

Combined 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. IVL10 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 10-N/20-N have a built-in display. Display is scanning between velocity and temperature. The display can be fixed to show either velocity or temperature using a jumper on the back of the display.



Model Type	Model	Description
	IVL 10	Combined Air Flow and Temperature Transmitter, 0...10m/s
	IVL10-N	Combined Air Flow and Temperature Transmitter with Display, 0...10m/s
	IVL 10-400	Combined Air Flow and Temperature Transmitter Sensor, Mounting Depth up to 400mm, 0...10m/s
	IVL 10-N-400	Combined Air Flow and Temperature Transmitter with Display, Mounting Depth up to 400mm
	IVL 20	Combined Air Flow and Temperature Transmitter, 0...20m/s
	IVL20-N	Combined Air Flow and Temperature Transmitter with Display, 0...20m/s

Technical Data	
Velocity Output	0...10V (<2mA) or 4...20mA (<600 Ohm)
Measuring range 1	IVL10: 0..10m/s IVL20: 0..20m/s
Measuring error (25°C)	<0.1m/s + 7% from reading (at 25°C)
Temperature Output	0...10V (<2mA) or 4...20mA (<600 Ohm)
Measuring range 2	0...50°
Measuring error (25°C, >0.5m/s)	<0.5°C
Supply voltage	24Vac/dc (22-28Vac/dc), <1.5VA
Operating temperature	0...50°C
Protection Class	IP54
Mounting	With adjustable duct connection

Wiring Terminals

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

I	
Housing	70W x 98H x 44D mm
Connection	Ø10mm x 200mm/400mm
Mounting depth	
IVL 10/20	50...190mm
IVL ...-400	200...400mm

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

