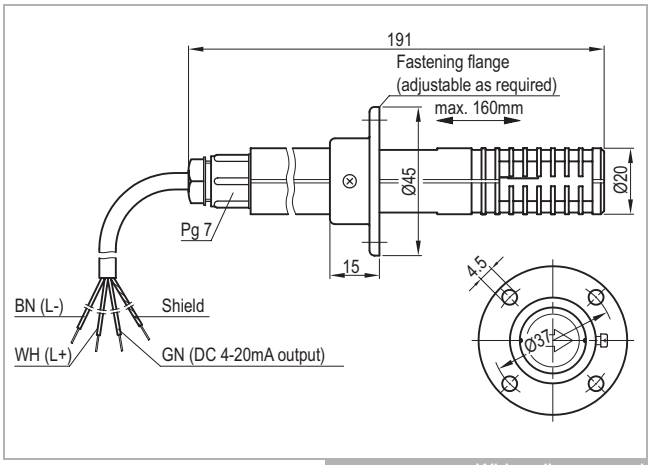
INT512® Linear air flow sensor

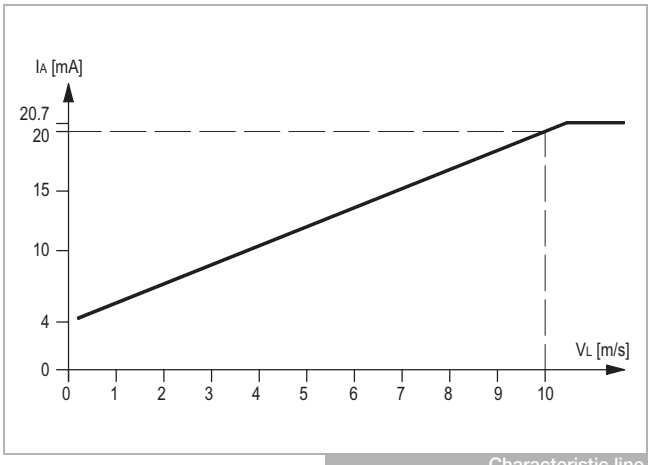
KRIWAN

INT512®

INT512



Wiring diagram and dimensions in mm



Characteristic line

Application

KRIWAN air flow sensors are used for monitoring air flow in a wide range of demanding applications (non-corrosive):

- Building technology, e.g. ventilation system regulation or air supply and exhaust air regulation
- Process automation
- Pharmaceutics
- Laminar flow
- Clean-room applications

Functional description

The KRIWAN air flow sensor INT512 measures the rate of air flow according to the calorimetric measuring principle and converts this value into a temperature-compensated, linear output signal.

The evaluation is then conducted separately using a measuring device, a display instrument, or a connected control and monitoring system.

The following features characterise this KRIWAN air flow sensor:

- Reliable industrial design
- Outstanding precision
- Linear standard signal output
- Integrated temperature compensation
- Simple installation

⚠ The installation, maintenance and operation must be carried out by an electrician. The applicable European and national standards for connecting electrical equipment must be observed.

Short power interruptions or failures influence the conversion of the measured values. Due to the calorimetric measuring principle, there is a small degree of self-heating, which results in a slight thermal effect.

Installation note

To prevent falsified values, the following points should be observed when selecting the installation location of the air flow sensor:

- Install in the laminar area (unobstructed infeed and outfeed paths approx. 3-times the duct diameter).
- Insert into the area in the middle of the duct if possible (distance about 1/3 duct diameter from the wall).
- Position the arrow on the sensor pipe pointing in the direction of flow, and the sensor pipe at 90° angle to the direction of flow.
- Do not install directly behind a heat exchanger.
- Earth the shield in one side of the switching cabinet. For cable extensions, use only shielded cables.
- Use suitable filters to avoid soil deposits of any kind, in particular wetting by water.

Product group N

Edition: 710.00435.0

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Technical specifications

Supply voltage	DC 24V ±20% max. 50mA
Permitted ambient temperature	-5...+60°C
Sensing range	0.2-10m/s
Signal output	DC 4-20mA limited to 20.7mA
Load resistor = cable + load resistor	R_{Load} ≤500Ω
Accuracy (ϑ_U 5-45°C and 1013hPa) for range 0.2-10m/s	±(0.3m/s +5% from the MW)
Strength	For air flow speed of max. 35m/s
Settling time - after applying the supply voltage - at a temperature jump of 10K (VL=1m/s)	 ≤20s ≤3min
Housing material	PA glass-fibre-reinforced
Connection type	Cable (2.5m), LiYCY 3x0.25mm²
Protection class acc. to EN 60529	IP20
Dimensions	Refer to wiring diagram and dimensions in mm
Weight	Approx. 150g
Check base	EN 61000-6-2, EN 61000-6-3 EN 61010-1 Overvoltage category II Pollution level 2

Order data

INT512 Linear air flow sensor	**13 N 140**
Accessories and application information	see www.kriwan.com

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