

AIR VELOCITY TRANSMITTERS FOR MEASUREMENT DOWN TO "0" M/S

EE66 Series

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 0m/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.

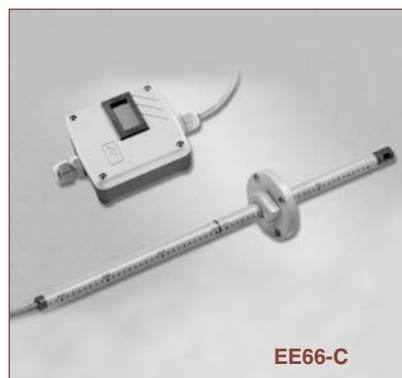
Low angular dependence enables easy, cost-effective installation. An integrated LC display and a version with remote sensing probe are also available.

Typical Applications

- Clean room control
- Laminar flow control

Features

- Measurement down to 0 m/s
- Low angular dependence
- Easy installation



Air Velocity Measurements

TEST & MEASUREMENTS

Technical Data EE66

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 4 - 20 mA	-1mA < I _L < 1 mA R _L , 450Ω (linear, 3 wires)
Accuracy at 20°C (68°F) 45% RH and 1013 hPa	0... 1m/s (0...200ft/min) 0...1.5m/s (0...300ft/min) 0...2m/s (0...400ft/min)	± (0.04m/s / 7.9ft/min + 2 % of M. V.) ± (0.05m/s / 9.8ft/min + 2 % of M. V.) ± (0.06m/s / 11.8ft/min + 2 % of M.V.)
Response time τ ₉₀ ^{1) 2)}	Typ. 4 sec. or typ. 0.2 sec. (at constant temperature)	

General

Power supply	SELV 24V AC/DC ± 20%	SELV = Safety Extra Low Voltage
Current consumption for AC supply for DC supply	max. 150mA max. 90 mA	
Angular dependence	< 3% of measurement at Δα < 10°	
Cable gland	M16x1.5	cable ø 4.5 - 10mm (0.18 - 0.39")
Electrical connection	Screw terminals max. 1.5mm ² (AWG16)	
Electromagnetic compatibility	EN 50081-1 EN 50082-1	EN 50082-2
Housing / protecting class	Polycarbonat / IP65, Nema 4	with LC display: IP40
Temperature range	working temperature probe working temperature electronic storage temperature	-25...50°C (-13...122°F) -10...50°C (14...122°F) -30...60°C (-22...140°F)



¹⁾ Selectable by jumper.

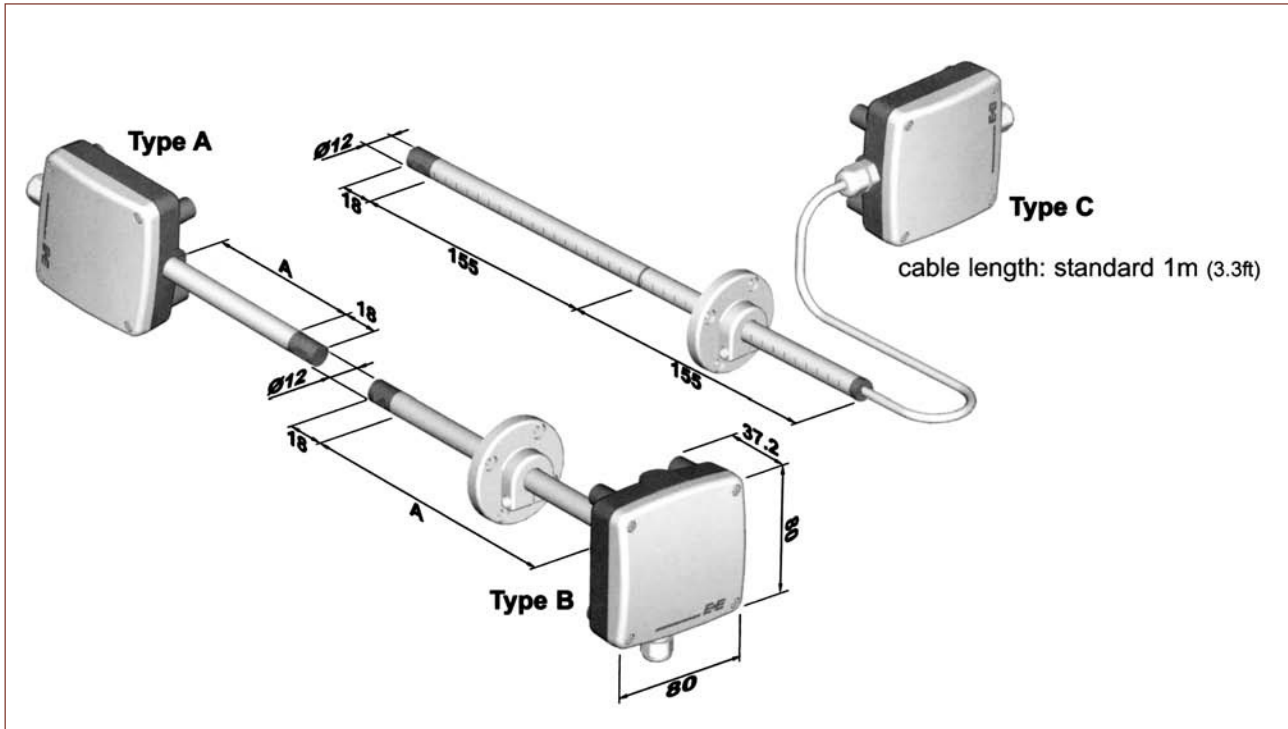
²⁾ Response time τ₉₀ is measured from the beginning of a step change of air velocity to the moment of reaching 90% of the step.



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Dimensions (mm)

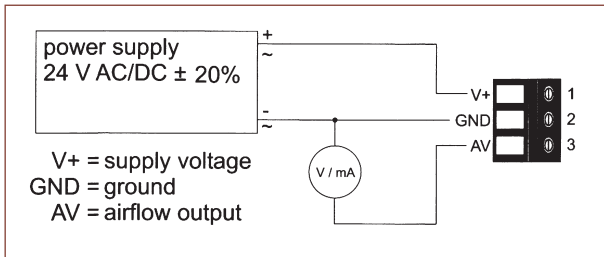
1mm = 0.03937" / 1" = 25.4mm



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Connection Diagram



Order Example

EE66-VB5-D02
 Model: Velocity
 Housing: Duct mounting
 Probe Length: 200mm (7.9")
 Display: with LC display

Ordering Guide EE66

Model	Housing	Probe Length (according to "A")	Cable Length (Type C only)	Display
Velocity (V)	Wall mounting	(A) 100mm (3.9")	(3) 1m (3.3ft)	without display (no code)
	Duct mounting	(B) 200mm (7.9")	(5) 2m (6.6ft)	with display (D02)
	Remote sensor probe	(C) others	(X) 5m (16.4ft) 10m (32.8ft)	
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