

TECHNICAL CATALOGUE

EDITION 2024 / 2

Awenta **PRO**

RECUPERATION SYSTEMS



FOUR SEASON VENTILATION



Awenta PRO





Welcome home

Awenta PRO



Dear Customers,

in order to meet your expectations related to taking care of health and the high quality of the air at your homes, as well as paying attention to the environment, we hereby present the product catalogue for the AWENTA PRO brand.

30 years of experience in the ventilation industry constituted the basis for AWENTA to start a new business chapter. A comprehensive recuperation system for buildings, called AWENTA PRO, has been developed in our Research and Development Centre (RDC), which is based on our proprietary design solutions to improve air quality and living comfort in your homes.

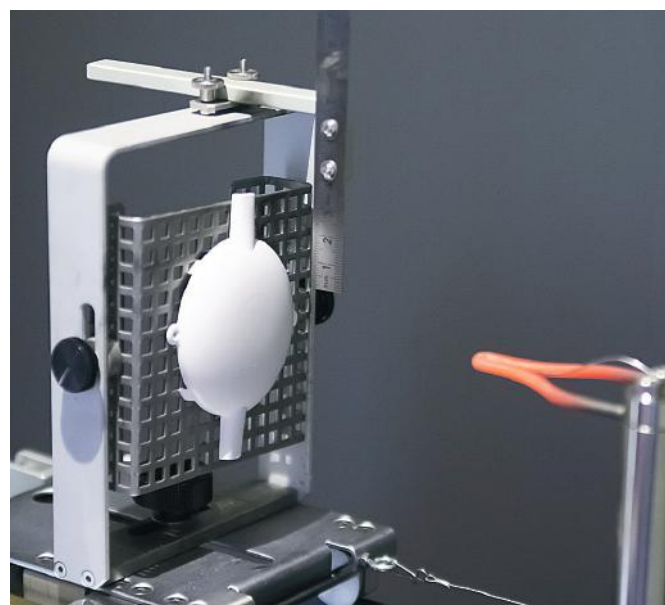
The basis of the system consists of the Aquila and Auros heat recovery units with a capacity from 175 m³/h to 655 m³/h. The units have been manufactured using components from renowned manufacturers such as: Knauf Industries, Recair, Ziehl-Abegg and which in combination with a thought-out proprietary design,

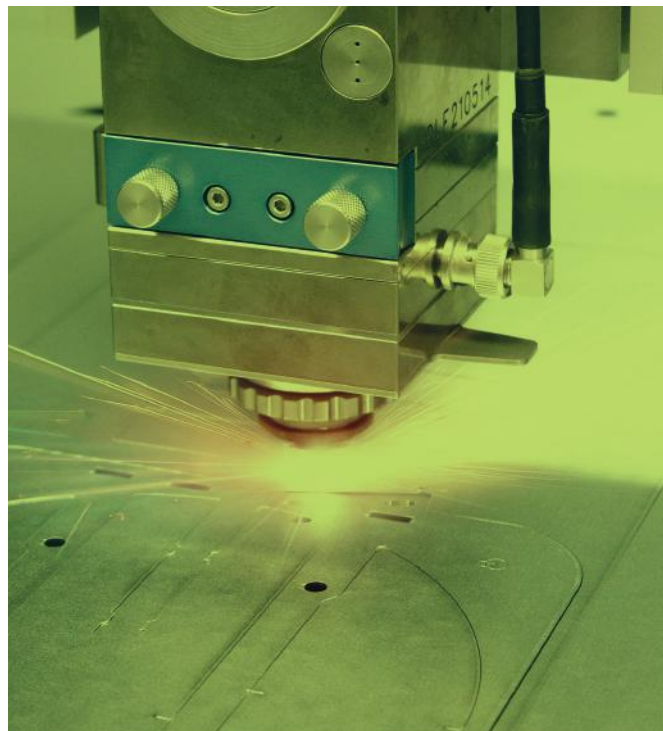
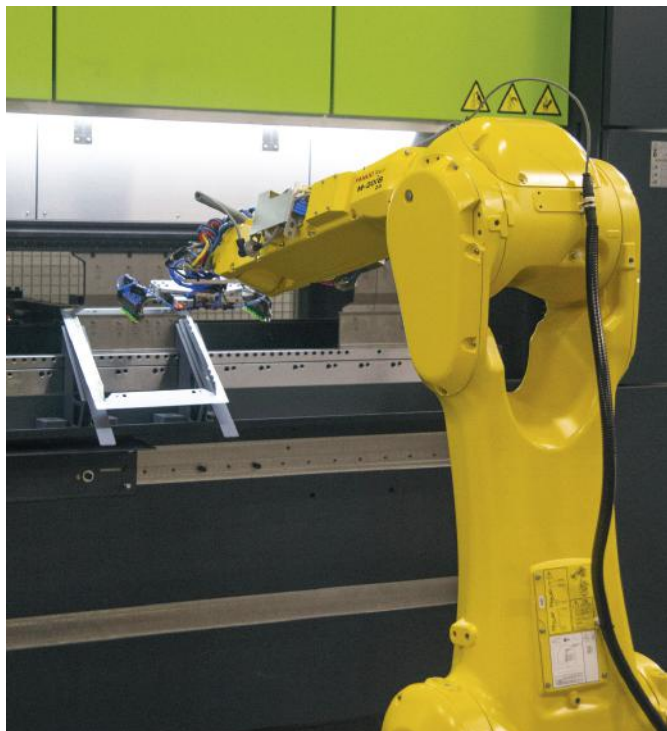
a range of technical solutions and attention to detail, have resulted in reliable and high-quality products.

Quiet operation, long service life and of operation are the characteristics of the AWENTA PRO air handling units, which significantly affect the of unit installation and their daily operation. AWENTA plans to systematically expand its range with new units for different types of residential buildings.

The product range of AWENTA PRO includes ventilation system components such as ducts, connectors, distribution and plenum boxes and other accessories, which together form a complete ventilation solution with heat recovery.

The AWENTA PRO products are manufactured at the AWENTA production plant in Stojadła near Warsaw, which ensures their constant availability. By applying advanced quality control procedures and using its equipment resources, AWENTA provides modern and durable products as well as comprehensive solutions for investors based on its complete commercial offer.





With the establishment of the **Research and Development Centre**, AWENTA has gained a tool for in-depth analysis and verification of the quality of materials and raw materials used in the production process. The company can also perform measurements of key parameters of both fans, ventilation units and the air handling units themselves.

At the heart of the RDC is its main component – the anechoic chamber. It allows for the testing of the products in terms of the noise generated. The chamber meets the stringent requirements of European directives and has been equipped with measuring equipment from renowned manufacturers, enabling measurements from 5 dB.

Manufacturing of high-quality products would not be possible without constant investment, both in the equipment resources as well as in human capital. AWENTA is steadily increasing its production capacity thanks to continuous investment.

Due to improved processes for the preparation of steel sheets, from which metal products such as ventilation grilles and inspection doors are made, the metal products have gained highly corrosion-resistant properties, which translates into an extended manufacturer's guarantee of up to 5 years. In addition, the application of new paint coatings has increased the scratch resistance of metal products to a value of 5 H (according to EN ISO 15184).

The recent investment in steel sheet processing equipment and a state-of-the-art automatic powder coating line enabled AWENTA to gain new production capacity. This has translated into the development of new product ranges or allowed the production of components for new units. In this case, an example may constitute the AWENTA PRO units designed for recuperation purposes.

The entire manufacturing process of metal products is performed exclusively by the production plant in Stojadła.



NOVELTY
SYSTEM **Ø90**



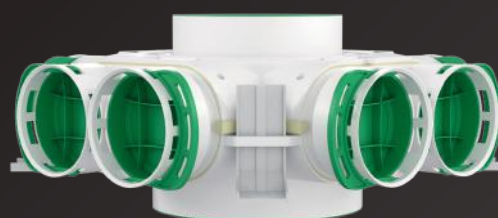
**Plenum box
VPB-2/90**



**Distribution box for
Ø90 mm pipes**

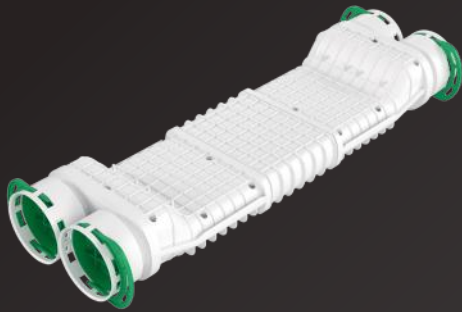


**Distribution box with side
connector for Ø90 mm pipes**

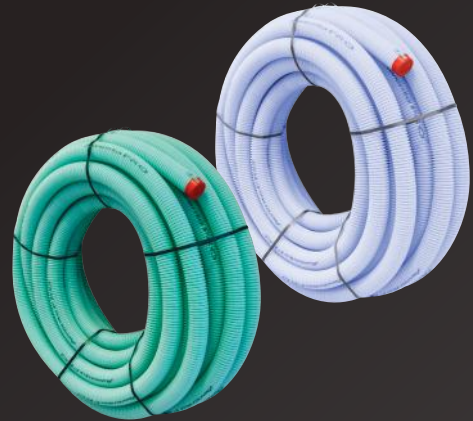


**Straight-through distribution
box for Ø90 mm pipes**

In order to meet our customers' expectations, we are pleased to announce the introduction of a new size of air distribution system for $\varnothing 90$ mm pipes, a new range of air intake and exhaust grilles and decentralised heat recovery ventilation units.



**Duct crossover
for $\varnothing 90$ mm pipes**



Ventilation duct $\varnothing 90$



Accessories $\varnothing 90$



**Duct cutter
for $\varnothing 90$ mm duct**



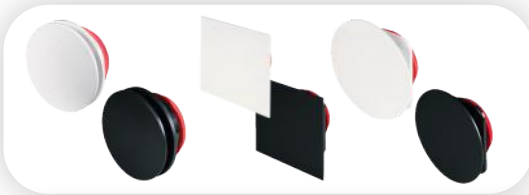
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Diagram of the Awenta **PRO** heat recovery system



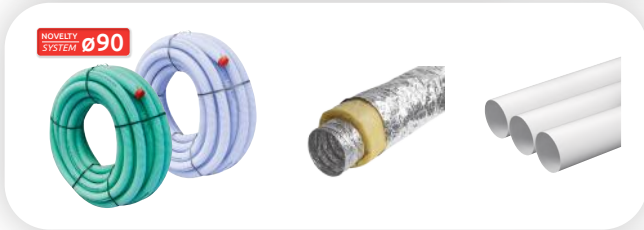
NEW MODEL



NEW MODEL



NEW MODEL



NOVELTY SYSTEM Ø90



NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90



NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90



NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90



NOVELTY SYSTEM Ø90



NOVELTY SYSTEM Ø90

NOVELTY SYSTEM Ø90



Auros Series NEW MODEL

VER305, VER405, VER505, VER605

Auros series

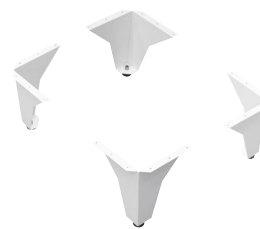
RECUPERATOR FEATURES

- Mounting position – wall (wall batten included) and floor standing (VKNER legs sold separately)
- 360° rotating connection joints
- Counterflow heat exchanger with the efficiency of up to 95%
- Energy-efficient fans with the Ziehl-Abegg EC motors
- Automatic bypass, 100% bypass, isolated
- Modulating preheat coil with variable operating parameters
- Excellent insulation thanks to the use of the EPP (expanded polypropylene) housing
- Leak tight structure preventing the penetration of odours and pollutants from the exhaust air into the supply air
- Mobile application for smartphones – Android, iOS and possible remote control by using webpage (iNext module required)
- Automatic flow control system (constant flow) – in CF versions.
- Equipped with two filters (M5/ISO ePM10) as a standard
- Possibility of using fine filters (F7/ISO ePM1) with higher filtration class
- Possibility of using reusable pre-filter.
- Possible interoperation with the air quality, carbon dioxide and humidity sensor (VSPM, VSHC, VSHW)
- Option of cleaning heat exchanger
- Long service life
- Scratch resistance of painted parts at a value of 5 H
- Antimicrobial properties of painted parts according to ASTM E2149-13a

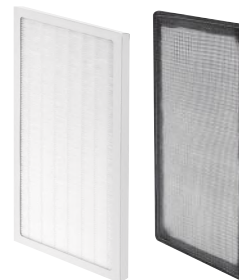


Supplementary products

LEGS
VKNER



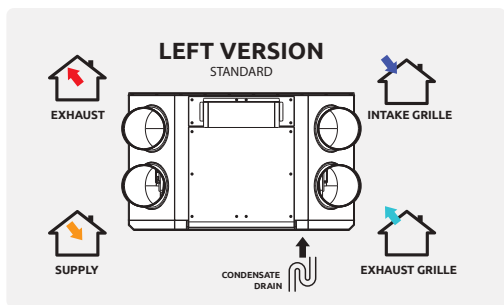
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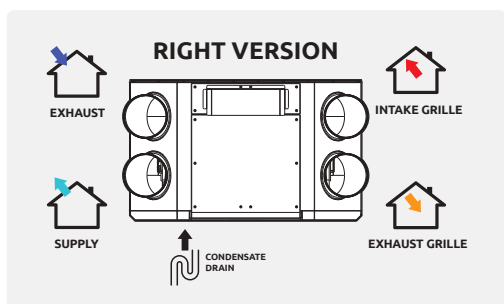
Auros Series

VER305, VER405, VER505, VER605

Auros series



VER305L	Recuperator AUROS 305 left version (standard)
VER405L	Recuperator AUROS 405 left version (standard)
VER505L	Recuperator AUROS 505 left version (standard)
VER605L	Recuperator AUROS 605 left version (standard)
VER305LCF	Recuperator AUROS 305 left version (standard) + module CF
VER405LCF	Recuperator AUROS 405 left version (standard) + module CF
VER505LCF	Recuperator AUROS 505 left version (standard) + module CF
VER605LCF	Recuperator AUROS 605 left version (standard) + module CF



VER305P	Recuperator AUROS 305 right version (standard)
VER405P	Recuperator AUROS 405 right version (standard)
VER505P	Recuperator AUROS 505 right version (standard)
VER605P	Recuperator AUROS 605 right version (standard)
VER305PCF	Recuperator AUROS 305 right version (standard) + module CF
VER405PCF	Recuperator AUROS 405 right version (standard) + module CF
VER505PCF	Recuperator AUROS 505 right version (standard) + module CF
VER605PCF	Recuperator AUROS 605 right version (standard) + module CF

TECHNICAL INFORMATION

	SERIES300	SERIES400	SERIES500 NOVELTY	SERIES600
INDEX	VER305	VER405	VER505	VER605
Supply voltage	230 V AC / 50 Hz			
IP protection class	IP33			
Preheat coil power	2000 W			
Max. power consumption (without preheat coil)	195 W	280 W	295 W	340 W
Capacity (at 100 Pa)	313 m ³ /h	430 m ³ /h	508 m ³ /h	605 m ³ /h
Maximum engine speed	3 600 RPM	4 000 RPM	3 500 RPM	4 400 RPM
Noise level	44,0 dB(A)	44,3 dB(A)	44,0 dB(A)	45 dB(A)
Type of heat exchanger	RECAIR cross - counter - flow heat exchanger (optional enthalpy)			
Max. heat recovery efficiency	up to 95%			
Heat exchanger material	Polystyrene			
Housing material	EPP + powder coated steel			
Filter - intake vent	VM5ER405 - M5 ISO ePM10 VF7ER405 (optional F7 ISO ePM1)		VM5ER605 - M5 ISO ePM10 VF7ER605 - (optional F7 ISO ePM1)	
Filter - exhaust	VM5ER405 - M5 ISO ePM10		VM5ER605 - M5 ISO ePM10	
Pre-filter intake / exhaust	VFWER305 (optional)	VFWER405 (optional)	VFWER505 (optional)	VFWER605 (optional)
Diameter of air connector	160 / torsional	160 / torsional	200 / torsional	200 / torsional
Diameter of condensate drain connector	32 mm			
Controller type	AERO 4 + NANO COLOR (colored)			
Bypass	Automatic 100%			
Fans	2x radial fan with EC motor			
System Constant Flow	YES, depend on version			
Komunikacja Modbus RTU	YES			
Internet module	VLAN iNEXT (optional)			
Air quality sensor	VSPM (optional)			
CO ₂ concentration and humidity sensor	VSHC (optional)			
Humidity sensor	VSHW (optional)			
Weight	43 kg	46 kg	52 kg	

PRODUCT DATA SHEET

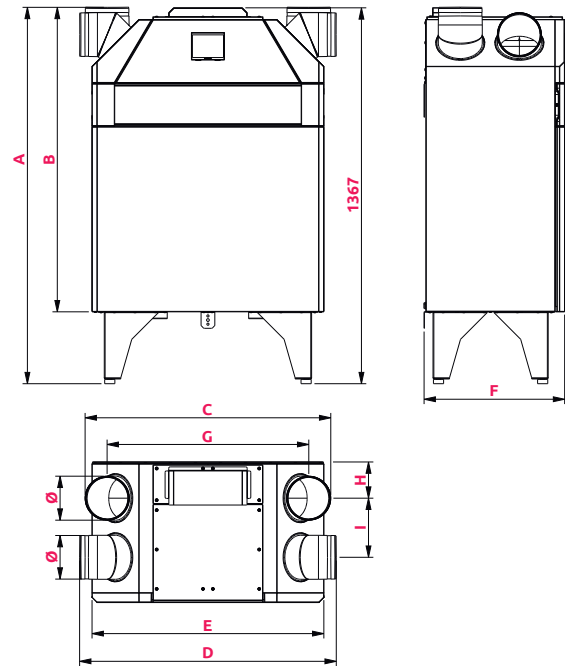
Auros Series

VER305, VER405, VER505, VER605

AUROS with horizontal mounting
on VKNER legs (sold separately)

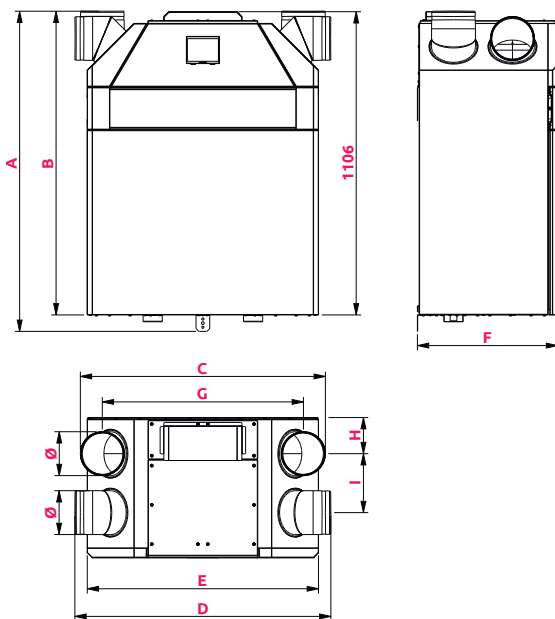


DIMENSIONS



	Ø	A	B	C	D	E	F	G	H	I
VER305	160	1 370	1 108	764	804	713	510	604	132	215
VER405	160	1 370	1 108	894	934	843	510	743	132	215
VER505	200	1 377	1 115	946	962	843	610	748	147	265
VER605	200	1 377	1 115	946	962	843	610	748	147	265

DIMENSIONS



AUROS with wall-mounting on strip
(included in the scope of supply)



Auros Series

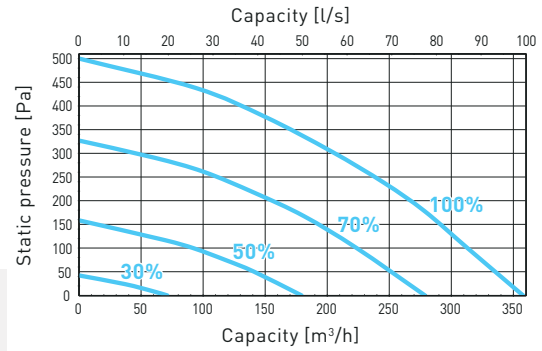
VER305, VER405, VER505, VER605

CAPACITY



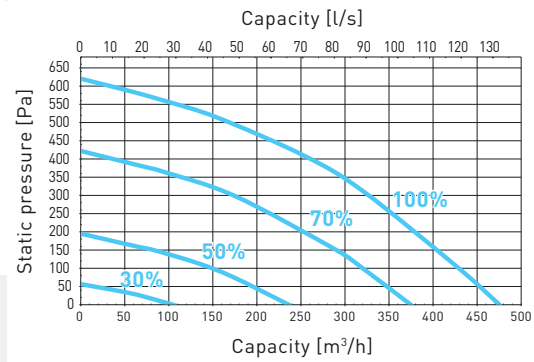
AUROS 305

VER305



Auros 405

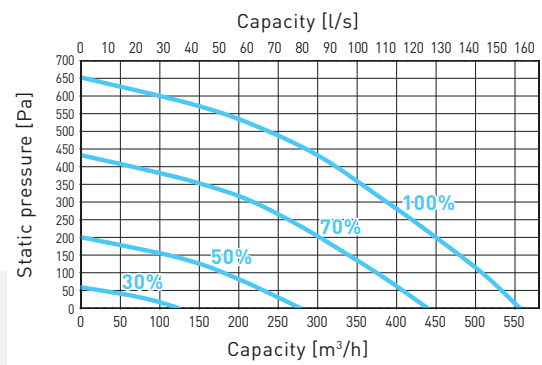
VER405



Auros 505

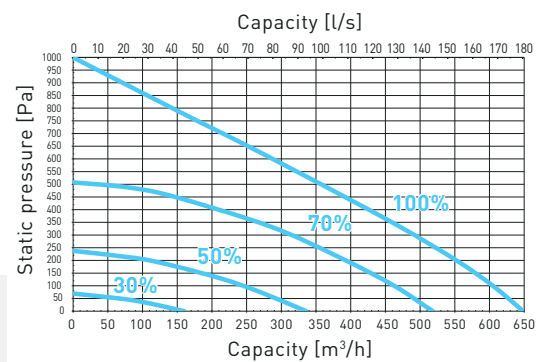
VER505

NOVELTY



Auros 605

VER605



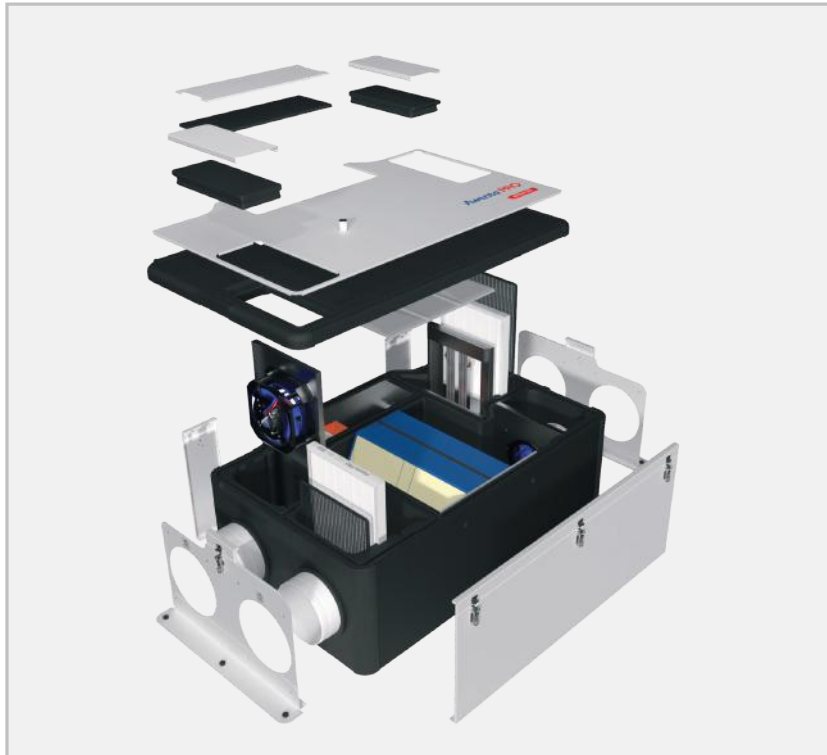
Avira Series NEW MODEL

VAVP305, VAVP405, VAVP505, VAVP605

Avira Series

RECUPERATOR FEATURES

- Installation position - ceiling (suspended)
- Counterflow heat exchanger with the efficiency of up to 95%
- Energy-efficient fans with the EC Ziehl-Abegg and EBM papst motors
- Automatic bypass, 100% bypass, isolated
- Modulatic preheat coil with variable operating parameters
- Excellent insulation thanks to the use of the EPP (expanded polypropylene) housing
- Leak tight structure preventing the penetration of odours and pollutants from the exhaust air into the supply air
- Mobile application for smartphones – Android, iOS and possible remote control by using webpage (iNext module required)
- Automatic flow control system (constant flow) - in CF versions
- Equipped with two filters (M5/ISO ePM10)
- Possibility of using fine filters (F7/ISO ePM1) with higher filtration class
- Possibility of using reusable pre-filter
- Possible interoperation with the air quality, carbon dioxide and humidity sensor (VSPM, VSHC, VSHW)
- Option of cleaning heat exchanger
- Long service life
- Scratch resistance of painted parts at a value of 5 H
- Antimicrobial properties of painted parts according to ASTM E2149-13a
- Possible remote control via MODBUS RTU protocol



