



## FLOXACT™ PROBE

### Multifunctional air flow probe

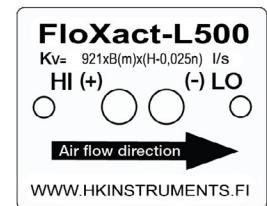
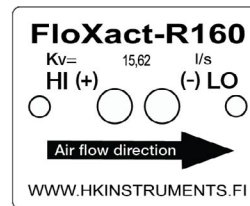
FloXact probe measures air volume in HVAC systems. Its intelligent design makes for easy installation in existing ducts or terminals.

Operating on the pitot tube principle, FloXact probe measures the total (**P**TOTAL) and static (**P**STATIC) pressure components of air flow. The probe determines average air flow, measured over 6, 8, or 10 precisely positioned sensing ports, depending on the length of ducts. The unique shape (patent pending) of the probe profile creates a linear amplification of at least 2.5 times the velocity pressure (**P**VEL), providing accurate measurement of lower air velocities down to 1.0 m/s (200 FPM). Chamfered entrances to the sensing ports eliminate air-direction affects, making the FloXact probe insensitive to approaching multi-directional, rotating airflow with yaw and pitch up to 30° from straight flow.

FloXact probe is easy to install and completes an accurate and cost-effective air flow station, when combined with a differential pressure transmitter. The probe integrates with most differential pressure transmitters, yet improved accuracy is obtained when output is linear to airflow rather than pressure. HK Instruments DPT-Flow line of air flow transmitters pairs well with FloXact probe.

#### KEY FEATURES

- Multi-point averaging based on the “Log-Tchebycheff” method, providing greater accuracy
- Chamfered sensing points ensure consistent readings
- Easy installation in existing air ducts or terminals
- 2% accuracy
- 2.5 times linear amplification of Velocity Pressure
- Accepts 1/4” OD tubing



Easy installation with sizing that matches existing ducts.

## HOW IT WORKS

The air volume can be determined with the following formula:

$$Q = KV \times \sqrt{Pfs}$$

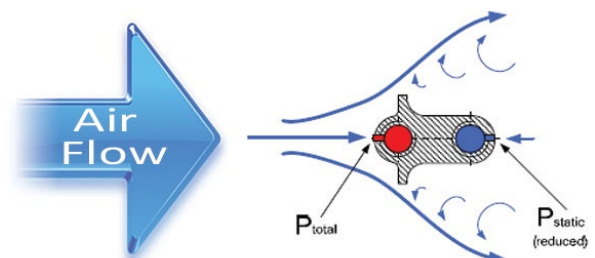
Q = air volume in l/s

KV = K V value in l/s/Pa (you can find this from the floxact sticker

Pfs = pressure difference measured by the FloXact stick in Pa

The formula is for air with 1.20 kg/m<sup>3</sup> density

(20 °C, 50 % rH and 1013 mbar).



# FLOXACT™ PROBE

## SPECIFICATIONS

### Performance

#### Accuracy:

±2.0 %

### Technical Specifications

#### Media compatibility:

Dry air or non-aggressive gases

#### Measurement units:

Pa, l/s

#### Environment:

Operating temperature: 5...95 °C

Storage temperature: -20...95 °C

Humidity: 0 to 95 % rH, non condensing

### Physical

#### Dimensions:

Probe:

< 200 mm: 15 x 20 x Length (mm)

≥ 200 mm: 25 x 20 x Length (mm)

Mounting plate:

60 W x 50 H x 1.5 D (mm)

#### Lengths:

Round: All standard round duct sizes up to 1200 mm.

(100, 125, 160, 200, 250, 315, 400, 450...1200 mm)

Rectangular: 250, 300... 1200 (50 mm steps)

Additional lengths available on request.

#### Mounting:

2 each 5.0 mm screw holes. Lengths 350 mm and greater include 6 mm stud, washer, and nut to secure opposite end of the probe.

### Materials:

Probe: T3015 aluminium

Mounting plate: Mild steel

Sealing gasket: expanded foam

### Pressure fittings

4.5 mm barbed brass

+ High pressure

- Low pressure

### Conformance

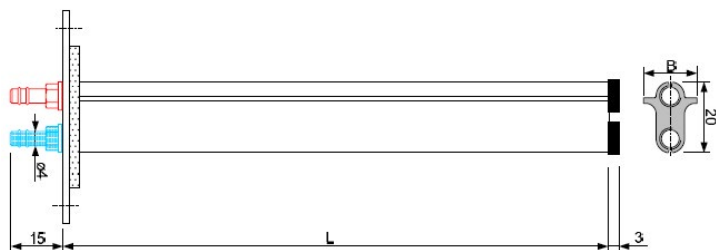
Meets requirements for CE marking:

RoHS Directive 2011/65/EU

**COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL**  
= ISO 9001 = ISO 14001 =



## DIMENSIONS



## HOW TO GENERATE A MODEL?

Example:	Product series		
FloXact-R200	FloXact	FloXact air flow probe	
		Duct type	
		-R	Round duct
		-L	Rectangular duct
		Probe length (R = duct diameter, L= duct width in mm)	
		100, 125, 160, 200, 250, 315, 400, 450 and other standard round duct sizes up to 1200 mm	
		250, 300... 1200 (50 mm steps) for rectangular ducts	
Model	FloXact	-R	200

Additional lengths available on request.