

MultiVent® in-line fans.  
As thin as the ducting system.

**SPACE-SAVING**

With a volume of 190 to 1820 m<sup>3</sup>/h and pressure of over 800 Pa (given a two-level configuration), Helios MultiVent® is suitable for ventilation of small to medium-sized rooms of all kinds.

Its specific advantage is its small size. The casing diameter is only slightly bigger than the ventilation duct. It can be installed in any location – horizontally, vertically or diagonally.

**ROTATES AS REQUIRED**

The installation of Helios MultiVent® is space-saving as it fits directly in the ducting. It is ideal in areas where it gets narrow, e.g. under suspended ceilings. The casing and integrated bracket can be fitted in any location and the fan unit with the terminal box can be rotated as required. The fan unit is easy to remove by loosening the clamps.

**FREELY ACCESSIBLE**

This device design guarantees the simplest possible installation in the ducting and unproblematic maintenance and cleaning where necessary. The concept satisfies the requirements of VDI 6022. The energy-saving capacitor motors (degree of protection IP 44) are equipped with ball bearings for 30.000 operating hours and fully closed. This means that they can even be used when air is contaminated and contains dust.



In-line fans

Energy-efficient  
EC version

Ø 125 – 315 mm  
V = 360 – 2050 m³/h

**300<sup>on</sup>**

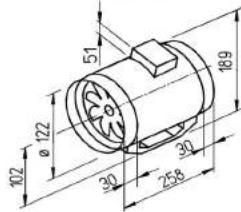
Standard AC types  
available in two-speed  
or parallel design  
Ø 100 – 250 mm  
V = 190 – 1820 m³/h

**304<sup>on</sup>**



**MV EC**

Swing-out EC in-line fan for space-saving installation in ducting.



Dim. in mm

Energy-saving EC in-line fan with high pressure and volumetric performance with space-saving dimensions.

Specifically made for in-duct installation. Diverse applications in commercial, industrial and residential areas.

**Special features**

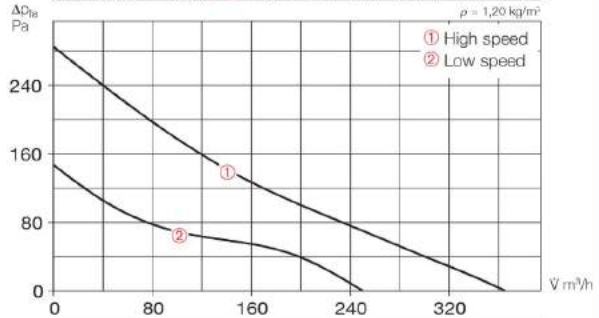
- Highly efficient EC motor for lowest operating costs.
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds as standard; 100% speed-controllable.
- Installation in any position.
- Longlife ball bearings, designed for 30.000 operating hours.
- simple maintenance and cleaning without dismantling the ducting system due to removable fan unit.
- Fan unit with terminal box can be rotated to any position.
- Integrated mounting bracket for simple wall and ceiling installation.

**Specification**

- Casing**  
The fan unit can be removed from the casing with integrated mounting bracket by loosening the clamps.  
All components made from impact and corrosion resistant polymers. Colour: Light grey.
- Impeller**  
Optimised for high pressure and volumetric performance, made from high quality polymers. Dynamically balanced for silent operation.
- Motor**  
Energy-saving, speed-controllable EC external rotor motor protected to IP 44 with high efficiency level and humidity protection. Maintenance-free and interference-free, ball bearing mounted.
- Electrical connection**  
Large terminal box (IP 44) on outside of casing; can be rotated to any position.

**MV EC 125**

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout	dB(A)	50	27	44	45	46	40	36	32
L <sub>WA</sub> Intake	dB(A)	62	33	56	55	53	47	40	
L <sub>WA</sub> Exhaust	dB(A)	63	34	57	58	59	54	48	42



Free discharge						
	n min <sup>-1</sup>	V̇ m³/h	P W	I A	Lp dB(A)	SFP kW/m²/s
High speed	2040	365	15	0,13	42	0,15
Low speed	1600	250	9	0,09	37	0,13

**Motor protection**

Integrated electronic temperature monitoring for EC motor and electronics.

**Speed control**

Standard two-speed control with external operating switch MVB (accessory).

**Installation**

Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**Sound levels**

Sum levels and spectrum figures are indicated above characteristic curves for:

- Sound level case breakout
  - Sound level intake
  - Sound level exhaust
- The sound pressure level at 1 m (free field conditions) can be seen in the table below and below the performance curve.

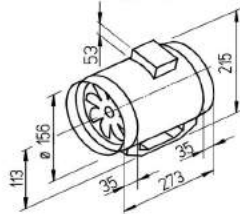
Accessory details	Page
Filters, heater batteries and attenuators	421 on
Temperature control systems for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, Roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Operating switch
		mm	V̇ m³/h	min <sup>-1</sup>	dB(A) in 1 m	kW	A	No.	+ °C	kg	Type Ref. no.
<b>Single phase motor, 230 V, 50 Hz, EC motor</b>											
MV EC 125	6032	125	250/360	1600/2040	38/42	0.010/0.017	0.10/0.17	951	60	1.8	MVB 6091



### MV EC

Swing-out EC in-line fan for space-saving installation in ducting.



Dim. in mm



Energy-saving EC in-line fan with high pressure and volumetric performance with space-saving dimensions.

Specifically made for in-duct installation. Diverse applications in commercial, industrial and residential areas.

#### ■ Special features

- Highly efficient EC motor for lowest operating costs.
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds as standard; 100% speed-controllable.
- Installation in any position.
- Longlife ball bearings, designed for 30.000 operating hours.
- simple maintenance and cleaning without dismantling the ducting system due to removable fan unit.
- Fan unit with terminal box can be rotated to any position.
- Integrated mounting bracket for simple wall and ceiling installation.

#### ■ Specification

##### Casing

The fan unit can be removed from the casing with integrated mounting bracket by loosening the clamps. All components made from impact and corrosion resistant polymers. Colour: Light grey.

##### Impeller

Optimised for high pressure and volumetric performance, made from high quality polymers. Dynamically balanced for silent operation.

##### Motor

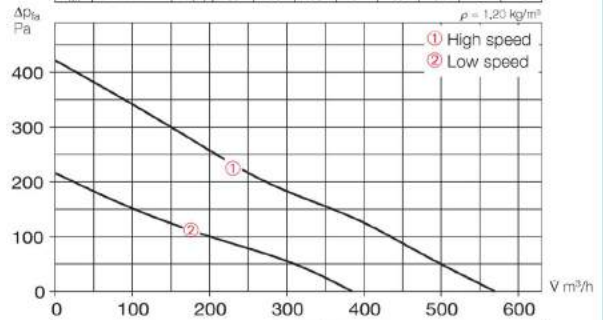
Energy-saving, speed-controllable EC external rotor motor protected to IP 44 with high efficiency level and humidity protection. Maintenance-free and interference-free, ball bearing mounted.

##### Electrical connection

Large terminal box (IP 44) on outside of casing; can be rotated to any position.

### MV EC 160

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L <sub>WA</sub>	Case breakout	dB(A)	55	27	44	43	48	53	44	36
L <sub>WA</sub>	Intake	dB(A)	69	39	57	62	61	67	58	48
L <sub>WA</sub>	Exhaust	dB(A)	68	36	56	61	63	62	59	48



Free discharge						
	n min <sup>-1</sup>	ṽ m³/h	P W	I A	Lp dB(A)	SFP kW/m²/s
High speed	2290	570	34	0.30	47	0,21
Low speed	1560	365	14	0,12	39	0,13

#### Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

#### Speed control

Standard two-speed control with external operating switch MVB (accessory).

