The EE660 transmitters are designed for the exact measurement of air velocity. The measuring method is based on the hot film anemometer principle. The special construction of the sensor mounting provides a very small directional derivative within a wide range, thus allows easy mounting. Using the mounting device the penetration depth is infinitely adjustable. By changing a jumper on the PCB the measuring range and the response time can be set.

The transmitters are designed for applications within the HVAC industry, in clean room applications and laminar flow control. For special applications do not hesitate to contact the manufacturer or the corresponding distributor.

CAUTION

- The accurate and reliable determination of the air velocity depends on the correct positioning of the probe. Accurate measurements are only possible if the probe is installed in a location with approximate laminar flow.
- For duct mounting the required inlet and outlet paths have to be observed. More information can be found on www.epluse.com.
- Extreme mechanical, unspecified strain, corrosive environments and condensation must be avoided.

**CONNECTING DIAGRAM**

**GENERAL**

**EE660 - Transmitter for Very Low Air Velocity**

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**CONNECTING DIAGRAM**

EE660 - Voltage output 0-10 V

EE660 - Current output 4-20 mA

**SETTINGS**

**Selection of the response time \( t_{90} \)**

- jumper **t90**
  - **Hi**
  - **MED**
  - LO

  SLOW \( \text{ca. 4 sec.} \)

  (factory setting)

- no jumper

  FAST \( \text{ca. 1 sec.} \)

**Selection of the working range**

- jumper **Hi**
  - **LO**

  0...2 m/s

  (factory setting)

- jumper **MED**
  - **LO**

  0...1.5 m/s

- no Jumper

  0...1 m/s

By using the Configuration Software (EE-PCS) to change the output scaling, the jumper has to be on HI.
**TECHNICAL DATA**

*(Modification rights reserved)*

### Measuring values

**Working range**

<table>
<thead>
<tr>
<th>Range</th>
<th>Output</th>
<th>Accuracy at 20 °C (68 °F), 45 % RH, 1013 hPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...1 m/s</td>
<td>0 - 10 V</td>
<td>± (0.04 m/s (7.9 ft/min) + 2 % of mv)</td>
</tr>
<tr>
<td>0...1.5 m/s</td>
<td>4 - 20 mA</td>
<td>± (0.05 m/s (9.8 ft/min) + 2 % of mv)</td>
</tr>
<tr>
<td>0...2 m/s</td>
<td>-1 mA &lt; I &lt; 1 mA</td>
<td>± (0.06 m/s (11.8 ft/min) + 2 % of mv)</td>
</tr>
</tbody>
</table>

**Response time**

\[ \tau_{90} = 4 \text{ sec or typ. 1 sec (at constant temperature)} \]

### General

- **Power supply**: 24V AC/DC ± 20%
- **Current consumption**
  - for AC supply: max. 180 mA rms (with Display), 74 mA rms (without Display)
  - for DC supply: max. 85 mA (with Display), 41 mA (without Display)
- **Angular dependence**: < 3% of the measured value at \( |\Delta x| < 10° \)
- **Electrical connection**: screw terminals max. 1.5 mm² (AWG 16)
- **Cable gland**: M16x1.5
- **Electromagnetic compatibility**: EN61326-1, EN61326-2-3
- **Housing material**: Polycarbonate, UL94V-0 (with Display UL94HB) approved
- **Protection class**: Enclosure IP65 / NEMA4, remote 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)

### DIMENSIONS MM (INCH)

- **Type A - wall mounting**
- **Type B - duct mounting**
- **Type C - remote probe**
**SETUP AND ADJUSTMENT**

The EE660 is ready for use immediately and requires no configuration set-up by the customer. If required, the optional E+E Product Configuration Adapter (EE-PCA) and the E+E Product Configuration Software (EE-PCS) can be used for customer adjustment of the air velocity. Various display settings such as backlighting and orientation can also be changed.

For product data sheets EE-PCS and EE-PCA please see [www.epluse.com](http://www.epluse.com). The E+E Product Configuration Software (EE-PCS) is free and can be downloaded from [www.epluse.com/configurator](http://www.epluse.com/configurator).

**MOUNTING**

**Bore for mounting flange:**

Drilling in the wall of the duct:

<table>
<thead>
<tr>
<th>CORRECT</th>
<th>INCORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Correct Diagram" /></td>
<td><img src="image2" alt="Incorrect Diagram" /></td>
</tr>
</tbody>
</table>

The mounting flange allows for an infinite variation of the depth of the sensor probe. It is important to ensure that the sensor head is completely submerged into the flow.

If the sensor probe is installed without a mounting flange, make sure the air velocity sensor is aligned parallel with the air stream.

<table>
<thead>
<tr>
<th>CORRECT</th>
<th>INCORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Correct Diagram" /></td>
<td><img src="image4" alt="Incorrect Diagram" /></td>
</tr>
</tbody>
</table>