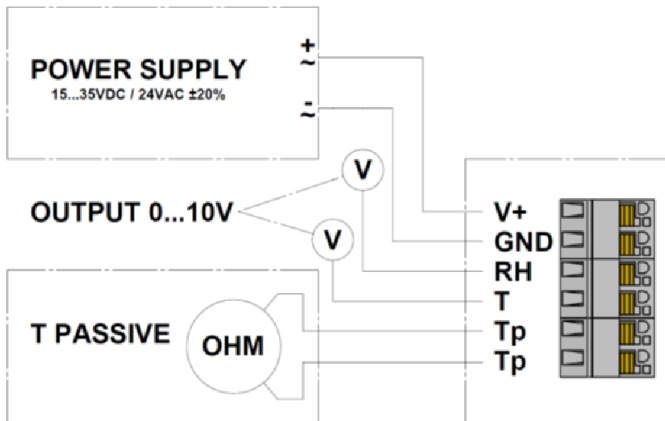
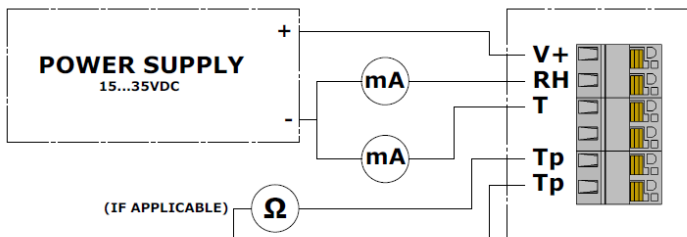## TERMINAL ASSIGNMENT

Fig. 2. Connection diagram, voltage output

Fig. 3. Connection diagram, current output