

## IVL02 Air Flow and Temperature Transmitters with Display Option

These combined air flow and temperature transmitters are designed to measure the air flow and temperature in the ventilating units. They transmit a linear signals which are directly proportional to the air flow and temperature inside the ventilation duct. The sensor is mounted in the duct, on a place where the air flow is as homogenous as possible. IVL 02-N has a display unit and outputs IVL 02. All models are available with a 400mm long stem (IVL...-400).

By connecting VK 10 switch unit or RY1-U relay to the sensor, it is possible to have relay contact to operate external devices when the air flow drops below the set point.

IVL 02-N has a built-in display.



| Model Type            | Model                 | Description  |
|-----------------------|-----------------------|--|
|                       | <b>IVL 02</b>         | Combined Air Flow and Temperature Transmitter, 0...2m/s                                    |
|                       | <b>IVL02-N</b>        | Combined Air Flow and Temperature Transmitter with Display, 0...2m/s                       |
|                       | <b>IVL 02-400</b>     | Combined Air Flow and Temperature Transmitter Sensor, Mounting Depth up to 400mm, 0...2m/s |
|                       | <b>IVL 02-N-400</b>   | Combined Air Flow and Temperature Transmitter with Display, Mounting Depth up to 2mm       |
| <b>Technical Data</b> |                       | <b>IVL 02(-N)</b>  |
|                       | Supply voltage        | 24Vac/dc (22-28Vac/dc), <1.5VA   |
|                       | Ranges                |  |
|                       | - velocity            | 0...2m/s   |
|                       | - temperature         | 0...50°C   |
|                       | Outputs               | 0...10V, <2mA<br>4...20mA, <600Ohm   |
|                       | Velocity Erro         | <10% of reading, at 25°C   |
|                       | Temperature error     | <0.5°C (25°C, >0.5ms)  |
|                       | Operating temperature | 0...50°C   |
|                       | Mounting              | by adjustable flange   |
|                       | Housing               | IP54   |
|                       | Materials             | PBT, PC, PA and stainless steel  |
|                       | Dimensions            | Case: 70W x 94H x 250/480D mm<br>Stem: Ø10mm x 200/400mm                                   |

**Wiring Terminals**

**IVL 02 and IVL 02-N**

|   |  |
|---|--|
| 1 | 24Vac/dc power supply                  |
| 2 | 0V                                     |
| 3 | output 0...10V or 4...20mA = 0...2m/sV |
| 4 | output 0...10V or 4...20mA = 0...50°C  |

**Mounting**

The flow transmitter must be fitted in the part of ductwork where the air flow is as homogenous as possible to guarantee accurate flow measurement. Recommended distance from the duct bend is 5 x diameter of the duct. The IVL flow transmitters are fixed to the duct with adjustable duct connection that also seals the connection hole. The adjustable duct connection is fixed to the position by means of fixing screw.

NOTE: The air flow transmitter must be mounted so that the air flows towards the wider part of the measurement tip (i.e. the cable gland downwards).

**Service**

Dirty measurement tip can be washed with mixture of soap and water.

**Dimensions**

