

Small room fan MiniVent® M1.
The premium class.



He



Triple M1. The MiniVent® family.



Triple M1 – the MiniVent® family.

The most successful small room fan series from Helios with multiple award-winning premium design.

Supplied with two speeds as standard, innovative ultraSilence® technology for near-silent operation and unbeatably energy-efficient.

Whether for the ventilation of toilets, bathrooms or other small and medium-sized rooms in residential, industrial and commercially-used buildings.

Optionally available with DN 100, 120 and 150 mm.

With humidity control or motion sensor for barrier-free automatic mode or the 0-10 V model.

Helios M1 is always suitable.

M1. Better performance is standard for Helios.

The MiniVent® M1 range offers the right solution for every application area and requirement. All three sizes have two speeds: 90/75 m³/h for the M1/100, 170/150 m³/h for the M1/120 and 260/220 m³/h for the M1/150.

Requirement-based operation with high pressure performance is thereby guaranteed.

The models M1 N/C, equipped with comprehensive coding functions, can be adapted to individual user needs. In addition to the overrun time (optionally 6, 10, 15, 21 min.), the delay time can also be adjusted to 0, 45, 90, 120 sec. Furthermore, the optionally selectable interval operation (0, 8, 12, 24 hrs.) ensures the best room air quality, even during periods of absence.



Manual control via switch, parallel to light or automatically via time switch. Ideal in rooms which are used frequently.

M1/100

M1/120

M1/150



For rooms with a normal or low frequency of use. Optional periodic, economic room ventilation in case of absence.

M1/100

M1/120

M1/150



M1 F. With intelligent automatic humidity monitoring.

The types M1 F are developed for barrier-free automatic operation. They preserve the building fabric and create an ideal room air humidity level. A complex and unique combination of precise sensors and highly developed control electronics detects and stops the increase of humidity at an early stage. Thus, mould and building damage are effectively prevented – without the need for user intervention.

M1 P. With motion sensor.

M1 P is ideal wherever contactless fan activation is desired. The integrated infrared sensor detects persons entering the room and switches the fan on. If another movement is registered within 6 minutes, the operating time is extended correspondingly. An overrun time of approx. 6 minutes starts after the last person has left the room. The electrical connection is made to the nearest junction box.

M1 0-10 V. With variable speed control.

The type M1/150 0-10 V opens up universal areas of application in combination with CO₂, VOC or temperature sensors. Furthermore, the min./max. speed can be adjusted as required and variable control is possible via potentiometers. The speed can be controlled via a three-stage switch, variably via universal control systems or electronic differential pressure/temperature controllers. A floating relay output comes as standard for the connection of an electrical cover flap.



Barrier-free, automatic ventilation without the need for a switch. Ideal in rooms with high levels of humidity.

M1/100

M1/120

M1/150



Barrier-free, automatic ventilation without the need for a switch. Motion-controlled via infrared sensor.

M1/100

M1/120



Particularly energy-efficient, demand-based ventilation of larger rooms depending on control variables such as temperature, CO₂, VOC (mixed gas).

M1/150

Clean.



Elegantly clean.

With regard to all three MiniVent® sizes, the air flows in from all sides and, thus, the interior facade is completely closed. The smooth and easy-care faceplate can be cleaned with one hand in no time. In this respect, MiniVent® M1 always makes a long lasting impression.

Beautiful.



Outstanding design. Made in Germany.

The MiniVent® family is presented in a uniform, minimalist and linear premium design, which has been honoured by several renowned institutions. M1 stands out in any room through unostentatious elegance and creates a stunning visual impression. The fans are developed and manufactured completely in Germany and thus it is guaranteed that the highest quality standards are observed.



Quiet.



Powerful and quiet.

No compromises are made with MiniVent® M1 in terms of power and noise level. The ultraSilence® technology developed by Helios ensures optimum quietness and the lowest noise emission at all levels.

When introducing the M1/100, Helios succeeded in setting the market standard with just 25 dB (A)* at 75 m³/h. The M1/150 is furthering this success with just 35 dB(A)* at 220 m³/h.

* Sound pressure at a distance of 3 m, free field

ultraSilence
Technology by Helios

Energy-efficient.



