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 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.

Typical Applications
- clean room control
- laminar flow control

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

Technical Data

Measuring values

<table>
<thead>
<tr>
<th>Working range</th>
<th>Output 1)</th>
<th>± (0.05m/s / 9.8ft/min + 2 % of m. v.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...1m/s</td>
<td>0 - 10 V</td>
<td>(0.04m/s / 7.9ft/min + 2 % of m. v.)</td>
</tr>
<tr>
<td>0...1.5m/s</td>
<td>0 - 10 V</td>
<td>(0.05m/s / 9.8ft/min + 2 % of m. v.)</td>
</tr>
<tr>
<td>0...2m/s</td>
<td>0 - 10 V</td>
<td>(0.06m/s / 11.8ft/min + 2 % of m. v.)</td>
</tr>
</tbody>
</table>

Accuracy at 20°C (68°F), 45% RH and 1013 hPa

| 0.15...1m/s   | 4 - 20 mA | ± (0.05m/s / 9.8ft/min + 2 % of m. v.) |
| 0.15...1.5m/s | 4 - 20 mA | ± (0.05m/s / 9.8ft/min + 2 % of m. v.) |
| 0.15...2m/s   | 4 - 20 mA | ± (0.05m/s / 9.8ft/min + 2 % of m. v.) |

Response time τ90 1)2)

| typ. 4 sec. or typ. 0.2 sec. | (at constant temperature) |

General

Power supply
24V AC/DC ± 20 %

Angular dependence
< 3 % of measurement at | Δα | < 10°

Cable gland
M16x1.5

Electrical connection
screw terminals max. 1.5 mm² (AWG 16)

Electromagnetic compatibility
EN61326-1
EN61326-2-3

Housing / protecting class
Polycarbonate / IP65, Nema 4 with LC display: IP40

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.
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)

Dimensions (mm)

1 mm = 0.03937” / 1” = 25.4 mm

Connection Diagram

Ordering Guide

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HOUSING</th>
<th>PROBE LENGTH (according to “A”)</th>
<th>CABLE LENGTH (Type C only)</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>velocity</td>
<td>wall mounting (A)</td>
<td>100mm (3.9”) (3)</td>
<td>1m (3.3ft) (no code)</td>
<td>without display (no code)</td>
</tr>
<tr>
<td></td>
<td>duct mounting (B)</td>
<td>200mm (7.9”) (5)</td>
<td>2m (6.6ft) (K200)</td>
<td>with display (D02)</td>
</tr>
<tr>
<td></td>
<td>remote sensor probe (C)</td>
<td>others (x)</td>
<td>5m (16.4ft) (K500)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10m (32.8ft) (K1000)</td>
<td></td>
</tr>
</tbody>
</table>

Order Example

EE66-VB5-D02
- model: velocity
- housing: duct mounting
- probe length: 200mm (7.9”)
- display: with LC display