#### Installation

Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

#### ■ Sound levels

Sum levels and spectrum figures are indicated above characteristic curves for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

The sound pressure level at 1 m (free field conditions) can be seen in the table below and below the performance curve.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature control systems for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, Roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Operating switch	
		mm	ṽ m³/h	min <sup>-1</sup>	dB(A) in 1 m	kW	A	No.	+ °C	kg	Type	Ref. no.
<b>Single phase motor, 230 V, 50 Hz, EC motor</b>												
MV EC 160	6033	160	365/570	1560/2290	39/47	0.015/0.038	0.15/0.33	951	60	2.1	MVB	6091

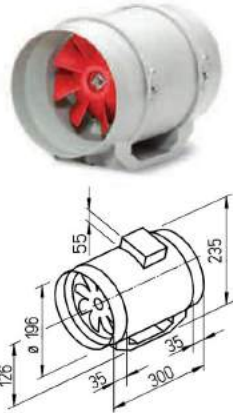


EC in-line fans



**MV EC**

Swing-out EC in-line fan for space-saving installation in ducting.



Dim., in mm

**60% Saving\***  
\* with speed control

Energy-saving EC in-line fan with high pressure and volumetric performance with space-saving dimensions.

Specifically made for in-duct installation. Diverse applications in commercial, industrial and residential areas.

**Special features**

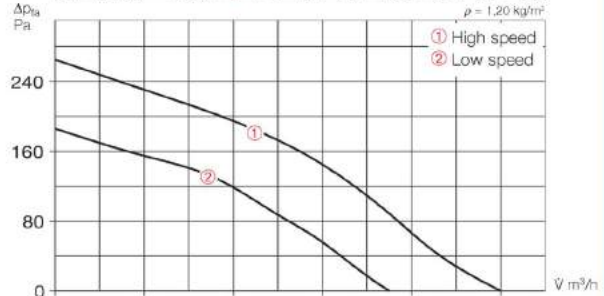
- Highly efficient EC motor for lowest operating costs.
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds as standard; 100% speed-controllable.
- Installation in any position.
- Longlife ball bearings, designed for 30.000 operating hours.
- simple maintenance and cleaning without dismantling the ducting system due to removable fan unit.
- Fan unit with terminal box can be rotated to any position.
- Integrated mounting bracket for simple wall and ceiling installation.

**Specification**

- Casing**  
The fan unit can be removed from the casing with integrated mounting bracket by loosening the clamps.  
All components made from impact and corrosion resistant polymers. Colour: Light grey.
- Impeller**  
Optimised for high pressure and volumetric performance, made from high quality polymers. Dynamically balanced for silent operation.
- Motor**  
Energy-saving, speed-controllable EC external rotor motor protected to IP 44 with high efficiency level and humidity protection. Maintenance-free and interference-free, ball bearing mounted.
- Electrical connection**  
Large terminal box (IP 44) on outside of casing; can be rotated to any position.

**MV EC 200**

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k	
L <sub>WA</sub>	Case breakout	dB(A)	57	40	52	51	50	49	45	40
L <sub>WA</sub>	Intake	dB(A)	70	49	66	65	62	61	56	49
L <sub>WA</sub>	Exhaust	dB(A)	70	53	64	64	63	62	58	50



	Free discharge					
	n min <sup>-1</sup>	V m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
<b>High speed</b>	2820	1000	51	0,45	49	0,18
<b>Low speed</b>	2400	750	32	0,28	46	0,16

**Motor protection**

Integrated electronic temperature monitoring for EC motor and electronics.

**Speed control**

Standard two-speed control with external operating switch MVB (accessory).

**Installation**

Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**Sound levels**

Sum levels and spectrum figures are indicated above characteristic curves for:  
– Sound level case breakout  
– Sound level intake  
– Sound level exhaust  
The sound pressure level at 1 m (free field conditions) can be seen in the table below and below the performance curve.

**Accessory details Page**

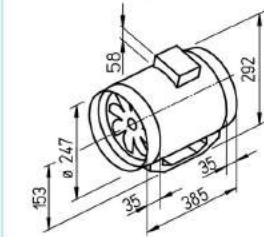
Filters, heater batteries and attenuators	421 on
Temperature control systems for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, Roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Operating switch
		mm	V m³/h	min <sup>-1</sup>	dB(A) in 1 m	kW	A	No.	+ °C	kg	Type Ref. no.
<b>Single phase motor, 230 V, 50 Hz, EC motor</b>											
<b>MV EC 200</b>	6034	200	750/1000	2400/2820	46/49	0.036/0.057	0.33/0.50	951	50	2.5	<b>MVB</b> 6091



### MV EC 250

Swing-out EC in-line fan for space-saving installation in ducting.



Dim. in mm

Energy-saving EC in-line fan with high pressure and volumetric performance with space-saving dimensions.

Specifically made for in-duct installation. Diverse applications in commercial, industrial and residential areas.

#### ■ Specification

##### □ Casing

The fan unit can be removed from the casing with integrated mounting bracket by loosening the clamps.

All components made from impact and corrosion resistant polymers. Colour: Light grey.

##### □ Impeller

Optimised for high pressure and volumetric performance, made from high quality polymers. Dynamically balanced for silent operation.

##### □ Motor

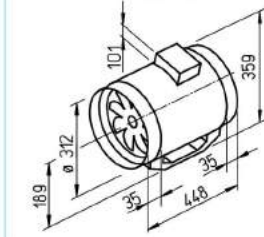
Energy-saving, speed-controllable EC external rotor motor protected to IP 44 with high efficiency level and humidity protection. Maintenance-free and interference-free, ball bearing mounted.

##### □ Electrical connection

Large terminal box (IP 44) on outside of casing; can be rotated to any position.

### MV EC 315

Swing-out EC in-line fan for space-saving installation in ducting.



Dim. in mm

##### □ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

##### □ Speed control

Standard two speed control for type MV EC 250 by means of external operating switch MVB. Stepless speed control for type MV EC 315 in the range between the min. and max. speed stages with potentiometer PU and commercial on/off switch (light switch), see table.

##### □ Installation

Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

##### ■ Sound levels

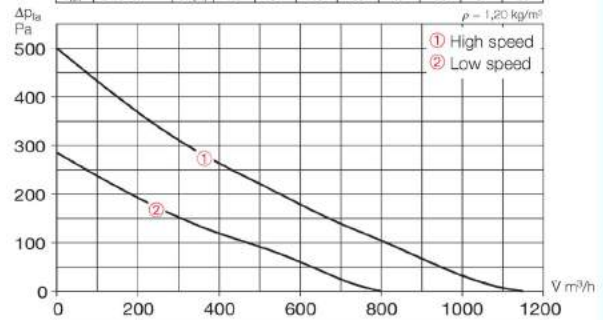
Sum levels and spectrum figures are indicated above characteristic curves for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

The sound pressure level at 1 m (free field conditions) can be seen in the table below and below the performance curve.