Up to 50% energy savings.

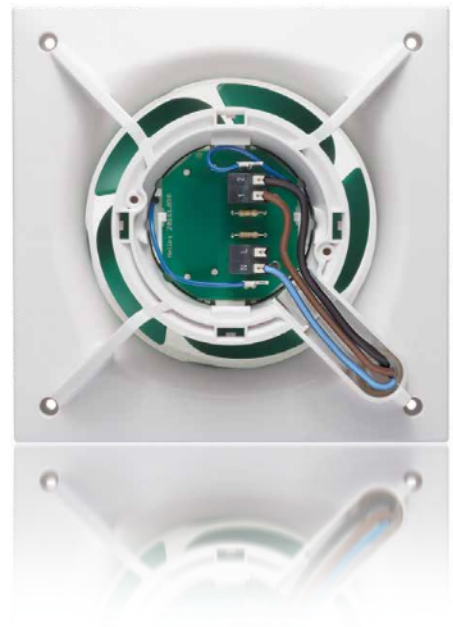
If power consumption is analysed in relation to flow rate, it is clear at a glance that M1 from Helios scores well. For this reason, MiniVent® has been awarded the "greenTec-Label" for particularly energy saving solutions.

Furthermore, the M1/150 is equipped with highly efficient EC motor technology which, with regard to speed control, leads to a saving of up to 50 % in comparison to conventional AC technology.

greenTec
by Helios



Blazing fast connection.
Practically and comfortable.



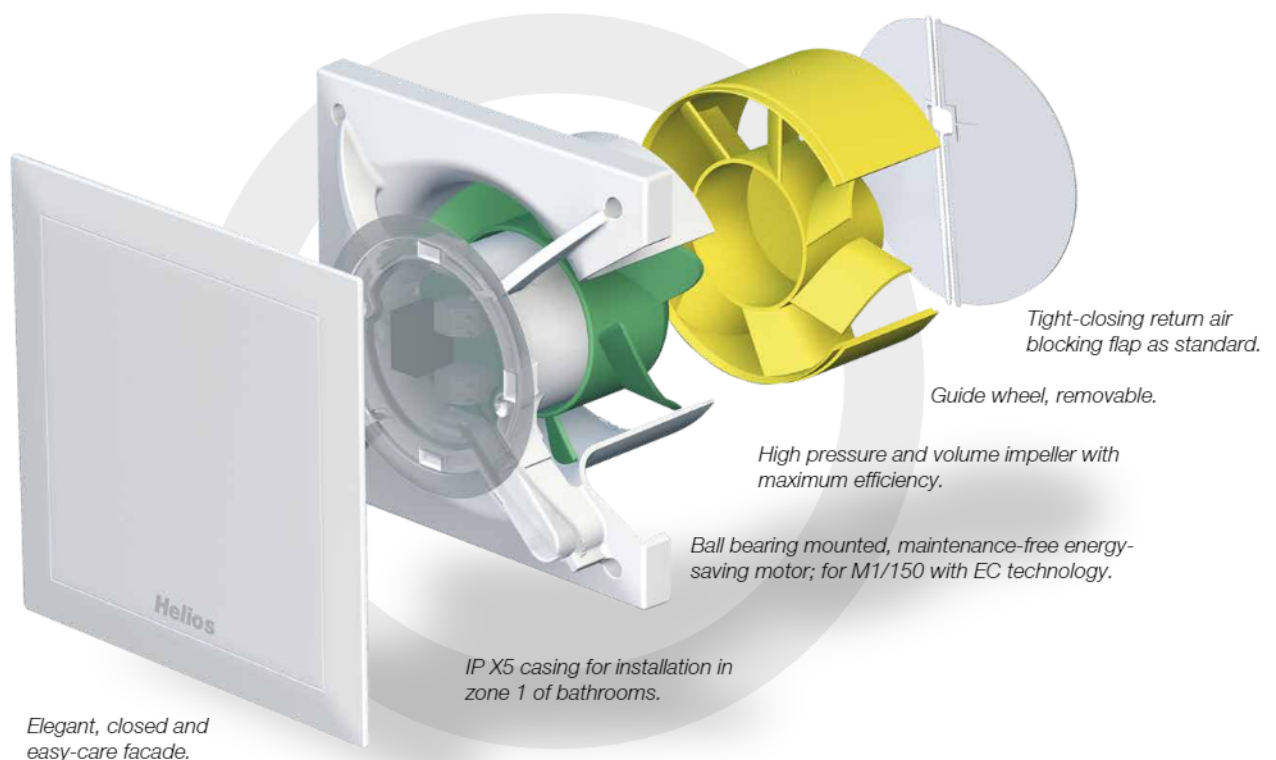
Very practical.

