

TECHNICAL DATA SHEET

AIR FLOW CONES

KIMO has designed and manufactured the flow cones as an essential instrument for measuring direct air flows in ventilators and HVAC systems.

These instruments can be associated with the hot wire and vane Ø100 mm anemometers from Class 100, 200 and 300 portable instruments.

Many models are available according to the flow, the dimensions of the diffusers and the probes used :

CONES for hot-wire anemometers



K35 CONE

- Flow : from 10 up to 400 m³/h
- Dimensions : 200 x 200 mm
Height : 330 mm
- Weight : 800 g
- Material : Fibreglass 300 PLP



Multiplier Factors :

- Supply : **21**
- Exhaust : **27**

K75 CONE

- Flow : from 30 up to 750 m³/h
- Dimensions : 300 x 300 mm
Height : 470 mm
- Weight : 1400 g
- Material : Fibreglass 300 PLP



Multiplier Factors :

- Supply : **49**
- Exhaust : **51**

K120 CONE

- Flow : from 50 up to 1200 m³/h
- Dimensions : 450 x 450 mm
Height : 600 mm
- Weight : 1700 g
- Material : Fibreglass 300 PLP



Multiplier Factors :

- Supply : **150**
- Exhaust : **165**

K150 CONE

- Flow : from 10 up to 400 m³/h
- Dimensions : 550 x 100 mm
Height : 600 mm
- Weight : 1400 g
- Material : fibreglass 300 PLP



Multiplier Factors :

- Supply : **21**
- Exhaust : **23**

CONE for vane Ø100 mm anemometers



K25 CONE

- Flow : from 10 up to 300 m³/h
- Dimensions : 200 x 200 mm
Height : 215 mm
- Weight : 250 g
- Material : Fibreglass 300 PLP



Multiplier Factors in supply and exhaust :

- For a velocity below than 1,45 m/s : **28,33**
- For a velocity between 1,45 m/s and 3,8 m/s : **21,26**
- For a velocity more than 3,8 m/s : **20,35**

- [Kimo K 25 Airflow Cone For Vane 100mm](#)
- [Kimo H25 Soft Cover For K25 Airflow Cone](#)
- [Kimo H85 Soft Cover For K85 Airflow Cone](#)
- [Kimo H35 Soft Cover For K35 Airflow Cone](#)
- [Kimo H75 Soft Cover For K75 Airflow Cone](#)
- [Kimo H120 Soft Cover For K120 Airflow Cone](#)
- [Kimo H150 Soft Cover For K150 Airflow Cone](#)
- [Kimo K35 Airflow Cone For Hot Wire Anemometer](#)
- [Kimo K75 Airflow Cone For Hot Wire Anemometers](#)
- [Kimo K85 Airflow Cone For 100mm Vane Anemometer](#)
- [Kimo K120 Airflow Cone For Hot Wire Anemometers](#)
- [Kimo K150 Airflow Cone For Hot Wire Anemometers](#)

HOW TO USE FLOW CONES

○ Put the probe on the cone :

1 - If you use the **K35, K75, K120 and K150** cones , clip the **hot-wire anemometer probe** into the cone.

Put the sensing element at the centre of the orifice and perpendicularly to the air flow. (Remember to slide the protection back on the sensing element).



Position the hot-wire probe

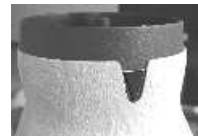
2 - If you use a **K25** cone, put the probe of the **vane Ø100mm anemometer** on the end of the measurement cone :

For a measure in supply, put the vane with the arrow turned towards the outside of the cone.

For a measure in exhaust, put the vane with the arrow turned towards the inside of the cone.



Measure in supply



Measure in exhaust

○ Put the cone on the grille.

○ Calculate and read the result :

1 - For the anemometers of class 100, 200 and 300, select the cone you are using, type K35, K75 or K25. Press OK.

The flow in m³/h can be read directly on the instrument.

2 - For the anemometers which don't have the "flow" function, read the velocity in m/s and multiply this value by the multiplier factor (supply or exhaust) of the cone you are using.

Velocity X factor = Flow in m³/h

Example :

Anemometer used with a K75 cone in an exhaust application.

$$12 \text{ m/s} \times 51 = 612 \text{ m}^3/\text{h}$$

Note : DON'T TAKE OUT THE VANE Ø100 mm PROBE OF THE CONE BY DRAWING ON THE PROBE HANDLE...