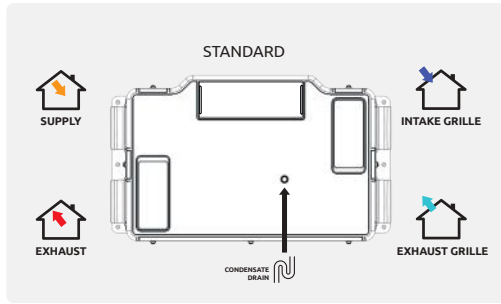
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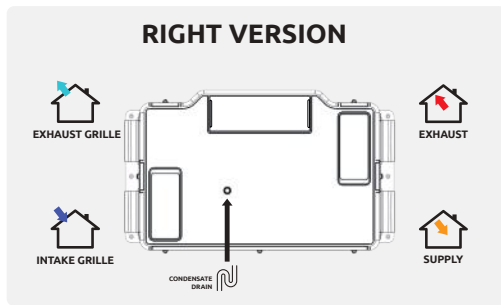


Avira Series

VAVP305, VAVP405, VAVP505, VAVP605



VAVP305L	Recuperator Avira 305 left version (standard)
VAVP405L	Recuperator Avira 405 left version (standard)
VAVP505L	Recuperator Avira 505 left version (standard)
VAVP605L	Recuperator Avira 605 left version (standard)
VAVP305LCF	Recuperator Avira 305 left version (standard) + module CF
VAVP405LCF	Recuperator Avira 405 left version (standard) + module CF
VAVP505LCF	Recuperator Avira 505 left version (standard) + module CF
VAVP605LCF	Recuperator Avira 605 left version (standard) + module CF



VAVP305P	Recuperator Avira 305 right version (standard)
VAVP405P	Recuperator Avira 405 right version (standard)
VAVP505P	Recuperator Avira 505 right version (standard)
VAVP605P	Recuperator Avira 605 right version (standard)
VAVP305PCF	Recuperator Avira 305 right version (standard) + module CF
VAVP405PCF	Recuperator Avira 405 right version (standard) + module CF
VAVP505PCF	Recuperator Avira 505 right version (standard) + module CF
VAVP605PCF	Recuperator Avira 605 right version (standard) + module CF

TECHNICAL INFORMATION

	SERIES300 <small>NOVELTY</small>	SERIES400 <small>NOVELTY</small>	SERIES500	SERIES600
INDEX	AVIRA 305	AVIRA 405	AVIRA 505	AVIRA 605
Supply voltage	230 V AC / 50 Hz			
IP protection class	IP33			
Preheat coil power	2000 W			
Max. power consumption (without preheat coil)	155 W	305 W	340 W	400 W
Capacity (at 100 Pa)	305 m ³ /h	425 m ³ /h	546 m ³ /h	655 m ³ /h
Maximum engine speed	3 300 RPM	4 200 RPM	4 400 RPM	2 400 RPM
Noise level	42,0 dB(A)	47,0 dB(A)	48 dB(A)	42 dB(A)
Type of heat exchanger	RECAIR cross - counter - flow heat exchanger (optional enthalpy)			
Max. heat recovery efficiency	up to 95%			
Heat exchanger material	Polystyrene			
Housing material	EPP + powder coated steel			
Filter - intake vent	VM5AV405 - M5 ISO ePM10 (optional VF7AV405 - F7 ISO ePM1)		VM5AV605 - M5 ISO ePM10 (optional VF7AV605 - F7 ISO ePM1)	
Filter - exhaust	VM5AV405 - M5 ISO ePM10		VM5AV605 - M5 ISO ePM10	
Pre-filter intake / exhaust	VFWAV405 (optional)		VFWAV605 (optional)	
Diameter of air connector	160 mm		200 mm	
Diameter of condensate drain connector	32 mm			
Controller type	AERO 4 + NANO COLOR 2			
Bypass	Automatic 100%			
Fans	2x radial fan with EC motor			
System Constant Flow	YES, depend on version			
Komunikacja Modbus RTU	YES			
Internet module	VLAN iNEXT (optional)			
Air quality sensor	VSPM (optional)			
CO ₂ concentration and humidity sensor	VSHC (optional)			
Humidity sensor	VSHW (optional)			
Weight	35 kg		43 kg	

PRODUCT DATA SHEET

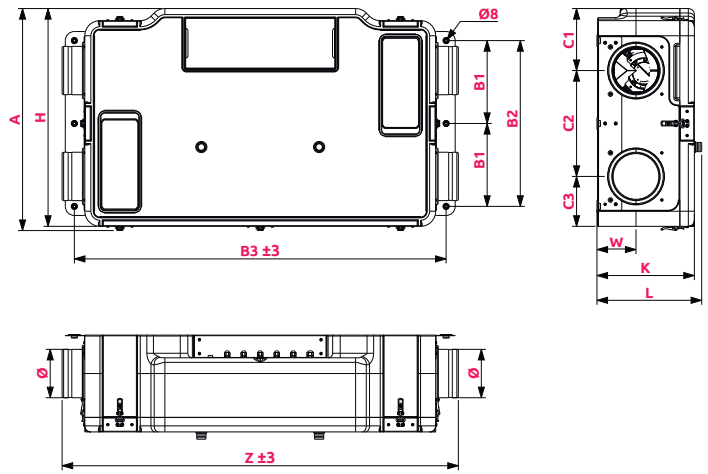
Avira Series

VAVP305, VAVP405, VAVP505, VAVP605

Avira 305

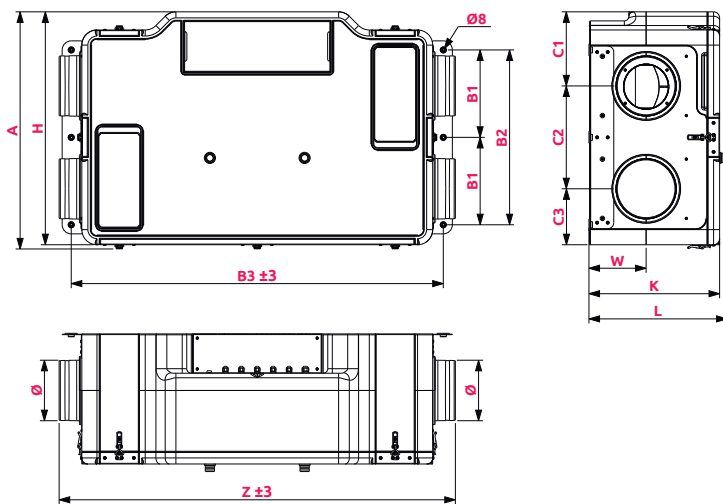


DIMENSIONS

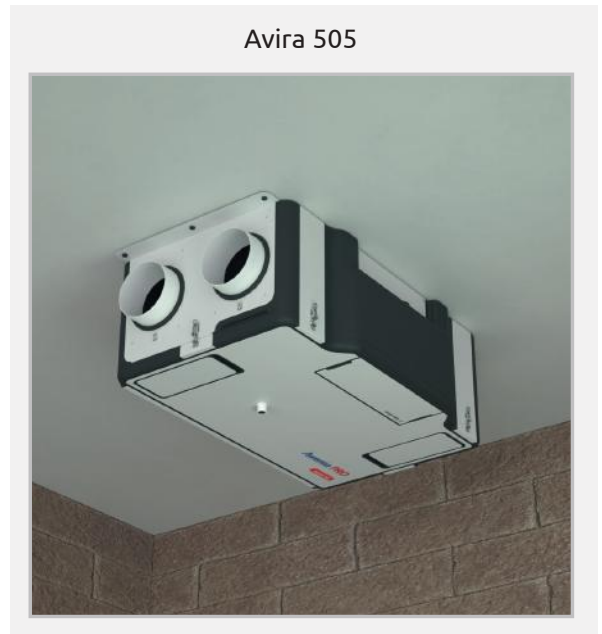


	Ø	A	H	Z	B1	B2	B3	W	K	L	C1	C2	C3
VAVP305	160	734	720	1310	274	548	1230	129	322	347	205	350	165
VAVP405	160	734	720	1310	274	548	1230	129	322	347	205	350	165
VAVP505	200	784	770	1310	289	578	1230	189	432	457	245	340	185
VAVP605	200	784	770	1310	2897	578	1230	189	432	457	245	340	185

DIMENSIONS



Avira 505



Avira Series

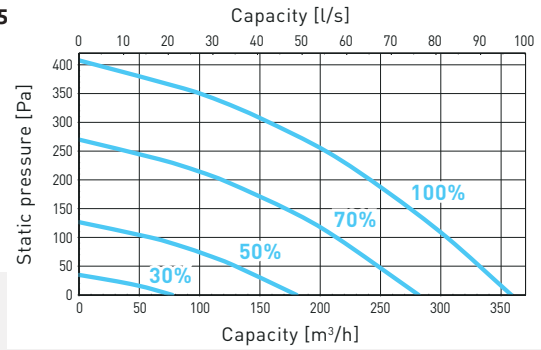
VAVP305, VAVP405, VAVP505, VAVP605

CAPACITY

NOVELTY

Avira 305

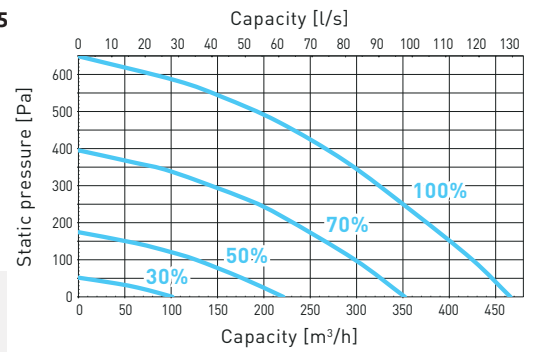
VAVP305



NOVELTY

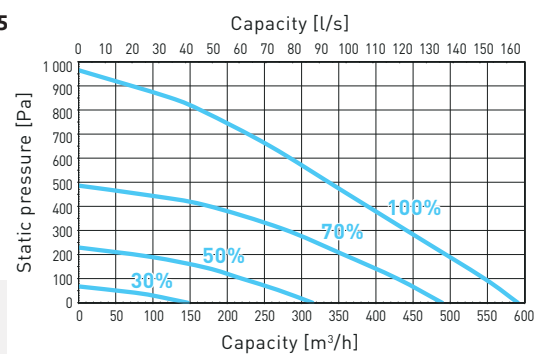
Avira 405

VAVP405



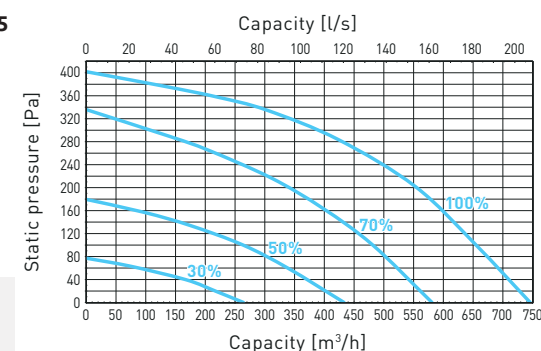
Avira 505

VAVP505



Avira 605

VAVP605



Aquila Series - wall mounted version

VAR305

RECUPERATOR FEATURES

- Installation positions – wall mounted or floor standing (VKNAR feet required)
- Counter-flow heat exchanger with the efficiency of up to 95%
- Energy-saving fans with Ziehl-Abegg motors
- Automatic bypass, 100% bypass, insulated
- Excellent insulation thanks to an outer housing made of EPP (expanded polypropylene)
- Tight structure preventing odours and contaminants from the exhaust air from entering the supply air
- Wireless control available (iNext module required)
- Equipped with two filters (M5/ISO ePM10) as standard
- Option of using fine filters (F7/ISO ePM1) with a higher filtration class
- Possible use of reusable pre-filter
- Possible interoperation with the air quality, carbon dioxide and humidity sensor (VSPM, VSHC, VSHW)
- Cleanable heat exchanger
- Long service life
- Anti-freeze system
- Scratch resistance of painted parts at a value of 5 H
- Antimicrobial properties of painted elements according to ASTM E2149-13a
- Possible remote control via MODBUS RTU protocol



TECHNICAL INFORMATION

AQUILA S 305	
INDEX	VAR305
Supply voltage	230 V AC / 50Hz
Power consumption	210 W
Preheat coil maximum power	750 W
Electrical protection class	I
IP protection class	IP22
Capacity (at 100 Pa)	313 m³/h
Maximum engine speed	4 000 RPM
Noise level	49 dB(A)
Type of heat exchanger	RECAIR cross - counter - flow heat exchanger (optional enthalpy)
Max. heat recovery efficiency	up to 95%
Heat exchanger material	Polystyrene
Housing material	EPP + powder coated steel
Filter - air inlet	VM5AR - M5 ISO ePM10 (optional VF7AR - F7 ISO ePM1)
Filter - extracted air	VM5AR - M5 ISO ePM10
Pre-filter - air inlet / extracted air	VFWAR (optional)
Air spigots diameter	160 mm
Diameter of condensate drain connector	25/32 mm
Weight	16kg (VAR305) + 5kg (VARR75-160)
Controller type	AERO 4 + NANO COLOR (colored)
Bypass	Automatic (100%)
Fans	2x radial fan with EC motor
Internet module	VLAN iNEXT (optional)
Android, iOS application	YES
Air quality sensor	VSPM (optional)
CO ₂ concentration and humidity sensor	VSHC (optional)
Humidity sensor	VSHW (optional)

Supplementary products

FEET VKNAR



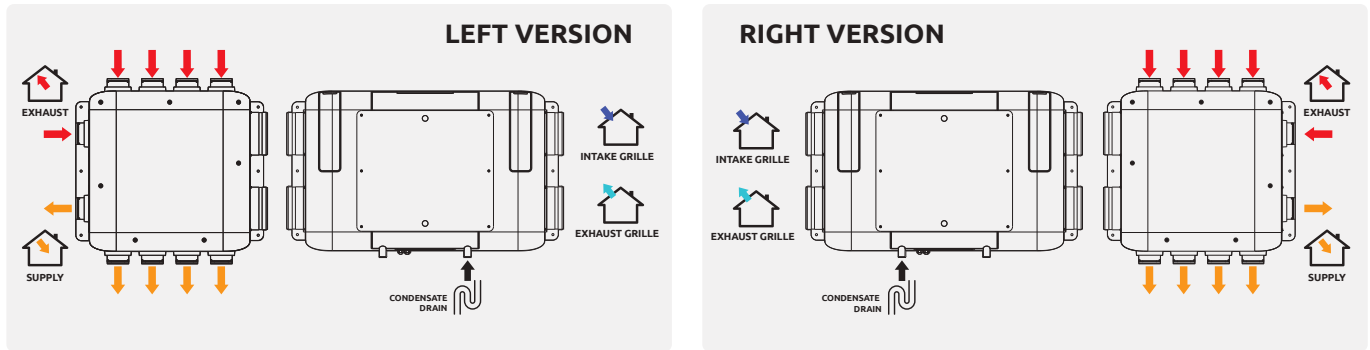
FILTERS page 24



Aquila Series - wall mounted version

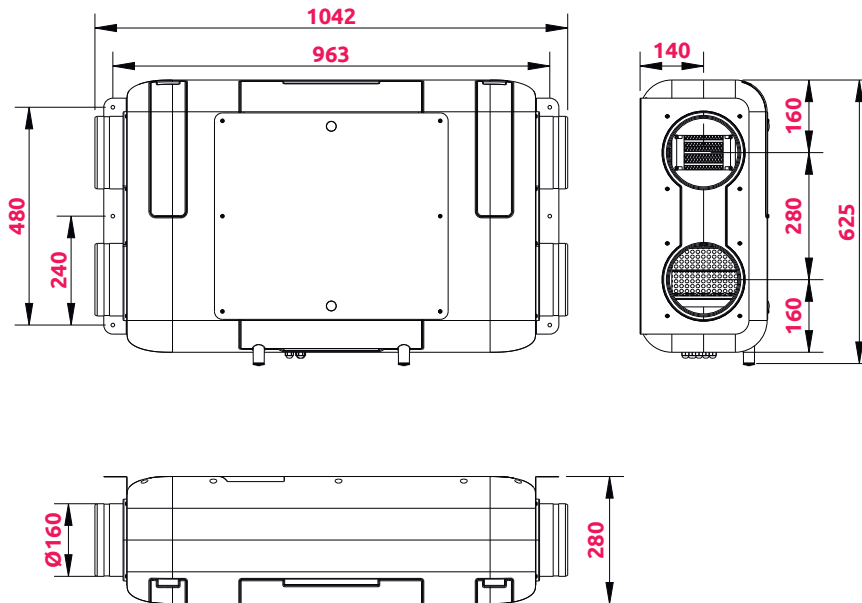
VAR305

Aquila Series



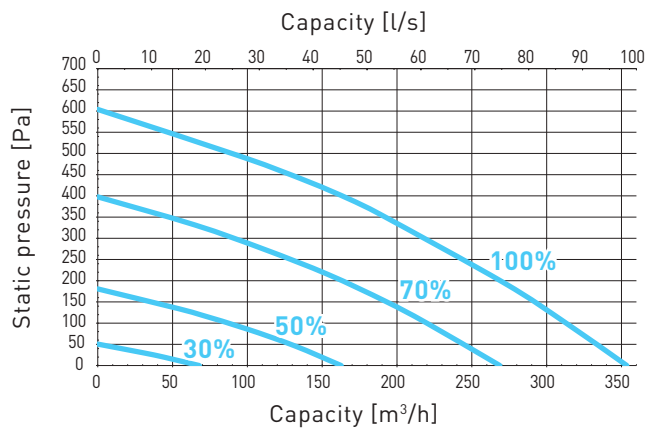
DIMENSIONS

VAR305



CAPACITY

VAR305



Aquila Series - ceiling mounted version

VARP305

RECUPERATOR FEATURES

- Installation position – ceiling mounted (suspended)
- Counter-flow heat exchanger with the efficiency of up to 95%
- Energy-saving fans with Ziehl-Abegg motors
- Automatic bypass, 100% bypass, insulated
- Excellent insulation thanks to an outer housing made of EPP (expanded polypropylene)
- Tight structure preventing odours and contaminants from the exhaust air from entering the supply air
- Wireless control available (iNext module required)
- Equipped with two filters (M5/ISO ePM10) as standard
- Option of using fine filters (F7/ISO ePM1) with a higher filtration class
- Possible use of reusable pre-filter
- Possible interoperation with the air quality, carbon dioxide and humidity sensor (VSPM, VSHC, VSHW)
- Cleanable heat exchanger
- Long service life
- Anti-freeze system
- Scratch resistance of painted parts at a value of 5 H
- Antimicrobial properties of painted elements according to ASTM E2149-13a
- Possible remote control via MODBUS RTU protocol



TECHNICAL INFORMATION

AQUILA P 305	
INDEX	VARP305
Supply voltage	230 V AC / 50Hz
Power consumption	210 W
Preheat coil maximum power	750 W
Electrical protection class	I
IP protection class	IP22
Capacity (at 100 Pa)	313 m ³ /h
Maximum engine speed	4 000 RPM
Noise level	49 dB(A)
Type of heat exchanger	RECAIR cross - counter - flow heat exchanger (optional enthalpy)
Max. heat recovery efficiency	up to 95%
Heat exchanger material	Polystyrene
Housing material	EPP + powder coated steel
Filter - air inlet	VM5AR - M5 ISO ePM10 (optional VF7AR - F7 ISO ePM1)
Filter - extracted air	VM5AR - M5 ISO ePM10
Pre-filter - air inlet / extracted air	VFWAR (optional)
Air spigots diameter	160 mm
Diameter of condensate drain connector	32 mm
Weight	16kg (VAR305) + 5kg (VARR75-160)
Controller type	AERO 4 + NANO COLOR (colored)
Bypass	Automatic (100%)
Fans	2x radial fan with EC motor
Internet module	VLAN iNEXT (optional)
Android, iOS application	YES
Air quality sensor	VSPM (optional)
CO ₂ concentration and humidity sensor	VSHC (optional)
Humidity sensor	VSHW (optional)

