EE66

Air Velocity Transmitter for Measurement of Lowest Velocity

EE66 air velocity transmitter series are designed for high accuracy measurement of lowest air velocities. It is the ideal solution for laminar flow control and special ventilation applications. The E+E thin film sensor is operating on an innovative hot film anemometer principle. This guarantees excellent accuracy for air velocity down to almost 0.15m/s, which is not possible for conventional anemometers with commercial temperature sensors or NTC bead thermistors.

The E+E sensor is much more insensitive to pollution than all other anemometer principles. This increases reliability and reduces maintenance costs.

EE66 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 also available.

The configuration equipment allows air velocity adjustment of the sensor.


EE66 - A / B


EE66 - C

Typical Applications

clean room control
laminar flow control

Features

measurement down to 0m/s
low angular dependence
easy installation

Technical Data

Measuring values

Working range[1]	0...1m/s (0...200ft/min)	
	0...1.5m/s (0...300ft/min)	
	0...2m/s (0...400ft/min)	
Output[1]	0 - 10 V	-1mA < I_L < 1 mA
0...1m/s / 0...1.5m/s / 0...2m/s	4 - 20 mA	R_L < 450 Ω (linear, 3 wires)
Accuracy at 20°C (68°F), 45% RH	0.15...1m/s (30...200ft/min)	± (0.04m/s / 7.9ft/min + 2 % of m. v.)
and 1013 hPa	0.15...1.5m/s (30...300ft/min)	± (0.05m/s / 9.8ft/min + 2 % of m. v.)
	0.15...2m/s (30...400ft/min)	± (0.06m/s / 11.8ft/min + 2 % of m. v.)
Response time τ_{90} [1) 2)]	typ. 4 sec. or typ. 0.7 sec.	(at constant temperature)

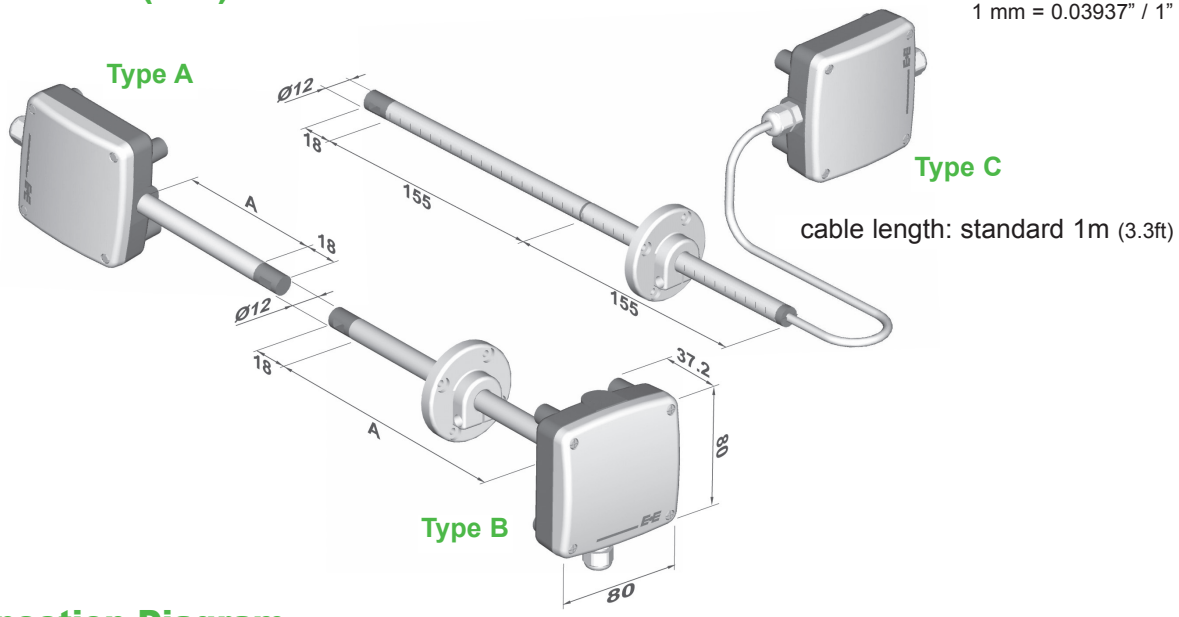
General

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 mm² (AWG 16)	
Electromagnetic compatibility	EN61326-1	CE
	EN61326-2-3	
Housing material	Polycarbonate, UL94HB approved	
Protection 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)	

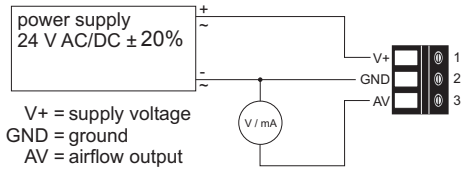
1) Selectable by jumper
2) Response time τ_{90} is measured from the beginning of a step change of air velocity to the moment of reaching 90% of the step.

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)	wall mounting	(A)	100mm (3.9")	(3)	1m(3.3ft)	(no code)	without display	(no code)
		duct mounting	(B)	200mm (7.9")	(5)	2m (6.6ft)	(K200)	with display	(D02)
		remote sensor probe	(C)	others	(x)	5m (16.4ft)	(K500)		
						10m (32.8ft)	(K1000)		
EE66-									

Order Example

EE66-VB5-D02

model:	velocity
housing:	duct mounting
probe length:	200mm (7.9")
display:	with LC display

Accessories

- Snap in - mounting flange for wall mounting (HA010204)
- 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/EE66

Position 4 - optional:
- power supply for EE66 (V03)