

# EE16 Series

## Humidity / Temperature Transmitter for HVAC Applications

EE16 transmitters are the ideal solution for accurate measurement of relative humidity and temperature at a reasonable price in HVAC applications. The appropriate filter cap enables employment in heavily polluted environment.

The new developed E+E humidity sensors HC101 guarantee excellent long term stability and resistance against chemical pollutants. Their excellent reproducibility allows a simple low-cost-one-point calibration for very good accuracy over the entire working range.

EE16 transmitters are available as wall or duct mounted, with current or voltage output signals.



### Typical Applications

building-automation  
storage rooms  
climate and ventilation control

### Features

excellent price/performance ratio  
wetable  
long term stable

### Technical Data

#### Measuring values

##### Relative Humidity

Sensor	HC101	
Output appropriate 0...100% RH	0-10 V	-1 mA < I <sub>L</sub> < 1 mA
	4-20 mA (two wire)	R <sub>L</sub> < 500 Ohm
Working range <sup>1)</sup>	10...95% RH	
Accuracy at 20 degC	±3% RH	
Temperature dependence at 45% RH	typ. -0.05% RH/degC	

##### Temperature

Sensor	Pt1000 (class A, DIN EN 60751)	
Output appropriate 0...50 degC	0-10 V	-1 mA < I <sub>L</sub> < 1 mA
	4-20 mA (two wire)	R <sub>L</sub> < 500 Ohm
Accuracy at 20 degC	±0.5 degC	

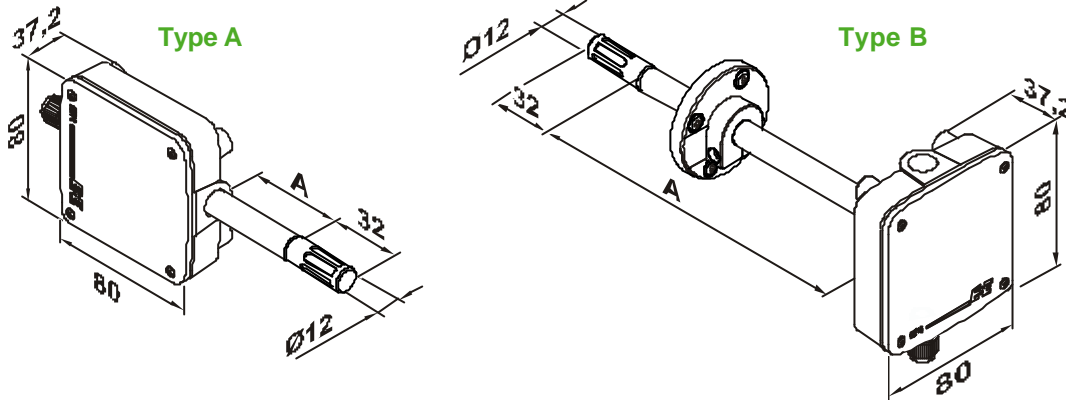
#### General

Supply voltage	15 - 35V DC or 24V AC ±20%	
for 0 - 10 V	10V + R <sub>L</sub> x 20 mA < U <sub>v</sub> < 35V DC	
for 4 - 20 mA		
Current consumption	for DC supply	typ. 8 mA
	for AC supply	typ. 20 mA <sub>eff</sub>
Electrical connection	screw terminals max. 1.5 mm <sup>2</sup>	
Housing / protection class	Polycarbonat / IP65	
Cable gland	M16	
Sensor protection	membrane filter, sintered bronze filter or metal grid filter	
Electromagnetic compatibility	EN 61000-6-1	EN 61326-1+A1+A2
	EN 61000-6-3	
Temperature range	working temperature:	-5...+50 degC
	storage temperature:	-25...+60 degC



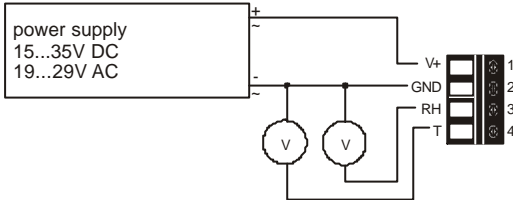
1) Refer to the working range of the humidity sensor HC101!

## Housing Dimensions (mm)

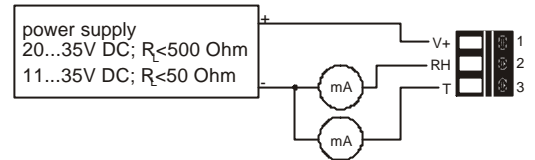


## Connection Diagram

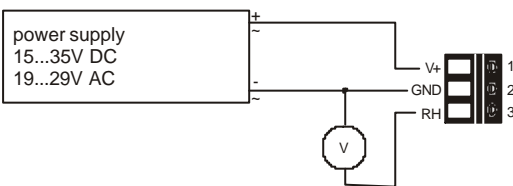
### EE16-FT3xxx



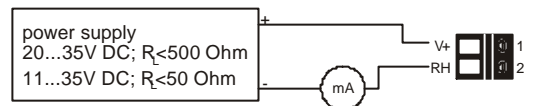
### EE16-FT6xxx



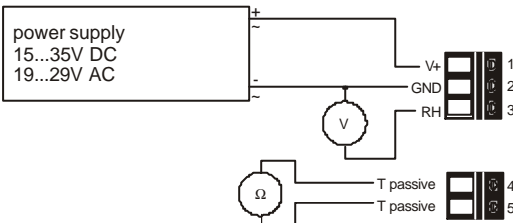
### EE16-F3xxx



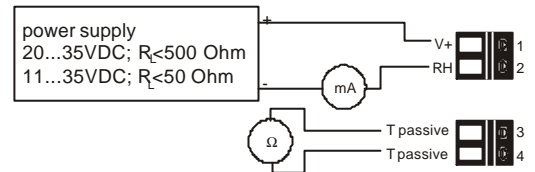
### EE16-F6xxx



### EE16-FP3xxx



### EE16-FP6xxx



## Ordering Guide

MODEL	OUTPUT	T-Sensor (only model FP)	HOUSING	PROBE LENGTH (according to "A")	FILTER
humidity + temperature (FT)	0-10V (3)	Pt 100 DIN A (A)	wall mounting (A)	50 mm (2)	membrane filter (1)
	4-20 mA (6)	Pt 100 DIN B (B)	duct mounting (B)	200 mm (5)	sintered bronze filter (2)
humidity (F)		Pt 1000 DIN A (C)			metal grid (6)
humidity + temperature passive (FP)		Pt 1000 DIN B (D) others on request			
EE16-					

## Order Example

### EE16-F3A21

model: humidity transmitter  
output: 0-10V  
housing: wall mounting  
probe length: 50 mm  
filter: membrane filter