

# EE65

## Air Velocity Transmitter for HVAC Applications

EE65 air velocity transmitters are ideal for accurate ventilation control applications. They are operating on an innovative hot film anemometer principle.

The E+E thin film sensor guarantees very good accuracy at low air velocity, which is not possible for conventional anemometers with commercial temperature sensors or NTC bead thermistors. Moreover, the E+E sensor is much more insensitive to dust and dirt than all other anemometer principles. This means high reliability and low maintenance costs.

EE65 series are available with current or voltage output, the measuring range and the response time can be selected with jumpers by the user.

Low angular dependence enables easy, cost-effective installation. An integrated LC display and a version with remote sensing probe are available.

The configuration equipment allows air velocity adjustment of the sensor.



### Typical Applications

**HVAC**  
**process and environmental control**

### Features

**low angular dependence**  
**easy installation**  
**adjustable to application requirements**

### Technical Data

#### Measuring values

Working range <sup>1)</sup>	0...10m/s (0...2000ft/min) 0...15m/s (0...3000ft/min) 0...20m/s (0...4000ft/min)	
Output <sup>1)</sup>	0 - 10 V 0...10m/s / 0...15m/s / 0...20m/s	-1 mA < I <sub>L</sub> < 1 mA R <sub>L</sub> < 450 Ω
Accuracy at 20°C (68°F), 45 % RH and 1013hPa	0.2...10m/s (40...2000ft/min) 0.2...15m/s (40...3000ft/min) 0.2...20m/s (40...4000ft/min)	± (0.2m/s / 40ft/min + 3 % of m. v.) ± (0.2m/s / 40ft/min + 3 % of m. v.) ± (0.2m/s / 40ft/min + 3 % of m. v.)
Response time τ <sub>90</sub> <sup>1) 2)</sup>	typ. 4 sec. or typ. 0.7 sec.	(at constant temperature)

#### General

Power supply	24V AC/DC ± 20 %
Current consumption for AC supply	max. 150 mA
for DC supply	max. 90 mA
Angular dependence	< 3 % of measurement at  Δα  < 10°
Cable gland	M16x1.5 cable Ø 4.5 - 10 mm (0.18 - 0.39")
Electrical connection	screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)
Electromagnetic compatibility	EN61326-1 EN61326-2-3
Housing material	Polycarbonate, UL94HB approved
Protecting class	IP65, Nema 4; with LC display: IP40; remot sensor probe: IP20
Temperature range	working temperature probe -25...50°C (-13...122°F) working temperature electronic -10...50°C (14...122°F) storage temperature -30...60°C (-22...140°F)
Working range humidity	5...95 % RH (non-condensing)

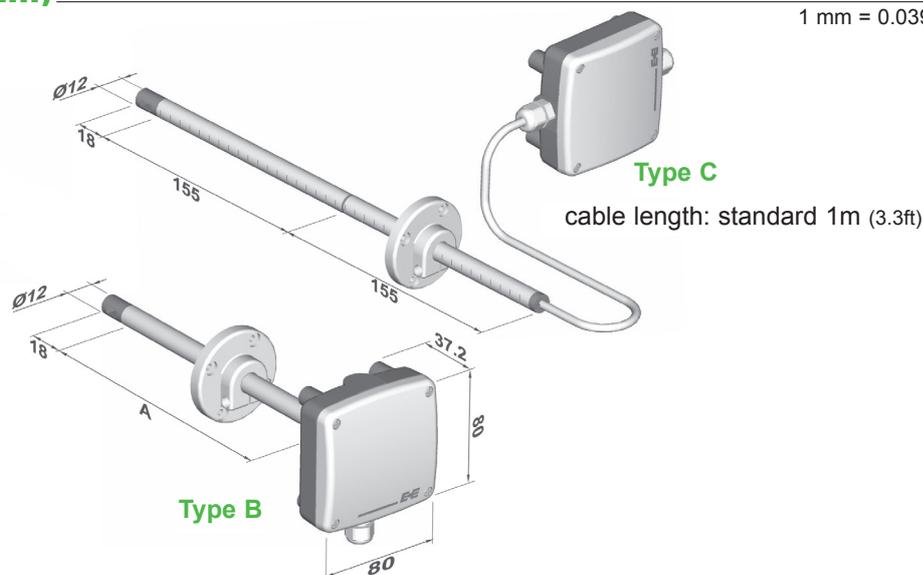
1) Selectable by jumper

2) Response time τ<sub>90</sub> is measured from the beginning of a step change of air velocity to the moment of reaching 90% of the step.

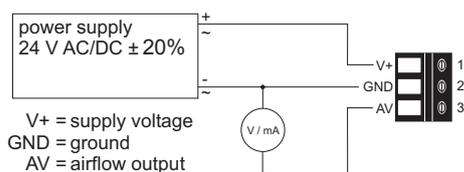


## Dimensions (mm)

1 mm = 0.03937" / 1" = 25.4 mm



## Connection Diagram



## Ordering Guide

MODEL	HOUSING	PROBE LENGTH (according to "A") (Type B only)	CABLE LENGTH (Type C only)	DISPLAY
velocity (V)	duct mounting (B)	100mm (3.9") (3)	1m (3.3ft) (no code)	without display (no code)
	remote sensor probe (C)	200mm (7.9") (5)	2m (6.6ft) (K200)	with display (D02)
		others (x)	5m (16.4ft) (K500)	
			10m (32.8ft) (K1000)	
<b>EE65-</b>				

## Order Example

**EE65-VB5-D02**  
 model: velocity  
 housing: duct mounting  
 probe length: 200mm (7.9")  
 display: with LC display

## Accessories

- Snap in - mounting flange for duct mounting (HA010205)

**Configuration equipment:** The configuration equipment allows air velocity adjustment of the sensor.

**Position 1:**  
- configuration adapter (incl. USB cable for PC) (HA011050)

**Position 2:**  
- cable for configuration adapter (HA011058)

**Position 3:**  
- configuration software: free download: [www.epluse.com/EE65](http://www.epluse.com/EE65)

**Position 4 - optional:**  
- power supply for EE65 (V03)

