

VK 200 – 900



RVK



EVK 200 – 710



Special characteristics

- Made of non-corrosive, weather proof, long life and ultra-violet stable polymers, colour light grey (VK 160 in white).
- Resists most harmful atmospheres.
- External building cladding stays clean longer as air flow channelled straight through the shutter.
- Easy and quick installation.
- Flat design.
- Attractive appearance.

Automatic

- Air stream operated louvers in a compact flat design to cover exhaust air openings in walls.
- Automatic operation; opens and closes when the fan is switched on and off.
- Fixed to wall by means of four concealed holes in corners.
- Supplied in individual boxes including mounting materials.
- Maximum air flow velocity = 8 m/s.
- Sizes 630 and 710 have an additional centre mullion to increase overall stability and sizes 800 and 900 have two mullions resulting in several louver panels.

Manually adjustable

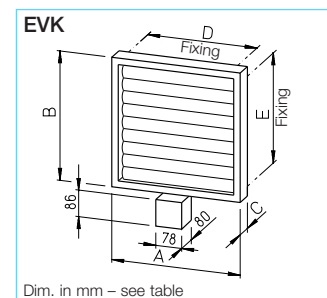
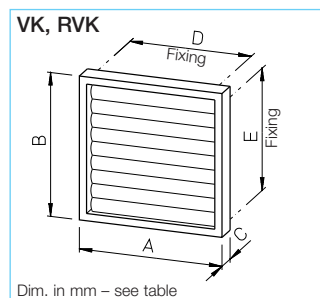
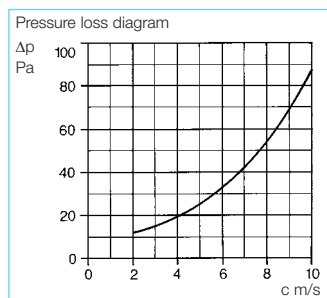
- To cover intake and exhaust air openings in external walls.
- Compact flat design. Suitable for reversible axial fans (intake and extract) as air flow in either direction is possible.
- Rattle-free and tight insulated, as the louvers are closed by spring force via mullions.
- Manual operation by means of pull cord via guide roller.
- Supplied with pull cord protection, guide roller, fixing hook and mounting materials.
- Frames, louvers with axis and adjusting parts made of UV resistant, impact resistant polymer in light grey.
- Up to nominal size 500 the louver has one centre mullion. For larger sizes (see "custom sizes") the models have an additional centre mullion to increase overall stability and result in several louver panels. Each part has a separate pull cord.

Electrically adjustable

- External shutters to cover intake and exhaust air openings.
- Automatic operation linked with fan controller. It can be wired so that the fan start is delayed until the shutter is fully opened.
- Control of fan and shutter via remote switch to be installed on site. The limit switch in servo motor connects the fan circuit when the shutter is fully opened. Max. current 1 A (ind.). With higher currents or 3 phase fans an auxiliary relay is required (contactor, Ref. no. 99611).
- If the fan is operated by a speed controller the shutter must be controlled via a relay installed on site.
- Ready for installation with a lead (5 x 1,5 mm², approx. 1,5 m long). Connection according to wiring diagram no. 39 and 73.
- Water proof motor housing, protected to IP 55, made of polymer; includes maintenance free gear box motor 230 V~, 50 Hz.
- Made of light grey polymer, rattle free operation and tight closing.

Pressure loss

When selecting a fan the pressure drop of all components of the system like ducting and shutters must be considered. The diagram shows the resistance subject to air velocity.



Model ranges

Automatic Type	Ref. no.	Manually adjustable Type	Ref. no.	Electric control Type	Ref. no.	Fits fan nominal size mm	Dimensions				
							A mm	B mm	C mm	D mm	E mm
VK 160 ¹⁾	0892	—	—	1)	1)	150/160	190	190	25	131	131
VK 200	0758	RVK 200	0766	EVK 200	0774	180/200	240	240	28	193	167
VK 250	0759	RVK 250	0767	EVK 250	0775	225/250	290	290	28	243	217
VK 315	0760	RVK 315	0768	EVK 315	0776	280/315	340	340	28	293	267
VK 355	0761	RVK 355	0769	EVK 355	0777	355	390	390	28	343	317
VK 400	0762	RVK 400	0770	EVK 400	0778	400	440	440	28	393	367
VK 450	0763	RVK 450	0771	EVK 450	0779	450	490	490	30	443	417
VK 500	0764	RVK 500	0772	EVK 500	0780	500	540	540	30	493	467
VK 630	0836			EVK 630	0781	560/630	686	690	40	520	630
VK 710	0838			EVK 710	0784	710	785	785	40	771	685
VK 800	0839					800	876	885	40	862	785
VK 900	0841					900	1026	985	40	1012	885

Larger sizes are available on request, also see custom models.

¹⁾ For specification, design and dimensions of smaller shutters see following page.

Accessories

Adapter F allows installation of these shutters (up to nominal diameter 710) on circular ducting. For selection and specification see page 496.

VK 100, 125, 160



- **Small automatic shutters made of polymer for Ø 100, 125 and 160 mm**
Airstream operated louvers to cover exhaust air openings.
- Suitable as extract outlet of small fans, cooker hoods, tumble dryers and others.
- Made of UV-resistant and impact resistant polymer.
- Fixing via spigot or masonry plugs. Sealing foam strip included in contents.

EVK 100, 150



- **Small electric shutter**
To cover intake and exhaust air openings in all types of rooms.
- Attractive design blends into any decor. The view into the duct is obscured even when the shutter is open.
- Maximum air flow velocity approx. 6 m/s.
- Noise free operation with a 60 second opening delay.
- Control via on/off switch, wired in parallel by preference.

VK rectangular duct



- **Rectangular shutter**
In landscape format, to cover exhaust air openings in external walls.
- Dimensions fit Helios rectangular fan range.
- Automatic operation.
- All parts made of high quality, light grey polymer.
- Fixing via dowels.
- Maximum air flow velocity = 10 m/s.

Custom sizes



- **Custom sizes**
The shutter ranges
 - automatic (airstream operated)
 - manually adjustable
 - electrical control
 are available in project specific custom sizes.
- The dimensions can be varied within steps of 50 mm. Any rectangular portrait, landscape or square dimensions are available. The shutters are manufactured to order and are non-exchangeable or returnable. Therefore the dimensions must be defined accurately.
- For more stability, an additional vertical centre mullion is fitted over 40 cm louver length and a horizontal centre mullion over 100 cm louver length. Large shutters are supplied in segments for stability and transport reasons and have to be assembled on frames.
- The maximum air flow velocity for standard models is 10 m/s.
- All parts (frames, shutters and their stocks) made of light grey, high quality, UV resistant polymer.

Model range

Type	Ref. no.	Colour	Spigot Ø mm	Qty
VK 100	0757	white	100	1
VK 100 B	0765	brown	100	1
VK 100 VE*	0885	white	100	24
VK 125	0857	white	125	1
VK 160	0892	white	150/160	1

* low-cost bulk pack

Model range

Type	Ref. no.	Spigot Ø mm	Weight kg
EVK 100	0453	100	0,26
EVK 150	0251	150	0,44

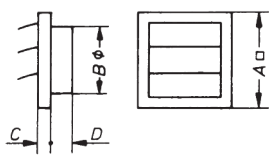
Break-proof polymer, alpine white.
Wiring diagram no. 479
Voltage/Frequency 230 V~, 50/60 Hz
Power consumption approx. 6 W

Note

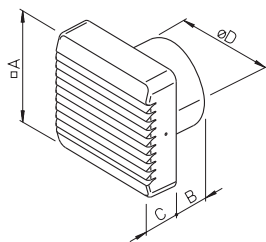
Operating temp. EVK 100, EVK 150: 0 to +40 °C, for all other polymer backdraught shutters: -30 to +60 °C.

Model range

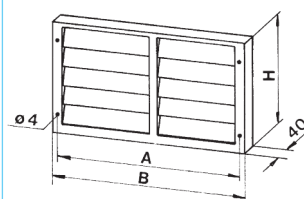
Type	Ref. no.	Duct nominal size cm
VK 30/15	0735	30 x 15
VK 40/20	0874	40 x 20
VK 50/25	0875	50 x 25
VK 50/30	0876	50 x 30
VK 60/30	0877	60 x 30
VK 60/35	0878	60 x 35
VK 70/40	0879	70 x 40
VK 80/50	0880	80 x 50
VK 100/50	0881	100 x 50



Dim in mm – see table



Dim in mm – see table



Dim in mm – see table

Type	A	Dim. in mm			D
		Ø B	C		
VK 100	140	98	15	28	
VK 125	160	120-125	20	30	
VK 160	190	145	25	35	

Type	A	Dim. in mm			Ø D
		B	C		
EVK 100	140	58	38,5	97	
EVK 150	190	62	43	145	

Type	A	B	H	Dim. in mm	
				Weight kg	
VK 30/15	381	395	235	1.0	
VK 40/20	473	485	285	1.3	
VK 50/25	574	585	335	2.0	
VK 50/30	574	585	385	2.2	
VK 60/30	674	685	385	2.4	
VK 60/35	674	685	435	2.6	
VK 70/40	774	785	485	3.1	
VK 80/50	864	876	585	4.4	
VK 100/50	1162	1176	585	5.5	

RVE



Air tight in-duct backdraught shutter RVE

In-duct mounted, ideal for retro-fit installation.

- Polymer ring with surrounding double lip seal and tight adjacent rubber membrane, which opens at low and high pressure.
- Supplied with two membranes for air flow velocity up to approx. 3.5 m/s or 6 m/s.
- At horizontal air flow the rotation axis must be in vertical position.
- Temperature range -20 to +90 °C.

RSK



Backdraught shutters RSK

Automatic shutters for in-duct installation.

- Prevents back draughts (extract of warm air or intake of cold air) when the fan is switched off.
- Automatic operation at low and high pressure (rotatable mounting position) through spring blades. At horizontal air flow the rotation axis must be in vertical position. If installed vertically it only operates with rising air flow. To cover further requests and severe conditions use RVS or RVM.

RVS



Automatic backdraught shutter with spring release

For all horizontal ducting and vertical with the air flow upwards i.e. blades opening upwards. Blades open in air flow direction automatically by the airflow (fan operation).

The spring mechanism is outside the air flow. Closing force, fan power and installation position can be adjusted. Blades and casing made of galvanised steel, at dia. 225 – 560 mm blades are made of aluminium. Flanged on both ends. Fixing holes DIN 24155, Pt. 2. Ambient temperature -30 to +100 °C

RVM



Motorised backdraught shutter¹⁾

As RVS, but with built-on spring release motor (outside the air flow), can be installed horizontally and vertically in any direction. Electrical control wired in parallel with the fan; for installation supplied with a 0.9 m long lead, closed when currentless.

Ambient temperature -30 to +60 °C
Protection to IP 54
Voltage/Frequency 230 V AC, 50/60 Hz
Power consumption - to Ø 560 14 W
- from Ø 630 6,5 W
Opening time of flaps, approx. 75 sec.
Wiring diagram no. 380.1

Type	Ref. no.	Dim. in mm	Wgt. kg
Ø D1	Ø D2	L	
RVE 80	2584	75 83	20 0,1
RVE 100	2587	95 103	20 0,1
RVE 125	2588	120 128	20 0,1
RVE 160	2589	155 163	20 0,2
RVE 200	2618	195 203	20 0,2

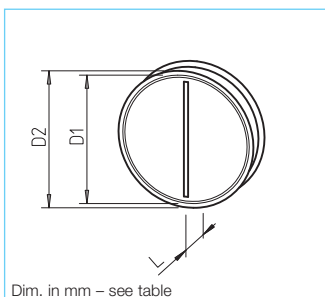
Type	Ref. no.	Dim. in mm	Wgt. kg
Ø D	L	S	
RSKK 100*	5106	97 57	2,0 0,1
RSKK 125*	5107	121 57	2,0 0,1
RSK 150	5073	149 100	1,25 0,5
RSK 160	5669	159 100	1,25 0,5
RSK 180	5662	170 70	0,5 0,3
RSK 200	5074	199 140	1,25 1,0
RSK 250	5673	248,5 140	1,25 1,2
RSK 315	5674	312,5 140	1,25 1,5
RSK 355	5650	352 160	0,75 1,3
RSK 400	5651	397 160	0,75 1,4

* made of polymer (temp. max. +70 °C).
Remaining models made of galvanised steel, flaps made of aluminium and springs made of stainless steel.

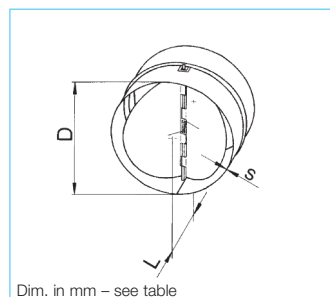
Automatic		Motorised ¹⁾		Dim. in mm						Weight
Type	Ref. no.	Type	Ref. no.	Ø D i.L.	A	B	C	L	Ø LK	kg
RVS 225	2591	RVM 225	2575	225	–	95	130	300	259	3,3
RVS 250	2592	RVM 250	2576	250	–	95	130	300	286	3,7
RVS 280	2593	RVM 280	2577	280	–	95	130	300	322	4,2
RVS 315	2594	RVM 315	2578	315	–	95	130	300	356	4,6
RVS 355	2595	RVM 355	2579	355	–	95	130	300	395	5,3
RVS 400	2596	RVM 400	2580	400	–	95	130	330	438	7,5
RVS 450	2597	RVM 450	2581	454	15	95	130	330	487	10,7
RVS 500	2598	RVM 500	2582	504	40	95	130	330	541	12,0
RVS 560	2599	RVM 560	2583	560	65	95	130	330	605	16,4
RVS 630	2600	RVM 630	2609	630	115	150	225	400	674	21,0
RVS 710	2601	RVM 710	2610	710	155	150	225	400	751	28,0
RVS 800	2602	RVM 800	2614	800	200	150	225	420	837	37,8
RVS 900	2603	RVM 900	2615	900	250	150	225	420	934	42,3
RVS 1000	2604	RVM 1000*	2616	1000	300	150	225	420	1043	47,8

¹⁾ Typen RVM not suitable for explosion proof areas.

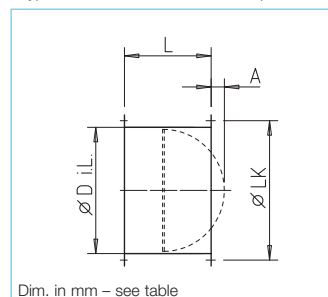
* RVM 1000 only for horizontal through flow.