### MV EC 250

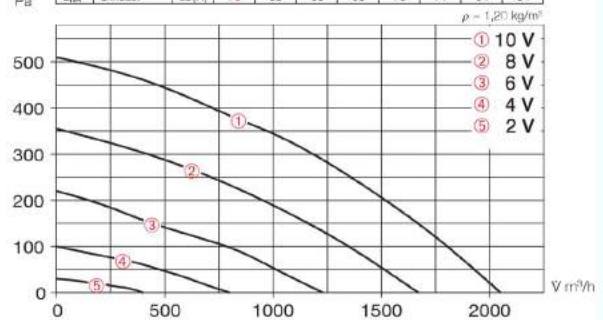
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout	dB(A)	58	40	49	52	51	53	47	39
L <sub>WA</sub> Intake	dB(A)	73	55	66	68	66	66	58	49
L <sub>WA</sub> Exhaust	dB(A)	73	54	65	68	67	68	61	51



Free discharge						
	n min <sup>-1</sup>	V̇ m³/h	P W	I A	Lp dB(A)	SFP kW/m²/s
High speed	2750	1150	95	0,83	50	0,29
Low speed	2100	800	45	0,42	44	0,20

### MV EC 315

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout	dB(A)	62	42	54	55	58	57	50	40
L <sub>WA</sub> Intake	dB(A)	76	56	67	69	71	70	63	53
L <sub>WA</sub> Exhaust	dB(A)	76	55	66	68	70	71	64	54



Free discharge						
Voltage V	n min <sup>-1</sup>	V̇ m³/h	P W	I A	Lp dB(A)	SFP kW/m²/s
10	2350	2050	240	1,70	54	0,42
8	1940	1670	140	1,00	50	0,30
6	1470	1230	70	0,54	44	0,21
4	1000	800	30	0,25	36	0,14



#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature control systems for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, Roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Operating switch
		mm	V m³/h	min <sup>-1</sup>	dB(A) in 1 m	kW	A	No.	+ °C	kg	Type Ref. no.
<b>Single phase motor, 230 V, 50 Hz, EC motor</b>											
MV EC 250	6035	250	800/1150	2100/2750	44/50	0.045/0.095	0.42/0.83	951	50	5.3	MVB 6091
MV EC 315	6036	315	2050	2350	54	0.280	1.97	1058	50	9.5	PU 10 <sup>1)</sup> 1734

1) alternative potentiometer for flush mounting (PA 10, No. 1735) or three-step speed switch (SU/SA, No. 4266/4267), see Accessories





High air flow volume and high pressure characteristic in a space saving design. Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

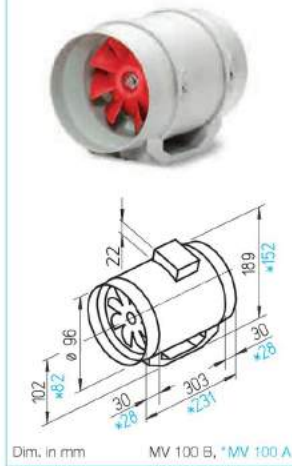
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed
- Installation in any position.
- Long life ball bearings, designed for 30,000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.
- Sound levels**  
See explanations on page 307.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.



**Specification MV**

- Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.

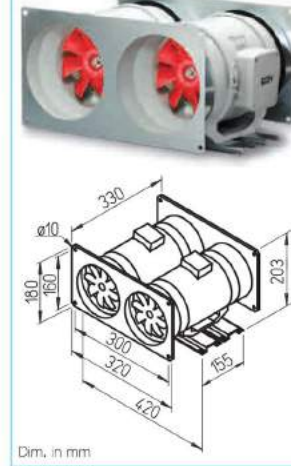


**Specification MVZ**

- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



**Specification MVP**

- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

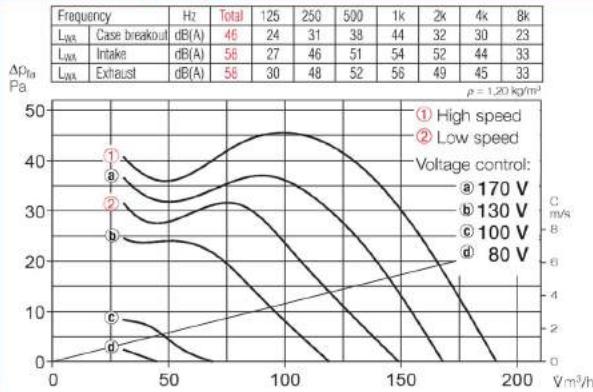
Type	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m		Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, stepless flush/surface	
					case breakout	air noise min./max.						Type	Ref. no.	Type	Ref. no.
		mm	∛ m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 100 A	6050	100	150/190	2070/2620	34/38	45/50	12/15	0.05/0.07	844.1	60	1.2	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
MV 100 B	6051	100	170/240	1590/2170	32/38	46/52	20/23	0.09/0.11	844.1	60	1.7	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 100 B	6058	100	170/240	1590/2170	37/43	49/55	40/46	0.18/0.22	845.1	60	4.5	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 100 B	6065	—	340/480	1590/2170	35/41	49/55	40/46	0.18/0.22	845.1	60	5.7	TSW 0,3	3608	ESU 1/ESA 1	0236/0238

\* In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

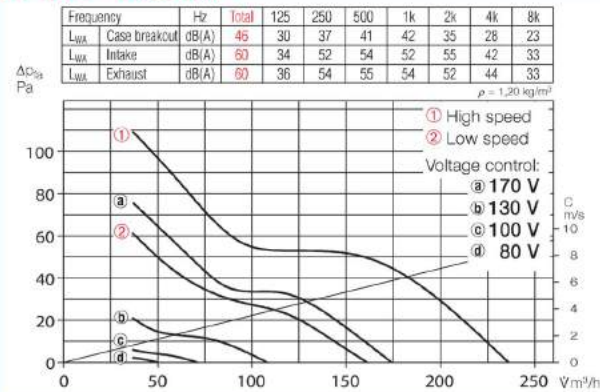




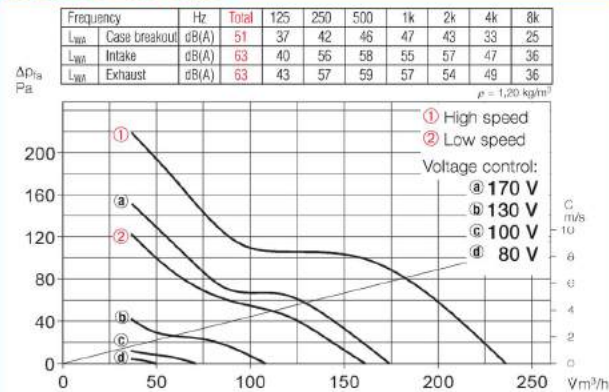
### MV 100 A – Single-stage



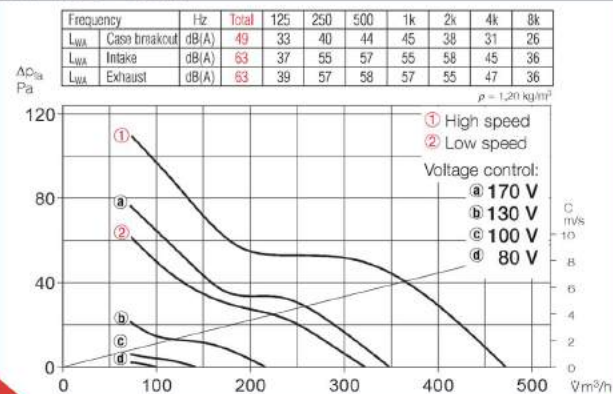
### MV 100 B – Single-stage



### MVZ 100 B – Two-stage



### MVP 100 B – Parallel



### Accessories for MV and MVZ

#### Flexible connector

**Type FM 100** Ref. no. 1681  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



#### Gravity shutter

**Type VK 100** Ref. no. 0757  
Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



#### External wall grille

**Type G 100** Ref. no. 0796  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



#### Guard

**Type MVS 100** Ref. no. 6071  
For intake and exhaust installation on the ventilation unit.



#### Spigotted attenuator

**Type FSD 100** Ref. no. 0676  
Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



#### Air filter box

**LFBR 100 G4** Ref. no. 8576  
With a large cross section area, for in-duct installation.



#### Electric heater batteries

**EHR-R 0,4/100** 0,4 kW No. 8708  
In circular casing, made of galvanised steel.



#### Warm-water heater batteries

**Type WHR 100** Ref. no. 9479  
For in-duct installation.



### Accessories for all types

#### Back draught shutter

**Type RSKK 100** Ref. no. 5106  
Automatic, made of polymer. For in-duct installation.



#### Operating switch 0-1-2

**Type MVB** Ref. no. 6091  
With on/off, low and high speed functions.



#### Transformer speed controller

**Type TSW** see table  
Five-step, for surface mounting.



#### Electronic speed controller

**Type ESU/ESA** see table  
For flush-/surface mounting.



#### Electronic run-on switch

**Type ZNE** Ref. no. 0342  
With continuously adjustable follow-up time.





**High air flow volume and high pressure characteristic in a space saving design.**  
Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