Supplementary products

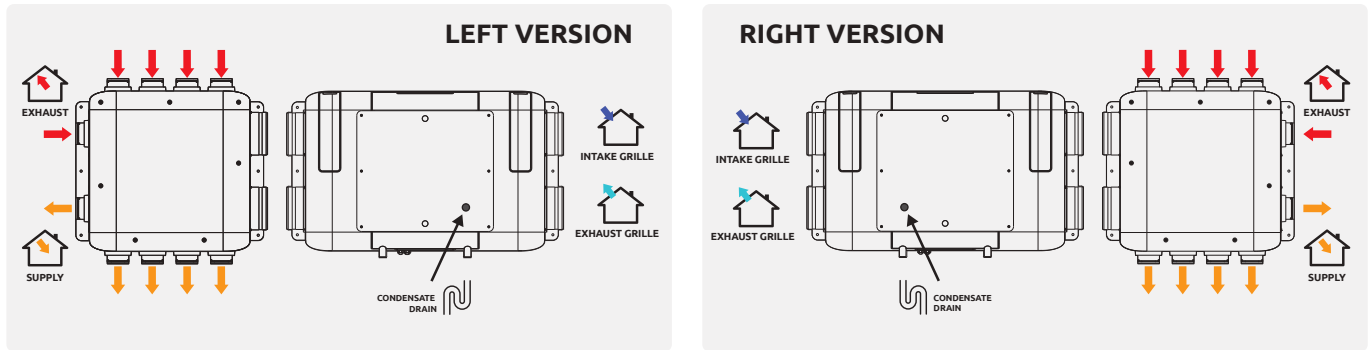
FILTERS page 24



Aquila Series - ceiling mounted version

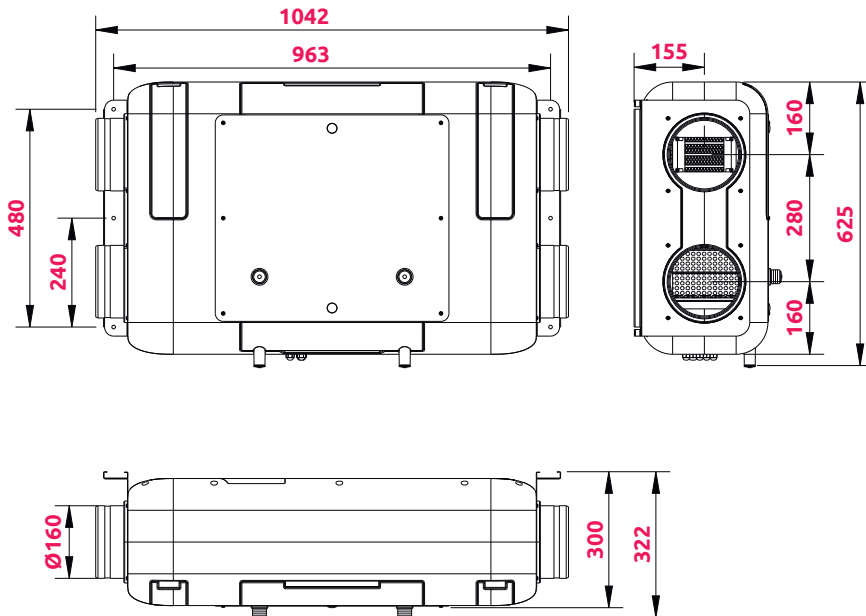
VARP305

Aquila Series



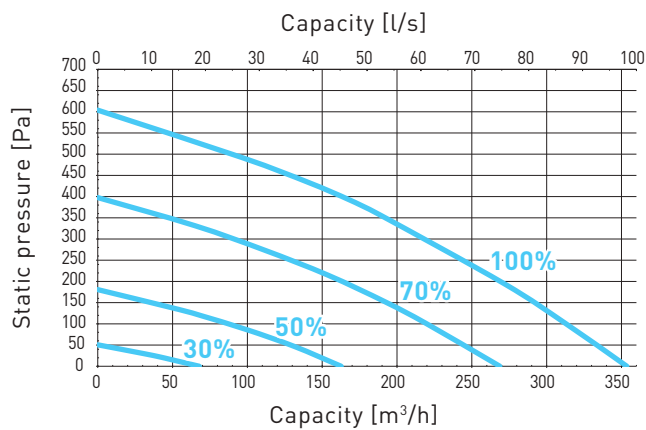
DIMENSIONS

VARP305



CAPACITY

VARP305

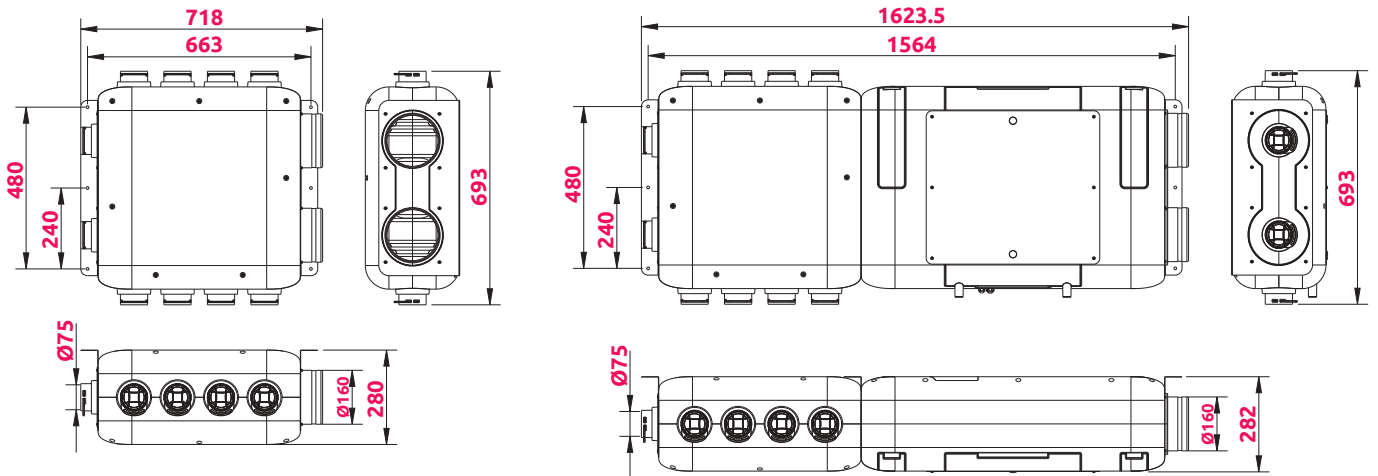


PRODUCT DATA SHEET

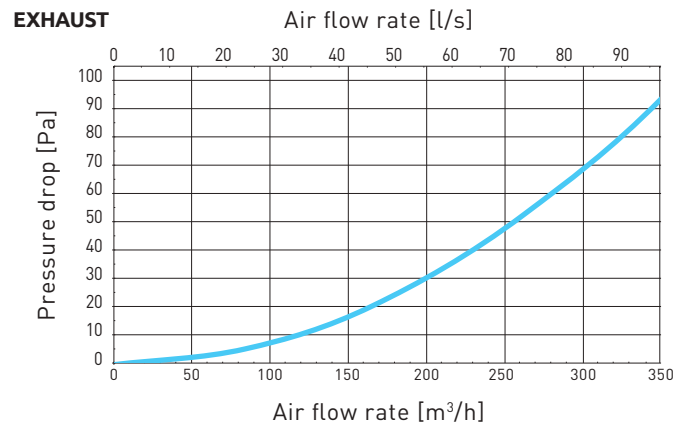
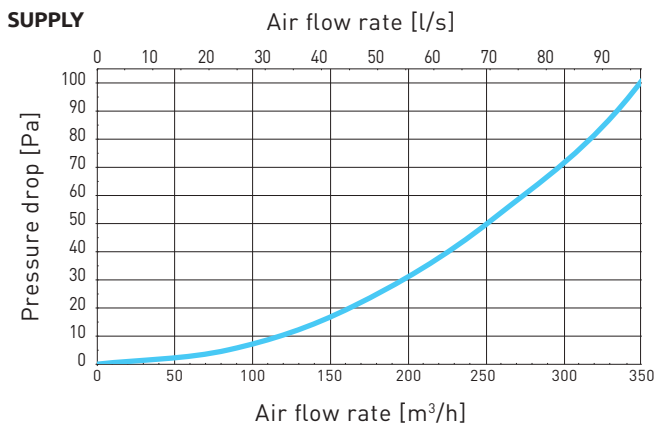
Distribution unit for Aquila heat recovery unit

VARR75-160, VARR75-160K

- Dedicated distribution unit for the Aquila series heat recovery units, connection of up to 10 ducts
- $\varnothing 75$ mm (5 supply ducts + 5 exhaust ducts). It is used to distribute the supply air and collect used air from rooms connected to the recuperation system
- The distribution unit can be combined with the air handling unit or moved to any suitable location and connected by means of ventilation ducts f160 (version VARR75-160K)
- The distribution unit housing is made of EPP (expanded polypropylene), which has a significant effect on the volume level by absorbing vibrations
- The product is of the highest tightness class (D), insulating heat perfectly while being stable over a wide temperature range (from -40°C to $+60^{\circ}\text{C}$). What is more important, expanded polypropylene is not conducive to mould and mildew
- The distribution unit is compatible with the left and right versions of the heat recovery unit. The spigot diameter of the unit is $\varnothing 160$ mm
- The distribution unit replaces the traditional distribution box



CAPACITY



Enthalpy heat exchanger

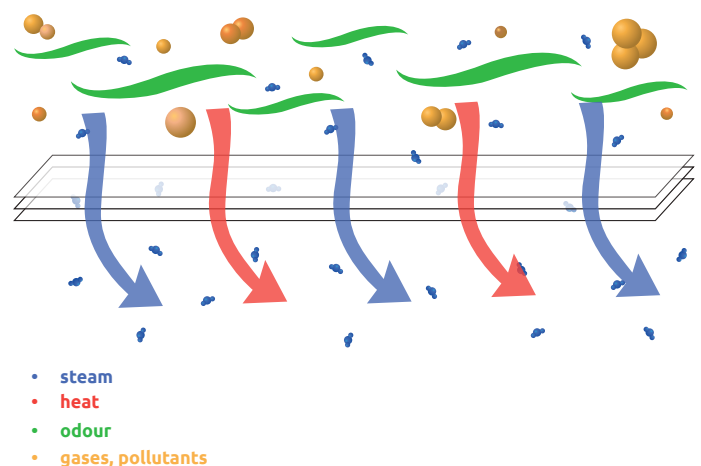
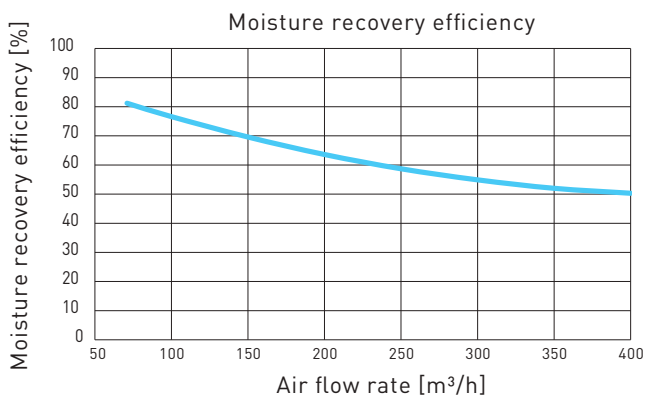
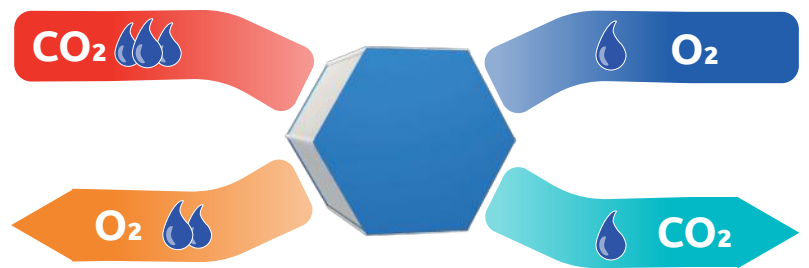
Enthalpy heat exchangers allow the simultaneous recovery of heat and moisture from the exhaust air. The main difference between an enthalpy heat exchanger and a standard heat exchanger is the use of polymeric membrane technology. This innovative membrane enables the transfer of energy and at the same time prevents cross-contamination with viruses, gases and volatile organic compounds. Exhaust and supply air pass through the enthalpy heat exchanger channels in opposite directions. The application of osmosis principles served to efficiently transfer moisture through the pore structures present in the polymer membrane in an efficient and hygienic manner.



Additional equipment of units

COMPATIBILITY

HRU type	Option of using enthalpy heat exchanger
AUROS VER305	•
AUROS VER405	•
AUROS VER505	•
AUROS VER605	•
AVIRA VAVP305	•
AVIRA VAVP405	•
AVIRA VAVP505	•
AVIRA VAVP605	•
AQUILA VARS305	•
AQUILA VARP305	•



PRODUCT DATA SHEET

Filters and Pre-filters

The AWENTA PRO air handling units are equipped as standard with high-quality M5 class air filters (ISO 16890 standard) capable of removing particles with sizes from 2.5 to 10 µm (microns), e.g.: particulates and fine dust (the thickness of human hair is from 40 to 120 µm).

For air drawn in from the outside, an F7 class filter, which removes the smallest particles from 0.3 to 1 µm, e.g.: viruses, cigarette smoke, bacteria, fungi and their spores, can be installed. Dirty filters reduce air flow, increase resistance in the system and electricity consumption. In practice, this means that the efficiency of the system will be lower, as the amount of air exchanged will be lower than desired, with a consequent negative impact on well-being. Therefore, it is important to replace them regularly.

To extend the life of the M5 or F7 class main filters used in air handling units, it is possible to install an additional pre-filter. The task of the pre-filter is to stop dust and particles of large size. This ensures that only small particles reach the main filter and do not cause it to wear out quickly. The pre-filters have a cassette design, making them easy to remove for cleaning or replacement.

In case of pre-filter with nylon mesh as filter material, there is no need to replace it. The material used allows to be cleaned multiple times.



AUROS / AVIRA / AQUILA

ZEPHYR

COMPATIBILITY

FILTERS

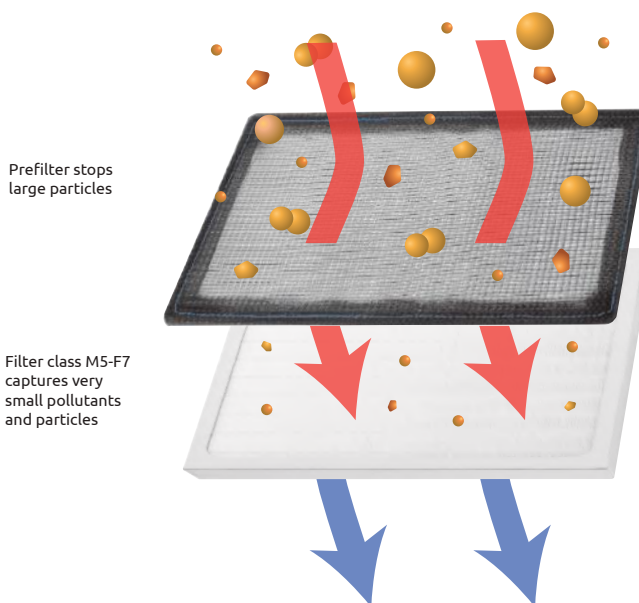
Index	Filter class	Intended use
VM5ER405	M5	AUROS VER305
		AUROS VER405
VF7ER405	F7	AUROS VER305
		AUROS VER405
VM5ER605	M5	AUROS VER505
		AUROS VER605
VF7ER605	F7	AUROS VER505
		AUROS VER605
VM5AV405	M5	AVIRA VAVP305
		AVIRA VAVP405
VF7AV405	F7	AVIRA VAVP305
		AVIRA VAVP405
VM5AV605	M5	AVIRA VAVP505
		AVIRA VAVP605
VF7AV605	F7	AVIRA VAVP505
		AVIRA VAVP605
VM5AR	M5	AQUILA VARS305
		AQUILA VARP305
VF7AR	F7	AQUILA VARS305
		AQUILA VARP305
VM5ZH	M5	ZEPHYR VZH405 / VZH605
		ZEPHYR VZH405 / VZH605
VF7ZH	F7	ZEPHYR VZH405 / VZH605
		ZEPHYR VZH405 / VZH605

PREFILTER

Index	Filter class	Intended use
VFWER405	unclassified	AUROS VER305
		AUROS VER405
VFWER605	unclassified	AUROS VER505
		AUROS VER605
VFWAV405	unclassified	AVIRA VAVP305
		AVIRA VAVP405
VFWAV605	unclassified	AVIRA VAVP505
		AVIRA VAVP605
VFWAR	unclassified	AQUILA VARS305
		AQUILA VARP305
VFWZH	G2	ZEPHYR VZH405 / VZH605

TECHNICAL DATA

	F7	M5
Filter class	tested according to ISO 16890 Filter F7 (ePM1 0,3-1,0 µm)	tested according to ISO 16890 Filter M5 (ePM10 2,5-10 µm)
Fire protection	DIN 53438-3 (F1)	DIN 53438-3 (F1)
Maximum relative humidity	100%	100%
Temperature resistance	max. 80°C	max. 80°C
Filter materials	Glass-fibre paper	Glass-fibre paper
Frame	Cardboard	Cardboard



Prefilter stops large particles

Filter class M5-F7 captures very small pollutants and particles

Internet module

VLAN

VLAN is an integrated network communication system that uses the C14 communication protocol and a special Internet module. The module allows monitoring and remote control of the air handling unit's settings.

VLAN module (iNEXT) enables:

- remote communication via a web browser and via a mobile application with all Awenta PRO air handling units
- reading of current control panel parameters (e.g.: reading from temperature sensors)
- capacity control of the air handling unit (speed change, ventilation mode)
- programming weekly operating schedule
- remote access to all user settings
- remote access to service settings for the installer
- bypass flap control

To ensure communication with the Internet, it is necessary to connect the module to an access device with an Ethernet connection – such as a router or 3G/4G/5G mobile network modem. Thanks to this connection the user can operate the air handling unit online from any place. To remotely operate the air handling unit via the VLAN module, a device with Internet access and web browser support (desktop computer, laptop, tablet, TV, smartphone) is required.



VLAN

COMPATIBILITY

HRU type	Access through the App (Android, iOS)	Access through the webpage
AUROS VER305	•	•
AUROS VER405	•	•
AUROS VER505	•	•
AUROS VER605	•	•
AVIRA VAVP305	•	•
AVIRA VAVP405	•	•
AVIRA VAVP505	•	•
AVIRA VAVP605	•	•
AQUILA VARS305	•	•
AQUILA VARP305	•	•

CO₂

HUMIDITY

CO₂ concentration and humidity sensor

VSHC, VSHW

The VSHC sensor is designed to measure the concentration of carbon dioxide and humidity in rooms. When the set value of carbon dioxide concentration and humidity is exceeded, the capacity of the air handling unit is automatically increased.

VSHC is equipped with automatic calibration algorithms. For the indications to be correct it is necessary to ventilate the room in which the sensor is located at least once a month to correct the reference point. After connecting the power supply, VSHC gives a value of 500 ppm of CO₂. The first measured value appears after approx. three minutes. Due to the automatic sensor calibration, the sensor gives correct measurements only after 30 minutes from the power supply connection. To ensure accurate measurements, VSHC should run continuously. The unit can operate at temperatures between 0°C-55°C in conditions where no vapour condensation occur.

The VSHW sensor is designed to measure the humidity in rooms. When the set humidity value is exceeded, the air handling unit's capacity is automatically increased. The device can operate in the temperature range of 0°C-55°C.



VSHC
VSHW

COMPATIBILITY

HRU type	Intended use
AUROS VER305	•
AUROS VER405	•
AUROS VER505	•
AUROS VER605	•
AVIRA VAVP305	•
AVIRA VAVP405	•
AVIRA VAVP505	•
AVIRA VAVP605	•
AQUILA VARS305	•
AQUILA VARP305	•

VSHC

HUMIDITY MEASUREMENT

Humidity measurement range	0-100% (Note: Humidity measurement is only possible at temperatures between 0°C-55°C)
Humidity reading accuracy	±3%

CARBON DIOXIDE MEASUREMENT

Carbon dioxide concentration measurement range	400 – 2000 ppm (Note: carbon dioxide concentration measurement is possible in the temperature range of 0°C-50°C)
Carbon dioxide reading accuracy	±3% + ±50 ppm (Note: the CO ₂ sensor is equipped with an automatic calibration algorithm).

VSHW

HUMIDITY MEASUREMENT

Humidity measurement range	0-100% (Note: Humidity measurement is only possible at temperatures between 0°C-55°C)	
Humidity reading accuracy	Digital	±3%
	Analogue (output AO)	±3% + ±0.1 V

Air quality sensor

VSPM

The VSPM air quality sensor is used to measure carbon dioxide content and the amount of PM1, PM2.5, PM4 and PM10 particles. Additionally, it measures relative humidity and room temperature. Thanks to the application of a sensor, the air handling unit, on the basis of the readout data, regulates the flow of the exhaust and supply air stream to the rooms, maintaining the desired comfort in them.

PM1 and PM2.5 particles are in the group of the most harmful particles to health. These are atmospheric aerosols which a diameter is less than 1 micrometres. Such fine dust can enter the alveoli, blood vessels and eventually the bloodstream. It is therefore harmful to both the respiratory and cardiovascular systems. People with lung and heart conditions, the elderly and children are considered more susceptible to the harmful effects of particulate matter. People who exercise regularly are also exposed to the consequences of these particulates.

PM4 and PM10 is, in turn, a particulate matter that primarily affects the respiratory system. The particles it contains are less than 10 microns in diameter. They are responsible for coughing fits, wheezing, deterioration in the condition of people with asthma or acute, violent bronchitis. Studies indicate that PM10 particles indirectly increase the risk of heart attack and stroke.

The unit's compact design allows it to be mounted anywhere not obvious to the eye. The sensor is mounted in the room where the measurement is to take place. It can be used in rooms without excessive vapour condensation and in the permissible operating temperature range from 0°C to 55°C.

The sensor is equipped with a signaling LED that provides real-time information about the level of air pollution.



VSPM

COMPATIBILITY

HRU type	Intended use
AUROS VER305	•
AUROS VER405	•
AUROS VER505	•
AUROS VER605	•
AVIRA VAVP305	•
AVIRA VAVP405	•
AVIRA VAVP505	•
AVIRA VAVP605	•
AQUILA VARS305	•
AQUILA VARP305	•

PRODUCT DATA SHEET

Plenum box

NOVELTY SYSTEM **Ø90**



TIGHTNESS CLASS

MATERIAL

BACTERIOSTATIC

VPB125-2, VPB125-2/90

The AWENTA PRO plenum box is used to connect two flexible ducts to the distribution boxes. Thanks to the possibility of supplying two ducts, it is recommended for mounting air valves in rooms requiring balanced ventilation intended for daytime stays or bedrooms.

The AWENTA PRO plenum boxes are made of durable HDPE (High Density Polyethylene) with a bacteriostatic Nano-Silver additive. The robust structure guarantees failure-free operation for many years and thanks to the use of a bacteriostatic additive the product has obtained a very high level of bacteriostatic activity. The design of the plenum box allows it to be mounted on different surfaces and in different planes. The Ø75 mm female connectors are equipped with a gasket and special protection of the connected ducts, which ensures the tightness of the entire system in the high D class. Mounting of the box is facilitated by brackets allowing for the installation height adjustment that adapts to the place of installation. They guarantee the quick and easy installation of the plenum boxes in the system. The box allows for connecting a maximum of two Ø75 or Ø90 mm ventilation ducts to a supply or exhaust air valve.

It is possible to install them on floor / wall / ceiling: made of concrete or plasterboard.