The generously proportioned, circular cable storage space and the free rotatability of the housing with facade around 90° allow for the remarkably easy connection of the MiniVent® M1. No matter where the cable comes out of the wall. Cumbersome rework on the cable duct is a thing of the past.

Added convenience on site.

The clamp-style connectors on all MiniVent® models ensure that the electrical connection is made in no time at all. Due to the shallow installation depth, it is possible to install the M1 without any problems, even if space is limited. The guide wheel can also be removed without tools for even more space-saving, when necessary.

Simply ingenious in every detail.
Everything is just right.



Simply ingenious in every detail for maximum energy savings.

Optimum efficiency with lowest power consumption. This is ensured by the high volume impeller in all MiniVent® M1 types with its optimised air flow and removable guide wheel.

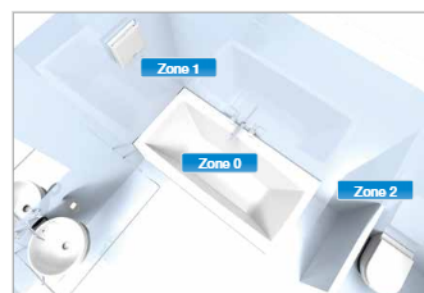
The M1/150 models are also equipped with a particularly energy-efficient EC motor.

An automatic, tight-closing return air blocking flap, which works without requiring energy, is integrated in the M1 as standard.



When installing the M1, there are almost no no-go areas. This is ensured not least by the protection against pressure jets of water IP X5. All M1 models can be used in zone 1 of bathrooms without hesitation according to DIN VDE 0100-701.

Highest standard across the series: Long-life ball bearings for 40.000 operating hours, protection against pressure jets of water IP X5, protection class II and an award-winning facade design. With these features, MiniVent® M1 can be installed universally in walls and ceilings in any position and it stands out in any room through unostentatious elegance.



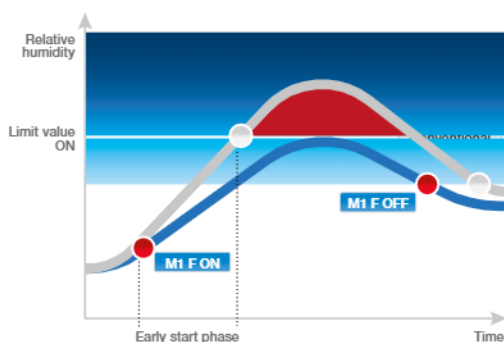
Installation in zone 1 possible (according to DIN VDE 0100-701).

Maximum protection. Intelligent early humidity detection.

Rapidly increasing air humidity must be dealt with immediately.

A relative air humidity that is too high provides an irksome indoor climate with negative effects on building fabric and residents. The earlier a fan remedies this situation, the less condensation can form and the more effectively mould formation and moisture damage can be prevented.

MiniVent® M1 F is equipped with a particularly intelligent and effective system for early humidity detection, which can, if required, immediately start in a high ventilation setting when humidity starts to increase and it responds differently to various types of humidity increase.



In case of a **normal** humidity increase (e.g. washing), the fan switches on when the limit value is reached and runs until the room air humidity has fallen by approx. 10 %.

In case of a **rapid** humidity increase (e.g. showering), the fan switches on before the limit value is reached and combats the excessive humidity at an early stage and quickly.

Furthermore, the dynamic humidity control of the M1 F is able to distinguish real humidity increases from external influences (e.g. high air humidity due to the weather).

