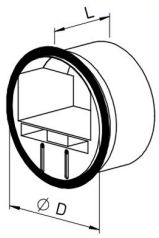
Air flow volume stabiliser VKH for in-line installation

Helios

VKH



Dim in mm – see table

Automatically achieving constant air flow volume the VKH is an easy and low cost solution that ensures a constant air flow volume desired for a wide range of pressures.

Operation

Simply insert the automatic volume stabiliser in the duct or duct components, either supply or extract. The VKH gives the preset air volume over a differential pressure range of approx. 50 – 200 Pa.

Advantages

- Measuring and balancing on building site omitted; thereby the system can be commissioned faster.
- Secure and simple design.
- Ensuring a constant air flow volume, even at low counter pressure.
- Easy change of air flow volume for each diameter of VKH. Thereby the other system inlets and outlets are not affected.
- Automatic adjustment to give constant air flow volume over a wide pressure range.
- Quick installation.
- Made of flame retardant polymer, class B1 DIN 4102-1.

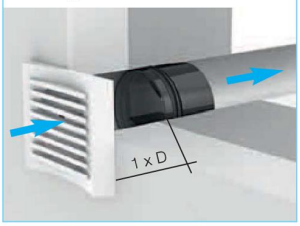
Function

- With an increasing pressure level the air flow velocity increases. The pressure against the butterfly valve decreases the opening cross section and keeps the air flow volume constant.
- At the minimum static pressure level the butterfly valve opens the cross section completely.
- The guiding cylinder is responsible for an equal movement of flaps and controls therefore the relation between pressure and air flow volume.

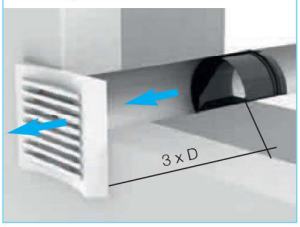
Installation

- Simple insertion in vertical or horizontal ducts, matching nominal duct diameter.
- The direction shown for the air flow must be considered.
- Perfect fitting and tightness is ensured due to textile sealing strip.

Installation extract:
Discharge = 1 x D



Installation supply:
Discharge = 3 x D



Model range	Dim. in mm			Air flow range
Type	Ø nom. duct	Ø D	L	m³/h
VKH 80	80	76	55	15-50
VKH 100	100	96	70	15-100
VKH 125	125	120	86	100-180
VKH 150-160	150-160	146	91	180-300
VKH 200	200	190	91	300-500
VKH 250	250	245	127	500-700

Selection chart						
m³/h	Ø 80	Ø 100	Ø 125	Ø 150-160	Ø 200	Ø 250
15-50	80/15-50	100/15-50	125/15-50			
50-100		100/50-100	125/50-100	150-160/50-100		
100-180			125/100-180	150-160/100-180	200/100-180	
180-300				150-160/180-300	200/180-300	250/180-300
300-500					200/300-500	250/300-500
500-700						250/500-700

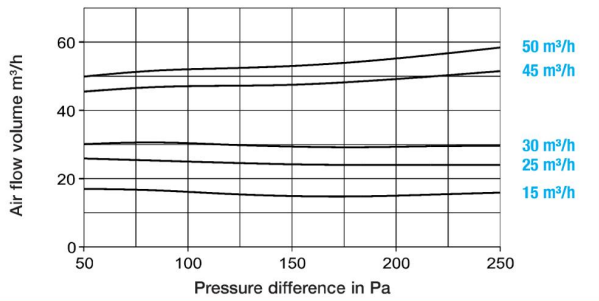
Assembly

Ø 80 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0001	**VKH 80/15-50**	15-50	25	29	32	35

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 80

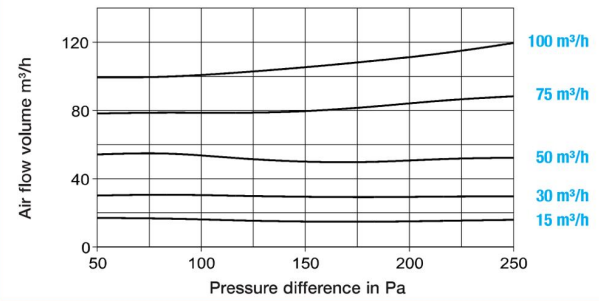


Ø 100 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0002	**VKH 100/15-50**	15-50	25	29	32	35
0003	**VKH 100/50-100**	50-100	32	37	39	42

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 100

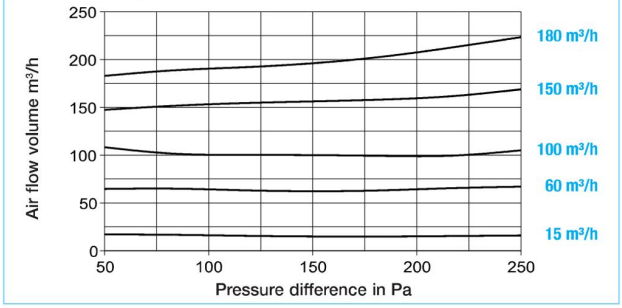


Ø 125 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0004	**VKH 125/15-50**	15-50	25	29	32	35
0005	**VKH 125/50-100**	50-100	32	37	39	42
0006	**VKH 125/100-180**	100-180	30	37	39	42

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 125

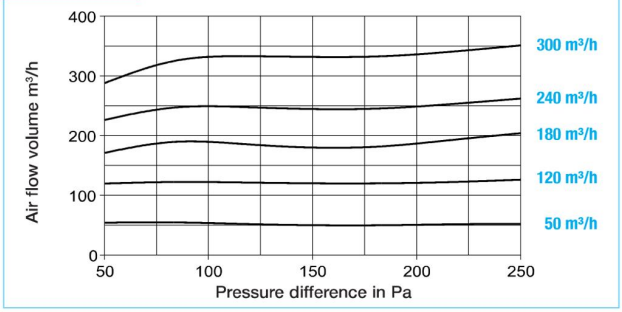


Ø 150-160 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0007	**VKH 150-160/50-100**	50-100	32	37	39	42
0008	**VKH 150-160/100-180**	100-180	30	37	39	42
0009	**VKH 150-160/180-300**	180-300	34	40	42	44

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 150-160

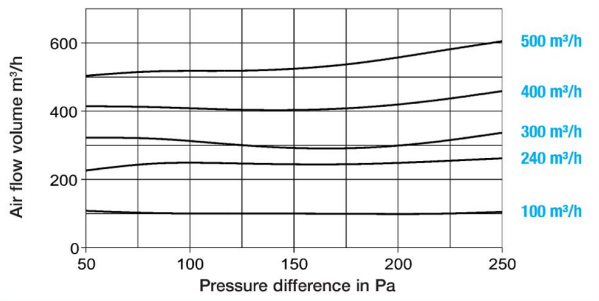


Ø 200 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0010	**VKH 200/100-180**	100-180	30	37	39	42
0011	**VKH 200/180-300**	180-300	34	40	42	44
0012	**VKH 200/300-500**	300-500	35	40	44	47

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 200



Ø 250 mm nominal duct diameter

Ref. no.	Type	Air flow volume*	Sound L_w in dB(A) at			
		m³/h	50 Pa	100 Pa	150 Pa	250 Pa
0013	**VKH 250/180-300**	180-300	30	37	39	42
0014	**VKH 250/300-500**	300-500	35	40	44	47
0015	**VKH 250/500-700**	500-700	36	40	46	49

* Tolerance range (50-250 Pa) for nominal air flow volume +/- 10 %.

VKH 250