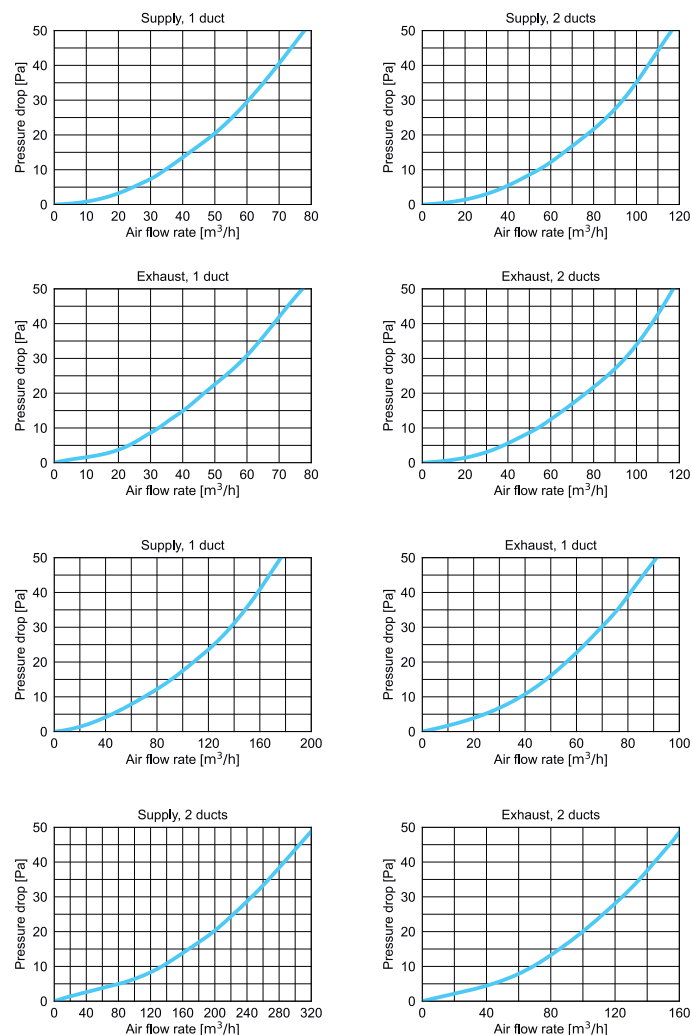


VPB125-2

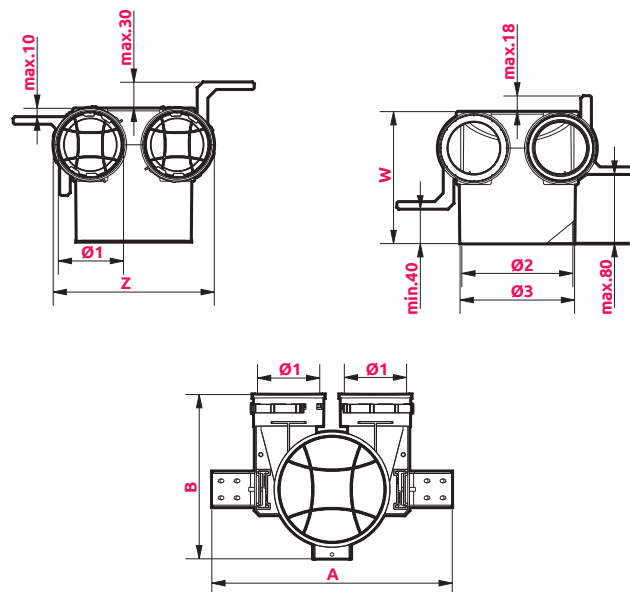
VPB125-2/90



AIR FLOW CHARACTERISTICS



DIMENSIONS



	Ø1	Ø2	Ø3	A	B	Z	W
VPB125-2	75	128	134	277	189	186	152
VPB125-2/90	90	128	134	288	202	200	158

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA





Plenum box

VPB125-3

The AWENTA PRO VPB125-3 plenum box is used to connect three flexible air ducts to the distribution boxes. Thanks to the possibility of supplying up to three ducts, it is recommended for mounting air valves in rooms requiring intensive ventilation, e.g. kitchen, bathroom or toilet. The high air flow efficiency of the VPB125-3 box makes it possible to achieve increased ventilation parameters without having to drill additional holes in the ceiling.

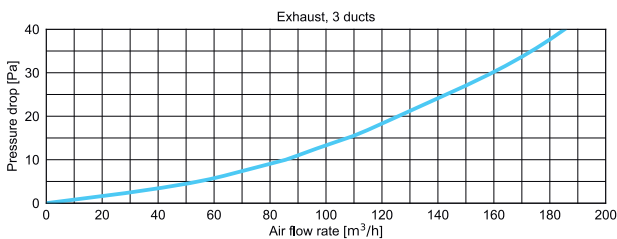
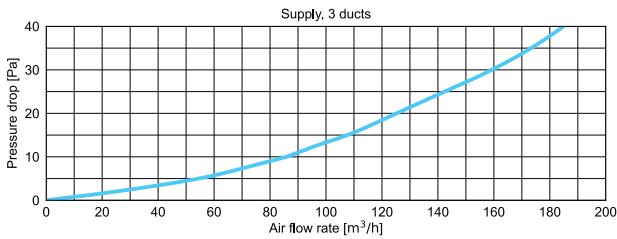
The AWENTA PRO plenum boxes are made of durable HDPE (High Density Polyethylene) with a bacteriostatic Nano-Silver additive. The robust structure guarantees failure-free operation for many years and thanks to the use of a bacteriostatic additive the product has obtained a very high level of bacteriostatic activity.

The design of the plenum box allows it to be mounted on different surfaces and in different planes. The Ø90 mm female connectors are equipped with a gasket and special protection of the connected ducts, which ensures the tightness of the entire system in the high D class. Mounting of the box is facilitated by brackets allowing for the installation height adjustment that adapts to the place of installation. They guarantee the quick and easy installation of the plenum boxes in the system.

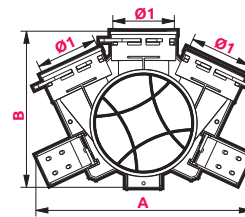
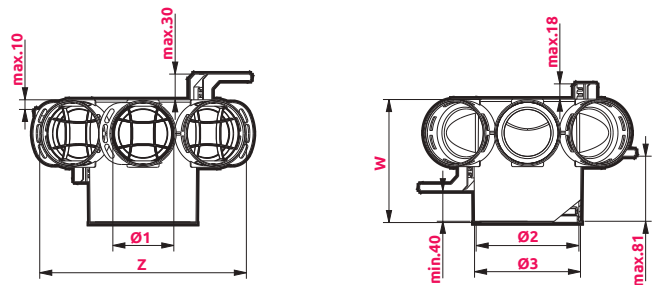
It is possible to install them on floor / wall / ceiling:
made of concrete or plasterboard.



AIR FLOW CHARACTERISTICS



DIMENSIONS



	Ø1	Ø2	Ø3	A	B	Z	W
VPB125-3	75	128	134	268	195	257	152

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET



TIGHTNESS
CLASS



MATERIAL



BACTERIOSTATIC

Ceiling plenum box – horizontal

VPC125-2

The AWENTA PRO VPC ceiling plenum box (horizontal) is an ultra-lightweight solution for use between a suspended ceiling, a ceiling or wall, and in other confined space locations. Mounting of the box to the surface can be additionally reinforced with a typical KP75-28 bracket (DIM. 75X150) from Awenta's product portfolio. The box allows for connecting a maximum of two $\varnothing 75$ mm ventilation ducts to a supply or exhaust air valve.

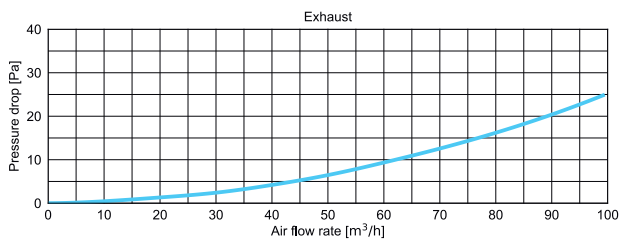
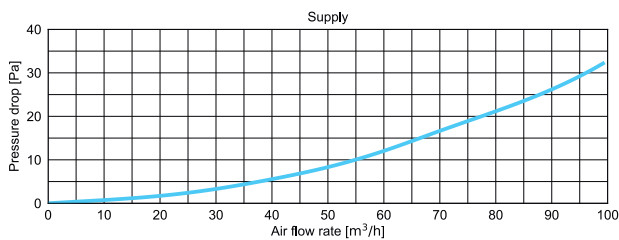
AWENTA PRO plenum boxes are made of durable ABS material. The robust structure guarantees failure-free operation for many years and thanks to the use of a bacteriostatic additive the product has obtained a very high level of bacteriostatic activity. The design of the plenum box allows it to be mounted on different surfaces and in different planes.

The $\varnothing 75$ mm female connectors are equipped with a gasket and special protection of the connected ducts, which ensures the tightness of the entire system in the high D class.

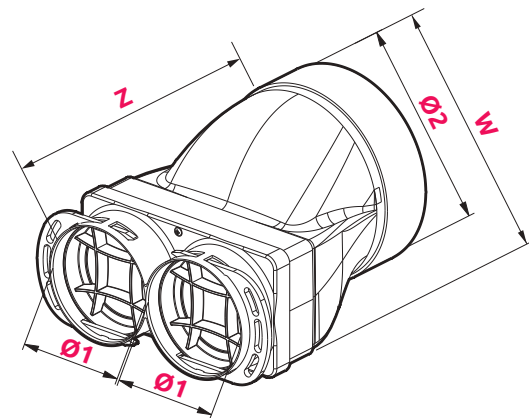
It is possible to install them on floor / wall / ceiling:
made of concrete or plasterboard.



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	Z	W
VPC125-2	75	128	194	134

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA





Ceiling plenum box – vertical

VPE125-2

The AWENTA PRO VPE ceiling plenum box (vertical) is an ultra-lightweight solution for use between a suspended ceiling, a ceiling or wall, and in other confined space locations. Mounting of the box to the surface can be additionally reinforced with a typical KP75-28 bracket (DIM. 75X150) from Awenta's product portfolio. The box allows for connecting a maximum of two Ø75 mm ventilation ducts to a supply or exhaust air valve.

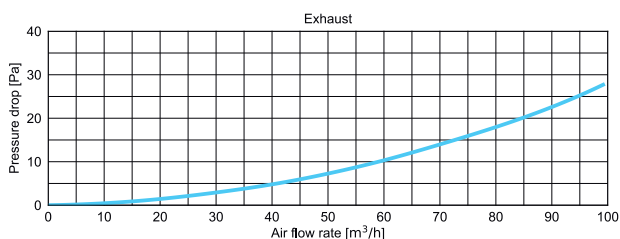
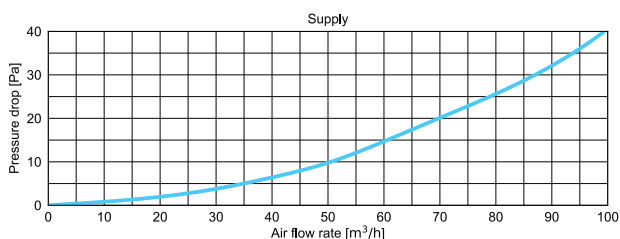
AWENTA PRO plenum boxes are made of durable ABS material. The robust structure guarantees failure-free operation for many years and thanks to the use of bacteriostatic additive the product has obtained 99.99% bacteriostatic activity. The design of the plenum box allows it to be mounted on different surfaces and in different planes.

The Ø75 mm female connectors are equipped with a gasket and special protection of the connected ducts, which ensures the tightness of the entire system in the high D class.

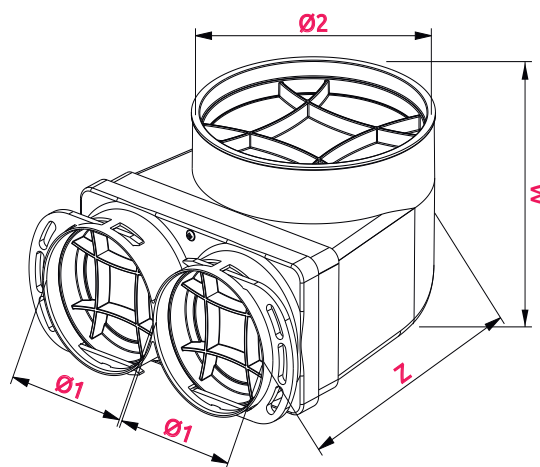
It is possible to install them on floor / wall / ceiling: made of concrete or plasterboard.



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	Z	W
VPE125-2	75	128	202	110



PRODUCT DATA SHEET



TIGHTNESS
CLASS



MATERIAL



BACTERIOSTATIC

Short duct crossover

NOVELTY
SYSTEM **Ø90**

VMK75-2-S, VMK90-2-S

The VMK AWENTA PRO duct crossover is used for crossing Ø75-Ø90 ducts without altering the height of the installation.

It also allows ducts to be run over other sanitary or electrical piping and any elements in the path of the duct.

AWENTA PRO crossovers, made of modified polypropylene with the bacteriostatic additive Nano-Silver.

Thanks to its robust construction, the crossover can be permanently embedded in the screed or ceiling.

The crossover package includes a set of gaskets and plugs for a tight connection between the socket and the ventilation duct and closure of unused connections.

VMK crossovers are available in two lengths to enable passing from 2 to as many as 8 Ø75-Ø90 ventilation ducts.

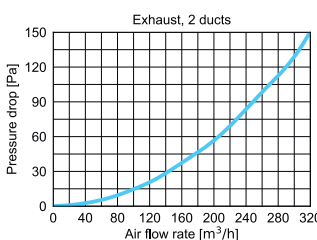
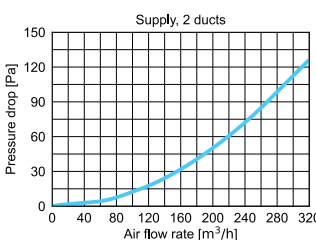
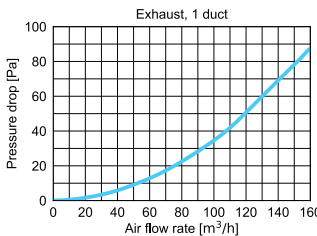
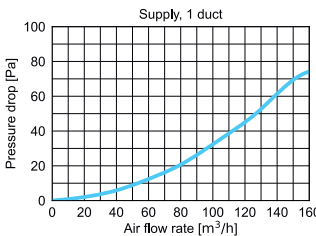
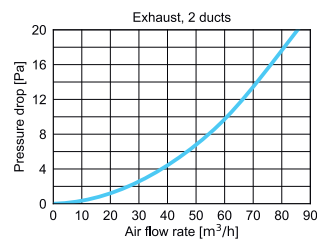
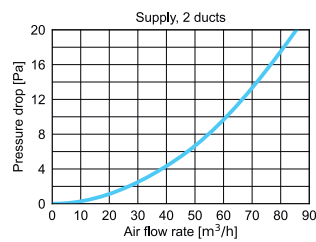
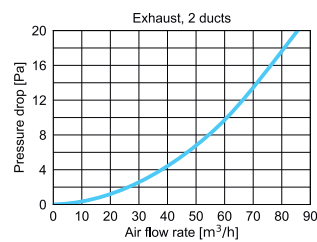
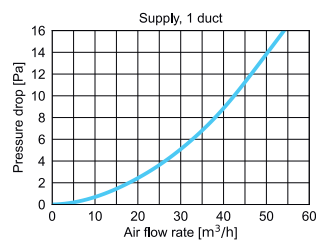


VMK75-2-S

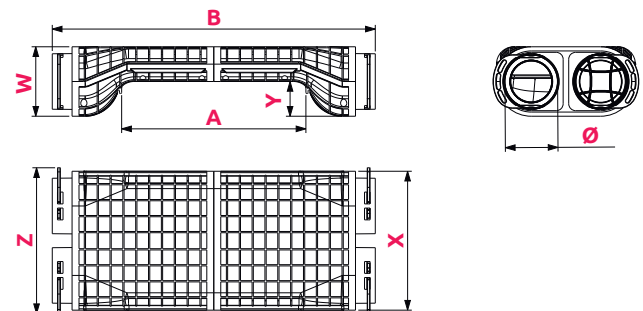
VMK90-2-S



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø	W	A	B	Y	Z	X
VMK75-2-S	75	100	265	465	50	210	200
VMK90-2-S	90	100	265	515	50	234	200



WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA



PRODUCT DATA SHEET



TIGHTNESS CLASS



MATERIAL



BACTERIOSTATIC

Long duct crossover

NOVELTY SYSTEM **Ø90**

VMK75-2-L, VMK90-2-L

The VMK AWENTA PRO duct crossover is used for crossing Ø75-Ø90 ducts without altering the height of the installation.

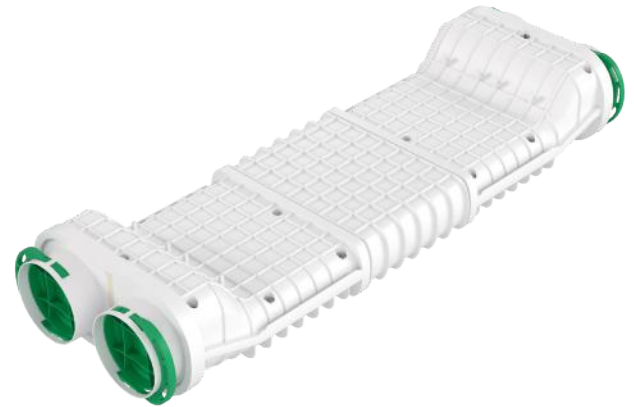
It also allows ducts to be run over other sanitary or electrical piping and any elements in the path of the duct.

AWENTA PRO crossovers, made of modified polypropylene with the bacteriostatic additive Nano-Silver.

Thanks to its robust construction, the crossover can be permanently embedded in the screed or ceiling.

The crossover package includes a set of gaskets and plugs for a tight connection between the socket and the ventilation duct and closure of unused connections.

VMK crossovers are available in two lengths to enable passing from 2 to as many as 8 Ø75-Ø90 ventilation ducts.



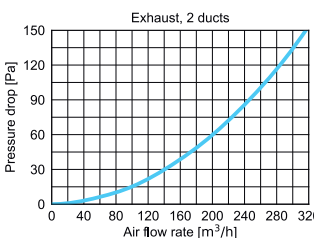
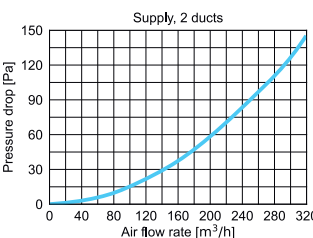
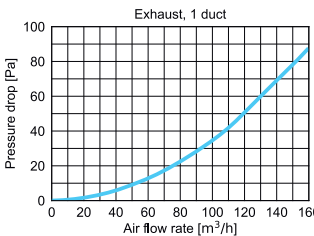
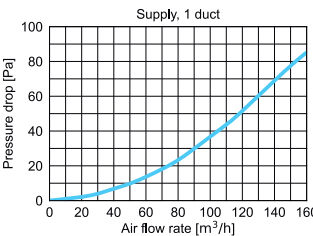
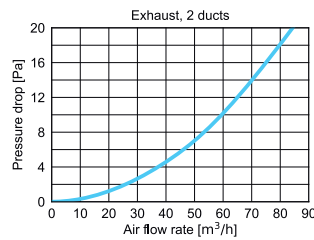
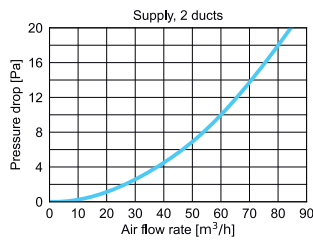
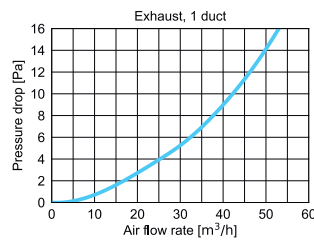
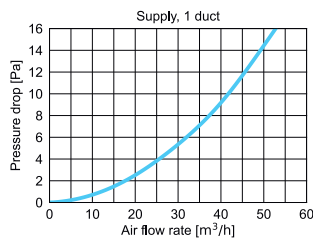
VMK75-2-L

VMK90-2-L

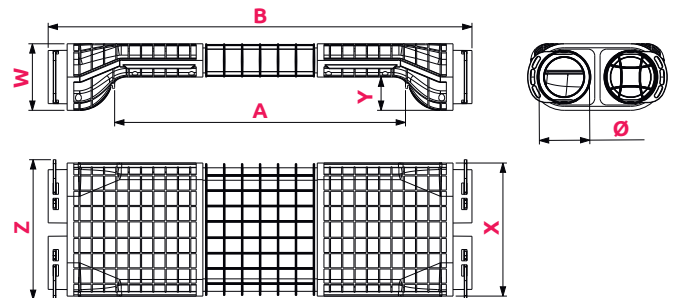


Heat recovery system components

AIR FLOW CHARACTERISTICS



DIMENSION



	Ø	W	A	B	Y	Z	X
VMK75-2-L	75	100	437	637	50	210	200
VMK90-2-L	90	100	437	607	50	234	200



WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET

Distribution box

VCB160-8, VCB200-8, VCB160-8/90, VCB200-8/90

NOVELTY SYSTEM **Ø90**

D
TIGHTNESS CLASS

PP
MATERIAL


BACTERIOSTATIC

The AWENTA PRO VCB distribution box is used for the distribution of supplied air or collection of used air from rooms connected to the heat recovery system and it is directly connected to the air handling unit.

AWENTA PRO distribution boxes are made of modified polypropylene with the Nano-Silver bacteriostatic additive. The robust structure is equipped with a system of gaskets guaranteeing tightness and failure-free operation for many years. The use of a bacteriostatic additive made it possible to obtain bacteriostatic activity at a very high level.

The VCB distribution boxes are available in different connection options allowing for the connection of up to 8 Ø75-90 mm ventilation ducts. All VCB boxes are supplied with mounting gaskets for a tight connection between the female connector and the ventilation duct. An integral part of each box is its mounting system, for which special adjustable mounting brackets are used.

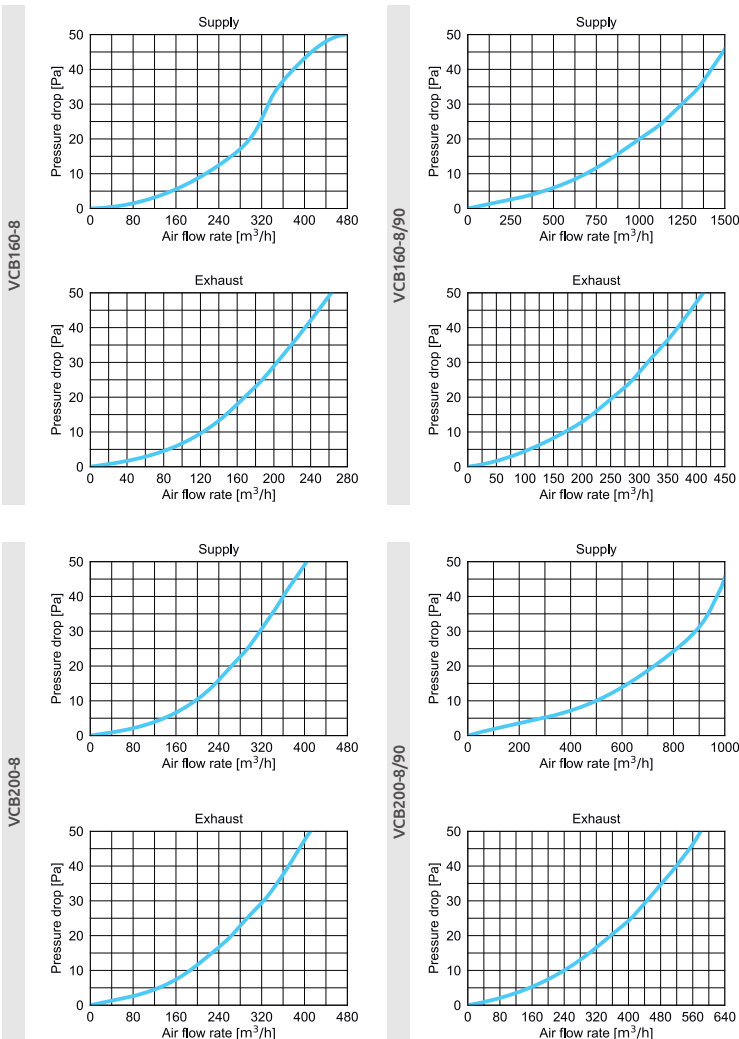


VCB160-8

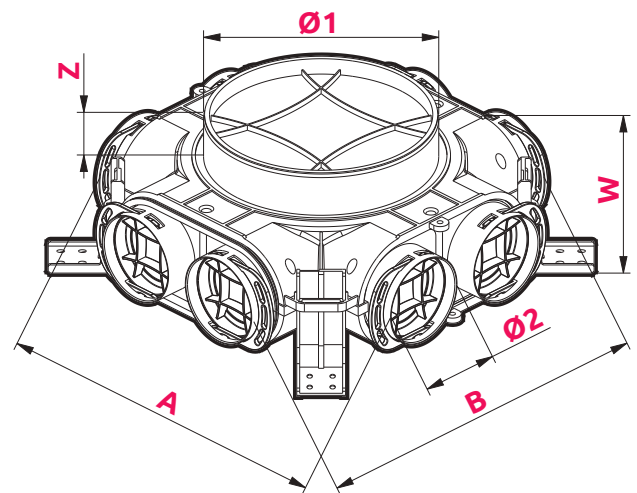
VCB160-8/90



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	A	B	W	Z
VCB160-8	160	75	347	349	104	38
VCB200-8	200	75	347	349	104	38
VCB160-8/90	160	90	407	407	104	38
VCB200-8/90	200	90	407	407	104	38

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA



PRODUCT DATA SHEET

Distribution box

VCB160-12, VCB200-12, VCB160-12/90, VCB200-12/90

NOVELTY SYSTEM Ø90

D
TIGHTNESS CLASS

PP
MATERIAL


BACTERIOSTATIC

The Awenta PRO VCB160-12 and VCB200-12 distribution boxes enable the connection of up to 12 Ø75-90 mm ventilation ducts. Ducts not in use can be closed with the supplied end caps.