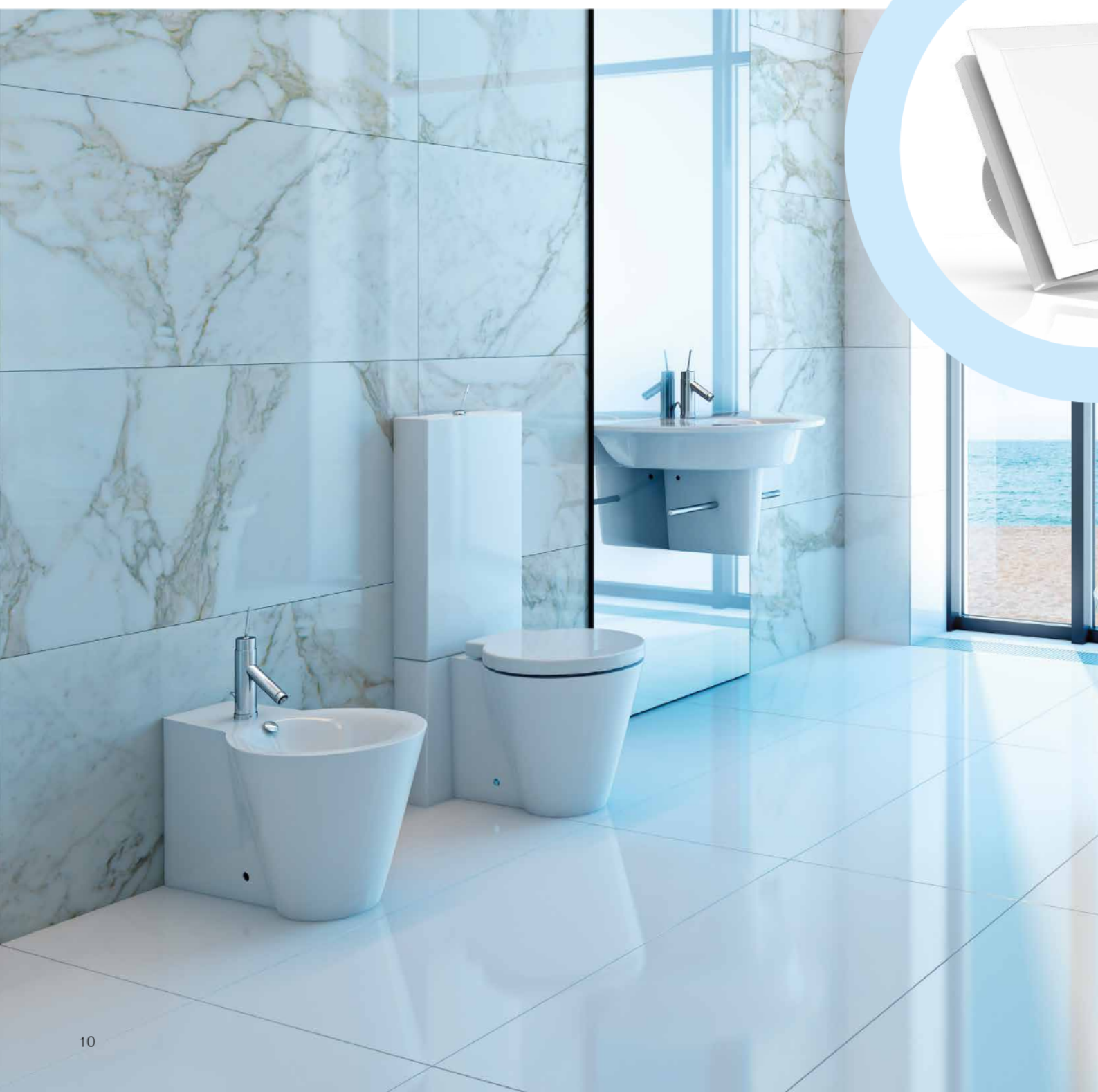
Permanent control for maximum protection.

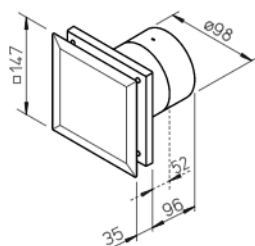
Highly developed sensors constantly check the environment for any humidity increase. The microprocessor-controlled electronic system of the M1 F analyses the measurement results in real time and always ensures optimum ventilation – without the need for user intervention. In addition, with regard to the M1/150, it is possible to control the removal of humidity via a two-stage switch or variable control – depending on the individual relevant, local conditions and requirements. The switch-on level can be adjusted as required.