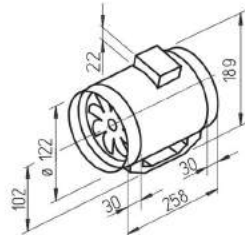
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed
- Installation in any position.
- Long life ball bearings, designed for 30.000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.



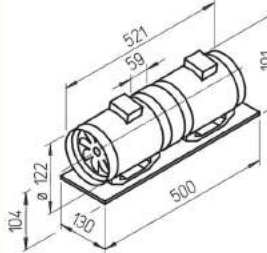
Dim. in mm

**Specification MV**

- Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.



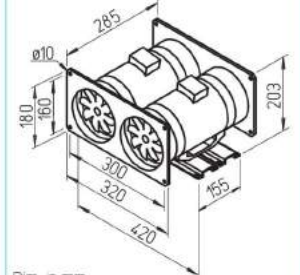
Dim. in mm

**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design



Dim. in mm

**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

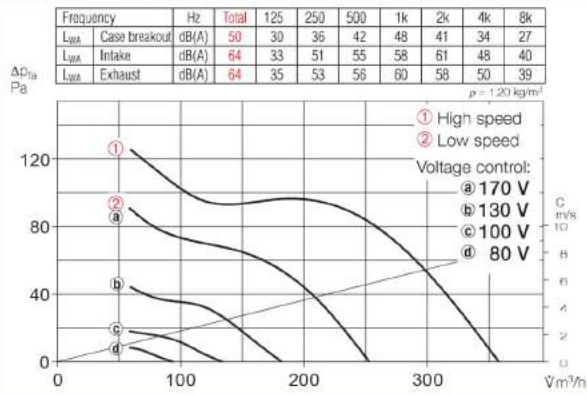
Type	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout		Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, stepless flush/surface	
					dB (A)	dB (A)						Type	Ref. no.	Type	Ref. no.
Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44															
MV 125	6052	125	250/360	1670/2300	35/42	49/56	25/33	0.11/0.15	844.1	60	1.7	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
Two-stage ventilation unit, 230 V, 50 Hz, capacitor motor, IP 44															
MVZ 125	6059	125	250/360	1670/2300	40/47	52/59	50/66	0.22/0.30	845.1	60	4.6	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44															
MVP 125	6066	—	500/720	1670/2300	38/45	52/59	50/66	0.22/0.30	845.1	60	5.8	TSW 0,3	3608	ESU 1/ESA 1	0236/0238

\* In all cases, transformer-control devices shall be provided. Electronic phase angle control may generate disturbing increase in motor noise.

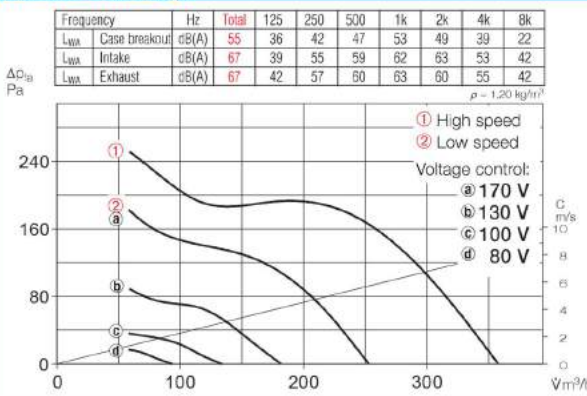




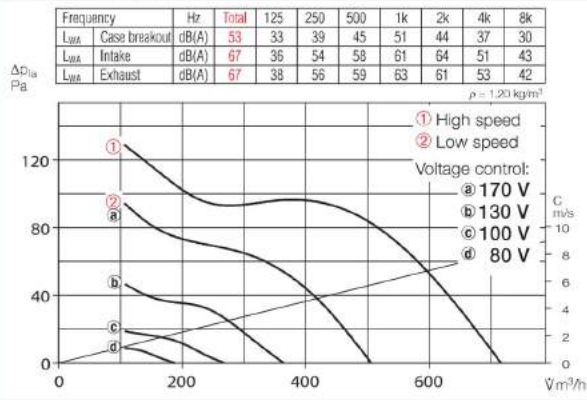
### MV 125 – Single-stage



### MVZ 125 – Two-stage



### MVP 125 – Parallel



#### ■ Sound levels

The total values and the spectrum figures are given above the performance curves for

- Sound level case breakout
- Sound level intake and exhaust air in dB(A)

On the table (see left page)

- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature controllers for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

#### ■ Accessories for MV and MVZ

##### Flexible connector

**Type FM 125** Ref. no. 1682  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



##### Gravity shutter

**Type VK 125** Ref. no. 0857  
Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



##### External wall grille

**Type G 160** Ref. no. 0893  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



##### Guard

**Type MVS 125** Ref. no. 6072  
For intake and exhaust installation on the ventilation unit.



##### Spigotted attenuator

**Type FSD 125** Ref. no. 0677  
Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



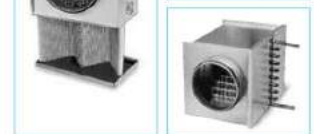
##### Air filter box

**LFBR 125 G4** Ref. no. 8577  
With a large cross section area, for in-duct installation.



##### Electric heater batteries

**EHR-R 0,8/125** 0,8 kW No. 8709  
In circular casing, made of galvanised steel.



##### Warm-water heater batteries

**Type WHR 125** Ref. no. 9480  
For in-duct installation.



#### ■ Accessories for all types

##### Back draught shutter

**Type RSKK 125** Ref. no. 5107  
Automatic, made of polymer. For in-duct installation.



##### Operating switch 0-1-2

**Type MVB** Ref. no. 6091  
With on/off, low and high speed functions.



##### Transformer speed controller

**Type TSW** see table  
Five-step, for surface mounting.



##### Electronic speed controller

**Type ESU/ESA** see table  
For flush-/surface mounting.



##### Electronic run-on switch

**Type ZNE** Ref. no. 0342  
With continuously adjustable follow-up time.





High air flow volume and high pressure characteristic in a space saving design. Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

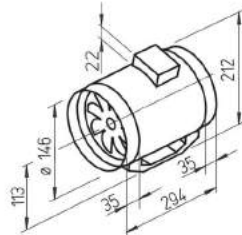
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed
- Installation in any position.
- Long life ball bearings, designed for 30,000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.



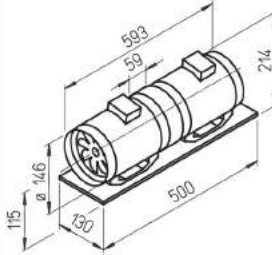
Dim. in mm

**Specification MV**

- Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.