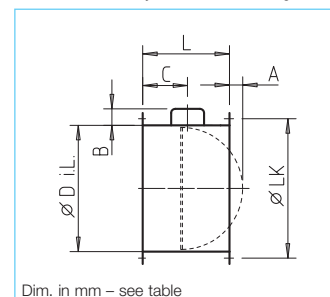
Dim. in mm – see table



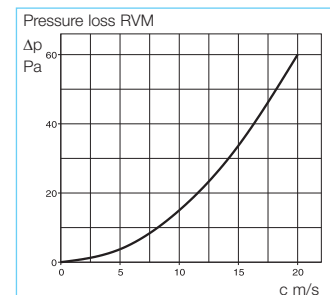
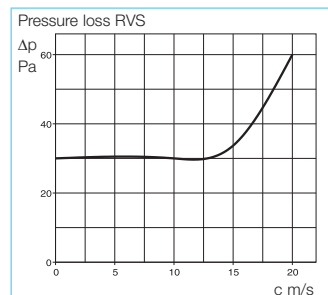
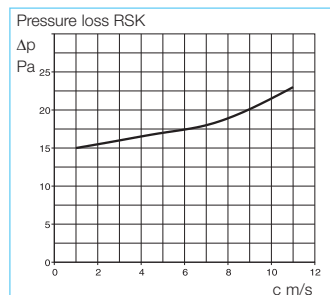
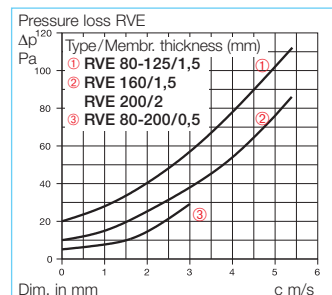
Dim. in mm – see table



Dim. in mm – see table



Dim. in mm – see table



RAG



■ Rain repellent grille RAG

To cover intake and exhaust air openings in facades, made of polymer.

- Attractive, corrosion and weather resistant finish in light grey colour prevents rain, snow and insects from entering the system.
- Frame with louvers made of UVresistant, impact resistant polymer. Mesh guard made of galvanised steel and coated with polymer. Mesh size 8 mm.
- Simple (also available as surface mounted or integrated in cladding) installation via dowels (mounting materials included). With adapter F (accessory) also suitable for circular ducting.

WSG



■ Weather proof grille WSG

In square or rectangular landscape format; to cover intake or exhaust air openings in facades.

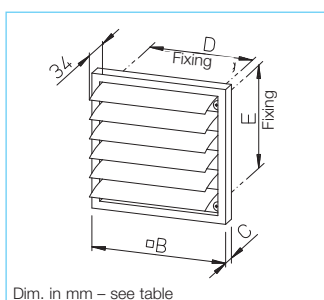
- Attractive finish protecting against rain, snow and vermin from entering the ducting. Suitable for square, rectangular and circular ducts.
- Solid construction made of aluminium extrusion profile, natural colour, anodised.
- Installation: Flush mounted or integrated in cladding.
- Fixed louvers and mesh guard behind made of galvanised steel. Mesh size: 16 mm.

■ The rectangular models

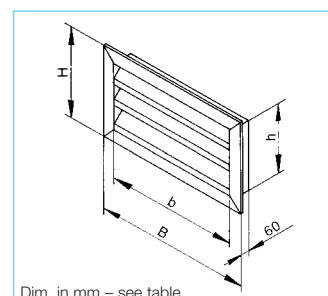
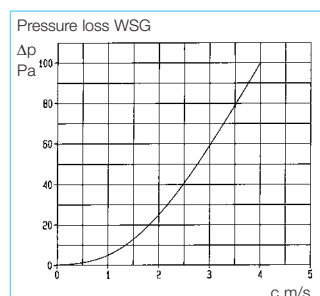
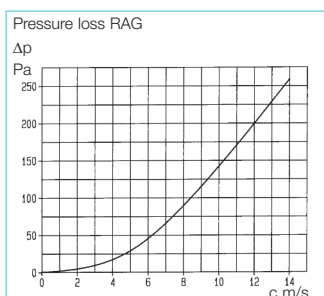
fit the Helios rectangular fan range and therefore can be fitted to rectangular ducting.

Type	Ref. no.	to fan nominal size mm	Dimensions in mm				Weight kg
			□ B	C	D	E	
RAG 200	0750	180/200	240	28	193	167	0,35
RAG 250	0751	225/250	290	28	243	217	0,45
RAG 315	0752	280/315	340	28	293	267	0,60
RAG 355	0753	355	390	28	343	317	0,75
RAG 400	0754	400	440	28	393	367	1,00
RAG 450	0755	450	490	30	443	417	1,35
RAG 500	0756	500	540	30	493	467	1,60

Type	Ref. no.	Fits to fan nom. size	spigot in mm	Dim. in mm		Weight kg
				□ b	□ B	
WSG 200	0117	180/200	□ 200	195	271	0,8
WSG 250	0118	225/250	□ 250	245	321	1,0
WSG 315	0119	280/315	□ 315	310	386	1,5
WSG 355	0120	355	□ 355	350	426	2,0
WSG 400	0121	400	□ 400	395	471	2,5
WSG 450	0122	450	□ 450	445	521	3,0
WSG 500	0123	500	□ 500	495	571	3,5
WSG 630	0124	600/630	□ 630	625	701	4,0
WSG 710	0125	710	□ 710	705	781	4,5



Type	Ref. no.	Fits to nominal size duct in mm	b	B	h	H	Weight kg
WSG 30/15	0108	300 x 150	296	370	146	220	0,9
WSG 40/20	0109	400 x 200	396	470	196	270	1,2
WSG 50/25	0110	500 x 250	496	570	246	320	1,9
WSG 50/30	0111	500 x 300	496	570	296	370	2,0
WSG 60/30	0112	600 x 300	596	670	296	370	2,2
WSG 60/35	0113	600 x 350	596	670	346	420	2,4
WSG 70/40	0114	700 x 400	696	770	396	470	2,9
WSG 80/50	0115	800 x 500	796	870	496	570	4,0
WSG 100/50	0116	1000 x 500	996	1070	496	570	5,0



LGR



■ **Grilles LGR**

Rectangular with adjustable louvres.

- To cover rectangular intake or exhaust air openings especially for flat ducting.
- Centrally adjustable louvres allow the adjustment of air flow volume.
- Corrosion resistant design made of galvanised steel in a white epoxy finish.
- Includes mounting frame which allows universal installation. When installing in thin walled ducts it must be fixed with 4 screws.

QVK



■ **Grilles QVK**

Square, with adjustable louvres.

- To cover intake or exhaust air openings with a square cross section.
- Centrally adjustable louvres allow the adjustment of air flow volume.
- Corrosion resistant design made of galvanised steel in a white epoxy finish.
- Includes mounting frame. Thereby suitable for flush mounted wall installation and without frame suitable for fixing via screws.

G 200 – 500



■ **Grilles G fixed**

To cover vents on walls and ceilings.

- Made of high quality, UV-resistant and impact resistant polymer.
- Compact flat design. Simple fixing via mounting materials which are included.
- Some models obscure view into ducting when installed.

■ **Model range**

Type	Ref. no.	Colour	Fits to fan size mm
G 200	0255	white	200
G 250	0256	white	250/280
G 315	0798	white	315
G 355	0799	white	355
G 400	0800	white	400
G 500	0801	light grey	450/500

G 100, 160



■ **Grilles G fixed**

To cover and insert in circular vent openings.

- Made of high quality and impact resistant polymer. Corrosion resistant and therefore suitable for indoor and outdoor applications.
- Simple installation using rear connecting sockets with conical shape. Foam strip for air tight connection is included. Fixed installation is ensured via four corner holes. Egg grille inserts can easily be removed for cleaning even when fixed.

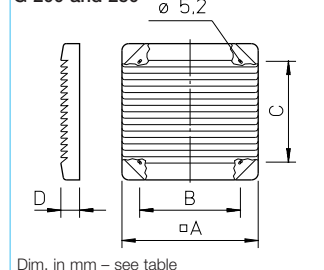
■ **Model range**

Type	Ref. no.	Fits nominal duct openings in mm
LGR 250/150	0927	228 x 128
LGR 450/150	0928	428 x 128
LGR 350/230	0929	328 x 208
LGR 450/230	0930	428 x 208

■ **Model range**

Type	Ref. no.	Fits up to fan size nominal size mm
QVK 200	0791	200
QVK 250	0792	250
QVK 315	0793	315
QVK 355	0794	355
QVK 400	0795	400

G 200 and 250

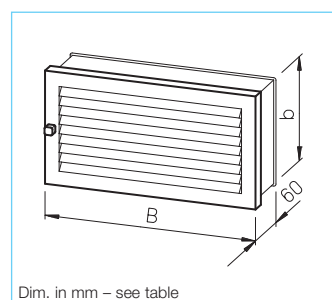


Dim. in mm – see table

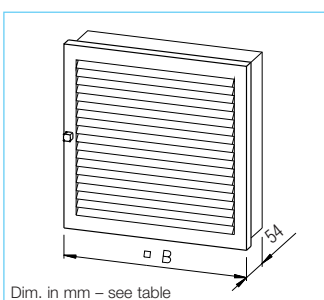
■ **Model range**

Type	Ref. no.	Nom. size in mm	Colour	Qty
G 100	0796	90/100	white	1
G 100 B	0782	90/100	brown	1
G 100 VE*	0828	90/100	white	12
G 160	0893	150/160	white	1

* low cost quantity pack

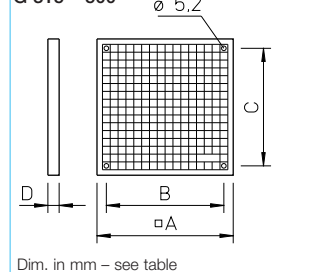


Dim. in mm – see table

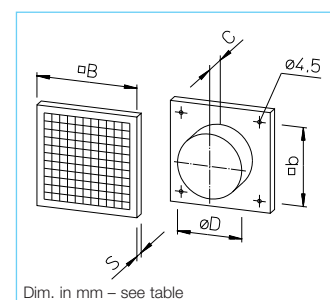


Dim. in mm – see table

G 315 – 500



Dim. in mm – see table



Dim. in mm – see table

Type	Free cross section cm ²	Dim. in mm B b	Wgt. kg
LGR 250/150	160	250 150	0,6
LGR 450/150	320	450 150	1,0
LGR 350/230	430	350 230	1,2
LGR 450/230	575	450 230	1,5

Type	Free cross section cm ²	Dim. in mm B	Weight kg
QVK 200	320	□ 250	0,8
QVK 250	490	□ 300	1,0
QVK 315	680	□ 350	1,3
QVK 355	920	□ 400	1,8
QVK 400	1190	□ 450	3,2

Type	Dim. in mm A B C D Ø	Wgt. kg
G 200	287 210 210 39 5,2	0,7
G 250	337 240 240 39 5,2	0,9
G 315	340 300 300 22 5,2	0,4
G 355	390 350 350 22 5,2	0,4
G 400	440 400 400 22 5,2	0,6
G 500	540 490 465 30 5,2	1,8

Type	Dim. in mm b B C S Ø D	Wgt. kg
G 100	90 140 28 15 100	0,8
G 160	130 190 40 24 150	0,3

LG



■ Grilles LG

With pitched louvres to cover circular vent openings of Ø 80, 100, 125 and 160 mm.

- High quality and attractively designed cover.
- Pitched louvres obscure the view into ducting when installed.
- Made of corrosion resistant die casting aluminium, powder coated. Colour: White. LGK 80 made of high quality and impact resistant polymer, Colour: White.
- Simple installation in ducting using rear spigots fixing springs and sealing tape.

LTG



■ Door grilles LTG

Fixed air transfer grilles for installation into door leaves.

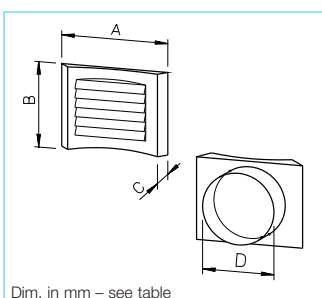
- Attractive and unobtrusive design, made of high quality and impact resistant polymer in light grey or brown.
- With wide surroundings and pitched louvres to obscure view. Only 3 mm visible thickness.
- Two telescopic parts. Installation: One element of the grille to be pushed in from either side of the door. Pulled together and tightened by the fixing screws.

■ Model range

Type	Ref. no.	Weight in grams
LGK 80*	0259	120
LGM 100	0254	300
LGM 125	0258	450
LGM 160	0261	750

* made of polymer

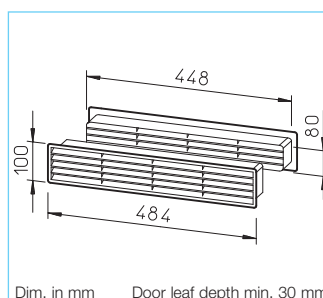
Type	Dim. in mm			
	A	B	C	D
LGK 80	135	105	14	80
LGM 100	155	127	16	95
LGM 125	195	150	25	120
LGM 160	252	190	25	155



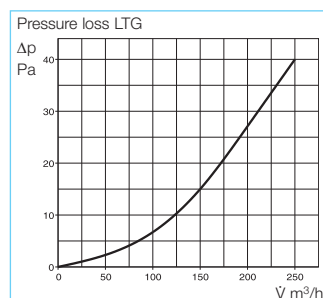
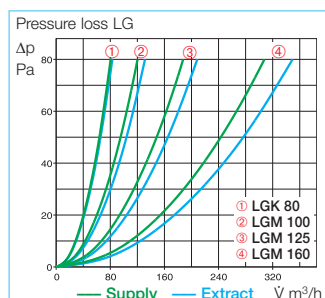
Dim. in mm – see table

■ Model range

Type	Ref. no.	Colour
LTGW	0246	white
LTGB	0247	brown

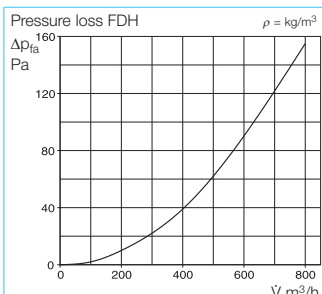
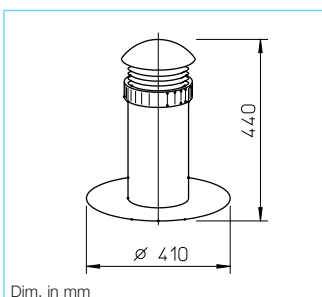


Dim. in mm Door leaf depth min. 30 mm



Roof appliances

FDH



Type FDH

Ref. no. 1477

Flat roof outlet

For connection of vent openings, up to 160 mm diameter, via the roof. Made of weather resistant polymer with a wide frame for fixing. Cold and heat resistant up to +200 °C. Cowl can be removed by insertion of a supplied ladder strip or insulation material (on site) to prevent the occurrence of condensation.

Roof outlet DH with roof pantiles FDP, UDP and connector STV

Roof outlet DH with duct



Connector STV

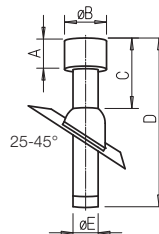


Pitched roof pantile UDP

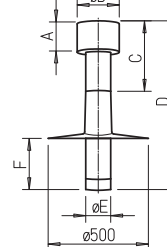


Flat roof pantile FDP

DH+UDP



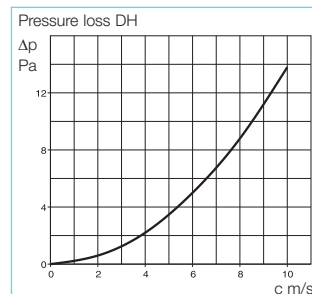
DH+FDP



Roof outlet DH

The ideal solution for ventilation system, without static pressure drop. Made of weather resistant polypropylene, removable exhaust outlet with protection against driving rain. Connection with ducting by means of the connector STV (accessory), which obstructs the escape of condensation at the juncture. For the Installation of the roof outlet, the following roof pantiles should be used:

- **Roof pantile UDP**, fits almost to every brick model, in black or brick-red. For roofs with inclinations of 25–45°.
- **Flat roof pantile FDP** made of aluminium for flat roofs.