MiniVent® M1/100. Technical Data.

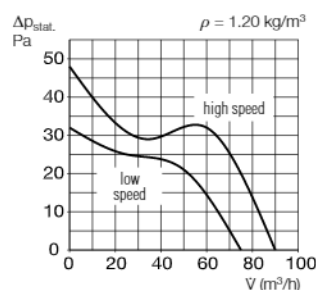
As the best-selling premium mini fan from Helios, the smallest family member is a real powerhouse with 100 mm connection Ø.
Ideal for toilets, bathrooms and other small rooms.





All dim. in mm

M1/100 Performance diagram



Features:

- Supplied with 2 speeds as standard, 90/75 m³/h.
- Lowest power consumption of only 5 Watt at $V = 75 \text{ m}^3/\text{h}$.
- Extremely quiet due to ultraSilence® technologie; just 25 dB(A) at $V = 75 \text{ m}^3/\text{h}$.
- Pressure output: 60 m³/h air flow at 31 Pa. Max. air flow 90 m³/h. Max. pressure 45 Pa.
- Where space is limited the guide vane of M1 can be simply removed. Thus reducing the installation depth to 52 from 96 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 100 mm.

Further properties:

- All components made from high-quality white polymers.
- The motor design and ball bearings are selected for long-term durability, steady performance and lifelong operational reliability.
- Motor supplied with thermal overload protection, providing maintenance and trouble-free, continuous operation.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- The electrical supply cables may be recessed or surface mounted.
- Practical quick assembly using push-on cable connectors for the electrical connection.

Type Ref. No.	M1/100 6171	M1/100 N/C 6172	M1/100 F 6175	M1/100 P 6174
Model	Standard model equipped with two speeds	As M1/100, with codeable overrun and interval timer ¹⁾	As M1/100, with automatic humidity control ^{1) 4)}	As M1/100, with motion sensor ¹⁾
Run on time, min. optionally on high or low speed	—	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable ³⁾	6
Interval operation, hrs. optionally on high or low speed	—	0, 8, 12, 24 adjustable	—	—
Delayed start approx. sec.	—	0, 45, 90, 120	0 or 45 ³⁾	—
Back draught shutter, removable	yes	yes	yes	yes
Air flow volume m³/h	90 / 75	90 / 75	90 / 75	90 / 75
Impeller-Ø mm	92	92	92	92
R.P.M. min ⁻¹	2650 / 2250	2650 / 2250	2650 / 2250	2650 / 2250
Voltage/frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	9 / 5	9 / 5	9 / 5	9 / 5
Rated current A	0.06 / 0.04	0.06 / 0.04	0.06 / 0.04	0.06 / 0.04
Sound pressure level dB(A) in 3 m ²⁾	30 / 25	30 / 25	30 / 25	30 / 25
Wiring diagram No.	915	917	919	918
Electrical power supply NYM-O in mm²	3 x 1.5	4 x 1.5	4 x 1.5	3 x 1.5
Protection class II, protection type	IP 45	IP 45	—	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	0.80	0.80	0.80	0.80
Accessories				
Operation switch 0-1-2	MVB 6091	—	—	—
Telescopic wall sleeve	TWH 100 6352	TWH 100 6352	TWH 100 6352	TWH 100 6352
Wall mounting kit	WES 100 0717	WES 100 0717	WES 100 0717	WES 100 0717
Mounting plate	MBR 90/.. 0281	MBR 90/.. 0281	MBR 90/.. 0281	MBR 90/.. 0281
Spacer frame	MF 100 6188	MF 100 6188	MF 100 6188	MF 100 6188

¹⁾ All electronic functions optionally on high or low speed - adjustable.

²⁾ Free field.