The box is available in two configurations of connection to the air handling unit: Ø160 mm and Ø200 mm.

The AWENTA PRO distribution boxes are equipped with a patented fixing system that enables precise adjustment of the distance between the box and the mounting planes and makes it easy to remove the box if necessary. Independently adjustable brackets allow the horizontal installation of the unit, enabling it to be tilted as well.

VCB series boxes are designed for installation in a heated area of the building; otherwise, they must be insulated with a layer of mineral wool (min. 15 cm).

It can be permanently embedded into the screed or ceiling, or installed under plasterboards.

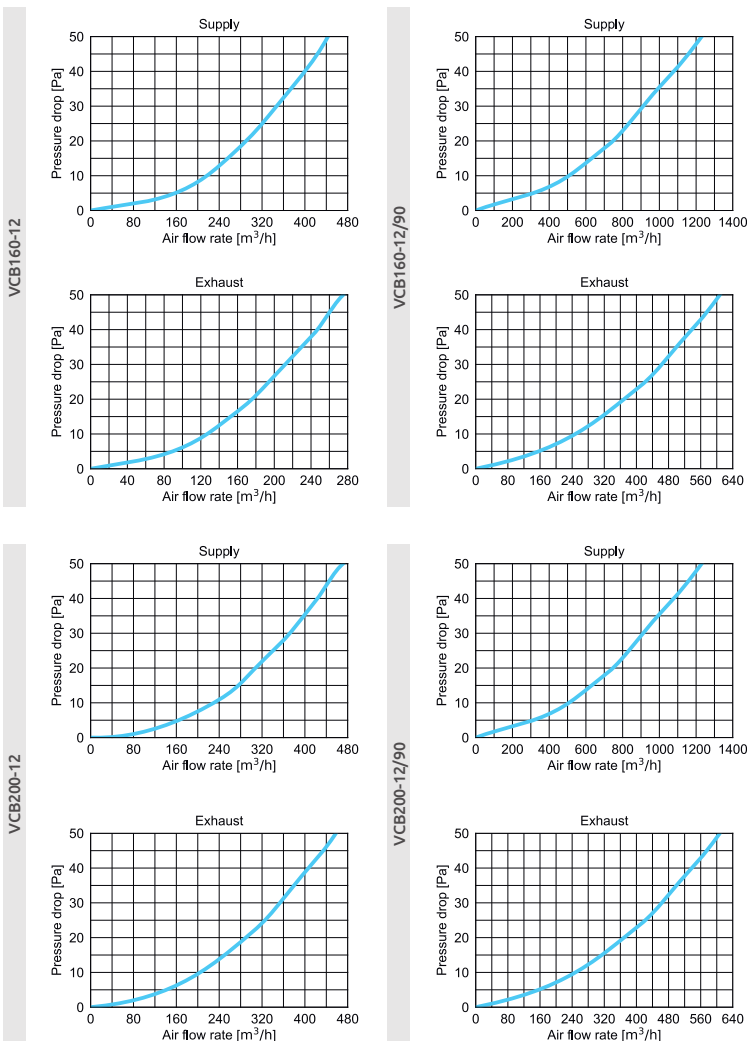


VCB160-12

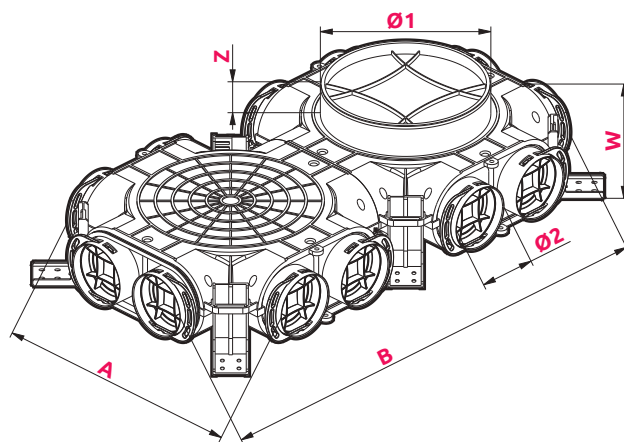
VCB160-12/90



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	A	B	W	Z
VCB160-12	160	75	347	639	104	38
VCB200-12	200	75	347	639	104	38
VCB160-12/90	160	90	407	697	104	38
VCB200-12/90	200	90	407	697	104	38

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA

PRODUCT DATA SHEET

Distribution box

NOVELTY
SYSTEM **Ø90**

VCB200-16, VCB200-16/90

TIGHTNESS
CLASS

MATERIAL



BACTERIOSTATIC

The Awenta PRO VCB200-16 distribution box enables the connection of up to 16 Ø75-90 mm ventilation ducts.

Ducts not in use can be closed with the supplied end caps. The box is available with a connector to the air handling unit with a diameter of Ø200 mm.

AWENTA PRO boxes are a well-thought-out design ensuring their use for many years. Thanks to their design and the use of high-quality plastics and bactericidal additives, they meet the expectations of the most demanding users. The range of available distribution boxes has been carefully planned to allow for their use in most typical mechanical ventilation systems.

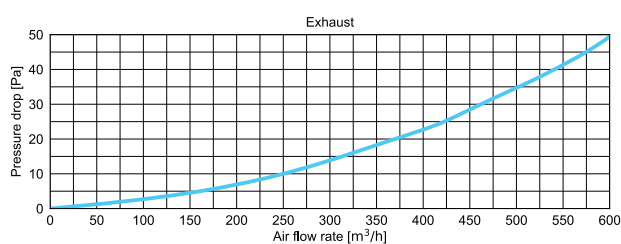
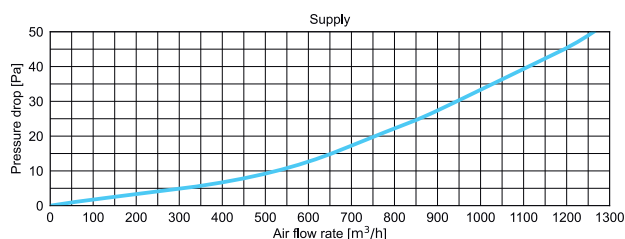
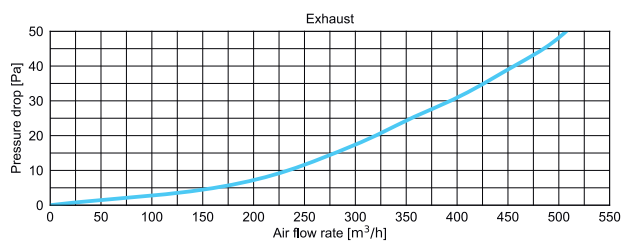
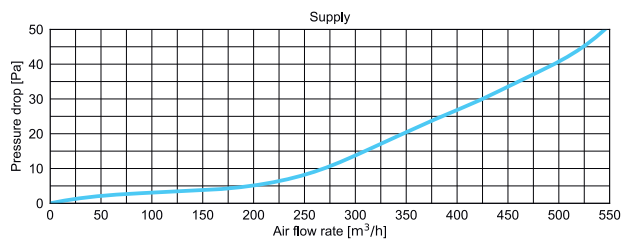


VCB200-16

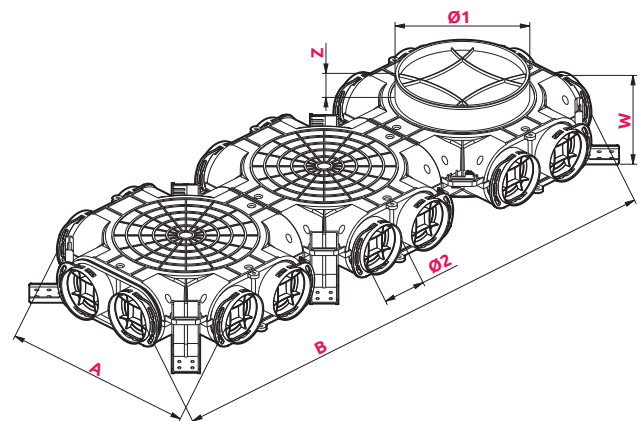
VCB200-16/90



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	A	B	W	Z
VCB200-16	200	75	347	927	104	38
VCB200-16/90	200	90	407	988	104	38

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET

Distribution box with side connection

VCB125-6, VCB160-6, VCB160-6/90

NOVELTY
SYSTEM **Ø90**



The Awenta PRO distribution box allows for the connection of up to 6 Ø75-90 ventilation ducts.

As with the other distribution boxes in the VCB series, unused spigots can be covered with plugs with gaskets included with the product. The box is characterised by a side connection available in two variants with a diameter of Ø160 mm and Ø125 mm.

Distribution boxes with side connections are ideal for installation above suspended ceilings and wherever installation height is limited.

The suitably profiled shape of the Awenta PRO boxes allows for a quiet air flow, while ensuring low pressure loss.

AWENTA PRO boxes are a well-thought-out design for long-term use. Thanks to their structure and the use of high-quality plastics and bacteriostatic additives, they will meet the expectations of the most demanding users.



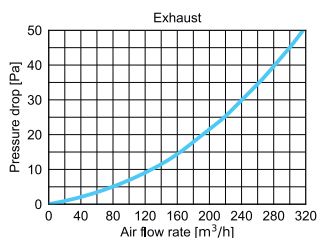
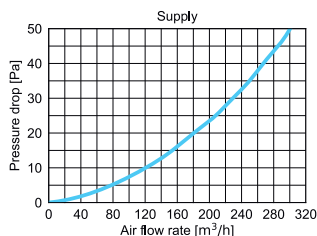
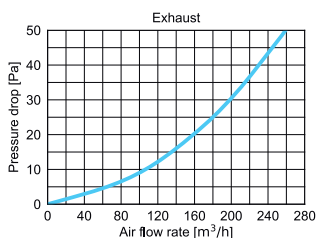
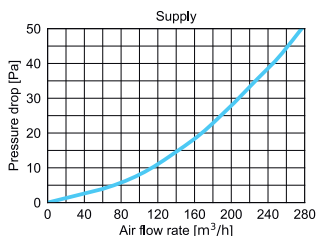
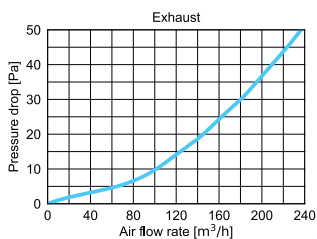
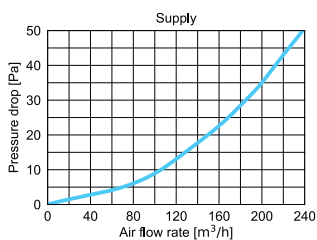
VCB125-6

VCB160-6

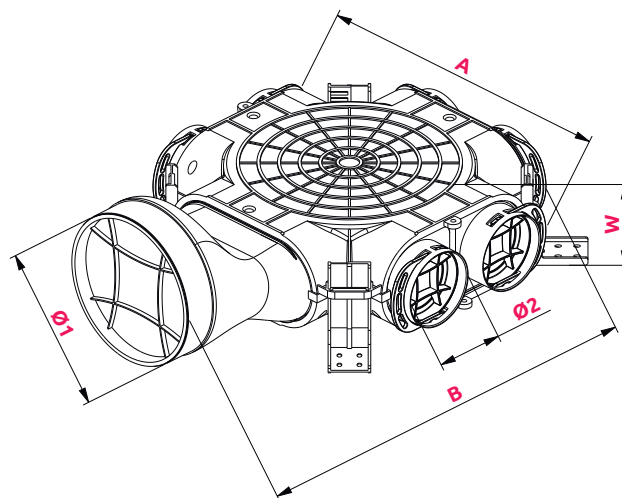
VCB160-6/90



AIR FLOW CHARACTERISTICS



DIMENSION



	Ø1	Ø2	A	B	W
VCB125-6	125	75	347	445	104
VCB160-6	160	75	347	475	104
VCB160-6/90	160	90	407	505	104

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET

Distribution box with side connection

VCB160-10, VCB160-10/90

NOVELTY
SYSTEM **Ø90**TIGHTNESS
CLASS

MATERIAL



BACTERIOSTATIC

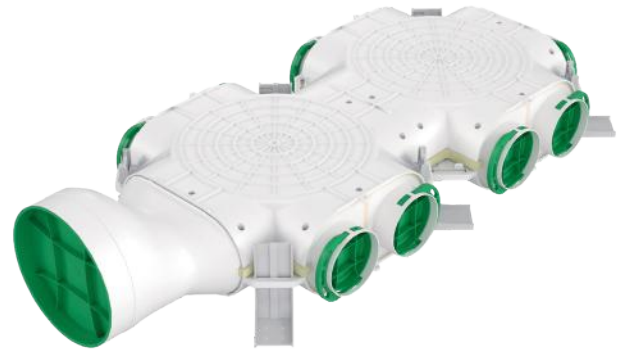
The Awenta PRO distribution box allows the connection of up to 10 Ø75-90 ventilation ducts.

As with the other distribution boxes in the VCB series, unused spigots can be covered with plugs with gaskets included with the product. The box is characterised by a side connection with a diameter of Ø160 mm.

Distribution boxes with side connections are ideal for installation above suspended ceilings and wherever installation height is limited.

The suitably profiled shape of the Awenta PRO boxes allows for a quiet air flow, while ensuring low pressure loss.

The range of distribution boxes available has been carefully planned to allow their use in most typical mechanical ventilation systems.



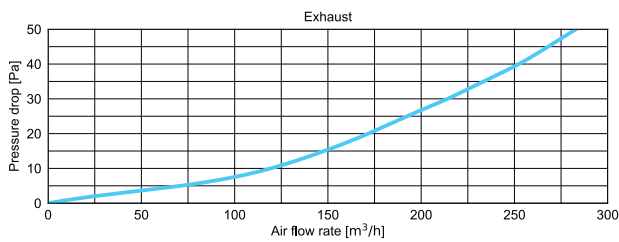
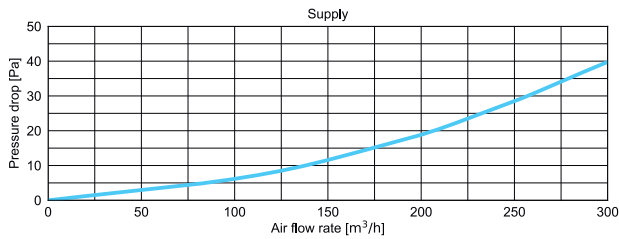
VCB160-10

VCB160-10/90

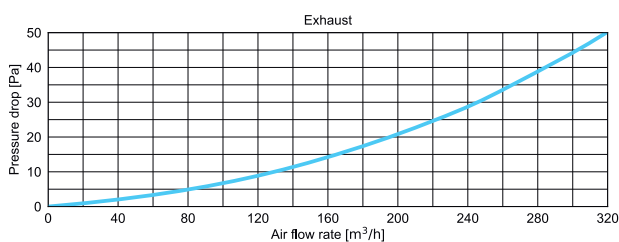
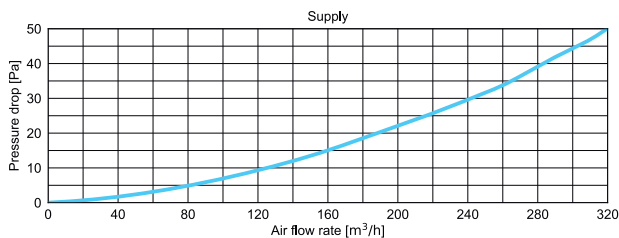


AIR FLOW CHARACTERISTICS

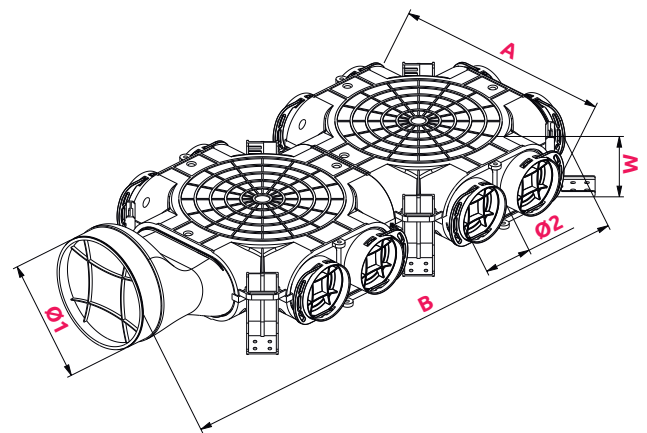
VCB160-10



VCB160-10/90



DIMENSIONS



	Ø1	Ø2	A	B	W
VCB160-10	160	75	347	766	104
VCB160-10/90	160	90	407	795	104

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET

Distribution box with side connection

VCB160-14, VCB160-14/90

NOVELTY SYSTEM **Ø90**

D
TIGHTNESS CLASS

PP
MATERIAL


BACTERIOSTATIC

The Awenta PRO VCB distribution box allows the connection of up to 14 Ø75-90 ventilation ducts.

As with the other distribution boxes in the VCB series, unused spigots can be covered with plugs with gaskets included with the product. The box is characterised by a side connection with a diameter of Ø160 mm.

Distribution boxes with side connections are ideal for installation above suspended ceilings and wherever installation height is limited.

The suitably profiled shape of the Awenta PRO boxes allows for a quiet air flow, while ensuring low pressure loss.

AWENTA PRO boxes are a well-thought-out design for long-term use. Thanks to their structure and the use of high-quality plastics and bacteriostatic additives, they will meet the expectations of the most demanding users.

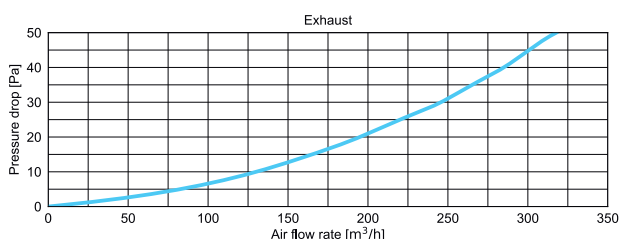
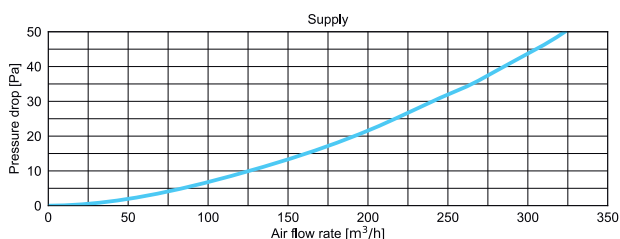
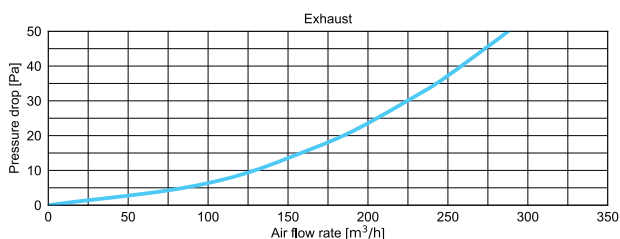
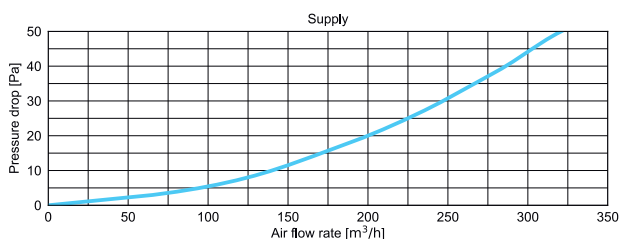


VCB160-14

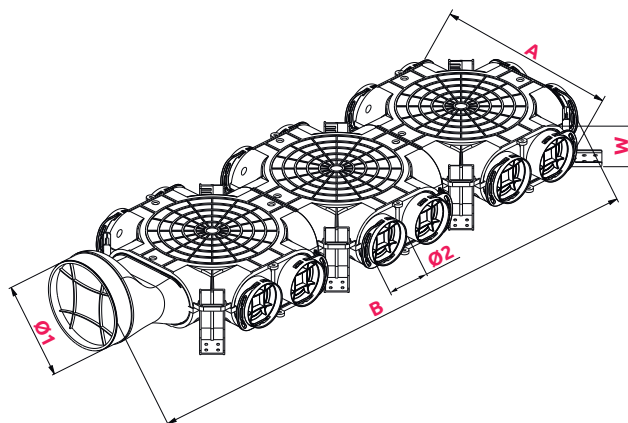
VCB160-14/90



AIR FLOW CHARACTERISTICS



DIMENSIONS



	Ø1	Ø2	A	B	W
VCB160-14	160	75	347	1057	104
VCB160-14/90	160	90	407	1086	104

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO **99%** BACTERIA



PRODUCT DATA SHEET

NOVELTY
SYSTEM **Ø90**

Straight-through distribution box

VCB160/200-8, VCB160/200-8/90

The Awenta PRO VCB straight-through distribution box is designed to distribute the air stream between two floors. Straight-through ducts, Ø160 or Ø200 mm, are used for air flow to the next floor of the building, while Ø75-90 mm ducts enable connection of up to 8 ducts for ventilation of rooms on the lower floor. The air flow between floors is adjusted by means of air valves.

In addition, the user can install a damper upstream of the inlet to the distribution box on the upper floor. Ducts not in use can be closed with the supplied end caps with gaskets.

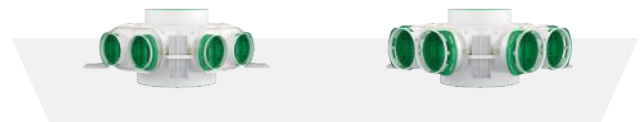
The AWENTA PRO distribution boxes are equipped with a patented fixing system that enables precise adjustment of the distance between the box and the mounting planes and makes it easy to remove the box if necessary. Independently adjustable brackets allow the horizontal installation of the unit, enabling it to be tilted as well.

VCB series boxes are designed for installation in a heated area of the building; otherwise, they must be insulated with a layer of mineral wool (min. 15 cm). It can be permanently embedded into the screed or ceiling, or installed under plasterboards.



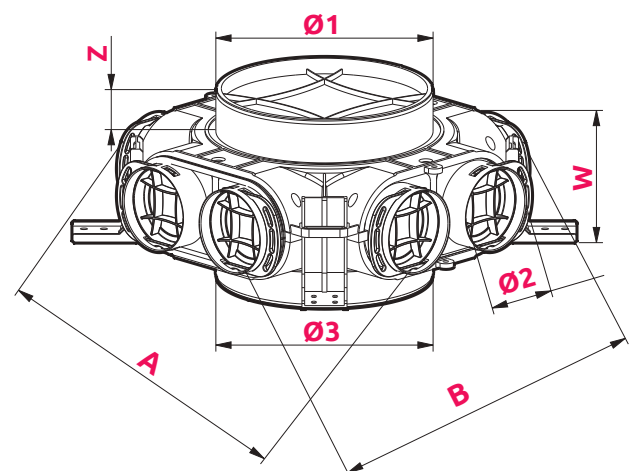
VCB160/200-8

VCB160/200-8/90



	Ø1	Ø2	Ø3	A	B	W	Z
VCB160/200-8	160	75	200	347	349	104	38
VCB160/200-8/90	160	90	200	407	407	104	38

DIMENSIONS



WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA



Straight-through distribution box

VCB160/200-12, VCB160/200-12/90

The Awenta PRO VCB straight-through distribution box is designed to distribute the air stream between two floors. Straight-through ducts, Ø160 or Ø200 mm, are used for air flow to the next floor of the building, while Ø75-90 mm ducts enable connection of up to 12 ducts for ventilation of rooms on the lower floor. The air flow between floors is adjusted by means of air valves.