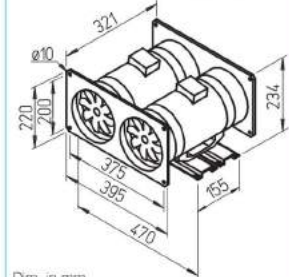
Dim. in mm

**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



Dim. in mm

**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

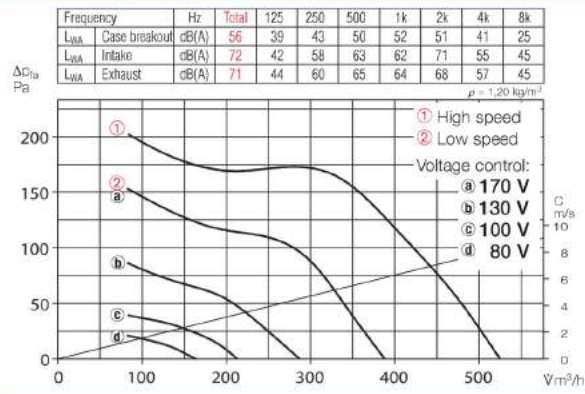
Type	Ref. no.	Connection ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1m		Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, stepless flush/surface	
					case breakout	air noise min./max.						Type	Ref. no.	Type	Ref. no.
mm															
m³/h															
min⁻¹															
dB (A)															
dB (A)															
W															
A															
No.															
+ °C															
kg															
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 150	6053	150	380/520	1520/2290	40/48	56/64	40/58	0.18/0.26	844.1	60	2.3	TSW 0,3	3608	ESU 1/ESA 1	0236/0238
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 150	6060	150	380/520	1520/2290	46/54	59/67	80/116	0.36/0.52	845.1	60	5.8	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 150	6067	—	760/1040	1520/2290	43/51	59/67	80/116	0.36/0.52	845.1	60	8.0	TSW 1,5	1495	ESU 1/ESA 1	0236/0238

\*In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

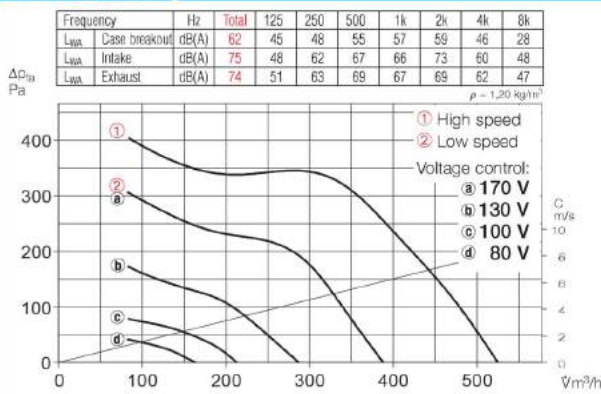




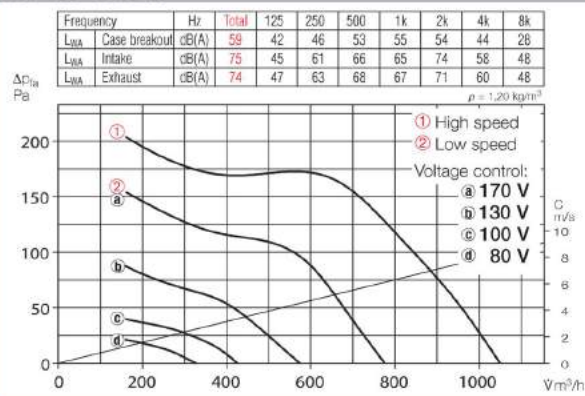
### MV 150 – Single-stage



### MVZ 150 – Two-stage



### MVP 150 – Parallel



#### ■ Sound levels

The total values and the spectrum figures are given above the performance curves for

- Sound level case breakout
- Sound level intake and exhaust air in dB(A)

On the table (see left page)

- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature controllers for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

#### ■ Accessories for MV and MVZ

##### Flexible connector

**Type FM 150** Ref. no. 1683  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



##### Gravity shutter

**Type VK 160** Ref. no. 0892  
Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



##### External wall grille

**Type G 160** Ref. no. 0893  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



##### Guard

**Type MVS 150** Ref. no. 6073  
For intake and exhaust installation on the ventilation unit.



##### Spigotted attenuator

**Type FSD 160<sup>1)</sup>** Ref. no. 0678  
Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



##### Air filter box

**LFBR 160 G4<sup>1)</sup>** Ref. no. 8578  
With a large cross section area, for in-duct installation.



##### Electric heater batteries

**EHR-R 1,2/160<sup>1)</sup>** 1,2 kW No. 9434  
In circular casing, made of galvanised steel.



##### Warm-water heater batteries

**Type WHR 160<sup>1)</sup>** Ref. no. 9481  
For in-duct installation.



#### ■ Accessories for all types

##### Back draught shutter

**Type RSK 150** Ref. no. 5073  
Automatic, made of metal. For in-duct installation.



##### Operating switch 0-1-2

**Type MVB** Ref. no. 6091  
With on/off, low and high speed functions.



##### Transformer speed controller

**Type TSW** see table  
Five-step, for surface mounting.



##### Electronic speed controller

**Type ESU/ESA** see table  
For flush-/surface mounting.



##### Electronic run-on switch

**Type ZNE** Ref. no. 0342  
With continuously adjustable follow-up time.



<sup>1)</sup> This accessory with ND 160 mm is applicable for ø 150 mm ducting by use of foam rubber.





High air flow volume and high pressure characteristic in a space saving design. Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

**Special features**

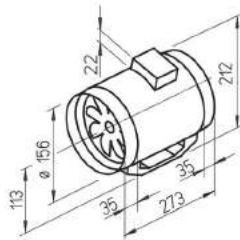
- Less space required and simple site installation of the compact in line design.
- Its simplicity reduces site costs.
- Supply and exhaust air spigots fit all standard circular duct sizes.
- Two speeds, as standard; plus fully controllable motor speed
- Installation in any position.
- Long life ball bearings, designed for 30,000 operating hours.
- Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
- Fan unit with terminal box can be rotated to any position.
- Integral mounting bracket for easy installation on floor, wall and ceiling.

**Common features**

- Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
- Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
- Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
- Motor protection**  
Thermal overload protection fitted in the winding as standard.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.



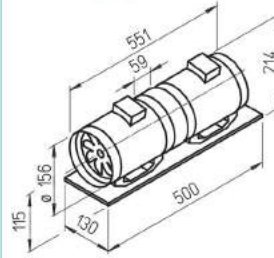
Dim. in mm

**Specification MV**

- Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.