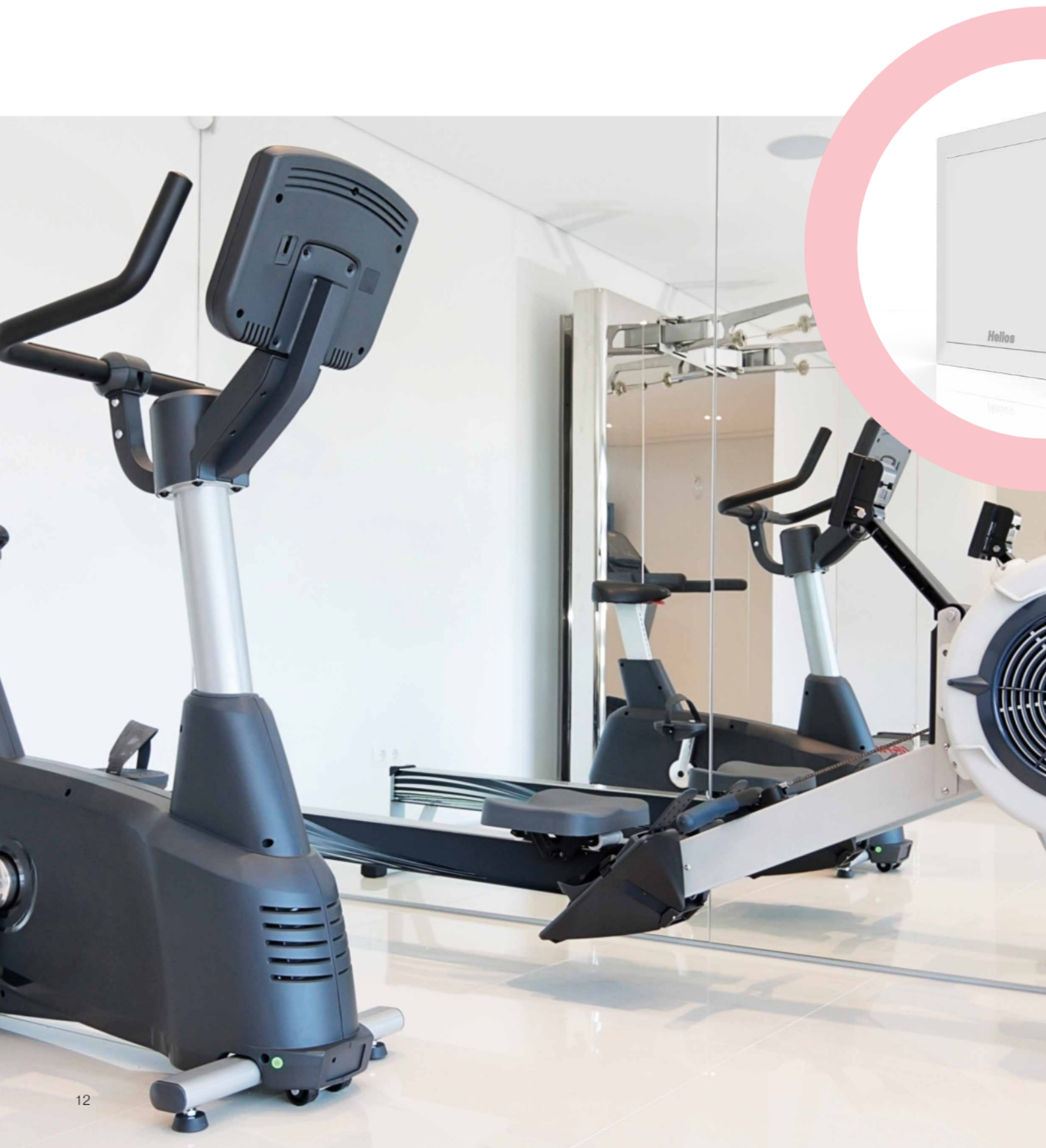
³⁾ With manual operation.

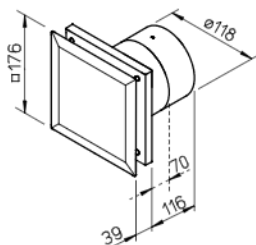
⁴⁾ Limit value 60, 70, 80, 90 % adjustable.



MiniVent® M1/120. Technical Data.