■ Model range: Outlet, pantile, connector to be ordered separately.

DN mm	Roof outlet*		Roof pantile*, lead		Roof pantile for flat roof, alu.		Connector	
Mains	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
100	DH 100 R	2014	UDP 100 R	2020	FDP 100	2024	STV 100	2026
	DH 100 S	2015	UDP 100 S	2021				
125	DH 125 R	2016	UDP 125 R	2020	FDP 125	2013	STV 125	2027
	DH 125 S	2017	UDP 125 S	2021				
160	DH 160 S	2019	UDP 160 S	2023	FDP 160	2025	STV 160	2028

* R = Brick-red, S = Black

■ Dimensions: Roof outlet DH with roof pantile UDP or FDP

DN mm	Dimensions in mm					
Mains	A	Ø B	C	D	Ø E	F
100	120	170	320	785	100	225
125	140	210	335	825	125	255
160	180	265	365	1113	160	345

Roof and wall appliances

DDF



SDH



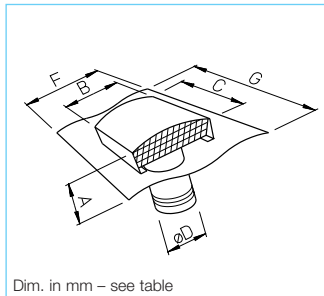
TMK



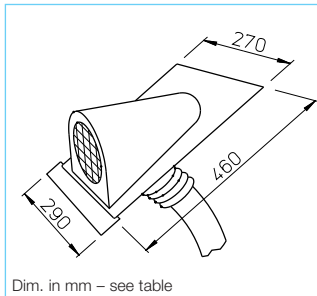
Universal roof appliances

For air inlet/outlet or for connection to ducting of Ø 125 – 400 mm. Cowl brick-red or slate grey as optional.

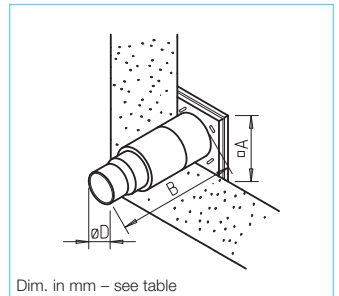
A large leaded sheet allows adaptation to all tile profiles on pitched roofs. Also suitable for flat roofs. Carrier plate for fixing. All remaining parts made of galvanised steel.



Dim. in mm – see table

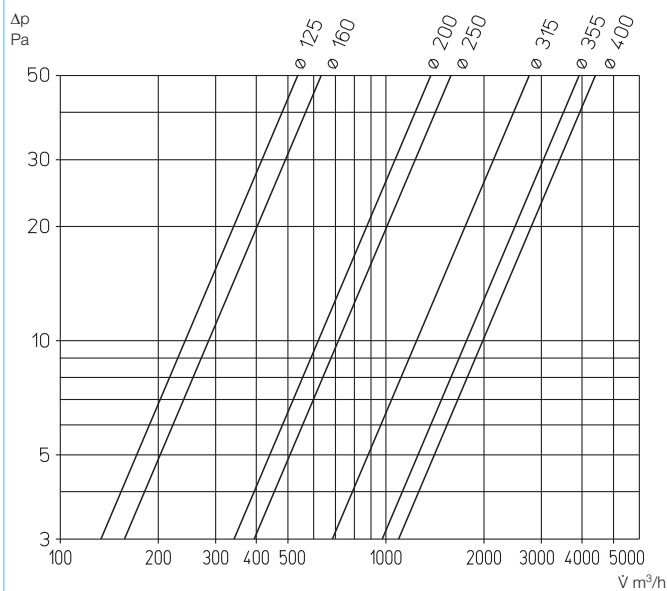


Dim. in mm – see table



Dim. in mm – see table

Pressure loss DDF at extract air



Type SDH

Ref. no. 1476

Pitched roof outlet

Universal design, suitable for most tile profiles. The large leaded sheet allows adaptation to different tile profiles. Cowl and mounting plate made of galvanised steel. Flexible polymer tube with stepped spigot for connection of all duct diameters from 70 – 115 mm. Duct fixing via supplied hose clamp.

Telescopic wall sleeve

For wall applications of supply and extract air ducting. Two telescopic polymer sleeves can be adapted to suit the wall thickness with air stream operated outdoor shutter or grille. Internal spigot suitable for connection of ducting. TMK 125/150 with stepped spigot in Ø 125, 150 and 160 mm. TMK 100 for duct Ø 100 mm.

Model range and dimensions

Type	TMK 100	TMK 125/150
Ref. no.	0844	0845
Dim. A mm	140 □	190 □
B max.	500	500
Ø D	100	125/150/160

Model range and dimensions DDF

Type ¹⁾	Ref. no.	Type ²⁾	Ref. no.	Dimensions in mm						Weight kg
				A	B	C	Ø D	F	G	
DDF 125	1964	DDF 125 G	1848	124	200	328	125	500	400	4
DDF 160	1965	DDF 160 G	1849	135	248	396	160	500	400	4
DDF 200	1966	DDF 200 G	1850	185	333	495	200	600	600	8
DDF 250	1967	DDF 250 G	1851	185	333	495	250	600	600	8
DDF 315	1968	DDF 315 G	1852	197	420	666	315	600	600	9
DDF 355	1969	DDF 355 G	1853	350	550	900	355	900	750	17
DDF 400	1970	DDF 400 G	1854	350	550	900	400	900	750	17

¹⁾ Outlet brick-red painted (RAL 8012)

²⁾ Outlet slate grey painted (RAL 7024)

TS



T-pieces

made of galvanised steel.

Type	Ref. no.	Nominal Ø mm
TS 100	1479	100
TS 125	5720	125
TS 160	5805	160

RVB



Duct connector

made of galvanised steel.

Type	Ref. no.	Nominal Ø mm
RVB 80	5993	80
RVB 100	5994	100
RVB 125	5995	125
RVB 160	5987	160
RVB 200	5997	200
RVB 250	5998	250
RVB 315	5999	315
RVB 355	5991	355
RVB 400	5992	400

RZ



Reducers

made of galvanised steel or polymer.*

Type	Ref. no.	Nominal Ø mm	reduced Ø mm
RZ 100/80*	5223	100	80
RZ 125/100*	5222	125	100
RZ 160/125	5729	160	125
RZ 160/150*	7684	160	150
RZ 200/160	5710	200	160

SCH



Hose clamps

A steel band with a snap on tension lock. Supplied in quantities of 10 pieces.

Type	Ref. no.	Nominal Ø mm
SCH 80/100	5722	80 – 115
SCH 125/160	5723	115 – 165
SCH 200	5724	165 – 215
SCH 250	5725	215 – 265
SCH 315/355	5727	265 – 375
SCH 400	5728	375 – 425

Helioflex ALF



■ Flexible ducting for universal use in the most industrial, commercial and domestic applications such as general ventilation and air-conditioning technology, outlets of cooker hoods and tumble dryers etc.

■ **Special characteristics**

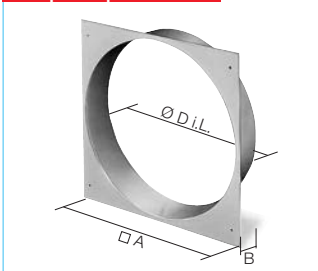
- Avoids storage, transportation and capacity issues.
- A carton of approx. 60 cm length incorporates 10 m ducting.
- Optimal in handling and finish.
- Smallest possible bending radius.
- Super elastic, can be bent repeatedly with no fatigue of material or leakage.
- Self extinguishing in the event of fire.

■ **Specification**

- Two layers of polyester foil, aluminium coated.
- Incorporated spring steel spiral for rigidity.
- No toxic fumes in event of fire.
- Temperature range from –20 to +100 °C.
- Maximum pressure: 2500 Pa
- Maximum allowed air flow speed: 20 m/s.

Type	Ref. no.	Nominal Ø mm	Inner Ø mm	Weight for 10 m	Contents per unit
ALF 80	5711	80	80	1.2	10 m
ALF 100	5712	100	102	1.4	10 m
ALF 125	5713	125	127	1.9	10 m
ALF 160	5757	160	160	2.5	10 m
ALF 200	5715	200	203	4.8	10 m
ALF 250	5716	250	254	5.3	10 m
ALF 315	5717	315	315	9.3	10 m
ALF 355	5758	355	356	9.7	10 m
ALF 400	5759	400	406	11.2	10 m

Adaption plate F



■ **Adaption plate F to square shutters for circular ducting / fans.**

- Use: By using this adaptor, the shutter ranges VK, RVK, EVK and RAG can be mounted directly to circular ducting or fan spigots (HQ/HW).
- Installation: The four holes in the corners match the fixing points of the shutters. The circular spigot fits over the fan's casing and is fixed with screws.
- Material: Made of galvanised steel.

AS



Type AS 100 Ref. no. 5224

Connection spigot
square flange plate (102 x 102 mm) with circular spigots (50 mm long), made of polymer.
To connect ducting (DN 100 mm) on flat surfaces.

■ **Model range**

Type	Ref. no.	Shutter size cm	Dim. in mm		
			□ A	B	Ø D. i. L
F 200	0804	20	240	55	210
F 250	0805	25	290	55	259
F 315	0807	30	340	55	324
F 355	0808	35	390	55	364
F 400	0809	40	440	55	409
F 450	0810	45	490	55	460
F 500	0811	50	540	55	510
F 560/630	0257	63	685	55	570
F 630 ¹⁾	0813	63	685	55	640
F 630 ²⁾	0826	63	685	55	630
F 710 ¹⁾	0824	71	785	55	717
F 710 ³⁾	0825	71	785	55	710

¹⁾ For Type HQ ²⁾ For Type HW

³⁾ For Type AVD DK

The innovative SVE elements have low cost solutions for:

- Air flow volume adjustment and optimised distribution in ducting system of centralised ventilation units.
- Sound level reduction through absorption of air flow and fan noises.

In order to increase the sound level reduction, several elements can be mounted in series, one after the other. Two elements virtually doubling the insertion loss.

Performance figures and insulation standards

The diagrams give an overview about air flow volumes and pressure levels according to the number of holes. The red lines and dB(A) values show the noise levels of elements (L_{WA}).

The sound power levels for the related frequency (noise level of SVE elements) are available as sum levels in the installation manuals and operating instructions. The values on the table give the insulation standard D_e for the corresponding frequency.

Material

- Fire retardant foam material with protection against mould.
- Meets the requirements of the emission category M1.
- No harmful toxic fumes in event of fire.
- Complies with fire class B.

Advantages

- Cost effective solution for prevention of noise transfer in ventilation ducting systems.
- Simple installation through insertion into the ducting.
- Simple adjustment thanks to pre-punched holes.
- Minimises the system costs by using low cost ducting.
- Can be used with all types of dampers, grilles and valves.
- Can be easily cleaned with a vacuum cleaner.

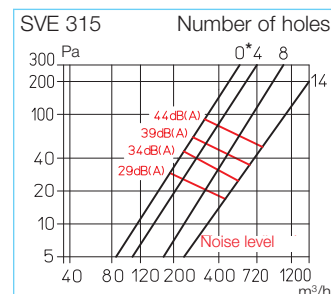
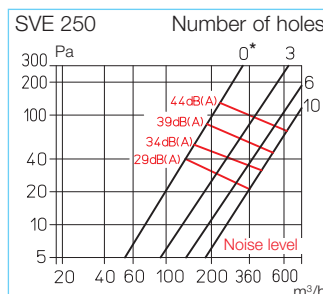
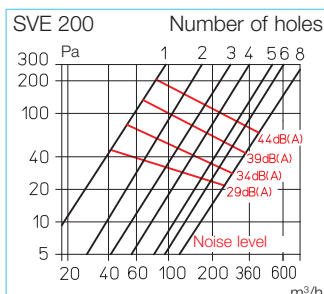
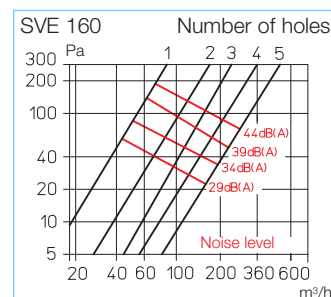
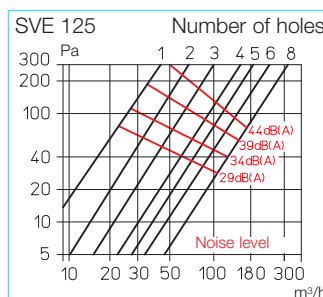
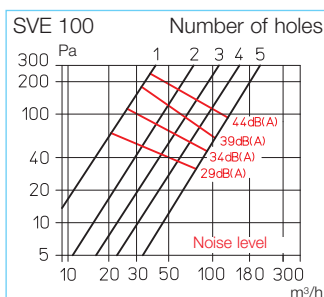
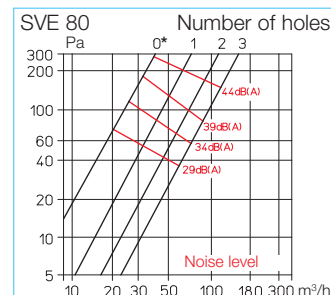
Delivery

Each element is delivered in a separate poly-bag.

Installation

SVE to be inserted into the ducting and a valve grille or exhaust element can be used as wall termination. By removing the elliptical plugs, the air flow can be adjusted to the desired volume in accordance with the diagrams above.