In addition, the user can install a damper upstream of the inlet to the distribution box on the upper floor. Ducts not in use can be closed with the supplied end caps with gaskets.

The AWENTA PRO distribution boxes are equipped with a patented fixing system that enables precise adjustment of the distance between the box and the mounting planes and makes it easy to remove the box if necessary. Independently adjustable brackets allow the horizontal installation of the unit, enabling it to be tilted as well.

VCB series boxes are designed for installation in a heated area of the building; otherwise, they must be insulated with a layer of mineral wool (min. 15 cm). It can be permanently embedded into the screed or ceiling, or installed under plasterboards.



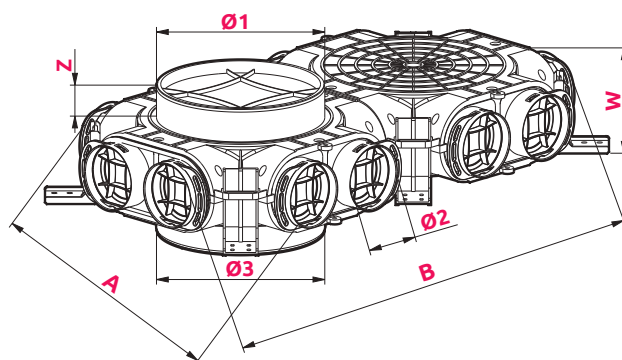
VCB160/200-12

VCB160/200-12/90



	Ø1	Ø2	Ø3	A	B	W	Z
VCB160/200-12	160	75	200	347	639	104	38
VCB160/200-12/90	160	90	200	407	697	104	38

DIMENSIONS



PRODUCT DATA SHEET

NOVELTY
SYSTEM $\varnothing 90$ TIGHTNESS
CLASS

MATERIAL



BACTERIOSTATIC

Straight-through distribution box

VCB160/200-16

The Awenta PRO VCB straight-through distribution box is designed to distribute the air stream between two floors. Straight-through ducts, $\varnothing 160$ or $\varnothing 200$ mm, are used for air flow to the next floor of the building, while $\varnothing 75$ - 90 mm ducts enable connection of up to 16 ducts for ventilation of rooms on the lower floor. The air flow between floors is adjusted by means of air valves.

In addition, the user can install a damper upstream of the inlet to the distribution box on the upper floor. Ducts not in use can be closed with the supplied end caps with gaskets.

The AWENTA PRO distribution boxes are equipped with a patented fixing system that enables precise adjustment of the distance between the box and the mounting planes and makes it easy to remove the box if necessary. Independently adjustable brackets allow the horizontal installation of the unit, enabling it to be tilted as well.

VCB series boxes are designed for installation in a heated area of the building; otherwise, they must be insulated with a layer of mineral wool (min. 15 cm). It can be permanently embedded into the screed or ceiling, or installed under plasterboards.



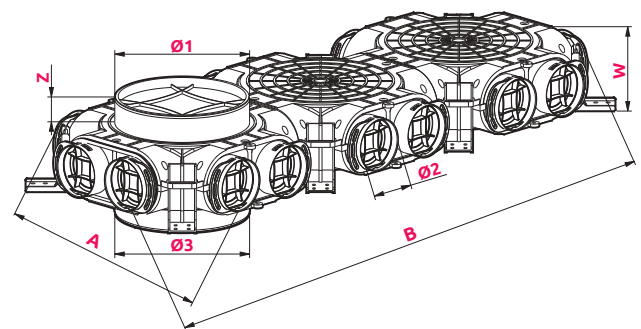
VCB160/200-8

VCB160/200-8/90



	$\varnothing 1$	$\varnothing 2$	$\varnothing 3$	A	B	W	Z
VCB160/200-16	160	75	200	347	927	104	38
VCB160/200-16/90	160	90	200	407	988	104	38

DIMENSIONS



WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA





MATERIAL



BACTERIOSTATIC

The directional diffuser

VAK125

The directional diffuser is the termination of the ventilation system. The product is equipped with a special damper that allows the setting of the direction of the air supply. This solution is used in situations where the diffuser is installed close to walls or fixtures that may be adversely affected by the air supply.

The intensity of the supply air flow is adjusted by means of a rotary disc.



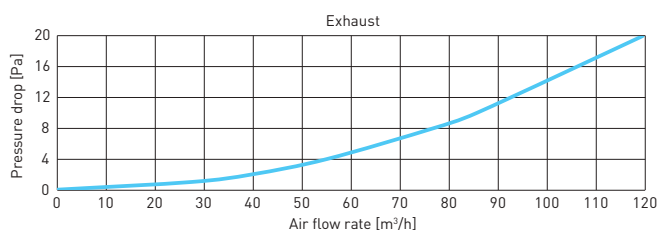
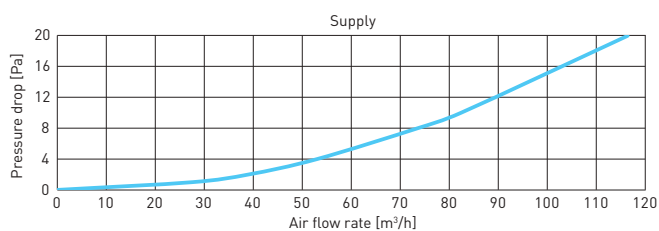
Heat recovery system components

VAK125/BIAŁY

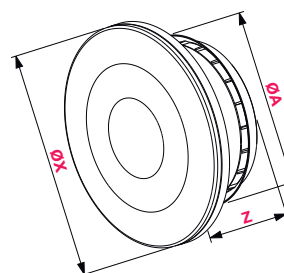
VAK125CZ/CZARNY



AIR FLOW CHARACTERISTICS

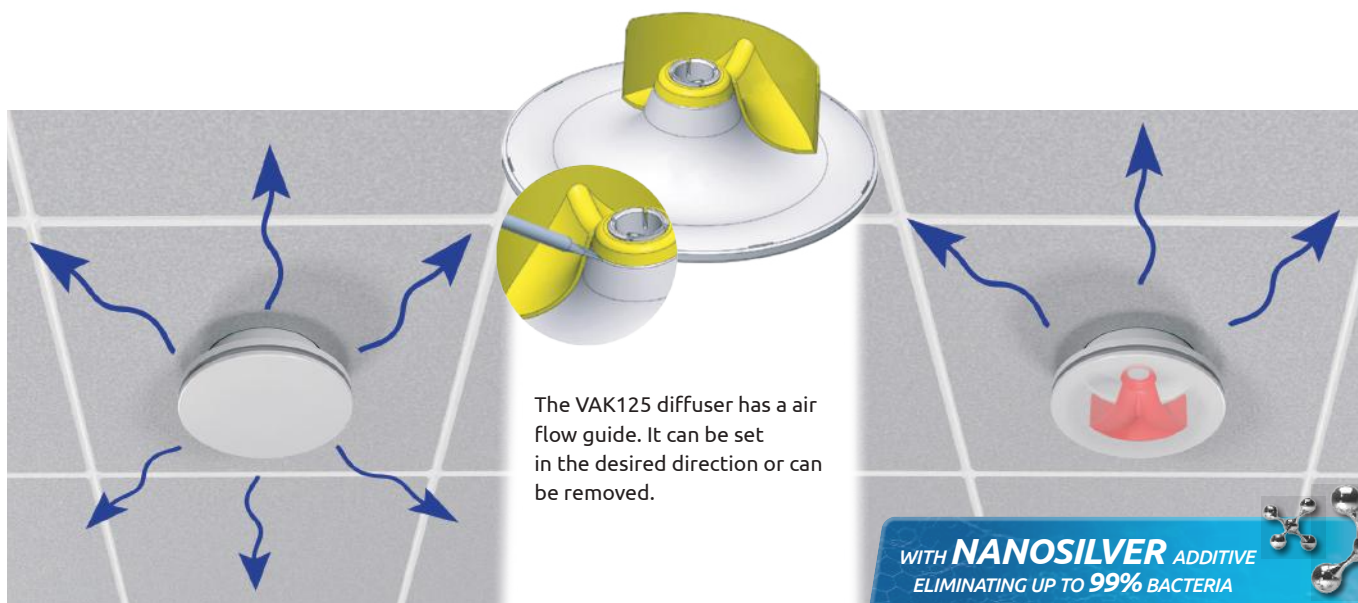


DIMENSIONS



	ØX	ØA	Z
VAK125	173	125	54

VAK 125



The VAK125 diffuser has an air flow guide. It can be set in the desired direction or can be removed.

WITH **NANOSILVER** ADDITIVE
ELIMINATING UP TO 99% BACTERIA





MATERIAL



BACTERIOSTATIC

The panel diffuser

VAP125

The VAP125 diffuser is fitted with a front panel that can be assembled and removed without tools. This solution makes it easier to keep the product clean.

It is a twin solution to the SYSTEM+ product range offered by AWENTA, which allows the use of plastic panels for Ø125 fans.

Beneath the aesthetic front panel, there is a damper that, similar to other air diffusers, allows for smooth airflow regulation.



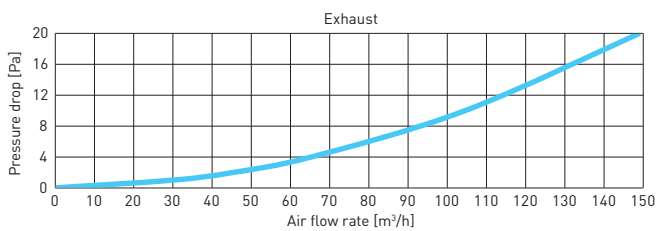
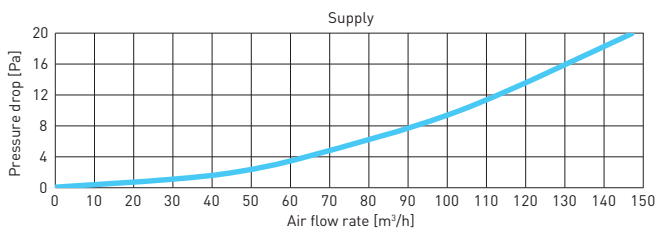
VAP125/WHITE



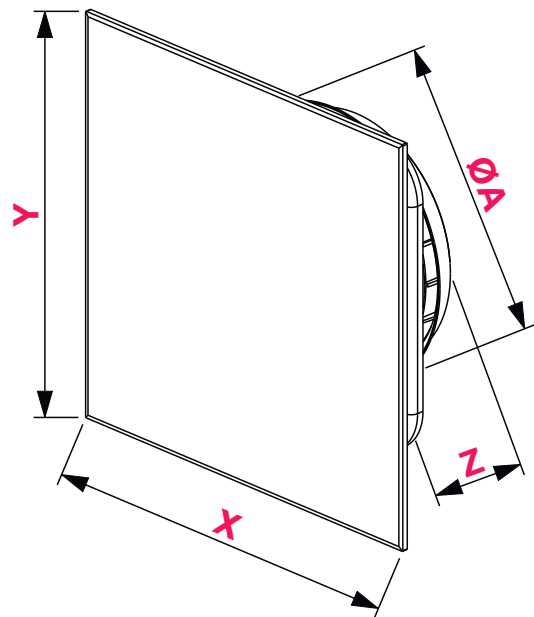
VAP125CZ/BLACK

AIR FLOW CHARACTERISTICS

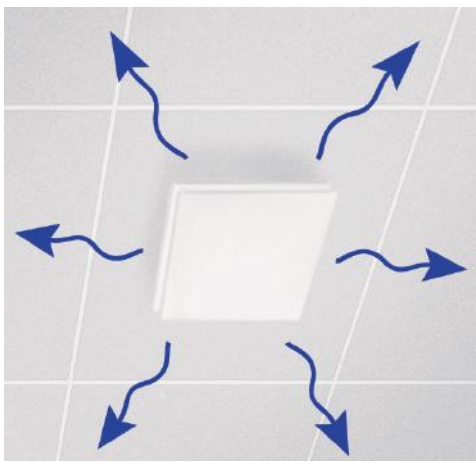
VAP 125



DIMENSION



	X	Y	Z	ØA
VAP125	200	200	36	125



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ELIMINATING UP TO **99%** BACTERIA





MATERIAL



BACTERIOSTATIC

The panel diffuser

VAPO125

The VAPO125 diffuser is fitted with a front panel that can be assembled and removed without tools. This solution makes it easier to keep the product clean.

It is a twin solution to the SYSTEM+ product range offered by AWENTA, which allows the use of plastic panels for Ø125 fans.

Beneath the aesthetic front panel, there is a damper that, similar to other air diffusers, allows for smooth airflow regulation.



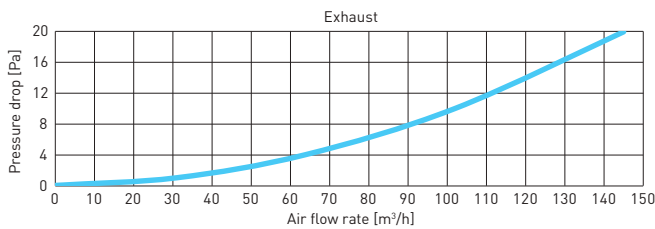
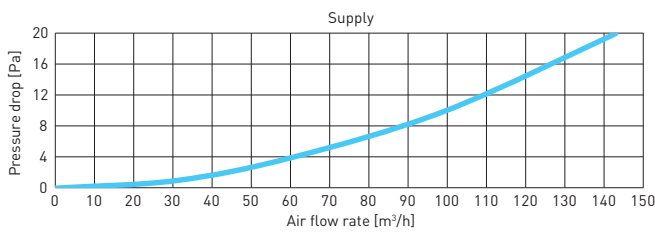
VAPO125/WHITE



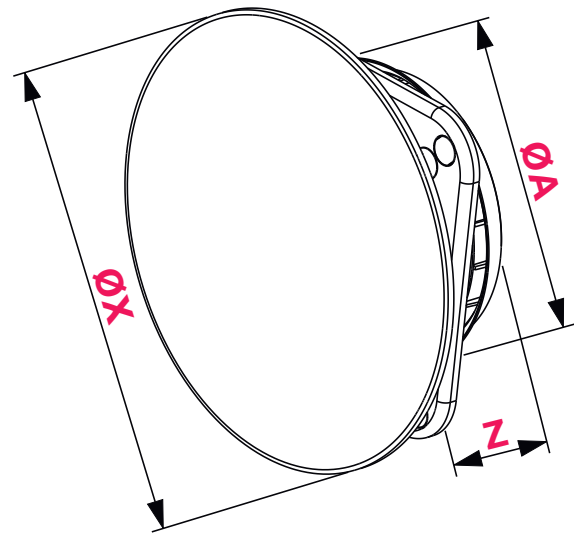
VAPO125CZ/BLACK

AIR FLOW CHARACTERISTICS

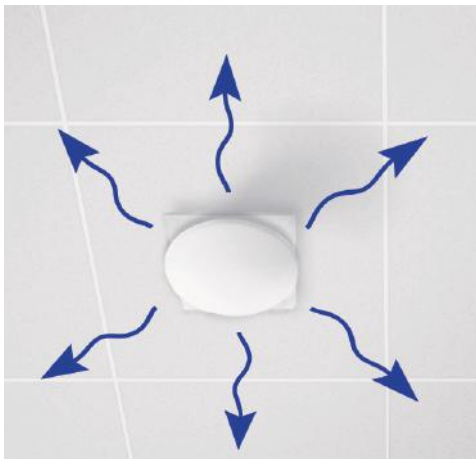
VAPO 125



DIMENSION



	ØX	ØA	Z
VAPO125	200	125	36



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PRODUCT DATA SHEET

Intake grilles

NEW MODEL

VCSM

The initial component of ventilation systems with heat recovery unit. Designed for external use in residential and public buildings. Equipped with a drip deflector to protect the wall from water droplets and a protective mesh to cover the inlet opening.

The designed geometry ensures minimal air resistance/pressure drop while providing protection against rainwater.

A rubber gasket facilitates installation and prevents water leakage from the ventilation duct. Mounting holes at the corners allow for attachment to the wall. The side placement of detachable intake front screws makes installation and disassembly for maintenance easier.

CHARACTERISTICS OF COLOR VARIANTS

White, Graphite(GR)

All materials used are suitable for external applications

- Galvanized steel sheet with a thickness of 0.7 mm, powder-coated using passivation technology for additional corrosion protection
- An attractive color used in contemporary construction

Inox(I)

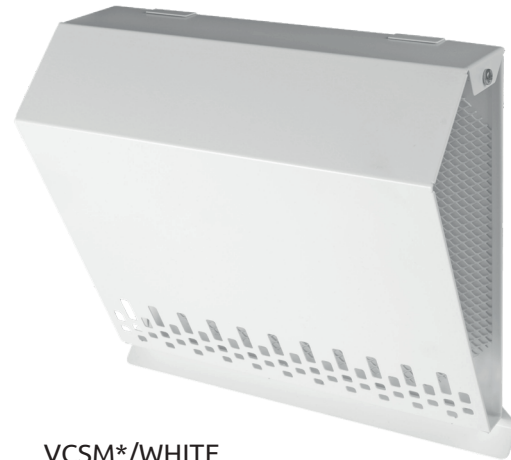
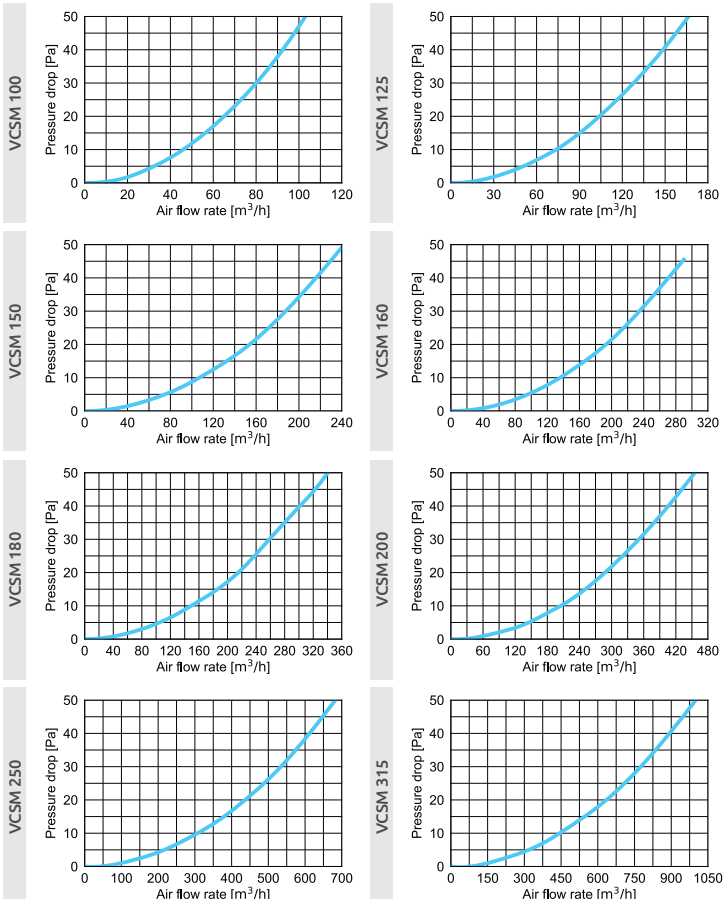
- High-quality stainless steel sheet - acid-resistant, chrome-nickel (grade: 316L/1.4404) with a thickness of 0.6 mm
- Aesthetically polished surface

Protective mesh for the inlet opening

Mounting gasket with double-lipped seal

Fast and easy installation (4 mounting holes in the corners)

AIR FLOW CHARACTERISTICS



VCSM*/WHITE



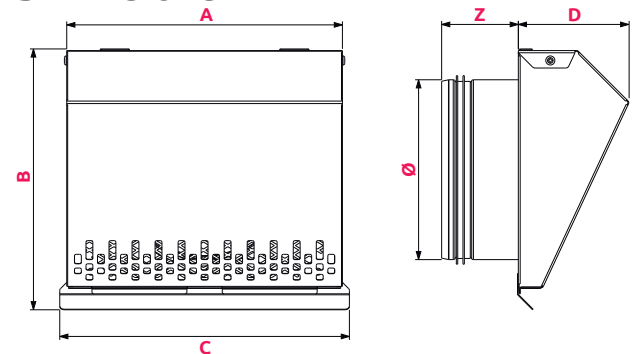
VCSM*GR/GRAPHITE



VCSM*/INOX

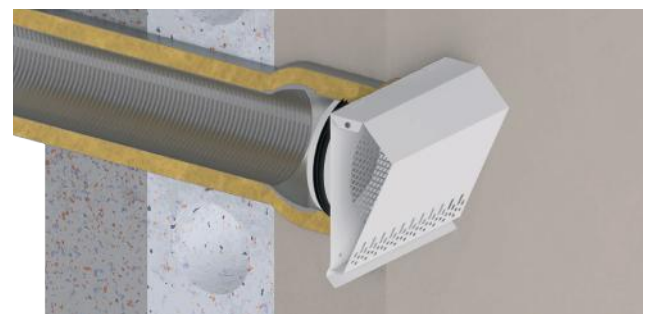
* Connector diameter

DIMENSIONS



NEW MODEL	Ø	A	B	C	D	Z
VCSM100	100	177	162	180	63	56
VCSM125	125	202	190	210	78	61
VCSM150	150	227	215	239	92	66
VCSM160	160	237	224	249	95	66
VCSM180	180	257	245	269	101	66
VCSM200	200	277	264	289	108	66
VCSM250	250	327	314	339	124	66
VCSM315	315	392	379	404	144	76

MOUNTING POSITION



Exhaust grilles NEW MODEL

VWSM

Endings of ducts in mechanical ventilation systems with heat recovery unit. Designed for external use in residential and public buildings. Equipped with a drip deflector to protect the wall from water droplets and a protective mesh to cover the outlet opening.

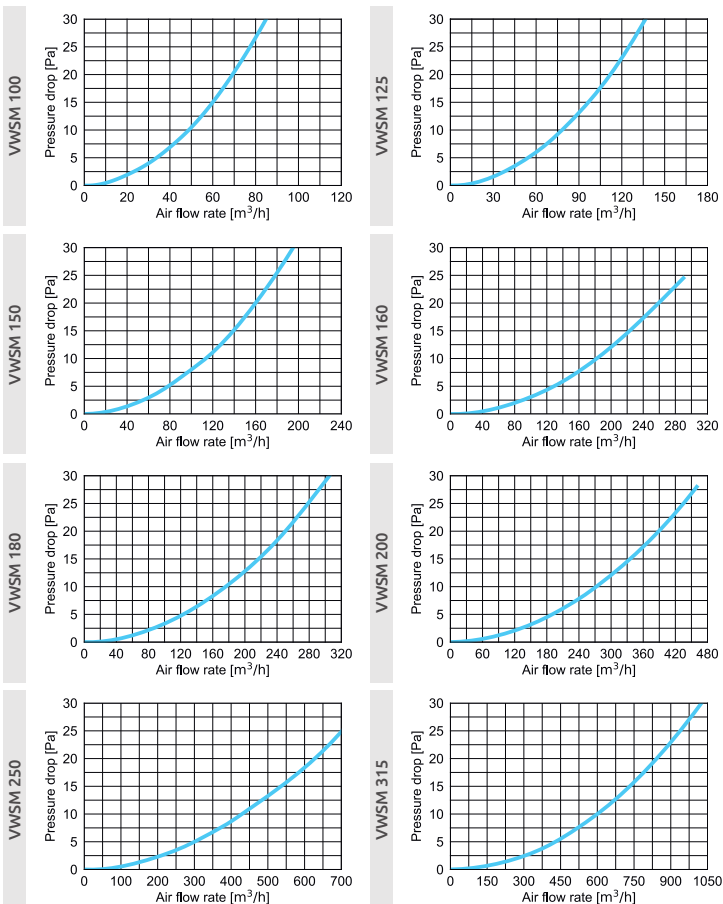
The perpendicular geometry of the air discharge with side closure prevents the wall from getting dirty due to exhausted air. The designed geometry ensures minimal resistance/pressure drop of the expelled air.