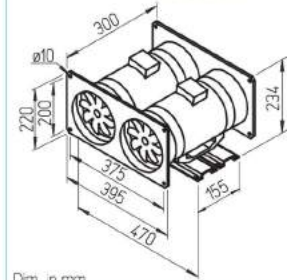
Dim. in mm

**Specification MVZ**

- Impeller**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- Impeller**  
As described on the left.
- Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



Dim. in mm

**Specification MVP**

- Impeller**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- Impeller**  
As described on the left.
- Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

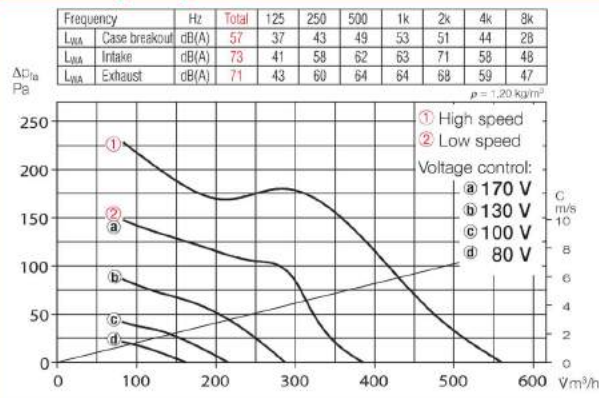
Type	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m		Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step		Electronic* speed controller, stepless flush/surface	
					case breakout	air noise min./max.						Type	Ref. no.	Type	Ref. no.
		mm	∇ m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 160	6054	160	390/550	1520/2290	41/49	57/65	40/58	0.18/0.26	844.1	60	2.3	TSW 0,3	3606	ESU 1/ESA 1	0236/0238
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 160	6061	160	390/550	1520/2290	47/55	59/67	80/116	0.36/0.52	845.1	60	5.8	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 160	6068	—	780/1100	1520/2290	44/52	60/68	80/116	0.36/0.52	845.1	60	7.7	TSW 1,5	1495	ESU 1/ESA 1	0236/0238

\* In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

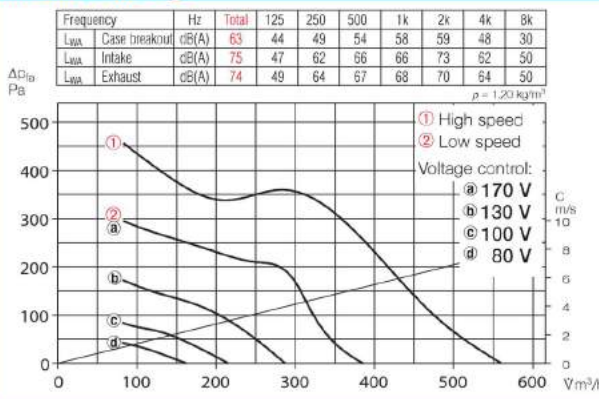




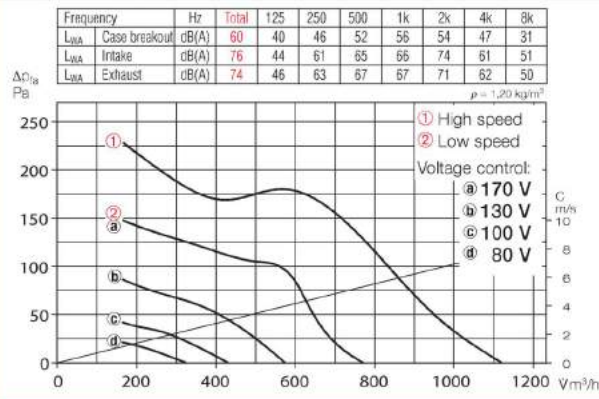
### MV 160 – Single-stage



### MVZ 160 – Two-stage



### MVP 160 – Parallel



#### ■ Sound levels

The total values and the spectrum figures are given above the performance curves for

- Sound level case breakout
- Sound level intake and exhaust air in dB(A)

On the table (see left page)

- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature controllers for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

#### ■ Accessories for MV and MVZ

##### Flexible connector

**Type FM 160** Ref. no. 1684  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



##### Gravity shutter

**Type VK 160** Ref. no. 0892  
Wall mounted, automatic pressure control shutter for the air outlet. Made of white polymer.



##### External wall grille

**Type G 160** Ref. no. 0893  
To cover or insert into circular ventilation holes. Made of impact resistant, white polymer.



##### Guard

**Type MVS 160** Ref. no. 6074  
For intake and exhaust installation on the ventilation unit.



##### Spigotted attenuator

**Type FSD 160** Ref. no. 0678  
Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



##### Air filter box

**LFBR 160 G4** Ref. no. 8578  
With a large cross section area, for in-duct installation.



##### Electric heater batteries

**EHR-R 1,2/160** 1,2 kW No. 9434  
In circular casing, made of galvanised steel.



##### Warm-water heater batteries

**Type WHR 160** Ref. no. 9481  
For in-duct installation.



#### ■ Accessories for all types

##### Back draught shutter

**Type RSK 160** Ref. no. 5669  
Automatic, made of metal. For in-duct installation.



##### Operating switch 0-1-2

**Type MVB** Ref. no. 6091  
With on/off, low and high speed functions.



##### Transformer speed controller

**Type TSW** see table  
Five-step, for surface mounting.



##### Electronic speed controller

**Type ESU/ESA** see table  
For flush-/surface mounting.



##### Electronic run-on switch

**Type ZNE** Ref. no. 0342  
With continuously adjustable follow-up time.



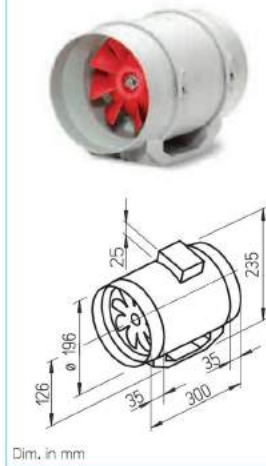


High air flow volume and high pressure characteristic in a space saving design. Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

- **Special features**
  - Less space required and simple site installation of the compact in line design.
  - Its simplicity reduces site costs.
  - Supply and exhaust air spigots fit all standard circular duct sizes.
  - Two speeds, as standard; plus fully controllable motor speed
  - Installation in any position.
  - Long life ball bearings, designed for 30,000 operating hours.
  - Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
  - Fan unit with terminal box can be rotated to any position.
  - Integral mounting bracket for easy installation on floor, wall and ceiling.
- **Common features**
  - **Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
  - **Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
  - **Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
  - **Motor protection**  
Thermal overload protection fitted in the winding as standard.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.

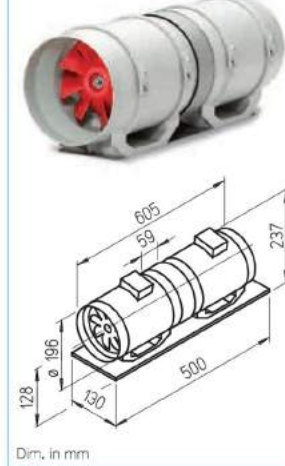


■ **Specification MV**

- **Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- **Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- **Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.

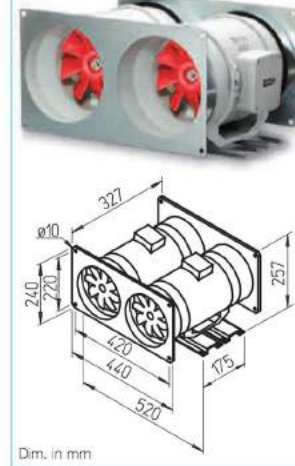


■ **Specification MVZ**

- **Specification MVZ**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- **Impeller**  
As described on the left.
- **Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- **Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



■ **Specification MVP**

- **Specification MVP**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- **Impeller**  
As described on the left.
- **Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

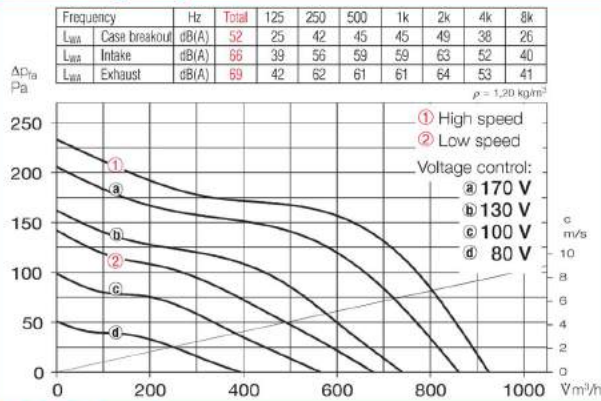
Type	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1 m case breakout	air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step	Electronic* speed controller, stepless flush/surface			
		mm	m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>																
MV 200	6055	200	680/930	1780/2740	36/44	50/58	45/75	0.22/0.37	844.1	60	3.7	TSW 1,5	1495	ESU 1/ESA 1	0236/0238	
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>																
MVZ 200	6062	200	755/900	1780/2740	44/51	55/62	90/150	0.44/0.74	845.1	60	8.5	TSW 1,5	1495	ESU 1/ESA 1	0236/0238	
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>																
MVP 200	6069	—	1360/1860	1780/2740	39/47	53/61	90/150	0.44/0.74	845.1	60	11.2	TSW 1,5	1495	ESU 1/ESA 1	0236/0238	