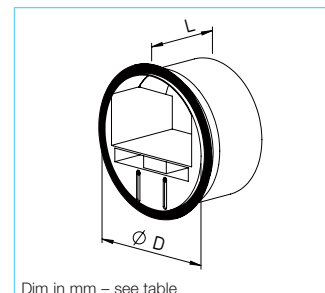
SVE



Ordering data						Insulation standard D_e dB bei Hz							
Type	Ref. no.	for DN (mm)	Thick. in mm	Weight in g	Holes	125	250	500	1000	2000	4000	8000	
SVE 80	8309	80	50	32	0*	9.0	5.0	11.5	14.5	18.0	20.0	24.0	
					1	4.5	3.5	7.5	11.5	10.5	17.5	21.0	
					3	4.5	2.5	5.0	8.0	9.5	13.0	15.5	
SVE 100	8310	100	50	60	1	7.0	4.0	9.5	12.5	16.0	17.5	22.0	
					3	3.5	2.5	5.5	8.5	8.5	14.5	19.0	
					5	2.5	1.5	3.5	6.0	6.5	12.0	16.5	
SVE 125	8311	125	50	70	2	6.0	5.0	5.0	12.0	12.5	19.0	21.0	
					5	2.0	2.5	3.0	8.5	8.0	13.5	19.0	
					8	1.5	1.5	2.5	6.0	5.0	11.0	17.5	
SVE 160	8312	160	50	140	1	7.0	4.0	9.5	12.5	16.0	17.5	22.0	
					3	3.5	2.5	5.5	8.5	8.5	14.5	19.5	
					5	2.5	1.5	3.5	6.0	6.0	12.0	16.5	
SVE 200	8313	200	50	190	2	6.5	2.5	5.5	13.0	14.0	18.0	15.5	
					5	3.0	1.5	2.5	9.5	8.5	14.0	14.5	
					8	2.0	1.0	1.5	7.0	7.0	13.0	13.5	
SVE 250	8314	250	75	480	0*	4.0	3.0	7.0	13.0	18.0	18.0	17.0	
					5	2.0	2.0	5.0	9.0	13.0	15.0	15.0	
					10	2.0	1.0	3.0	7.0	11.0	14.0	13.0	
SVE 315	8315	315	75	690	0*	5.0	3.0	6.0	12.0	15.0	16.0	18.0	
					8	3.0	2.0	3.0	8.0	12.0	13.0	15.0	
					14	1.0	1.0	2.0	7.0	8.0	10.0	13.0	

* Minimum air flow volume ensured by lateral recesses

VKH



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.

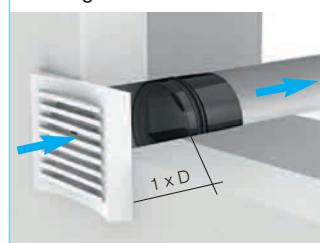
■ Installation

- Simple insertion in vertical or horizontal ducts, matching nominal duct diameter.

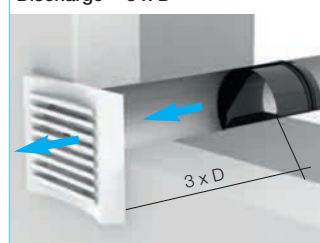
- The direction shown for the air flow must be considered.

- Perfect fitting and tightness is ensured due to textile sealing strip.

**Installation extract:
Discharge = 1 x D**



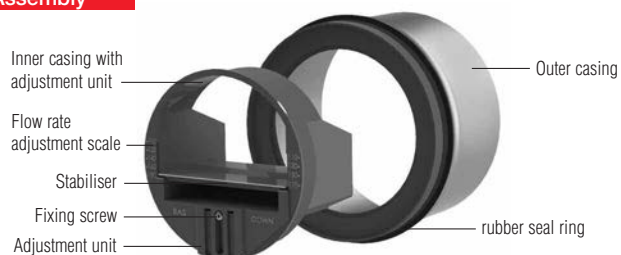
**Installation supply:
Discharge = 3 x D**



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	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

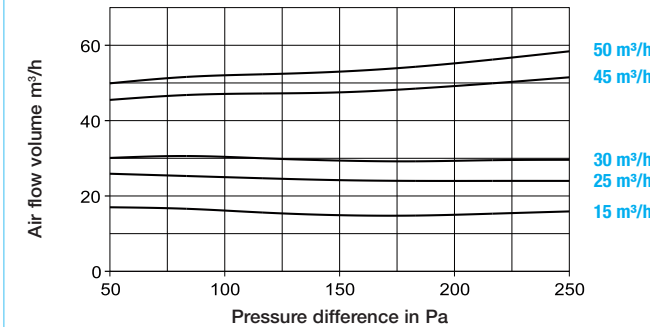


Ø 80 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

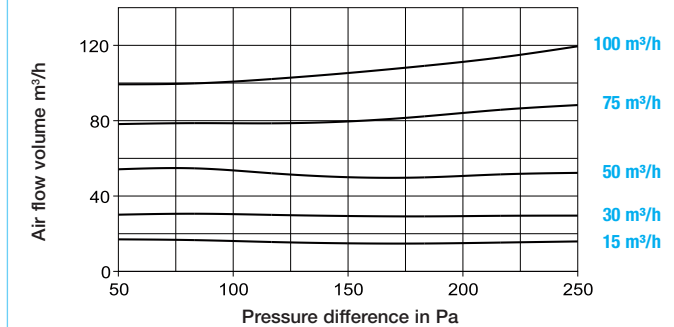


Ø 100 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

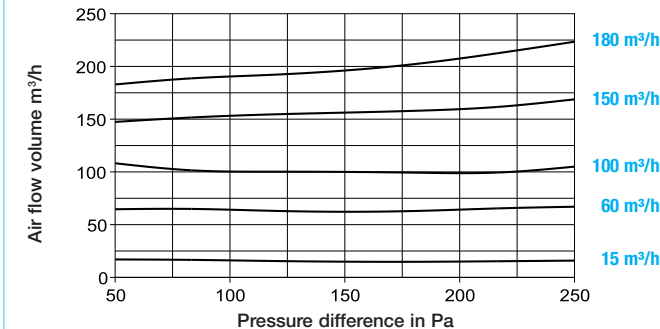


Ø 125 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

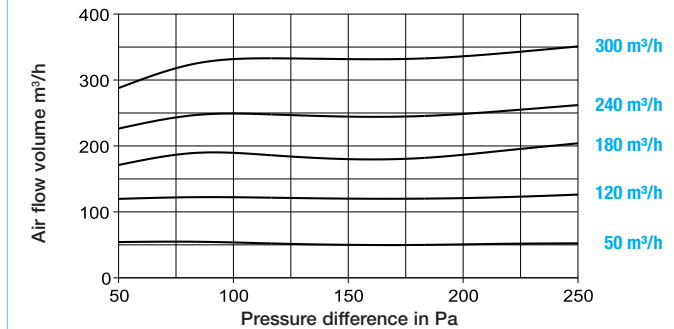


Ø 150-160 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

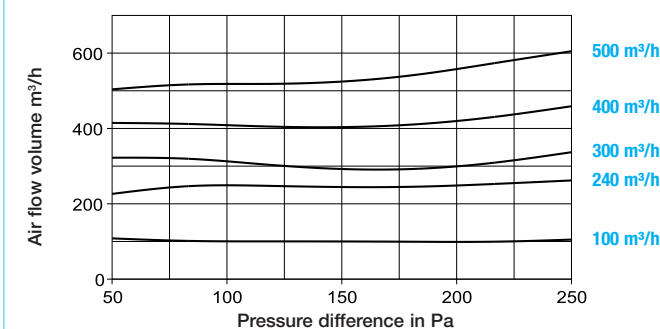


Ø 200 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

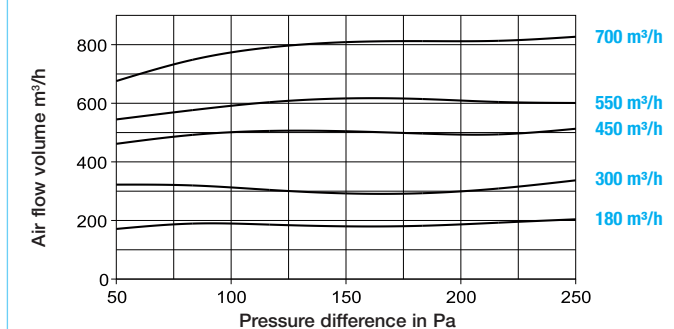


Ø 250 mm nominal duct diameter

Ref. no.	Type	Air flow volume* m³/h	Sound L _w in dB(A) at			
			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

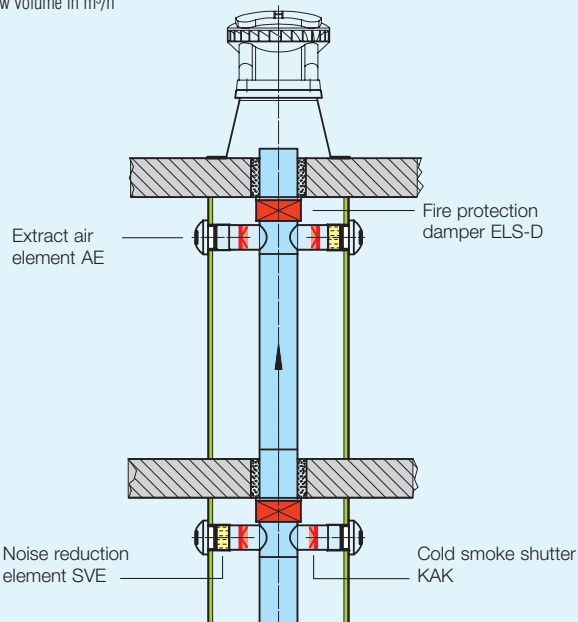


Selection

Extract air elements only optimally perform the required function when they are coordinated with the task. Use the chart below to select the correct extract element where the selection depends on volume and application. There is a choice of element designs, with constant air flow volume with and without on demand ventilation, with timer, motion or humidity controlled operation.

Bathroom 		WC 		Kitchen 	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Constant air flow volume controller, self-adjusting					
AE 45*	2031	AE 30*	2030	AE 75*	2033
Two air flow volumes (std. and demand-based ventilation), constant air flow control, self-adjusting					
AE GB 20/75*	2036	AE GB 15/30*	2035	AE GB 45/120*	2038
Two air flow volumes with electrical timer (without constant air flow volume control)					
AE GBE 30/60*	2047	AE GBE 15/30*	2044	AE GBE 45/120*	2048
Two air flow volumes with electrical timer and motion sensor, page 503					
	AE B 15/30*	2055	(without constant air flow control)		
Humidity controlled with variable, limited air flow volume, page 503					
AE Hygro 10/45*	2049				
Humidity controlled with electrically controlled on demand ventilation, page 503					
AE Hygro GBE 5/40/75*	2053			AE Hygro GBE 10/45/120*	2054
With filter and air flow volume adjustment					
AE FV 125	9478			AE FV 125	9478

* Air flow volume in m³/h



Acoustic data for extract air elements of series AE

The following sound levels are relevant for the extract air elements:
 – Sound power level for permanent air flow (L_w in dB (A))
 – Sound insulation between ducting system and ventilated room ($D_{n,e}$ in dB (A)).

This sound data is specified in the respective type table. They were measured according to the standard EN 13141. The sound insulation value can be increased by using attenuator "AESD" or "AESE" (accessories), which is to be positioned and simply inserted behind the extract air element. Cross talk attenuators are available for further noise reduction (p. 505).

Operation

Extract air elements with self adjusting constant air flow volume controllers are the ideal components for extraction in kitchens, bathrooms and toilets for central ventilation systems in houses.

Advantages

- ☐ Constant air flow volume between 40 and 160 Pa.
- ☐ No need for adjustment or balancing of the system.
- ☐ Attractive design.
- ☐ High quality construction in an aerodynamic shape with low sound levels.
- ☐ The cover and optimised height of the inlet nozzle offer an air-tight seal against the wall.
- ☐ Easy cleaning without a risk of air flow volume change.

Design

Extract air element with mounting ring, ready to install, made of white polymer to be inserted in ducts with a nominal diameter of 125 mm. A rubber seal on the mounting ring to avoid leakage. As a result, the discolouration of decor is minimised.

Function

Ensures constant air flow volume under different pressure conditions between 40 and 160 Pa.

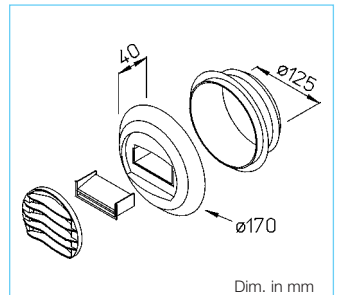
Delivery

Supplied as one element incl. mounting ring in separate poly bag.

Accessories

- ☐ Attenuator AESD to be inserted behind the element (Ref. no. 2059)
- ☐ Adapter filter element VFE 70 (Ref. no. 2552).

AE

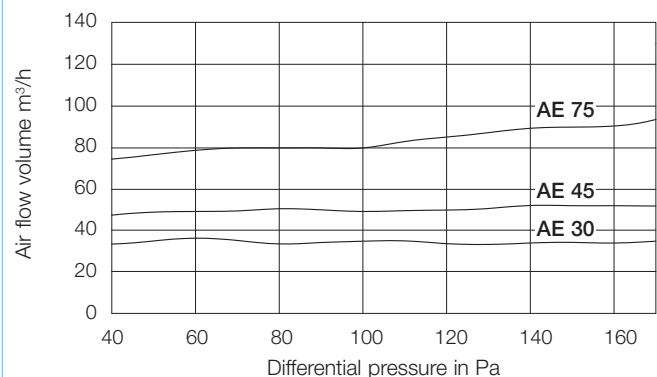


Dim. in mm

Installation

Suitable for wall and ceiling installation. The mounting ring, to be fixed via screws on duct or wall openings and the extract air element to be inserted. For an equal inlet and outlet air flow a straight duct of at least 300 mm is required.

Air flow volume performance curve AE



Ordering data		Sound power level L_w in dB (A)			Sound insulation $D_{n,e}$ in dB (A)	
		100 Pa	130 Pa	160 Pa	without AESD	with AESD
Type	Ref. no.					
AE 30*	2030	30	33	36	60	64 ¹⁾
AE 45*	2031	33	34	37	56	63 ¹⁾
AE 75*	2033	35	36	39	57	64 ¹⁾

¹⁾ Equipped with attenuator AESD (accessories) * Air flow volume in m³/h

■ Operation

Extract air elements for two air flow volumes (basic and boost) with self adjusting constant air flow volume controller are the ideal components for extraction in kitchens, bathrooms and toilets for central ventilation systems in houses.

■ Advantages

- Two air flow volumes for standard and demand-based ventilation.
- Constant air flow volume between 40 and 160 Pa.
- No need for adjustment or balancing of the system.
- Attractive design.
- High quality construction in an aerodynamic shape with low sound levels.
- The cover and optimised height of the inlet nozzle offer an air-tight seal against the wall.
- Easy cleaning without a risk of air flow volume change.

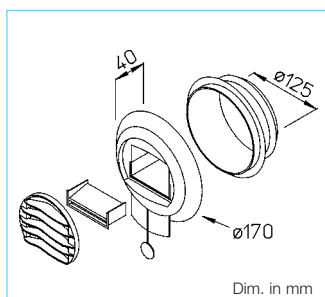
■ Function AE GB

The self adjusting air flow volume limiter keeps the adjusted nominal air flow volume (between 40 and 160 Pa) constant (see performance curve). Two control steps allow for standard and demand-based ventilation. On/off switching of high air flow volumes manually via pull cord.

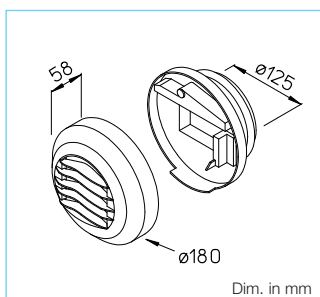
■ Design (AE GB, AE GBE)

Extract air element with mounting ring, ready to install, made of white polymer to be inserted in ducts with nominal diameter of 125 mm. The rubber seal on the mounting ring avoids leakage of air. As a result, dis-colouration of the decor is minimised.