A rubber gasket facilitates installation and prevents water from flowing out of the ventilation duct. Mounting holes in the corners allow for attachment to the wall. The side positioning of the detachable outlet front screws facilitates installation and disassembly for maintenance easier.

CHARACTERISTICS OF COLOR VARIANTS

White, Graphite(GR)	Inox(I)
All materials used are suitable for external applications	
<ul style="list-style-type: none"> Galvanized steel sheet with a thickness of 0.7 mm, powder-coated using passivation technology for additional corrosion protection Atrakcyjna kolorystyka stosowana w obecnym budownictwie 	<ul style="list-style-type: none"> High-quality stainless steel sheet - acid-resistant, chrome-nickel (grade: 316L/1.4404) with a thickness of 0.5 - 0.6 mm estetyczna powierzchnia polerowana
Protective mesh for the outlet opening	
Mounting gasket with double-lipped seal	
Fast and easy installation (4 mounting holes in the corners)	

AIR FLOW CHARACTERISTICS



VWSM*/WHITE



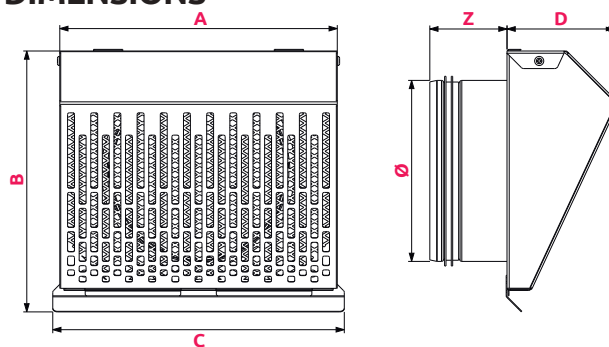
VWSM*GR/GRAPHITE



VWSM*I/INOX

* Connector diameter

DIMENSIONS



NEW MODEL	Ø	A	B	C	D	Z
VWSM100	100	177	162	180	63	56
VWSM125	125	202	190	210	78	61
VWSM150	150	227	215	239	92	66
VWSM160	160	237	224	249	95	66
VWSM180	180	257	245	269	101	66
VWSM200	200	277	264	289	108	66
VWSM250	250	327	314	339	124	66
VWSM315	315	392	379	404	144	76

MOUNTING POSITION



PRODUCT DATA SHEET

Ventilation duct

NOVELTY
SYSTEM **ø90**

VFG75, VFB75, VFG90, VFB90



MATERIAL



BACTERIOSTATIC

The VFG75/VFB75 ducts are used to transport air in mechanical ventilation systems. They are characterised by very high flexibility, which allows for free shaping of their course, bending and adjustment to the installation conditions, without the need of using additional connectors and fittings. The duct design provides a mechanical compressive strength of more than 450 N, which allows them to be poured over with structural concrete.

The double-walled duct design with partially closed air voids suppresses the noise caused by air flowing inside the duct and provides thermal insulation. The VFG75 ducts have an antibacterial internal coating containing silver in the amount of 150 ppm in the polymer matrix so it does not migrate, ionise or elute. The use of silver ensures a long-lasting bactericidal effect regardless of the air temperature and humidity and prevents bacteria from developing defence mechanisms.

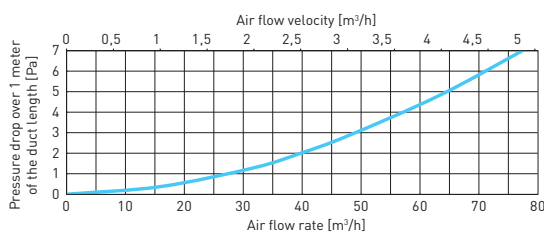
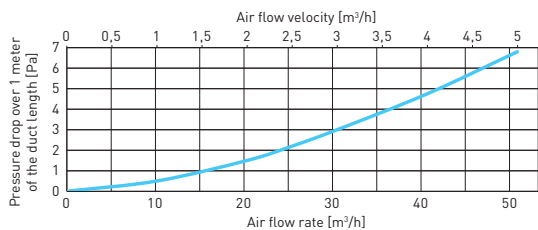
The inner layer also has an antistatic effect, which reduces the settling and accumulation of dust in the ducts. A smooth inner surface allows for high air flows with low-pressure losses contributing to the low energy intensity of the entire system. It also makes it easier to clean the ducts if needed.

The ergonomically shaped VNK 75 cutter with a replaceable blade is used for cutting ducts.

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duct characteristics	VFG75, VFG90	VFB75, VFB90
compression strength	(PN-EN 61386-241):450 N	
impact resistance	(PN-EN 61386-241): Normal (N)	
bending strength	flexible	
flammability	yes	
antibacterial effect after 24h	61-92%	none
outer layer – material	modified polyethylene (HDPE-mod)	
outer layer – colour	green	blue
inner layer – material	modified polyethylene (mod-LDPE), antistatic, antibacterial layer – silver 150 ppm	modified polyethylene (mod-LDPE), antistatic
inner layer – colour	transparent	
unit packaging	50 lm	

AIR FLOW CHARACTERISTIC



Air flow velocity	VFB/VFG 75			VFB/VFG 90		
	2 [m/s]	2,5 [m/s]	3 [m/s]	2 [m/s]	2,5 [m/s]	3 [m/s]
Air flow rate [m³/h] – 1 duct	20,4	25,5	30,5	31,8	39,8	47,7
Air flow rate [m³/h] – 2 ducts	40,7	50,9	61,1	63,6	79,6	95,4
Air flow rate [m³/h] – 3 ducts	61,1	76,4	91,6	95,4	119,4	143,1

Duct length	Pressure drop [Pa]			Pressure drop [Pa]		
	2 [m/s]	2,5 [m/s]	3 [m/s]	2 [m/s]	2,5 [m/s]	3 [m/s]
1 lm	1,5	2,2	3,0	1,3	2	2,8
2 lm	3,0	3,5	6,0	2,6	3,5	5,7
4 lm	6,0	8,8	12,0	5,2	8	11,4
6 lm	9,0	13,2	18,0	7,7	12	17
8 lm	12,0	17,6	24,0	10,3	16	22,7
10 lm	15,0	22,0	30,0	12,9	20	28,4
12 lm	18,0	26,4	36,0	15,5	24	34,1
14 lm	21,0	30,8	42,0	18,1	28	39,8
16 lm	24,0	35,2	48,0	20,6	32	45,4
18 lm	27,0	39,6	54,0	23,2	36	51,1
20 lm	30,0	44,0	60,0	25,8	40	56,8

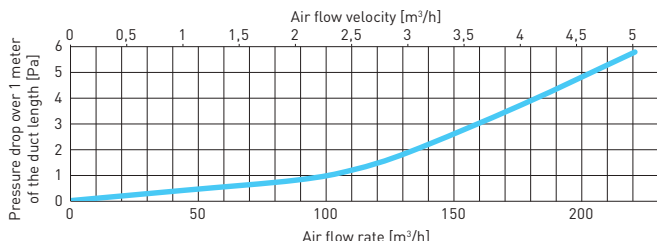
Nominal dimension DN (mm)	Inner diameter (mm)	Outer diameter (mm)	Minimum bending radius (above 100C) (m)	Lengths of sections (m)
75	61	76,2	0,17	50
90	76	91,2	0,17	50

Circular duct Ø125 for the plenum box

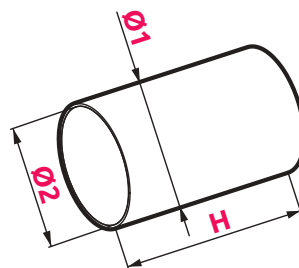
KO125-05, KO125-10, KO125-15

The circular duct allows for extending the connector in the plenum boxes to the required length and install the air valve (supply or exhaust) in the subsidence of the suspended ceiling or the under ceiling.

Available in 50 cm, 100 cm and 150 cm sections, made of PVC.



Air flow velocity	2 [m/s]	2,5 [m/s]	3 [m/s]
Duct length	Pressure drop [Pa]		
1 lm	0,8	1,2	2,0
2 lm	1,6	3,5	4,0
4 lm	3,2	4,8	8,0
6 lm	4,8	7,2	12,0
8 lm	6,4	9,6	16,0
10 lm	8,0	12,0	20,0
12 lm	9,6	14,4	24,0
14 lm	11,2	16,8	28,0
16 lm	12,8	19,2	32,0
18 lm	14,4	21,6	36,0
20 lm	16,0	24,0	40,0



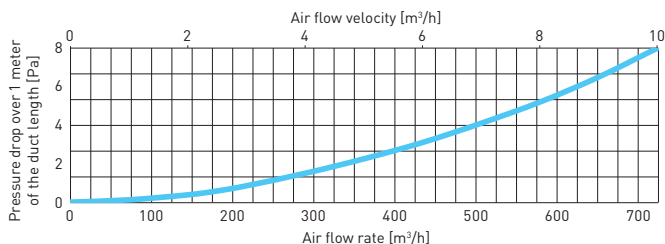
INDEX	Ø	Ø1	Ø2	H
KO125-05	Ø125	128	125	500
KO125-10	Ø125	128	125	1000
KO125-15	Ø125	128	125	1500

Circular duct Ø160 for the distribution box

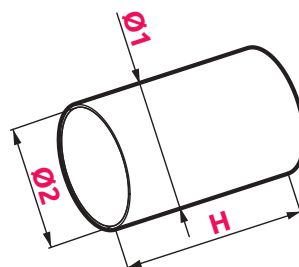
KO160-05, KO160-10, KO160-15

Ventilation ducts Ø160 mm are made of PVC in three lengths: 50 cm, 100 cm and 150 cm.

They are designed for the installation of distribution boxes.



Air flow velocity	2 [m/s]	2,5 [m/s]	3 [m/s]
Duct length	Pressure drop [Pa]		
1 lm	0,4	0,6	0,9
2 lm	0,8	1,2	1,7
4 lm	1,5	2,3	3,4
6 lm	2,3	3,5	5,1
8 lm	3,0	4,6	6,8
10 lm	3,8	5,8	8,5
12 lm	4,6	7,0	10,2
14 lm	5,3	8,1	11,9
16 lm	6,1	9,3	13,6
18 lm	6,8	10,4	15,3
20 lm	7,6	11,6	17,0

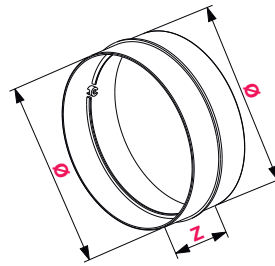


INDEX	Ø	Ø1	Ø2	H
KO160-05	Ø160	163	160	500
KO160-10	Ø160	163	160	1000
KO160-15	Ø160	163	160	1500

PRODUCT DATA SHEET

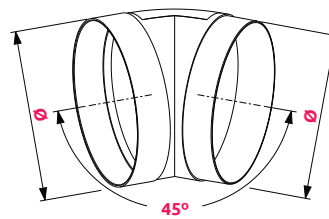
Circular duct connector \varnothing 160 KO160-21

	\varnothing	Z
KO160-21	160	62

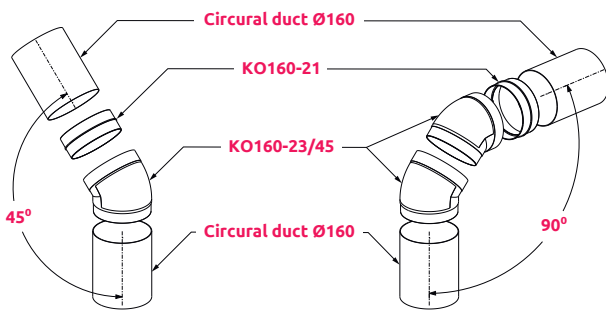
45° bend circular duct \varnothing 160 KO160-23/45

	\varnothing
KO160-23/45	160

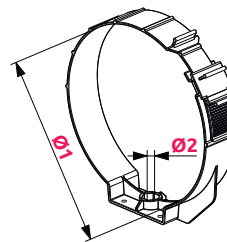
For the correct installation of KO160-23/45, it is necessary to use the connector KO160-21 and place it between the elbow and the duct section according to the following diagram.



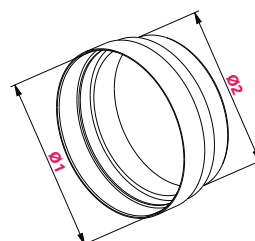
45 - degree bend circular ducts can be joined together and rotated in any direction up to 360 degrees.

Circular duct clamp \varnothing 160 KO160-28

	$\varnothing 1$	$\varnothing 2$
KO160-28	150-170	8

Circular duct reducer \varnothing 160/150 KO160-29

	$\varnothing 1$	$\varnothing 2$
KO160-29	160	150



PRODUCT DATA SHEET

Flexible duct with thermal insulation

KEI160, KEI200, KEI250, KEI315

Insulated ventilation ducts with temperature resistance up to 140°C. They are designed for ventilation, air conditioning and heat recovery systems. Adequate stiffness and maintenance of the cross-section are ensured by an internal duct frame made of spiral wound steel wire with increased strength. They are excellent at dampening noise, eliminating vibration, and reduce the need for fittings.

Available in length 5 and 10 meters.



Material: Aluminium

Operating temperature range: -30°C / +140°C

Air velocity: max. 30 m/sec.

Operating pressure: max. 5 000 Pa

Flammability class: fire-retardant

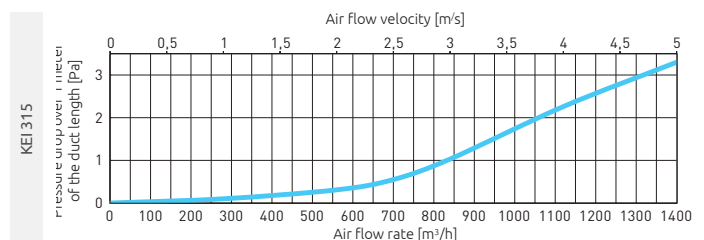
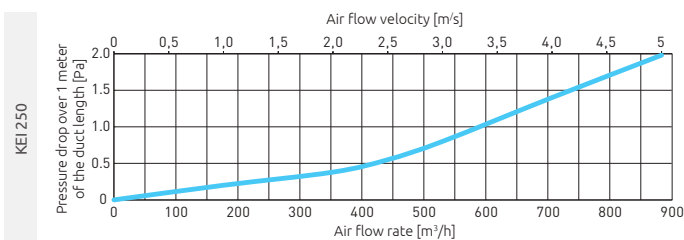
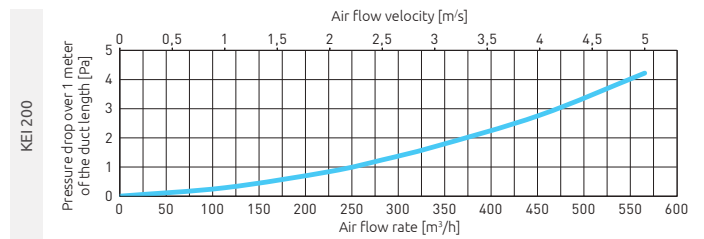
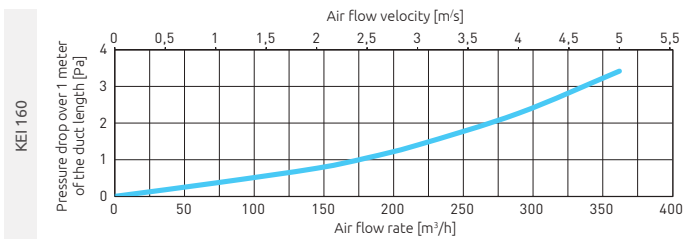
Insulation: wool with a thickness of 25 mm and density of 12 kg/m³

Outer cladding: Aluminium

INDEX	Ø	lm.	INDEX	Ø	lm.
KEI160	Ø160	10	KEI160-50	Ø160	5
KEI200	Ø200	10	KEI200-50	Ø200	5
KEI250	Ø250	10	KEI250-50	Ø250	5
KEI315	Ø315	10	KEI315-50	Ø315	5

AIR FLOW CHARACTERISTIC

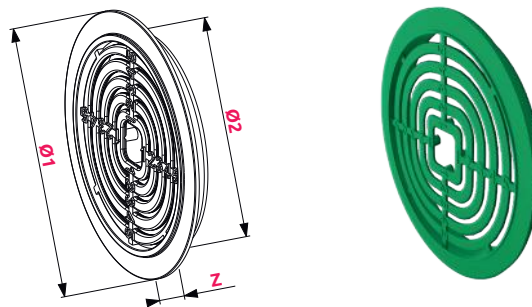
Air flow velocity	KEI160			KEI200			KEI250			KEI315		
	2 [m/s]	2,5 [m/s]	3 [m/s]	2 [m/s]	2,5 [m/s]	3 [m/s]	2 [m/s]	2,5 [m/s]	3 [m/s]	2 [m/s]	2,5 [m/s]	3 [m/s]
Duct length	Pressure drop [Pa]			Pressure drop [Pa]			Pressure drop [Pa]			Pressure drop [Pa]		
1 lm	0,8	1,2	1,6	0,8	1,2	1,8	0,4	0,6	0,8	0,3	0,6	1,0
2 lm	1,5	3,5	3,2	1,7	3,5	3,6	0,8	3,5	1,6	0,6	3,5	2,1
4 lm	3,1	4,9	6,5	3,4	5,0	7,1	1,5	2,2	3,2	1,2	2,2	4,1
6 lm	4,6	7,3	9,7	5,0	7,4	10,7	2,3	3,3	4,8	1,9	3,3	6,2
8 lm	6,2	9,8	13,0	6,7	9,9	14,2	3,0	4,4	6,4	2,5	4,4	8,2
10 lm	7,7	12,2	16,2	8,4	12,4	17,8	3,8	5,5	8,0	3,1	5,5	10,3
12 lm	9,2	14,6	19,4	10,1	14,9	21,4	4,6	6,6	9,6	3,7	6,6	12,4
14 lm	10,8	17,1	22,7	11,8	17,4	24,9	5,3	7,7	11,2	4,3	7,7	14,4
16 lm	12,3	19,5	25,9	13,4	19,8	28,5	6,1	8,8	12,8	5,0	8,8	16,5
18 lm	13,9	22,0	29,2	15,1	22,3	32,0	6,8	9,9	14,4	5,6	9,9	18,5
20 lm	15,4	24,4	32,4	16,8	24,8	35,6	7,6	11,0	16,0	6,2	11,0	20,6



Airflow regulator $\varnothing 75$ VRP75

NOVELTY

	$\varnothing 1$	$\varnothing 2$	Z			
VRP75	70	59	8,1			
Number of removed rings	Air flow velocity [m ³ /h]					
	10	20	30	40	50	60
	Pressure drop [Pa]					
	0	9,0	31,6	69,1	119,8	186,2
1	6,0	21,4	45,9	81,3	126,9	183,0
2	3,3	12,2	26,8	46,6	71,7	104,7
3	1,5	5,8	12,9	22,7	36,1	53,5
4	0,4	1,8	3,9	7,1	11,1	17,0
5	0,2	0,5	1,0	1,9	2,9	4,0



Coupling VM75, VM90

Couplings made of HDPE material in black are available for joining VFG* / VFB* ducts. The couplings provide fast, durable and break-resistant duct connections. The duct connection is tight thanks to the possibility of using the VU75 or VU90 gaskets.

NOVELTY SYSTEM $\varnothing 90$ 

End caps VZ75-5, VZ90-5

End caps protect ducts from any contamination during transport, storage and the system from possible contamination during installation. They are made of polyethylene PE.

NOVELTY SYSTEM $\varnothing 90$ 

Gaskets VU75-5, VU90-5

Specially designed gaskets ensure a tight connection between ducts as well as between duct and manifolds and plenum boxes. The gasket is placed on the ducts between the "humps". They are made of polyurethane PUR.

NOVELTY SYSTEM $\varnothing 90$ 

Duct cutter $\varnothing 75, 90$ VNK75R, VNK75G, VNK90R, VNK90G

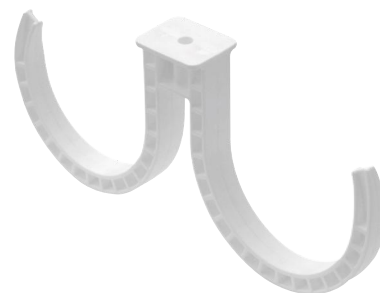
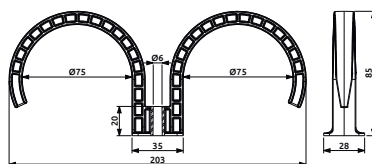
A cutter for ducts with a diameter of 75mm or 90mm allows for precise trimming to get your duct a desired length.

Precise cut will ensure a tight connection with other system components. Replaceable cutter blade extends its life span.

Duct cutter: $\varnothing 75$ VNK75R
 $\varnothing 90$ VNK90RNOVELTY SYSTEM $\varnothing 90$ Duct cutter: $\varnothing 75$ VNK75G
 $\varnothing 90$ VNK90G

Duct holder Ø 75 vH75-2

Duct holder with a diameter of 75 mm.
The holder allows you to instal the ducts both on the floor and the ceiling.



Mounting tape, perforated vTM

Perforated tape is used to suspend ventilation ducts of circular, oval and rectangular cross-section. It is ideal for installations requiring smooth height adjustment or when there is no possibility to use clamps.

Mounting openings of Ø 4 mm and 8 mm allow for mounting with threaded rods, screws, rivets or bolts.



Tape for the VZO band clamp

The metal tape allows you to create band clamps of any diameter. Special packaging makes it easy to measure the desired lengths of tape. It has properly shaped edges to prevent damage to ducts during installation. It can be toned for all types of ventilation ducts. The band clamp is installed using the VZT clamp..

VZO – Tape for band clamps

Length: 30 lm.

Width: 9 mm.

Thickness: 0.6 mm.

Material: Stainless steel.

Unit packaging: 30 lm.

Collective packing: 10 pcs.



VZT clamps for the VZO tape

VZT clamps for VZO clamp bands are made from high-quality steel, coated with a special layer to extend their lifespan for prolonged use. The unique design of the clasp allows for quick and easy opening or closing.

VZT – clamps for tape

Material: Stainless steel (lock),
galvanised steel (screw).

Unit packaging: 50 sets.

Collective packing: 10 pcs.



Aluminium sealing tape vTA

Aluminium sealing tape is used to protect connections from possible leaks. The tape is flexible so it adheres perfectly to the surface and sets very well even on uneven planes.