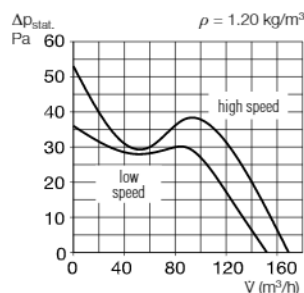
With a maximum air flow of 170 m³/h and multiple award-winning Premium-Design, M1/120 fits perfectly in medium-sized rooms of any kind with a nominal diameter of 120/125 mm.





All dim. in mm

M1/120 Performance diagram



Features:

- Supplied with 2 speeds as standard, 170/150 m³/h.
- Lowest power consumption of only 10 Watt at $V = 150$ m³/h.
- Extremely quiet due to ultraSilence® technologie; just 32 dB(A) at $V = 150$ m³/h.
- Pressure output: 120 m³/h air flow at 31 Pa. Max. air flow 170 m³/h. Max. pressure 53 Pa.
- Where space is limited the guide vane of M1 can be simply removed. Thus reducing the installation depth to 70 from 116 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 120/125 mm.

Further properties:

- All components made from high-quality white polymers.
- The motor design and ball bearings are selected for long-term durability, steady performance and lifelong operational reliability.
- Motor supplied with thermal overload protection, providing maintenance and trouble-free, continuous operation.
- Suitable for use in zone 1 of bathrooms according to DIN VDE 0100-701.
- The electrical supply cables may be recessed or surface mounted.
- Practical quick assembly using push-on cable connectors for the electrical connection.

Type Ref. No.	M1/120 6360	M1/120 N/C 6361	M1/120 F 6364	M1/120 P 6363
Model	Standard model equipped with two speeds	As M1/120, with codeable overrun and interval timer ¹⁾	As M1/120, with automatic humidity control ^{1) 4)}	As M1/120, with motion sensor ¹⁾
Run on time, min. optionally on high or low speed	—	6, 10, 15, 21 adjustable	6, 12, 18, 24 adjustable ³⁾	6
Interval operation, hrs. optionally on high or low speed	—	0, 8, 12, 24 adjustable	—	—
Delayed start approx. sec.	—	0, 45, 90, 120	0 or 45 ³⁾	—
Back draught shutter, removable	yes	yes	yes	yes
Air flow volume m³/h	170 / 150	170 / 150	170 / 150	170 / 150
Impeller-Ø mm	111	111	111	111
R.P.M. min ⁻¹	2350 / 2050	2350 / 2050	2350 / 2050	2350 / 2050
Voltage/frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	13 / 10	13 / 10	13 / 10	13 / 10
Rated current A	0.09 / 0.08	0.09 / 0.08	0.09 / 0.08	0.09 / 0.08
Sound pressure level dB(A) in 3 m ²⁾	36 / 32	36 / 32	36 / 32	36 / 32
Wiring diagram No.	915	917	919	918
Electrical power supply NYM-O in mm²	3 x 1.5	4 x 1.5	4 x 1.5	3 x 1.5
Protection class II, protection type	IP 45	IP 45	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.05	1.05	1.05	1.05
Accessories				
Operation switch 0-1-2	MVB 6091	—	—	—
Telescopic wall sleeve	TWH 120 6353	TWH 120 6353	TWH 120 6353	TWH 120 6353
Wall mounting kit	WES 120 0486	WES 120 0486	WES 120 0486	WES 120 0486

¹⁾ All electronic functions optionally on high or low speed - adjustable.

²⁾ Free field.

³⁾ With manual operation.

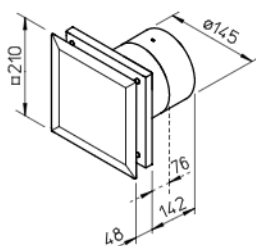
⁴⁾ Limit value 60, 70, 80, 90 % adjustable.



MiniVent® M1/150. Technical Data.

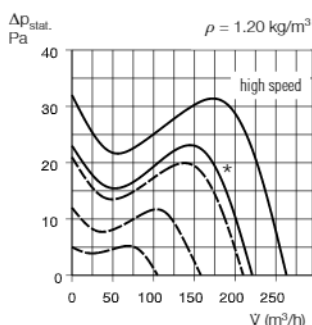
Thanks to EC technology, the M1/150 is extremely energy efficient and it brings the extra fresh air with its high performance capacity in medium-sized to larger rooms such as club showers etc.