AE GB



AE GBE



■ Operation

Extract air device with electric timer for two air flow volumes (standard and demand-based ventilation). Ideal components for extraction in kitchens, bathrooms and toilets for central ventilation systems in houses.

■ Advantages

- Two air flow volumes for standard and demand-based ventilation e.g. via on-site switch.
- No need for adjustment or balancing of the system.
- Attractive design.
- High quality construction in an aerodynamic shape with low sound levels.
- The cover and optimised height of the inlet nozzle offer an air-tight seal against the wall.
- Easy cleaning without a risk of air flow volume change.

■ Function AE GBE

The basic air flow is increased to the higher level of air flow via a switch on-site (by others). After 30 minutes – regardless of the position of the switch on-site – it automatically returns to “standard ventilation”. 230 V, AC 0.5/3 W, IP X1

■ Installation (AE GB, AE GBE)

AE GB for wall, AE GBE also suitable for ceiling installation. The mounting ring, to be fixed via screws on duct or wall openings and the extract air element to be inserted. For an equal inlet and outlet air flow a straight duct of at least 300 mm is required.

■ Accessories

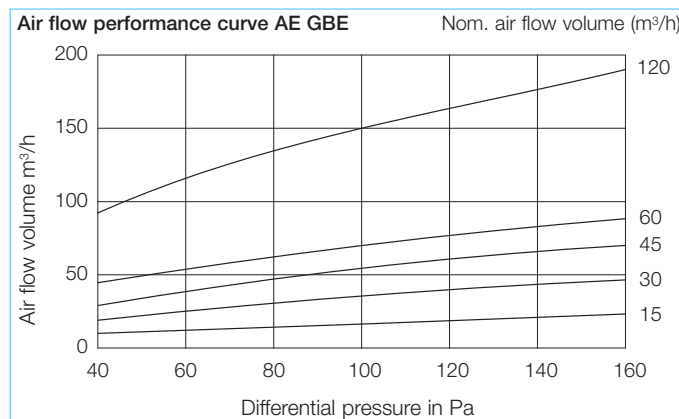
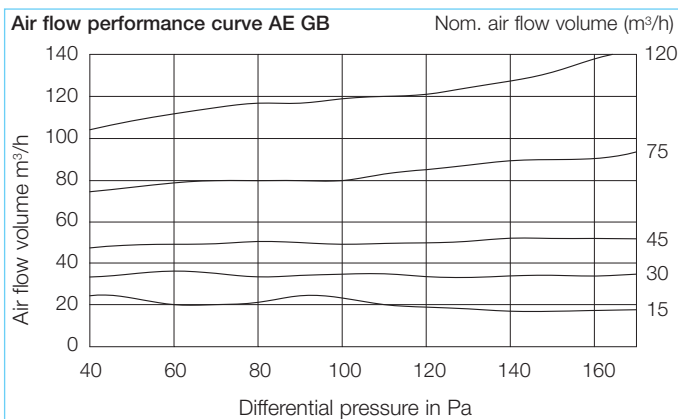
- Attenuator:
AE GB: AESD, Ref. no. 2059
AE GBE: AESE, Ref. no. 2058
- Adapter filter element
AE GBE: VFE 90, Ref. no. 2553 obstructs grease and dust deposits on extract air elements and in ducting.

■ Delivery

Supplied as one element incl. mounting ring in separate Poly-bag.

■ Upon request

Type AE FV 125 Extract air element filter and air flow volume adjustment, Ref. no. 9478



Ordering data		Sound power level ²⁾ L _w in dB (A)			Sound insulation D _{n,e} in dB (A)	
Type	Ref. no.	100 Pa	130 Pa	160 Pa	without AESD	with AESD
AE GB 15/30*	2035	27	31	34	60	64 ¹⁾
AE GB 20/75*	2036	27	30	33	57	64 ¹⁾
AE GB 45/120*	2038	33	34	37	56	63 ¹⁾

¹⁾ Equipped with attenuator AESD (accessories) ²⁾ Values are valid for standard ventilation
* Air flow volume in m³/h

Ordering data		Sound power level ²⁾ L _w in dB (A)			Sound insulation D _{n,e} in dB (A)	
Type	Ref. no.	100 Pa	130 Pa	160 Pa	without AESD	with AESD
AE GBE 15/30*	2044	30	33	36	60	64 ¹⁾
AE GBE 30/60*	2047	27	30	33	57	64 ¹⁾
AE GBE 45/120*	2048	29	32	35	57	62 ¹⁾

¹⁾ Equipped with attenuator AESE (accessories) ²⁾ Values are valid for standard ventilation

Operation

Extract air device with motion sensor and timer for two air flows (standard and demand-based ventilation). Ideal for extraction in kitchens, bathrooms and toilets for central ventilation systems in houses.

Advantages

- Two air flow volumes for standard and demand-based ventilation via integrated motion sensor.
- No need for adjustment or balancing of the system.
- Attractive design.
- High quality construction in an aerodynamic shape with low sound levels.
- The cover and optimised height of the inlet nozzle offer an air-tight seal against the wall.
- Easy cleaning without a risk of air flow volume change.

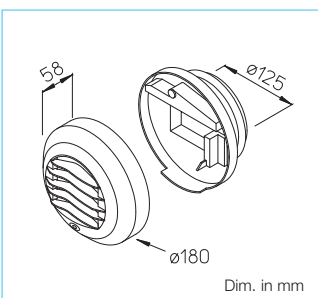
Design

Extract air element with mounting ring, ready to install, made of white polymer to be inserted in ducts with nominal diameter of 125 mm. The rubber seal on the mounting ring avoids air leakage. As a result, discolouration of the decor is minimised.

Function AE B

The basic air flow is to be increased to on demand air flow via an integrated motion sensor. After 30 minutes it automatically returns to "standard ventilation". Electrical supply through three batteries (on site, model LR 03, 1.5 V, operational life span approx. 18 months.).

AE B – with motion sensor



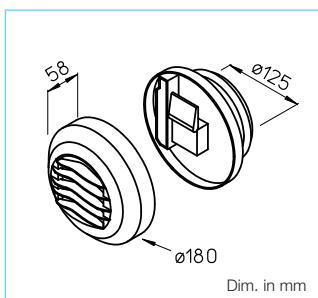
Delivery and installation

See description Type AE GB.

Accessories

- Attenuator AESE to be inserted behind the element (Ref. no. 2058).

AE Hygro – humidity controlled



Operation

The humidity controlled extract air elements allow a variable air flow volume depending on the relative humidity. They are suitable for the operation control of extract air volumes in bathroom and kitchen for ventilation systems in houses.

Advantages

- Automatically controlled air flow volume depending on the relative humidity between minimum and maximum limits.
- No need for adjustment or balancing of the system.
- Attractive design.
- High quality construction in an aerodynamic shape with low sound levels.
- The cover and optimised height of the inlet nozzle offer an air-tight seal against the wall.
- Easy cleaning without a risk of air flow volume change.

Function AE Hygro

The air flow volume is automatically controlled depending on the relative humidity between minimum and maximum limits. Achieving the defined trickle air flow at Δp of 80 Pa depending on the relative humidity. No need for electric connection.

Additional function

AE Hygro GBE

The basic air flow is increased to the higher level of air flow via a switch on-site (by others). After 30 minutes – regardless of the position of the switch on-site – it automatically returns to "standard ventilation".

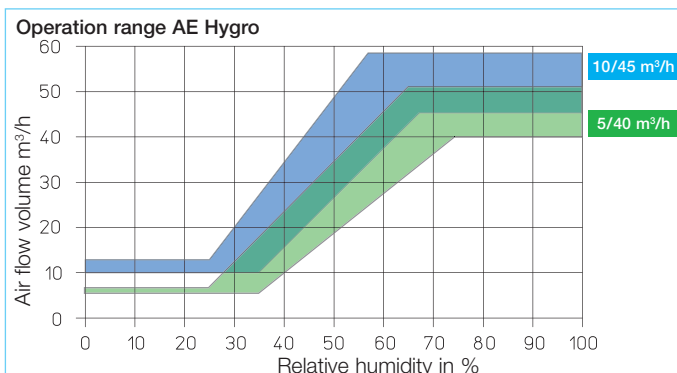
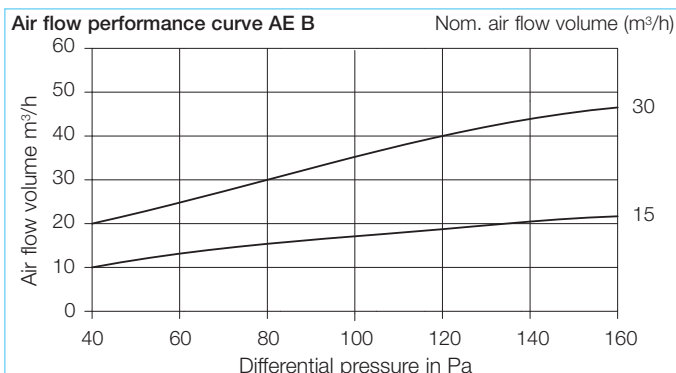
230 V, AC 0.5/3 W, IP X1 □

Design, delivery and installation

See description Type AE GB.

Accessories

- Attenuator AESE to be inserted behind the element (Ref. no. 2058).
- Adapter filter element VFE 90 for installation in front of the element (Ref. no. 2553).



Ordering data		Sound power level ²⁾			Sound insulation	
Type	Ref. no.	100 Pa	130 Pa	160 Pa	without AESE	with AESE
AE B 15/30*	2055	20	25	28	60	64 ¹⁾

¹⁾ Equipped with attenuator AESE (accessories) ²⁾ Values are valid for standard ventilation

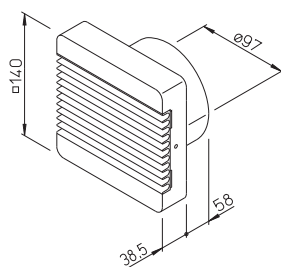
Ordering data		Sound power level ²⁾			Sound insulation	
Type	Ref. no.	100 Pa	130 Pa	160 Pa	without AESE	with AESE
AE Hygro 10/45*	2049	29	32	35	57	61 ¹⁾
AE Hygro GBE 5/40/75 ³⁾ *	2053	28	31	34	56	64 ¹⁾
AE Hygro GBE 10/45/120 ³⁾ *	2054	29	32	35	56	62 ¹⁾

¹⁾ Equipped with attenuator AESE (accessories)

²⁾ Values for standard ventilation

³⁾ For the performance curve of on demand ventilation see AE GBE left page * Air flow vol. in m³/h

ABV 100



Dim. in mm

AbluVent ABV 100

Can be used in central ventilation systems in accordance with DIN 18017-3 with variable air flow volumes. Demand-regulated ventilation, e.g. for bathrooms and toilets without windows. All elements in the system must have the same design. Made of high quality polymer, colour: White.

Function

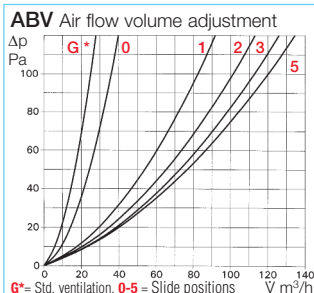
AbluVent is operated via a light switch. The louvers open when the room is in use. Standard ventilation is provided when the room is not in use, a low air flow is extracted when the louvers are closed.

Advantages

- ☐ Energy saving.
- ☐ Low cost.
- ☐ Quick installation.
- ☐ Always an optimum solution.
- ☐ Delayed closure of approx. 5 minutes.
- ☐ Stepless adjustment of air flow volume.
- ☐ Noiseless operation.
- ☐ Changeable filter to keep duct system clean.

Air flow volume

The opening pitch of the louvers can be set stepless between 15 – 80 degrees (covered, inside fascia panel).



The diagram above shows the air flow in relation to the setting and negative pressure.

Technical data – connection

The unit is operated by a standard on/off switch, ideally combined with a light switch. Supply voltage: ~220/240 V, 3 W. Double insulated, interference-free, protected to IP 44. Casing: polymer, alpine white. The thermal metal shutter works with a short delay opening (approx. 30 sec.) and closing of (approx. 5 min.).

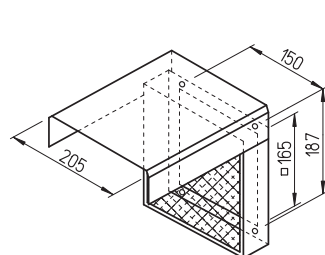
Type ABV 100 Ref. no. 0452

Accessories

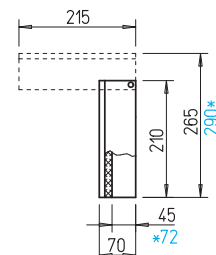
Type ELF/ABV Ref. no. 6906

Spare filter mats.
Contents = 5 pcs.

VFE



Dim. in mm



VFE 70, *VFE 90

Adapter filter element VFE

Simple and cost effective solution for filtering greasy, contaminated room air. To be installed in front of extract air elements or poppet valves.

Operation

Filter element to cover air vents and prevent dirt deposits from poppet valves, extract air elements and connected ducting. Ideal for use in the kitchen with a central ventilation system in line with DIN 18017.

Advantages

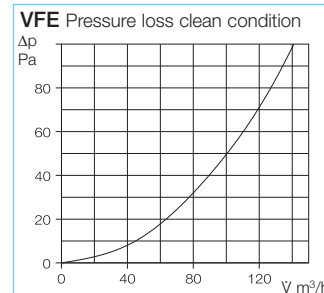
- ☐ Prevents grease and dust deposits from extract air elements or poppet valves and connected ducting.
- ☐ Filter replacement in a few easy steps.
- ☐ The permanent filter can be cleaned in a dishwasher.
- ☐ Discreet design in pleasant white.
- ☐ Simple installation via four screws.
- ☐ Hinders possible contamination areas.
- ☐ Less maintenance cost of ducting through longer cleaning periods

Casing

Robust casing made of galvanised sheet steel, white, powder coated polymer. The fascia panel is pivotable at 90° and prevents the view into the filter and contamination area.

Filter

Dimensionally stable aluminium filter fabric with 324 cm² free filter area and aluminium frame.



Installation

Suitable for wall and ceiling installation. Simply fixed with four screws. Elongated slot-fixing holes ensure easy positioning. To be fixed directly over the installed extract air element (max. outer Ø 175 mm). Fascia panel is hinged at 90°; for easy filter removal and a space between the upper edge of the casing and the ceiling (see drawing) is necessary.

Delivery

Each element including installation accessories is packed separately.

Delivery range

Type VFE 70 Ref. no. 2552

Suitable for extract air elements with max. 70 mm installation depth such as AE, MTVA, KTVA, BTVA, BTK.

Type VFE 90 Ref. no. 2553

Suitable for extract air elements with max. 90 mm installation depth such as e.g. AE GBE, AE Hygro.

Accessories

Type ELF/VFE Ref. no. 2554

Spare air filter, suitable for the types VFE 70 and VFE 90. Contents = 2 pcs.