\* In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

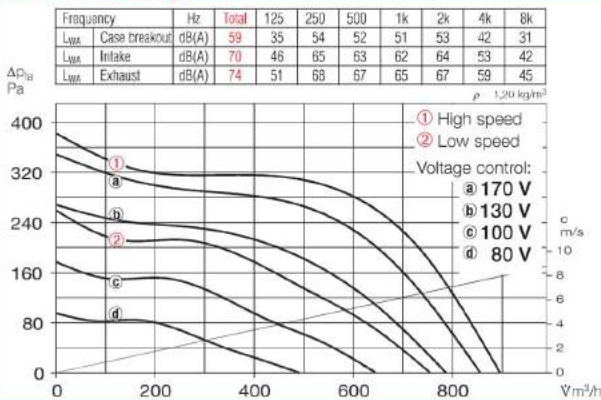




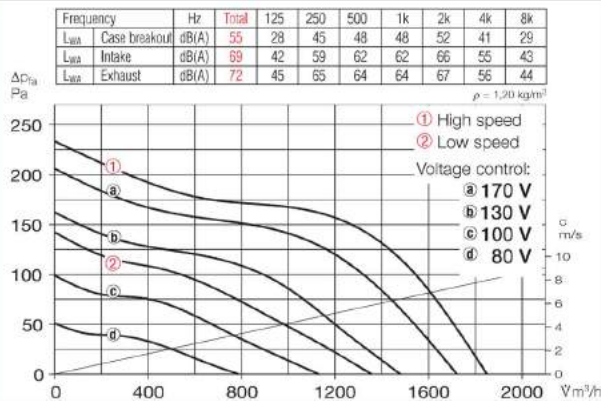
### MV 200 – Single-stage



### MVZ 200 – Two-stage



### MVP 200 – Parallel



#### ■ Sound levels

The total values and the spectrum figures are given above the performance curves for

- Sound level case breakout
- Sound level intake and exhaust air in dB(A)

On the table (see left page)

- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature controllers for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

#### ■ Accessories for MV and MVZ

##### Flexible connector

**Type FM 200** Ref. no. 1670  
Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



##### Gravity shutter

**Type VK 200** Ref. no. 0758  
Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer. Colour: Light grey.



##### External wall grille

**Type RAG 200** Ref. no. 0750  
To position in front of air inlets and outlets in facades. Made of polymer; colour: Light grey.



##### Guard

**Type MVS 200** Ref. no. 6075  
For intake and exhaust installation on the ventilation unit.



##### Spigotted attenuator

**Type FSD 200** Ref. no. 0679  
Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



##### Air filter box

**LFBR 200 G4** Ref. no. 8579  
With a large cross section area, for in-duct installation.



##### Electric heater batteries

**EHR-R 1,2/200** 1,2 kW No. 9436  
In circular casing, made of galvanised steel.



##### Warm-water heater batteries

**Type WHR 200** Ref. no. 9482  
For in-duct installation.



#### ■ Accessories for all types

##### Back draught shutter

**Type RSK 200** Ref. no. 5074  
Automatic, made of metal. For in-duct installation.



##### Operating switch 0-1-2

**Type MVB** Ref. no. 6091  
With on/off, low and high speed functions.



##### Transformer speed controller

**Type TSW** see table  
Five-step, for surface mounting.



##### Electronic speed controller

**Type ESU/ESA** see table

##### Electronic run-on switch

– for MV  
**Type ZNE** Ref. no. 0342  
– for MVZ and MVP  
**Type ZT** Ref. no. 1277



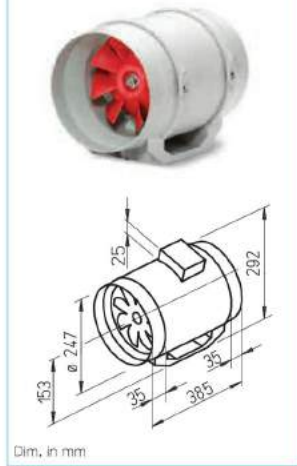


High air flow volume and high pressure characteristic in a space saving design. Specifically made for in-duct installation. Versatile for use in most commercial, industrial and domestic applications.

- **Special features**
  - Less space required and simple site installation of the compact in line design.
  - Its simplicity reduces site costs.
  - Supply and exhaust air spigots fit all standard circular duct sizes.
  - Two speeds, as standard; plus fully controllable motor speed
  - Installation in any position.
  - Long life ball bearings, designed for 30,000 operating hours.
  - Trouble-free maintenance and cleaning by removing the core of the unit from its frame without disassembling the ducting.
  - Fan unit with terminal box can be rotated to any position.
  - Integral mounting bracket for easy installation on floor, wall and ceiling.
- **Common features**
  - **Casing**  
By loosening the clips the fan section can be removed from the casing leaving the mounting bracket. All components are manufactured from impact resistant and corrosion resistant polymer. Colour: Light grey.
  - **Speed control**  
Standard two-speed control with external operating switch MVB (accessory). Full speed control with an electronic controller or five-step transformer.
  - **Motor**  
Totally enclosed ball bearing motor made for continuous operation with insulation class F and moisture protection. Maintenance-free and interference-free.
  - **Motor protection**  
Through a thermal contact that is connected in series with the winding and Turns the motor off at elevated temperatures to prevent motor damage. Resets after cooling and motor restart.

**MV – Single-stage**

Swing-out in-line fan for space-saving installation in ducting.

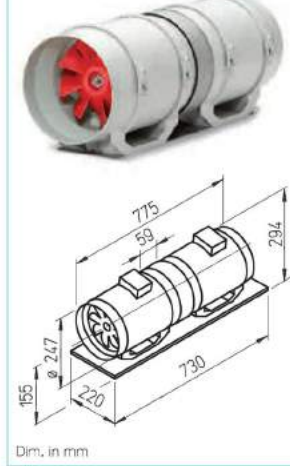


■ **Specification MV**

- **Impeller**  
Optimised for high pressure and volumetric performance, made from high grade polymer.
- **Electrical connection**  
The spacious terminal box (IP 44) is mounted on the casing; rotatable to any position.
- **Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVZ – Two-stage**

For higher pressure performance: Two in-line fans mounted in series.

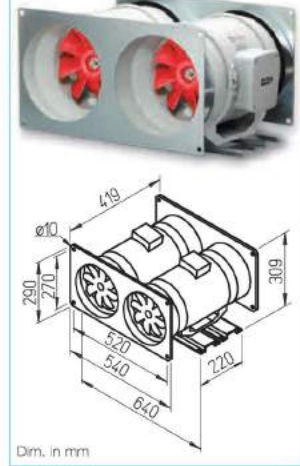


■ **Specification MVZ**

- **Specification MVZ**  
Two MV fans are connected in series using a connecting sleeve and assembled on a common base plate. Delivered as ready-to-assemble kits. Series operation doubles the pressure output at the same volume.
- **Impeller**  
As described on the left.
- **Electrical connection**  
Each fan has a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a coupling relay has to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for.
- **Installation**  
Can be mounted in any position – horizontal, vertical or diagonal – suitable for supply and extract ventilation by correct installation. To minimise the effective noise level it is recommended that the fan is installed as remote as possible from the ventilated space.