All dim. in mm

M1/150 Performance diagram



* low speed
--- Example performance levels of 0-10 V type with variable control



Features:

- Supplied with 2 speeds as standard, 260/220 m³/h.
- Lowest power consumption of only 6 Watt at $V = 220 \text{ m}^3/\text{h}$.
- Extremely quiet due to ultraSilence® technologie; just 35 dB(A) at $V = 220 \text{ m}^3/\text{h}$.
- Pressure output: 180 m³/h air flow at 31 Pa. Max. air flow 260 m³/h. Max. pressure 33 Pa.
- Where space is limited the guide vane of M1 can be simply removed. Thus reducing the installation depth to 76 from 142 mm.
- Compact dimensions for flush mounted installation in walls, shafts or ceilings with nominal dia. 150/160 mm.

Highlights:

- All M1/150 types are equipped with highly efficient EC motor technology for minimal operating costs as standard.
- The 0-10 V type has variable speed and offers a variety of application options in combination with CO₂, VOC or temperature sensors.
- The innovative, intelligent humidity control system of the M1/150 F allows the highly precise adjustment of functionality to individual circumstances (see description on page 9).
- Further properties see description M1/100.

Type Ref. No.	M1/150 6041	M1/150 N/C 6042	M1/150 F 6043	M1/150 0-10 V 6044
Model	Standard model equipped with two speeds	As M1/150, with codeable overrun and interval timer ¹⁾	As M1/150, with automatic humidity control ^{1) 4)}	Variable speed
Run on time, min. optionally on high or low speed	—	6, 10, 15, 21 adjustable	6, 10, 15, 21 adjustable ³⁾	—
Interval operation, hrs. optionally on high or low speed	—	0, 8, 12, 24 adjustable	—	—
Delayed start approx. sec.	—	0, 45, 90, 120	0, 45, 90, 120 ³⁾	—
Back draught shutter, removable	yes	yes	yes	yes
Air flow volume m³/h	260 / 220	260 / 220	260 / 220	260-50
Impeller-Ø mm	137	137	137	137
R.P.M. min ⁻¹	1900 / 1600	1900 / 1600	1900 / 1600	1900-980
Voltage/frequency 50 Hz	230 V	230 V	230 V	230 V
Power consumption W	8 / 4.5	8 / 5	9 / 6	9 / min. 3.5
Rated current A	0.08 / 0.06	0.10 / 0.09	0.08 / 0.06	0.08 / min. 0.035
Sound pressure level dB(A) in 3 m ²⁾	39 / 35	39 / 35	39 / 35	max. 39
Wiring diagram No.	1080	1081	1082	1083
El. power supply (supply) NYM-O in mm²	3 x 1.5	4 x 1.5	4 x 1.5	2 x 1.5 ⁸⁾
El. power supply (control) LiYY in mm²	—	—	—	3 x 0.34
Protection class II, protection type	IP 45	IP 45	IP 45	IP 45
Max. air flow temperature	+40 °C	+40 °C	+40 °C	+40 °C
Weight approx. kg	1.20	1.20	1.20	1.20
Accessories				
Operation switch	MVB 6091	DSEL 2 1306	DSEL 2 1306	SU-3 10 ⁵⁾ 4266
UP speed potentiometer	—	—	—	PU 10 ⁵⁾ 1734
Universal control system	—	—	—	EUR EC ⁶⁾ 1347
Telescopic wall sleeve	TWH 150 6354	TWH 150 6354	TWH 150 6354	TWH 150 6354
Wall mounting kit	WES 150 0537	WES 150 0537	WES 150 0537	WES 150 0537

¹⁾ All codeable times and electronic functions are optionally adjustable on high, low or both speeds. ²⁾ Free field conditions. ³⁾ With manual operation. ⁴⁾ Limit values of 40-90 % continuously adjustable. ⁵⁾ Surface mounted version see main Helios catalogue. ⁶⁾ Several EC fans can normally be connected. ⁷⁾ Alternative electronic differential pressure/temperature control (EDR/ETR, No. 1437/1438), see main Helios catalogue. ⁸⁾ Additional connection cable provided for relay output.



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