ETS

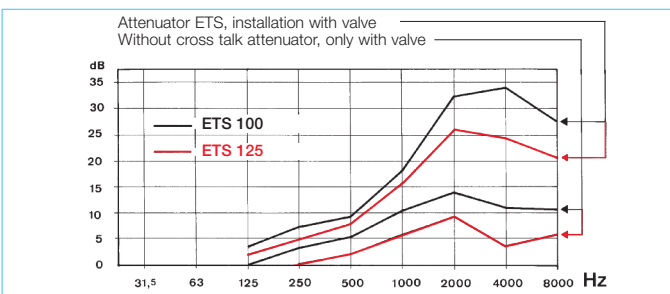
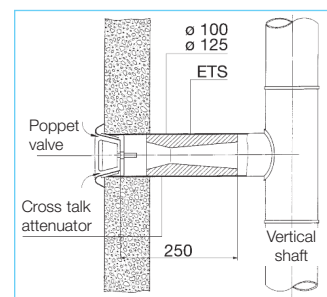
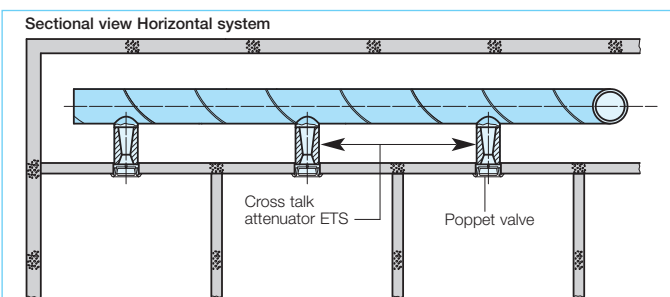


Installation example cross talk attenuator ETS (sliced)

Surprisingly simple and cost effective solution to reduce noise transmission in central ventilation systems. Easy installation direct into ducting behind the air valve.

Advantages

- Optimum solution for the prevention of noise transmission in ventilation ducting.
- Excellent attenuation figures (see diagram).
- Simple installation by inserting into duct behind the air valve.
- Virtually no additional resistance to the system, as the resistance value is below the setting value of the valve.
- Minimising system costs by using cost effective ducting.
- Can be used with any brand of valves.



Delivery range

Type ETS 100 Ref. no. 4521
Nominal duct Ø 100 mm

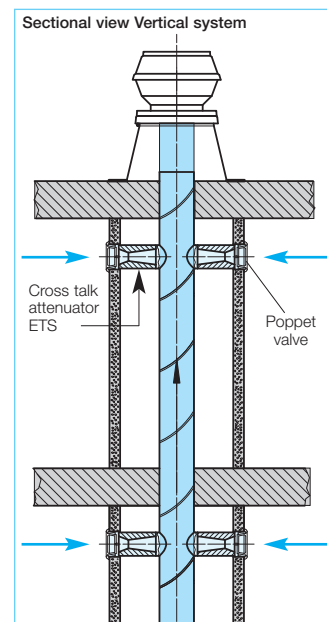
Type ETS 125 Ref. no. 4522
Nominal duct Ø 125 mm

Attenuation figure

The attenuation figure can be doubled if you have two facing rooms where both have an ETS attenuator in the ducting.

Material

Flexible polyurethane foam with improved reaction in case of fire, complies with DIN 4102, class B1, UL-94-HF 1, MVSS 302 among others.



DLVZ



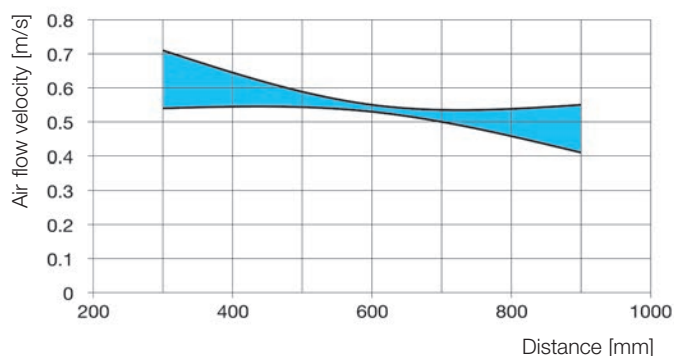
■ **Operation**

For supply air operation in all rooms without special fire protection requirements. Ideal for wall installation close to the ceiling with the air flow directed into the room.

■ **Advantages**

- Elegant, square casing made from high-quality polymer.
- Air cone evenly streams to the centre of the room.
- Includes mechanically adjustable volume controller for adjusting the ventilation system. Accessible by removing the casing, with location markers (stages 0 – 9, see diagram).
- Casing can be removed without tools for the simple cleaning of the air-exposed valve parts.
- Sealing ring on spigot for precise positioning and sealing in the ducting, prevents discolouration of the wall.
- Fixing holes in casing base for secure fixation.

DLVZ 100



■ **Design**

Casing design made from white, impact-resistant polymer.

■ **Delivery**

Valves individually packaged in polybag, including setting control (mountable if necessary) as well as installation and operating instructions.

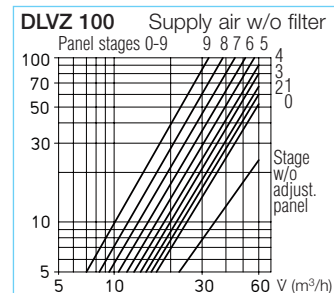
■ **Installation**

- Mount volume controller if necessary. Pre-set air volume according to diagram.
- Position casing base in ventilation duct and fix to the wall.

- When adjusting the entire system, adjust any air volume settings.
- Upper part of casing attachable without tools.

■ **Performance data**

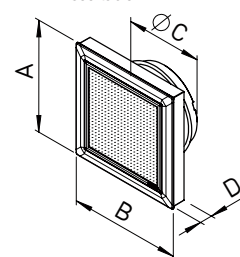
The diagrams provide an overview of the air volumes and pressure losses for different volume controller settings, as well as the flow velocity of the out-flowing air at 30 m³/h in relation to the valve distance.



Ordering data

Type	DLVZ 100
Ref. no.	3040
Dimensions in mm	
Ø C	100
A	135
B	135
D	20
Weight in g	150

Dim. in mm see table





reddot
design
award
winner
2008



Designpreis
Deutschland
2010
NOMINIERT



product
design
award
2008



Focus Green
Silber 2008

DLV



Operation

For supply and extract air operation in all rooms without special fire protection requirements. Ideal for ceiling installation.

Advantages

- ☐ Elegant, square casing made from high-quality polymer with covered air intake and discharge area.
- ☐ Precise air volume adjustment by turning the elegant front panel in 90° stages, with location markers for adjusting the ventilation system.
- ☐ Integrated filter exchangeable without tools and without risk of changing the setting.
- ☐ Selected air volume setting can be locked.
- ☐ Minimum air volume also ensured for fully closed air volume setting. Full closure only by nur irreversibly removing the minimum air volume stop.
- ☐ Front panel can be removed without tools, with adjustment mechanism and filter holder for the simple cleaning of the air-exposed valve parts.
- ☐ Sealing ring on spigot for precise positioning and sealing in the ducting.
- ☐ Fixing holes in casing base for secure fixation to the ceiling.

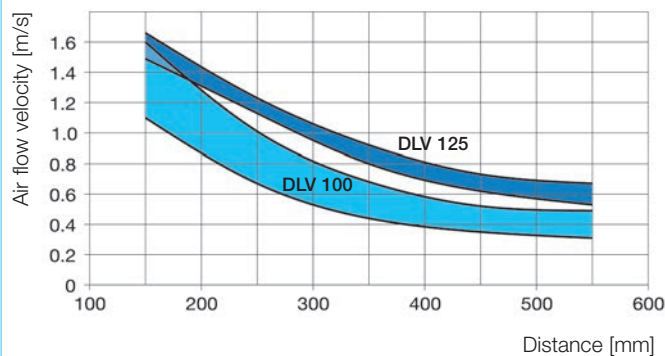
Accessories

Replacement air filter class G2
Contents: 5 pcs.

Type ELF-DLV 100 No. 3042

Type ELF-DLV 125 No. 3058

DLV 100 – DLV 125



Design

Casing design made from white, impact-resistant polymer. Elegant square appearance with closed front panel.

Delivery

Valves individually packaged in polybag, including G2 filter, installation and operating instructions.

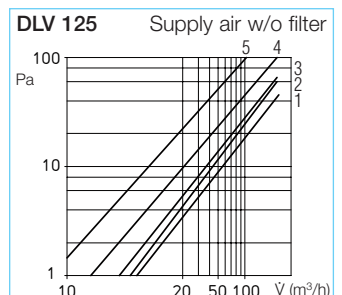
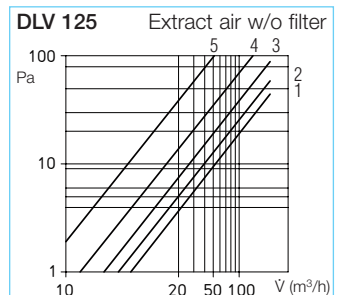
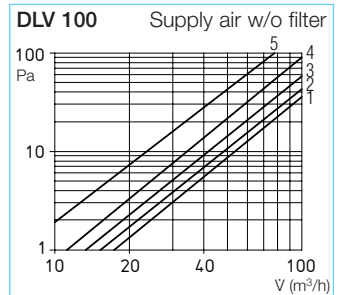
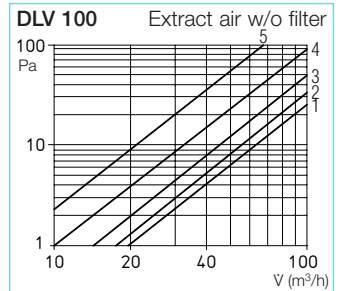
Installation

- ☐ Place G2 filter in the filter holder.
- ☐ Pre-set air volume according to diagram.
- ☐ Position casing base in ventilation duct and fix to the ceiling.

- ☐ When adjusting the entire system, adjust any air volume settings.
- ☐ Front panel with adjustment mechanism and filter holder can be attached without tools.

Performance data

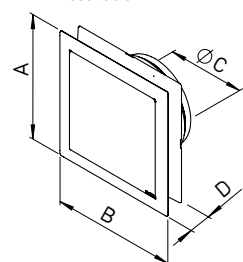
The diagrams provide an overview of the air volumes and pressure losses for different front panel settings, as well as the flow velocity of the outflowing air at 30 m³/h (DLV 100) or 60 m³/h (DLV 125) in relation to the valve distance.



Ordering data

Type	DLV 100	DLV 125
Ref. no.	3039	3049
Dimensions in mm		
Ø C	100	125
A	135	176.5
B	135	176.5
D	10-30	15-30
Weight in g	150	210

Dim. in mm see table



MTVA



■ Operation

For air extract in any room especially where ventilation system components of non flammable materials are required. Suitable for low and high air flow speed. Low noise characteristic.

■ Advantages

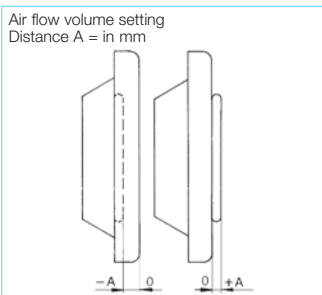
- Technically advanced design, aerodynamically shaped for low sound levels.
- Large cover with optimised height of the inlet ring avoids marking of decor.
- Quick mounting in ceiling and wall without tools.
- Plaster and difference compensation for unevenness, differences in diameter or ducting that has been too deeply plastered.
- Spring mounting clamp offers a direct insertion in ducts or walls up to approx. 20 mm size without an additional mounting ring.

■ Design

Metal construction protected against corrosion by a high quality epoxy paint in white. The foam strip fitted around the valve provides an air tight connection avoiding air leakage and dis-colouration around the valve.

■ Delivery

Each valve is separately supplied in polybag.



■ Accessories

For installation in ducting, walls or thin panels, a mounting ring may be required (see table).

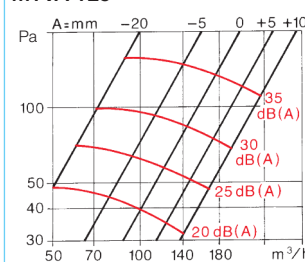
■ Installation

Set valve to required air flow volume according to the diagram. The distance 'A' is given in mm from the 0 point. Then simply press valve into wall or ducting.

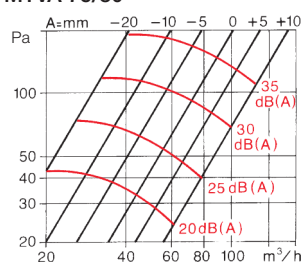
■ Performance data

These diagrams show the relationship between air flow volumes, resistances and sound levels at various adjustments of the distance "A" in mm.

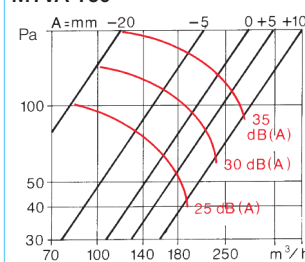
MTVA 125



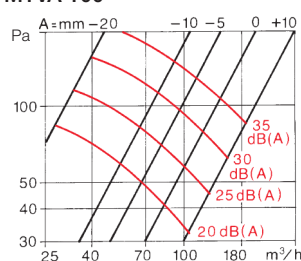
MTVA 75/80



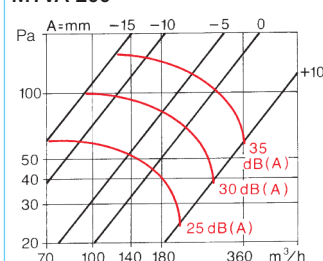
MTVA 160



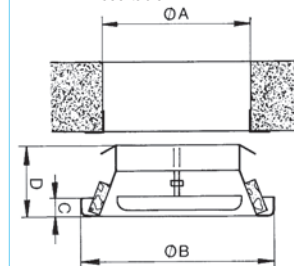
MTVA 100



MTVA 200



Dim. in mm see table



Ordering data

Type	MTVA 75/80	MTVA 100	MTVA 125	MTVA 160	MTVA 200
Ref. no.	8868	8869	8870	8871	8872
Dim. in mm					
Ø A	73 – 85	95 – 105	120 – 130	150 – 165	195 – 205
Ø B	108	135	160	195	230
C	15	15	15	15	18
D	58	59	60	58	63
Weight in g	150	190	255	340	450
Mounting ring					
Type	EBR 75/80	EBR 100	EBR 125	EBR 160	EBR 200
Ref. no.	0952	0953	0954	0955	0956
for DN (mm)	75/80	100	125	150/160	200

KTVA



Operation

For air extraction with high and low air flow speeds or resistances.
For all rooms without special fire protection requirements.

Advantages

- Installation without tools in seconds.
- High noise attenuation through built-in attenuator in fan.
- High quality anti static polymers suitable for temperatures up to +100 °C.
- Using a mounting ring avoids dis-colouration of surrounding decor.
- Plaster and difference compensation for unevenness, differences in diameter or ducting that has been too deeply plastered.
- Spring fit connector allows direct installation in ducting or wall with a minimum thickness of approx. 20 mm without an additional mounting ring.