**MVP – Parallel**

For higher volume output in a compact parallel design.



■ **Specification MVP**

- **Specification MVP**  
The two parallel MV fans are mounted on common mounting rails and have a connector plate fitted to both the intake and exhaust. Delivered as ready-to-assemble kits. Parallel operation (both fans running) doubles the air volume at the same pressure.
- **Impeller**  
As described on the left.
- **Speed control / Connection**  
Each fan is located with a separate terminal box on the outer casing. By operating the two fans on two speeds using one operation switch MVB (accessory) or one change-over switch (on site) a pair of relays have to be used as shown in the wiring diagram. When using a speed controller, the high speed amps have to be allowed for. Each fan can also be operated separately or together when necessary. To prevent the recirculation, two exhaust back draught shutters are required (RSK, accessory).

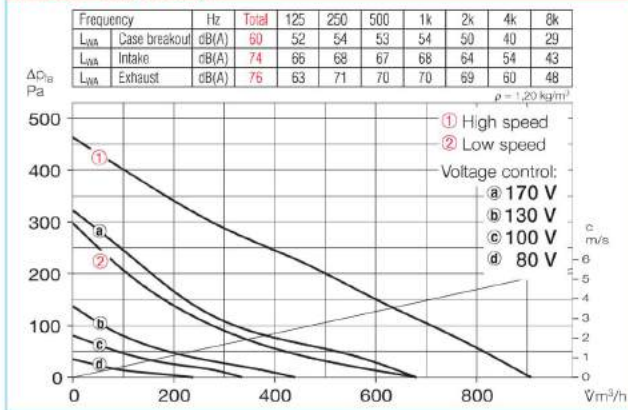
Type	Ref. no.	Connection Ø	Air flow volume min./max.	R.P.M. min./max.	Sound pressure level in 1m air noise case breakout	Sound pressure level in 1m air noise min./max.	Power consumption min./max.	Current min./max.	Wiring diagram	Max. air flow temperature	Weight net approx.	Transformer-speed controller 5-step	Electronic* speed controller, stepless flush/surface		
		mm	V m <sup>3</sup> /h	min <sup>-1</sup>	dB (A)	dB (A)	W	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.
<b>Single-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MV 250	6056	250	680/910	1850/2550	40/52	53/66	85/110	0.40/0.50	844.1	60	7.0	TSW 1,5	1495	ESU 1/ESA 1	0236/0238
<b>Two-stage in-line fan, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVZ 250	6063	250	710/900	1850/2550	46/56	57/67	170/220	0.80/1.00	845.1	60	17.6	TSW 1,5	1495	ESU 3/ESA 3	0237/0239
<b>Parallel-twin-unit, 230 V, 50 Hz, capacitor motor, IP 44</b>															
MVP 250	6070	—	1280/1820	1850/2550	43/55	56/69	170/220	0.80/1.00	845.1	60	18.7	TSW 1,5	1495	ESU 3/ESA 3	0237/0239

\* In noise sensitive cases, transformer-control devices should be used. Electronic phase angle control may generate disturbing increase in motor noise.

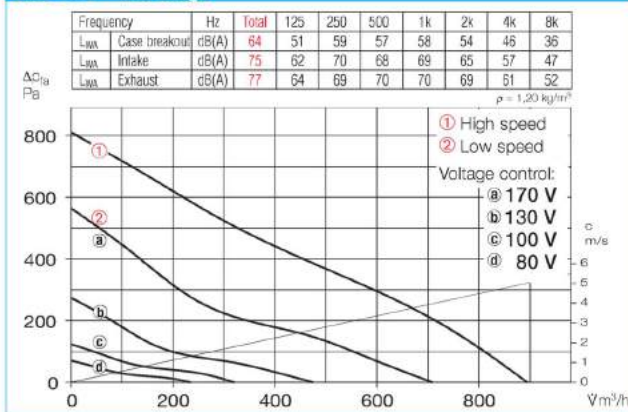




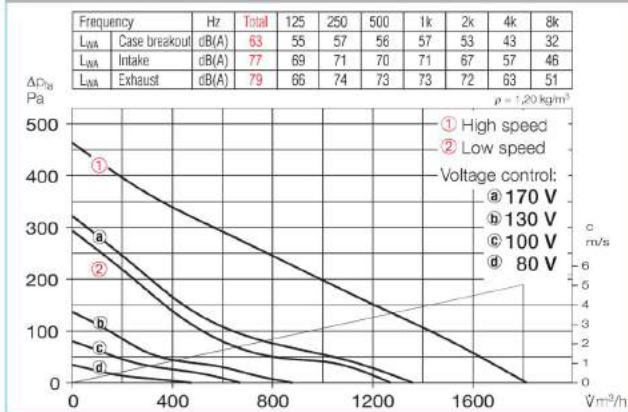
### MV 250 – Single-stage



### MVZ 250 – Two-stage



### MVP 250 – Parallel



#### ■ Sound levels

The total values and the spectrum figures are given above the performance curves for

- Sound level case breakout
- Sound level intake and exhaust air in dB(A)

On the table (see left page)

- The case breakout figures and the intake/exhaust air noise levels are additionally given as sound pressure level at 1 m (free-field conditions).

The Helios figures have to be reduced by 8 dB(A) if compared to sound pressure levels at 3 m.

#### ■ Accessory details Page

Filters, heater batteries and attenuators	421 on
Temperature controllers for heater batteries	427, 431
Flexible ventilation ducting, grilles, adaptors, roof terminations	487 on
Poppet valves	508 on
Speed controllers and switches	525 on

#### ■ Accessories for MV and MVZ

##### Flexible connector

Type FM 250 Ref. no. 1672

Supplied with two hose clips as standard; for installation between fan and duct system. Prevents sound and vibration transmission and compensates small misalignments on site. Two sleeves are needed for intake and exhaust operation.



##### Gravity shutter

Type VK 250 Ref. no. 0759

Wall mounted, automatic pressure control shutter for the air outlet. Made of polymer. Colour: Light grey.



##### External wall grille

Type RAG 250 Ref. no. 0751

To position in front of air inlets and outlets in facades. Made of polymer; colour: Light grey.



##### Guard

Type MVS 250 Ref. no. 6076

For intake and exhaust installation on the ventilation unit.



##### Spigotted attenuator

Type FSD 250 Ref. no. 0680

Made from aluminium with plug sockets on both sides. With 50 mm insulation, length 1 m.



##### Air filter box

LFBR 250 G4 Ref. no. 8580

With a large cross section area, for in-duct installation.



##### Electric heater batteries

EHR-R 6/250 6,0 kW No. 8712

In circular casing, made of galvanised steel.



##### Warm-water heater batteries

Type WHR 250 Ref. no. 9483

For in-duct installation.



#### ■ Accessories for all types

##### Back draught shutter

Type RSK 250 Ref. no. 5673

Automatic, made of metal. For in-duct installation.



##### Operating switch 0-1-2

Type MVB Ref. no. 6091

With on/off, low and high speed functions.



##### Transformer speed controller

Type TSW see table

Five-step, for surface mounting.



##### Electronic speed controller

Type ESU/ESA see table

For flush-/surface mounting.



##### Thermoelectr. run-on switch

Type ZT Ref. no. 1277

With variable run-on time.