Design

Aerodynamically shaped made from impact resistant white polymers. Adjustable air flow via rotating valve plate (volume throughput see diagram).

Delivery

Each valve is individually supplied in polybag.

Accessories

For installation in ducting, walls or thin panels, a mounting ring may be required (see table).

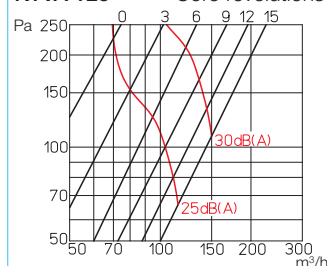
Installation

Set valve to required air flow volume according to the diagram through core revolutions then simply press valve into wall or ducting.

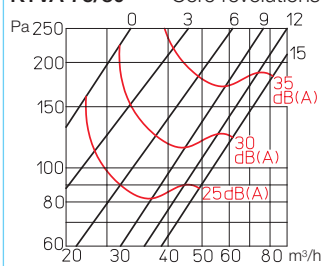
Performance data

These diagrams show the relationship between air flow volumes, resistances and sound levels at various core openings.

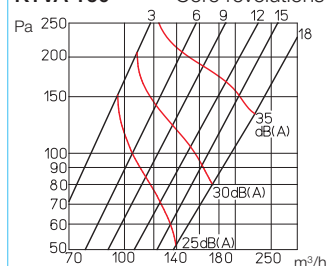
KTVA 125 Core revolutions



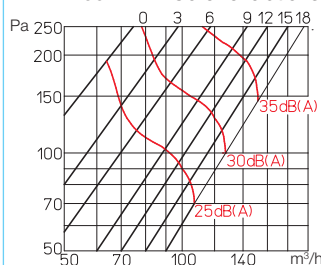
KTVA 75/80 Core revolutions



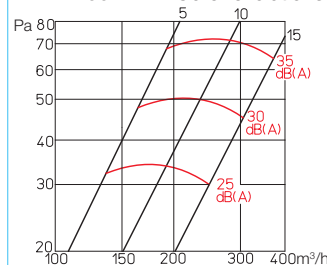
KTVA 160 Core revolutions



KTVA 100 Core revolutions

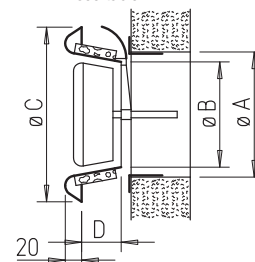


KTVA 200 Core revolutions



Ordering data					
Type	KTVA 75/80	KTVA 100	KTVA 125	KTVA 160	KTVA 200
Ref. no.	0940	0941	0942	0943	0944
Dim. in mm					
Ø A	73 – 85	95 – 105	120 – 130	150 – 165	195 – 210
Ø B	45	70	95	125	172
Ø C	120	145	160	195	240
D	35	35	35	35	35
Weight in g	90	115	150	200	340
Mounting ring					
Type	EBR 75/80	EBR 100	EBR 125	EBR 160	EBR 200
Ref. no.	0952	0953	0954	0955	0956
for DN (mm)	75/80	100	125	150/160	200

Dim. in mm see table



MTVZ



■ **Operation**

For air supply to any room especially where ventilation system components of non flammable materials are required. Suitable for low and high air flow speed. Low noise characteristic.

■ **Advantages**

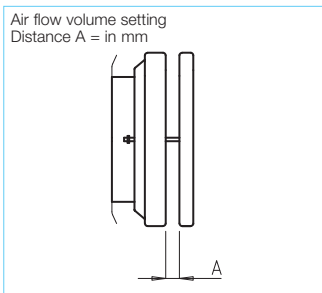
- High-quality metal design, aerodynamically shaped for low sound levels.
- Large cover with optimised height of the inlet ring avoids marking of decor.
- Quick mounting in ceiling and wall without tools.
- Plaster and difference compensation for unevenness, differences in diameter or ducting that has been too deeply plastered.
- Spring mounting clamp offers a direct insertion in ducts or walls up to approx. 20 mm size without an additional mounting ring.

■ **Design**

Metal construction protected against corrosion by a high quality epoxy paint in white. The foam strip fitted around the valve provides an air tight connection and avoids air leakage and dis-colouration around the valve.

■ **Delivery**

Each valve is separately supplied in a polybag.

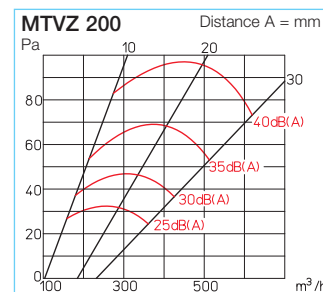
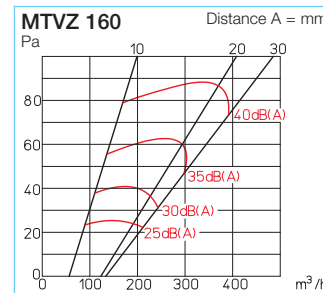
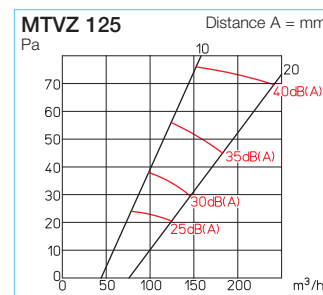
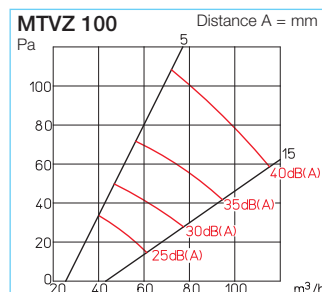
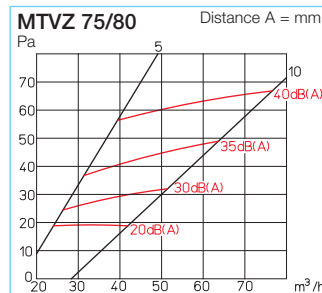


■ **Accessories**

For installation in ducting, walls or thin panels a mounting ring may be required (see table).

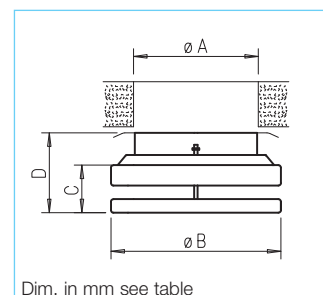
■ **Installation**

Set valve to required air flow volume according to the diagram. The distance 'A' is given in mm from the 0 point. Then simply press valve into wall or ducting. For an even air flow a straight duct of approximately 300 mm is required.



■ **Performance data**

These diagrams show the relationship between air flow volumes, resistances and sound levels at various adjustments of the distance "A" in mm.



Ordering data

Type	MTVZ 75/80	MTVZ 100	MTVZ 125	MTVZ 160	MTVZ 200
Ref. no.	9603	9604	9605	9606	9607
Dim. in mm					
Ø A	73 – 85	95 – 105	120 – 130	150 – 165	195 – 210
Ø B	108	135	160	195	230
C	26 – 46	26 – 46	26 – 46	26 – 56	26 – 56
D	68	70	70	68	73
Weight approx. g	190	240	300	390	480
Mounting ring					
Type	EBR 75/80	EBR 100	EBR 125	EBR 160	EBR 200
Ref. no.	0952	0953	0954	0955	0956
for DN (mm)	75/80	100	125	160	200

KTVZ



Fig.: Type KTVZ 100 – 200

Operation

For air extraction with high and low air flow speeds or resistances.
In all rooms without special fire protection requirements.

Advantages

- Installation without tools in seconds.
- Elegant valve plate covering the opening for stepless adjustment. Made from high-quality white polymer, suitable for temperatures up to +100 °C.
- Using a mounting ring avoids dis-colouration of surrounding decor.
- Plaster and difference compensation for unevenness, differences in diameter or ducting that has been too deeply plastered.
- Spring mounting clamp offers a direct insertion in ducts or walls up to approx. 20 mm size without an additional mounting ring.

Design

Made from impact resistant white polymers and aerodynamically shaped.
Adjustable air flow via rotating valve plate (volume throughput see diagram).

Delivery

Every valve is supplied separately in polybag.

Accessories

For installation in ducting, walls or thin panels a mounting ring may be required (see table).

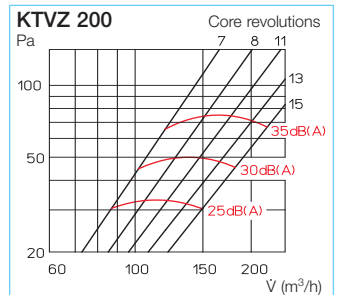
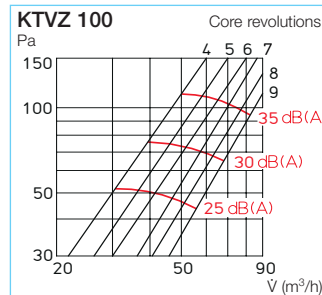
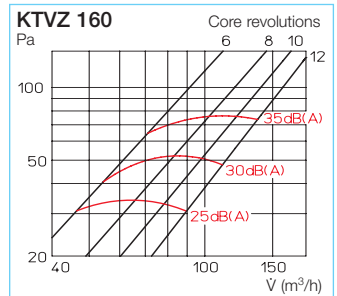
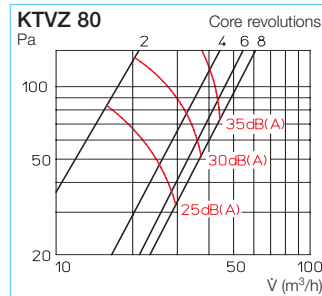
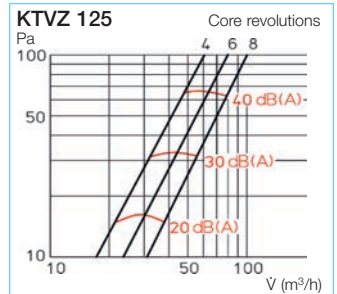
Installation

Set valve to required air flow volume through corresponding number of core revolutions according to the diagram. Then simply press valve into wall or ducting.
For an even air flow a straight duct of approximately 300 mm is required.

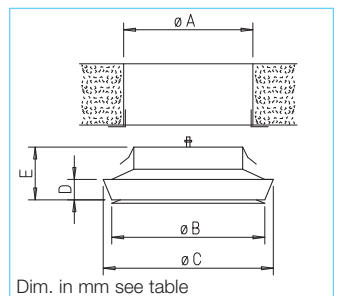
The air flow can be directed in a defined direction through the targeted sealing element, e.g. toward centre of room.

Performance data

These diagrams show the relationship between air flow volumes, resistances and sound levels at various core openings.



Ordering data					
Type	KTVZ 80	KTVZ 100	KTVZ 125	KTVZ 160	KTVZ 200
Ref. no.	2762	2736	2737	2738	2739
Dim. in mm					
Ø A	70 – 80	95 – 105	120 – 130	145 – 160	195 – 210
Ø B	80	138	170	195	235
Ø C	119	148	180	205	245
D	19,5	17	21	23	22
E	52	47	47	51	56
Weight approx. g	90	100	260	370	600
Mounting ring					
Type	EBR 75/80	EBR 100	EBR 125	EBR 160	EBR 200
Ref. no.	0952	0953	0954	0955	0956
for DN (mm)	75/80	100	125	150/160	200



ZTV

Special features – Operation

Innovative thermostatic supply air valve for automatic temperature controlled replacement air. Efficiently combines energy savings and permanent ventilation. Permanent control of supply air flow volume with adjustable core for any type of room. Suitable for natural (thermal) and mechanical ventilation as supply air element.

Advantages

- ☐ Fully automatic, demand-regulated air flow control.
- ☐ Maintenance free, no running cost.
- ☐ Individual air flow volume adjustment by rotating the valve plate.
- ☐ Good sound insulation due to the attenuator built into the valve plate.
- ☐ Attractive, functional design.
- ☐ Wide intake ring reduces wall discolouration.
- ☐ Quick and easy installation.

Design

The Helios supply air thermostat valves are made of impact resistant, white polymer. Aerodynamically shaped and an attractive design. Insulated coating on inner side of the valve plate to prevent condensation.

Installation

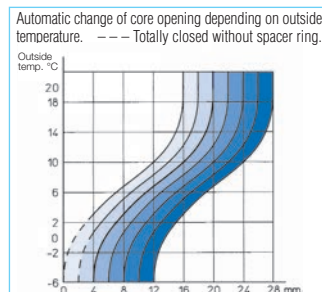
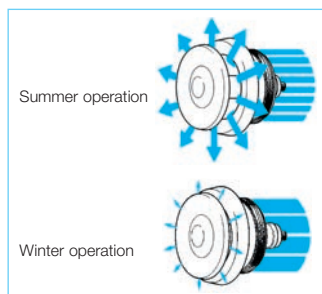
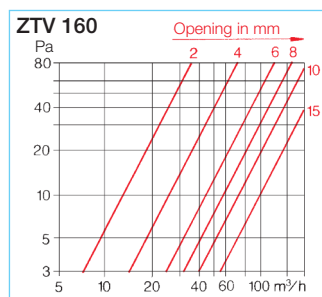
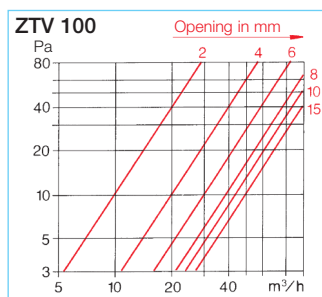
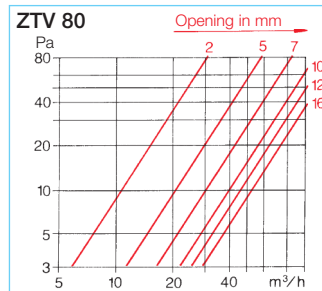
ZTV valves can be easily installed in existing supply air openings. They are fixed to ducting by push fit (with rubber gasket) or by three concealed fixing holes in the frame supplied with fixing screws.

Function

The thermostat operates automatically within a temperature range of -6°C to $+20^{\circ}\text{C}$. Within this range air flow volumes between 0 and $30\text{ m}^3/\text{h}$ are achieved conforming to DIN guidelines. See performance diagrams on the right. In its standard setting the valve closes completely at outside air temperature of approx. -4°C . A minimum supply air rate is allowed by the 4 mm wide distance clip. The initial setting of the valve can be changed manually by rotating the centre core. One full rotation equals to a variance of 4 mm gap (see blue marked areas in diagram).

Number of units

The number of supply air elements necessary is to be defined according to DIN 1946, T.6 depending on the apartment size and wind force (see chart on the right).


Number of units with mechanical demand-based ventilation

Apartment size m ²		Number of ZLA / ZLE		Fans
		Extract air (8 Pa)*	Supply air (4 Pa)*	
Hotel room	25 m ²	2	—	1
Apartment	25 m ²	2 (3) **	—	1
Flat	I 50 m ²	2	3 – 4	2
	II > 50, < 80 m ²	3	4	2
	III > 80 m ²	4	5	3
House	up to 120 m ²	4	5	3

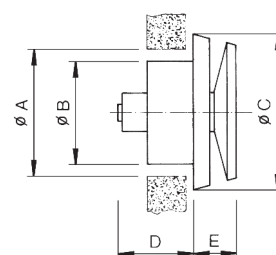
* according to DIN 1946, T.6 tab. 10

** if a kitchenette is also to be extracted

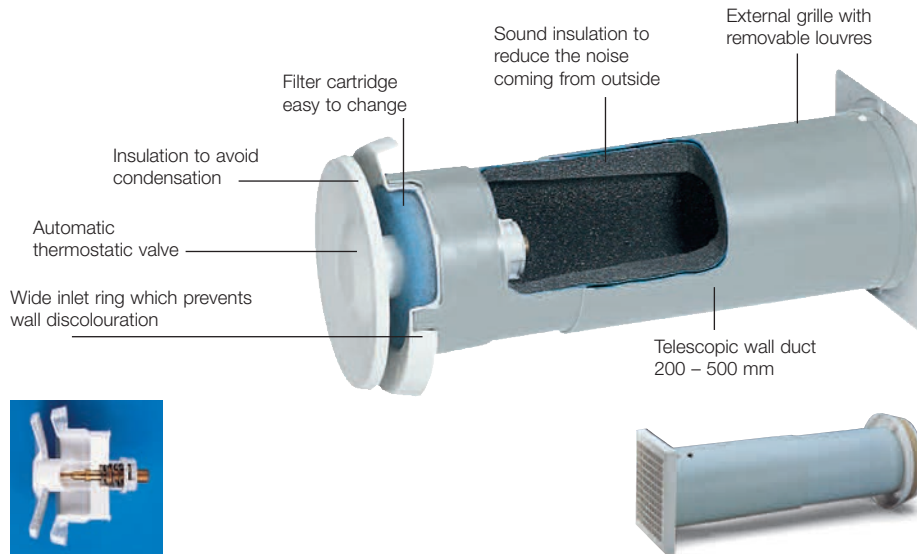
Ordering data

Type	ZTV 80	ZTV 100	ZTV 160
Ref. no.	0078	0073	0074
Dim. in mm			
Ø A = Duct nominal size	80	100	160
Ø B	77	95	156
Ø C	147	147	207
D	77	77	77
E	49	49	50
Weight approx. g	230	240	370

Dim. in mm see table



ZLA



Special features – Operation

Universally adaptable temperature controlled supply air unit. The energy saving, thermostatic supply valve provides a continuous air exchange at highest efficiency. The supply air volume is controlled depending on the outside air temperature, without any electrical connection. The supply air is evenly distributed, filtered (class G 3) and attenuated.

Advantages

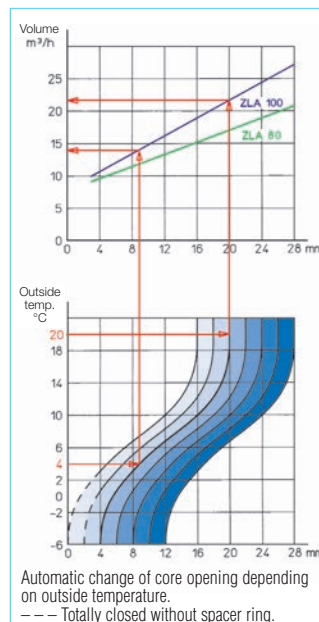
- ☐ Fully automatic, on demand air flow control.
- ☐ Maintenance free, no running cost.
- ☐ Individual air flow volume adjustment by rotating the central core.
- ☐ Telescopic wall duct, made of polymer for wall thicknesses between 200 to 500 mm.
- ☐ High sound insulation via the built-in attenuator.
- ☐ Easily removable filter.
- ☐ No electrical supply required.
- ☐ Quick and easy installation.

Function

The thermostat operates automatically within a temperature range of -6°C to $+20^{\circ}\text{C}$. Within this range air flow volumes between 0 and $30\text{ m}^3/\text{h}$ are achieved conforming to DIN guidelines. See performance diagrams on the right. In its standard setting the valve closes completely at outside air temperature of approx. -4°C . A minimum supply air rate is allowed by the 4 mm wide distance clip. The initial setting of the valve can be changed manually by rotating the centre core. One full rotation equals to a variance of 4 mm gap (see blue marked areas in diagram).

Installation

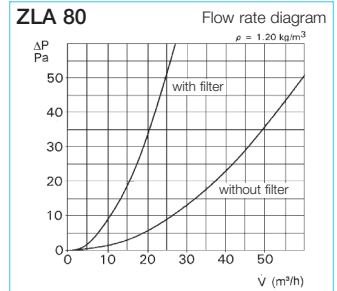
Suitable for wall or ceiling openings. Telescopic duct should be inserted from outside and the cover grille should be screwed on. Duct to be cleaned and the valve to be inserted from inside.



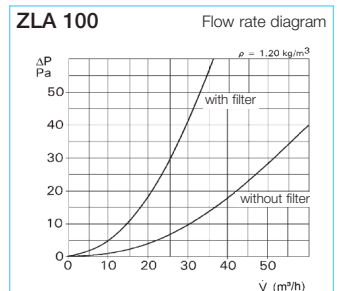
Note

The number of supply air units is to be defined according to DIN 1946, T.6 (see chart on the left page).

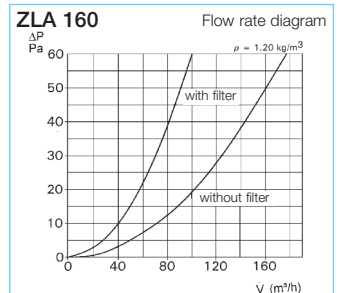
ZLA 80



ZLA 100



ZLA 160



Performance data

The air flow volume depending on pressure difference is determined by the opening gap of the valve plate. The performance values can be seen from the diagrams above.

Accessories

Spare filters class G 3
Contents: 10 pcs.

Type ELFZ 80 Ref. no. 0339

Type ELFZ 100 Ref. no. 0340

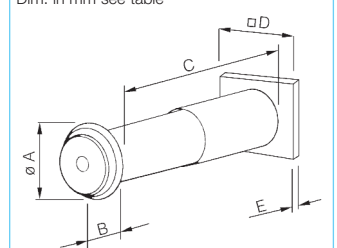
Type ELFZ 160 Ref. no. 0341

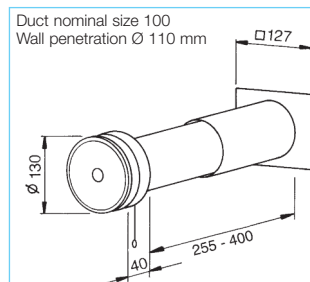
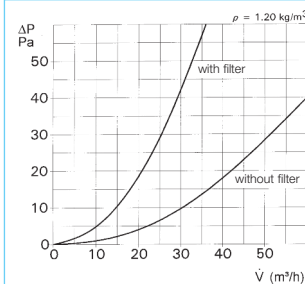
Ordering data

Type	ZLA 80	ZLA 100	ZLA 160
Ref. no.	0214	0215	0216
Volume max. with filter m^3/h	25	35	100
Duct nominal size (mm)	80	100	160
Wall penetration $\varnothing$ mm	96	115	175
$\varnothing A$ mm	147	147	207
B mm	49	49	50
C mm	260–500	260–500	260–500
D mm	107	140	190
E mm	3	15	24
Weight approx. kg	0,7	0,8	1,6

Sound insulation value $D_{n,e}$ 30 to 35 dB (depending on installation or wall thickness; corresponds to double glazing acc. to VDI 2719 protection class 2 or 3).

Dim. in mm see table



ZLE

Special features – Operation

Manually operated supply air element for any kind of room. The air flow volume can be adjusted through a four step ratchet mechanism using a pull cord. The supply air is evenly distributed, filtered (class G 3) and attenuated.

Advantages

- ☐ Permanent intake air reduces draughts.
- ☐ Adjustable air volume controlled by adjusting the valve plate.
- ☐ Simple control via pull cord.
- ☐ No electrical supply required.
- ☐ Wide intake ring reduces wall discolouration.
- ☐ Telescopic wall duct, made of polymer for wall thicknesses between 255 to 400 mm.
- ☐ Good sound insulation with the built-in attenuator.
- ☐ Easily removable filter.
- ☐ Quick and easy installation.

Installation

Simple installation in wall openings. Insert the telescopic duct from outside, adjust to thickness of wall and render. Push in rain repellent grille from outside, snap lock fixing or can be screwed with masonry plugs. Insert valve from inside. If placed near radiators the supply air is preheated during the cooler periods. Ensure that valve is accessible for filter change.

Design

ZLE comes as a complete unit including:

☐ **Valve**

Attractive, unobtrusive design made of high quality white polymer. Incorporating a pull cord for three core positions. Insulated coat on inner valve to prevent condensation.

☐ **Telescopic wall duct**

Two liners, made of impact resistant polymer.

☐ **Attenuator**

To reduce air sound levels from outside.

☐ **Air filter**

For clean and dust free air supply (class G 3), replaceable.

☐ **Outside wall grille**

Fixed, rain repellent, made of UV-stable polymer in white.

Filter change

Easy, without any tool kit. Can be maintained by removing the valve.

Performance data

The air flow volume depending on pressure difference is determined by the opening gap of the valve plate. The performance figures are shown in the diagram above. Sound insulation rate: $D_{n,e}$: 30–35 dB (depending on installation and wall thickness; comparable with double glazing class 2 or 3).

Number of units

The number of required supply air elements is to be defined according to DIN 1946, T.6 independent to the apartment size and wind force (see the following chart).

Accessories
Spare filter class G 3

Type ELF/ZLE 100 Ref. no. 0338

Contents = 10 pcs.

Type ZLE 100 Ref. no. 0079

Number of units with mechanical demand-based ventilation

Apartment size m ²		Number of ZLA / ZLE		Fans Number/Unit
		Extract air (8 Pa)*	Supply air (4 Pa)*	
Hotel room	25 m ²	2	–	1
Apartment	25 m ²	2 (3) **	–	1
Flat	I 50 m ²	2	3 – 4	2
	II > 50, < 80 m ²	3	4	2
	III > 80 m ²	4	5	3
House	up to 120 m ²	4	5	3

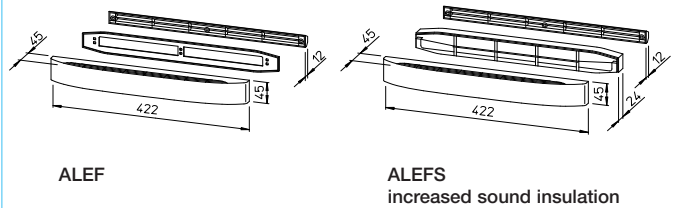
* according to DIN 1946, T.6 tab. 10

** if a kitchenette is also to be extracted

ALEF



Dim. in mm



ALEF

ALEFS
increased sound insulation

Air flow volume elements ALEF with air flow volume control / limitation, to install in window frames / casements.

■ Operation

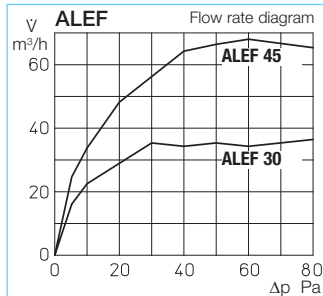
The window element flow is directly related to the differential pressure and supplies the outside air to living rooms and bedrooms. Simple installation, is also suitable for retro-fitting.

■ Design

Ready-to-install unit, contains inner facade with an automatic air flow volume delimiter, installation plate and cover strip. All parts are made of high quality, white polymer. The models ALEFS have an acoustic element for an increased sound insulation.

■ Function

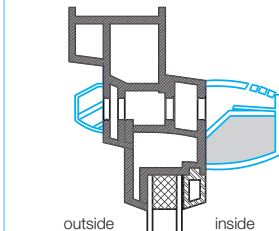
Due to the negative pressure of extract air in the kitchen, bathroom and toilet, the element allows a certain amount of air flow volume to enter in the living / bedrooms from outside (see diagram).



■ Installation

In wooden, polymer and metal window frames. Openings by means of milling groups or holes in the upper frame. Simply screw the cover strip to the installation plate and clip the inner facade on.

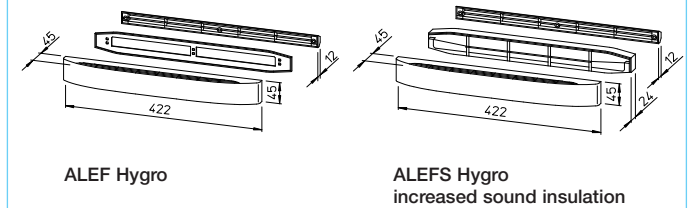
Application sample ALEF
In windows with aluminium frames



ALEF Hygro – humidity controlled



Dim. in mm



ALEF Hygro

ALEFS Hygro
increased sound insulation

Humidity controlled air flow volume elements ALEF Hygro with air flow volume control / limitation to install in window frames / casements.

■ Operation

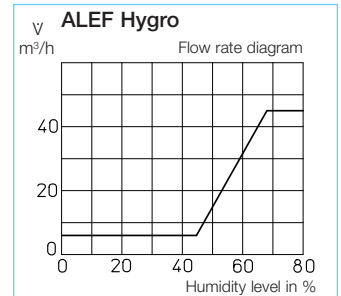
Window elements that allow a controlled air flow volume, dependent on the humidity level in the room, to enter in the living / bedrooms. Ideal in combination with humidity controlled extract fans. Simple installation, is also suitable for retro-fitting.

■ Design

Ready-to-install unit, contains inner facade with an automatic air flow volume delimiter, installation plate and cover strip. All parts are made of high quality, white polymer. The models ALEFS Hygro have an acoustic element for an increased sound insulation.

■ Function

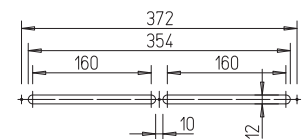
Due to the negative pressure of extract air in the kitchen, bathroom and toilet, the element allows a certain amount of air flow volume, which depends on the humidity level in the room, to enter in the living / bedrooms from outside (see diagram).



■ Installation

In wooden, polymer and metal window frames. Openings by means of milling groups or holes in the upper frame. Simply screw the cover strip to the installation plate and clip the inner facade on.

Dimension opening and fixing in mm



Ordering data	Air flow volume elements to install in window frames			
	ALEF with air flow volume control and limits		ALEFS similar to ALEF, extra attenuation	
Type	ALEF 30	ALEF 45	ALEFS 30	ALEFS 45
Ref. no.	2100	2101	2102	2103
Air flow vol. m³/h	30	45	30	45
Sound insulation D _{n,e} in dB (A)	39	37	41	39
Weight approx. g	190	190	210	210

Ordering data	Air flow volume elements to install in window frames	
	ALEF Hygro – with humidity controlled air flow volume control and limits	ALEFS Hygro similar to ALEF with extra attenuation
Type	ALEF 6/45 Hygro	ALEFS 6/45 Hygro
Ref. no.	2056	2057
Air flow vol. m³/h	6/45	6/45
Sound insulation D _{n,e} in dB (A)	37	39
Weight approx. g	200	220