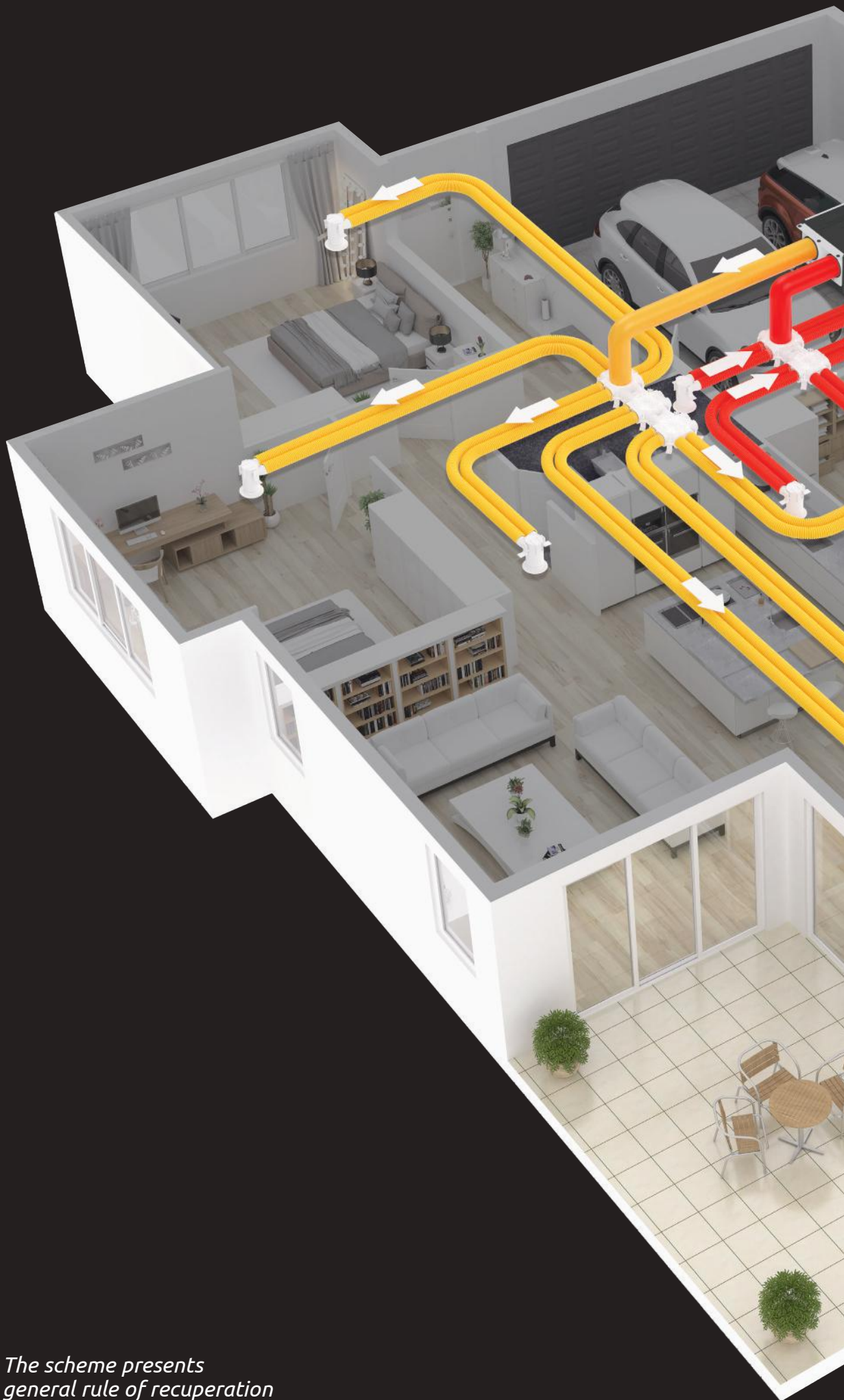
The tape is resistant to weather conditions including high temperatures, UV radiation and water.



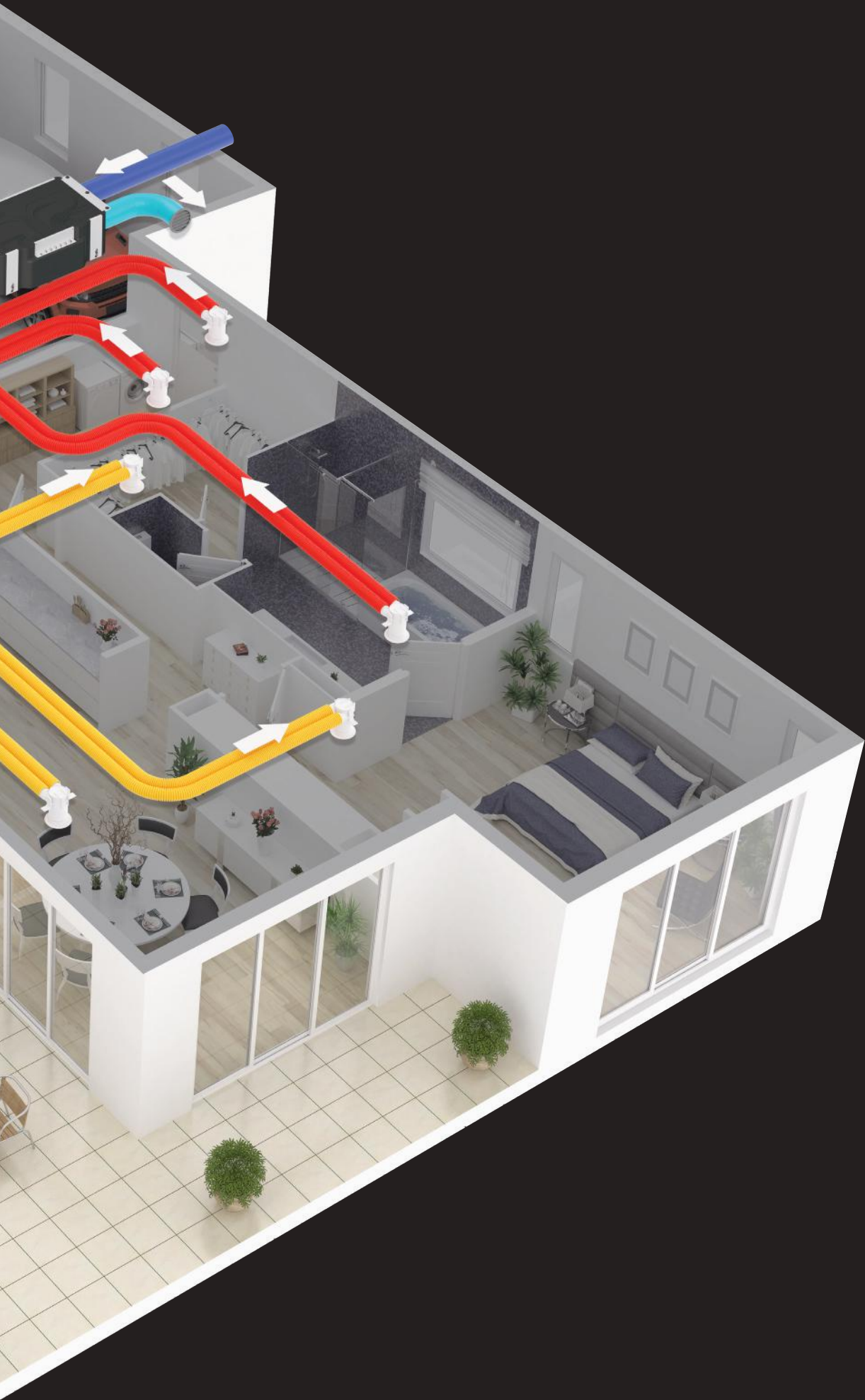
Reinforced sealing tape vTZ

Aluminium tape additionally reinforced with fibres for increased strength. It has the same properties as the VTA tape. It is used to protect connections from possible leaks. The tape is resistant to weather conditions including high temperatures, UV radiation and water.





*The scheme presents
general rule of recuperation*



DECENTRALIZED VENTILATION

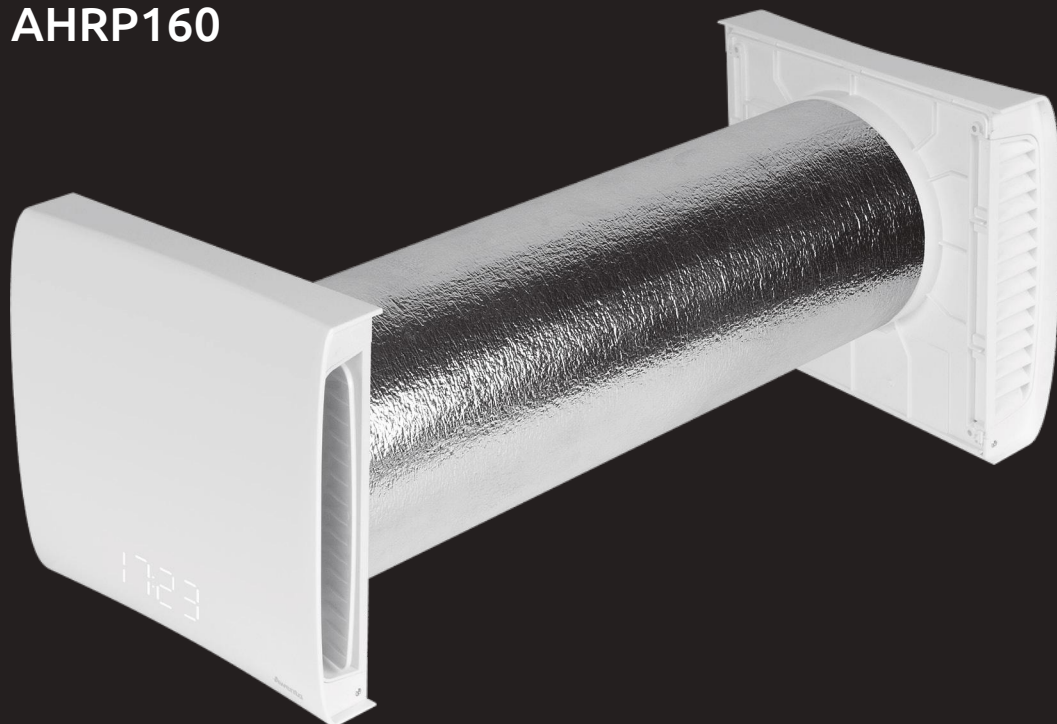
Decentralized ventilation provides comfort by supplying the optimal amount of fresh air with no necessity to open the windows.

Opened windows may cause a significant cooling down the room during the winter and the insects' influx in the summer. The ventilation system consists of several smaller units located in various rooms of the house.

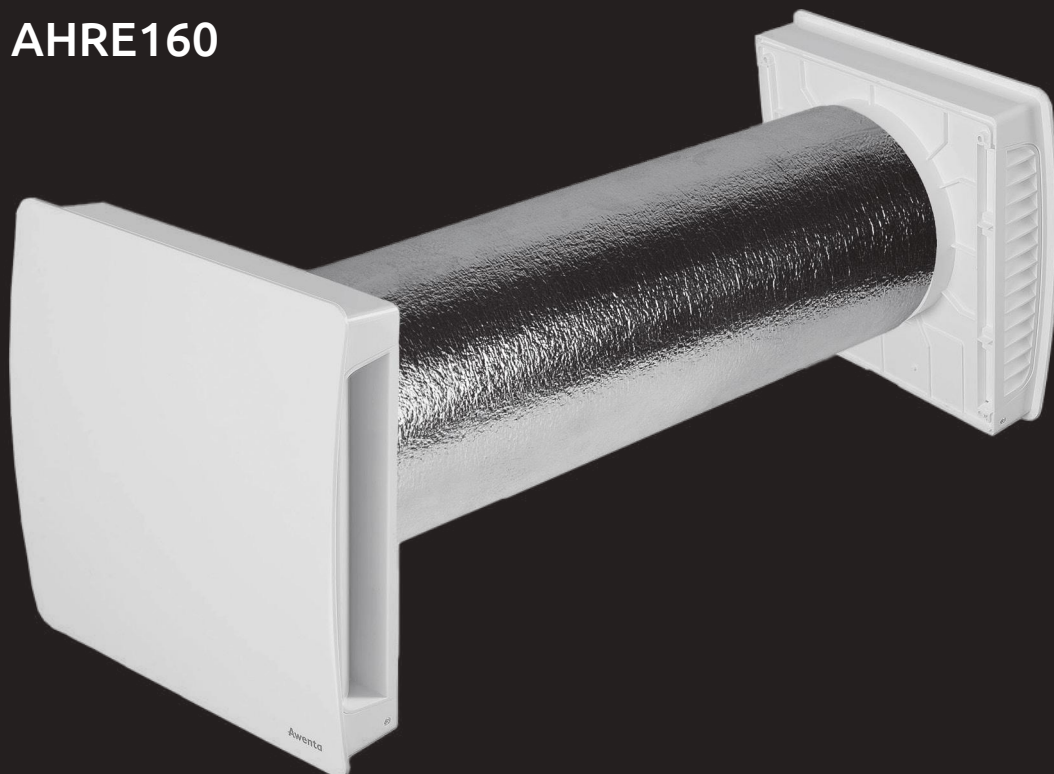
Thanks to use of the energy-saving fans and high-efficiency heat exchangers, the installation of the AHR and HRV devices brings economic benefits. Heat recovery always occurs by the two-way operation of the device. In the air exhaust cycle, the used air flows through the heat exchanger heating it up, while during the air supply cycle the heat accumulated by the exchanger is received back and transferred to the room.

An additional aspect of the decentralized ventilation is minor interference in the building construction in comparison to the traditional heat recovery ventilation system. The reason is the devices are located in the outside wall of the building and there is no need to build in the ventilation ducts and carry out a major renovation of the house. All these mentioned benefits allow to significantly reduce costs installations, especially in old-time buildings.

AHRP160



AHRE160



AHR160

AHR is a new generation of decentralized ventilation devices facilitating ventilation while reducing heat loss.

Thanks to the use of an accumulation heat exchanger, the AHR retains and stores heat energy to transfer it to the cooler, supplied air. The difference between the AHR and HRV series lies in the solutions used to automate its operation.

The applied electronics control the operation of the device and adjusts its parameters depending on the conditions in the room where the AHR is installed. In addition, the AHR series has possibility to pair multiple devices thanks to automatic wireless communication.





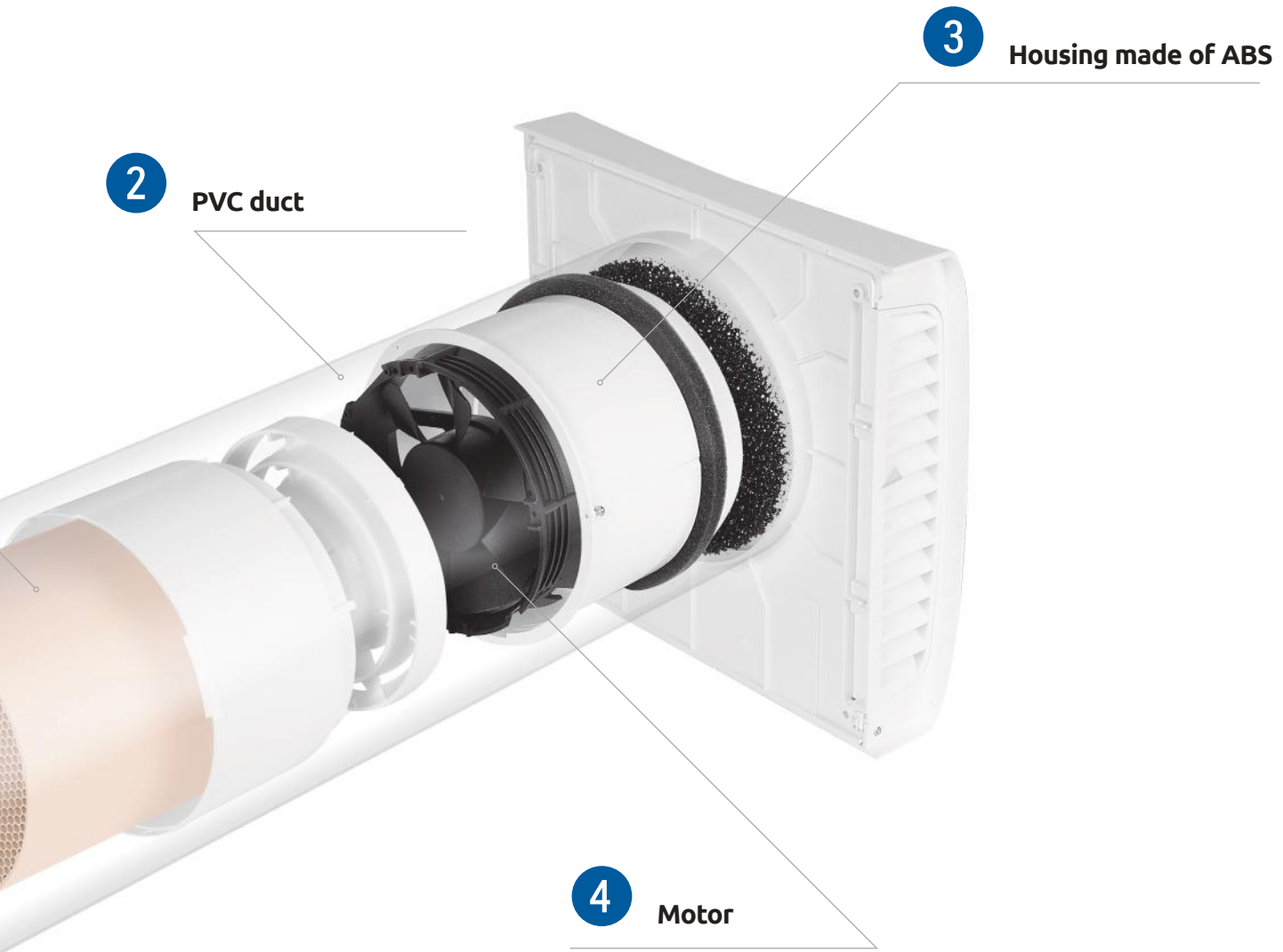
Wi-Fi



30 000 H



TIGHTNESS
CLASS



5 Filters

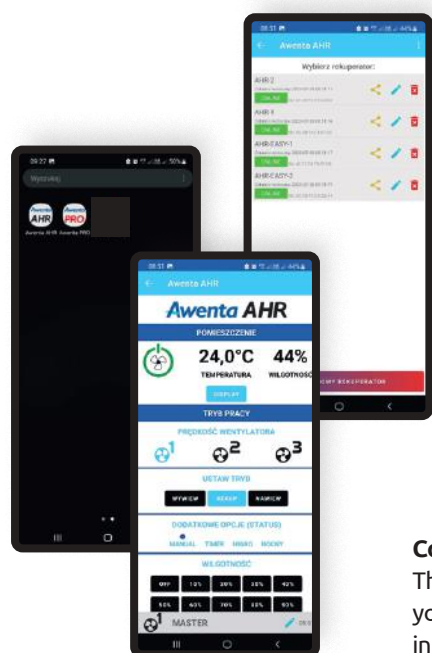
8 Temperature and humidity sensor



AHRP160 PLUS

NOVELTY

AHRP160



Awenta AHR app available on **Android**.

With the mobile app you can remotely manage your AHR family fans without the need for a remote control.

Comprehensive application

The extensive virtual control panel allows you to manage the functions of the AHR160 in detail.

I	24 dB (A)	23 m ³ /h	18 m ³ /h	4 W
II	34 dB (A)	36 m ³ /h	30 m ³ /h	5 W
III	39 dB (A)	52 m ³ /h	45 m ³ /h	7 W

Filter G3



G3 class filter included

Functionality of the application:

Switching on/off

Current temperature

Current humidity

Gear shift

Recuperation mode

Supply air mode

Exhaust mode

Hygro mode

Timer mode

Synchronised operation - info+activation

Night mode (time setting + activation)

Time to filter change

Reset time to filter change

Remote timer setting on the unit

Info master/slave

Info current gear

EQUIPMENT



Wi-Fi



Terminal block



3 speed



Remote control

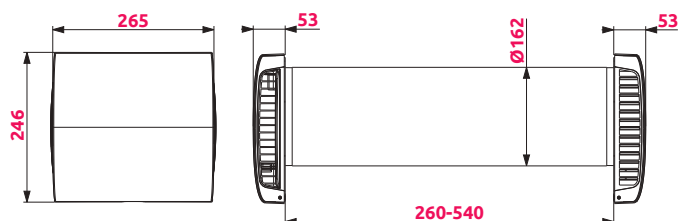


Timer



Humidity sensor

DIMENSIONS



BALL BEARINGS



4 RAWLPLUGS AND SCREWS



30 000 H



TIGHTNESS CLASS



1 The ceramic exchanger is the heart of the device and one of its most important elements. In AHR, a hexagonal exchanger was used, thanks to which one of the highest heat recovery rates in decentralized ventilation devices available on the market was obtained.



2 Duct was made of PVC with addition of silver ions to prevent proliferating of bacteria inside of it. Additional insulation was used to reduce condensation and heat loss.



3 Main components are made of ABS plastic with addition of UV stabilizer increasing resistance to sunlight.



4 Energy - saving brushless motor 24V DC.



5 The AHR is equipped with two air purifying filters.



6 The AHRP160 is equipped with an infrared remote control, enabling the device to be operated in the full range of changing operating modes, operating speed as well as switching on and off.



7 Automatic shutters that cut off the air flow when the device is turned off and a soundproofed internal panel increase the comfort of use.



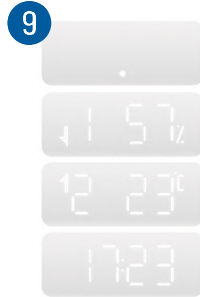
8 The wireless temperature and humidity sensor enables automatic operation of the device, which, based on the measurements, adjusts the operating speed.



Additional filter: G3 class. Included as standard.



For thick walls it is possible to obtain longer isolation duct AHR160KO-075 at length 750 mm.



9

Wyświetlenie 1

Wyświetla tryb pracy (zadany) i temperaturę powietrza w pomieszczeniu (wewnętrzny czujnik temperatury).

Wyświetlenie 2

Wyświetla tryb pracy i poziom wilgotności powietrza, ustawiony bieg, wilgotność w pomieszczeniu.

Wyświetlenie 3

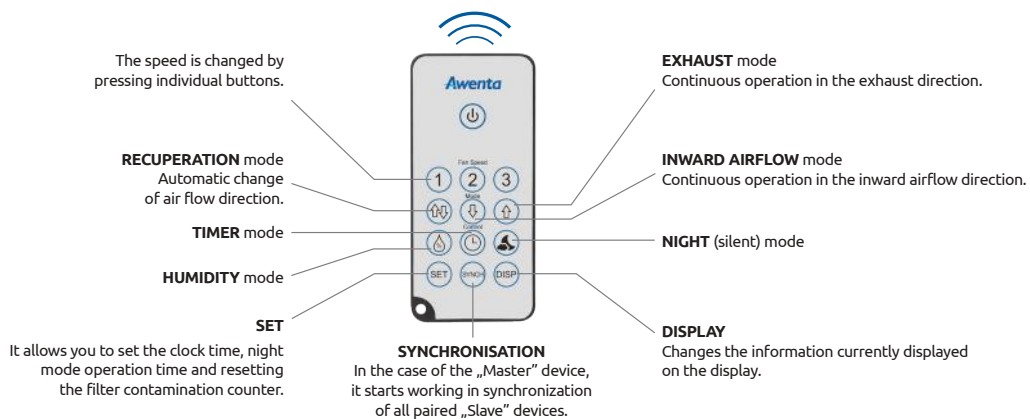
Wyświetla tryb pracy i temperaturę powietrza, ustawiony bieg, temperaturę w pomieszczeniu.

Wyświetlenie 4

Wyświetla godzinę.

Wyświetlenie 5

Sequencyjnie zmienia wyświetlanie (25, 50, 75, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000).



RECUPERATION mode
The air flow direction is changed automatically based on the measurement temperature.



AIR SUPPLY / EXHAUST mode
Continuous operation in the inward or exhaust airflow direction at the room.



HUMIDITY mode
The speed depends on the settings and currently measured humidity.



TIMER mode
Enables automatic shutdown of the device after 5-180 minutes.

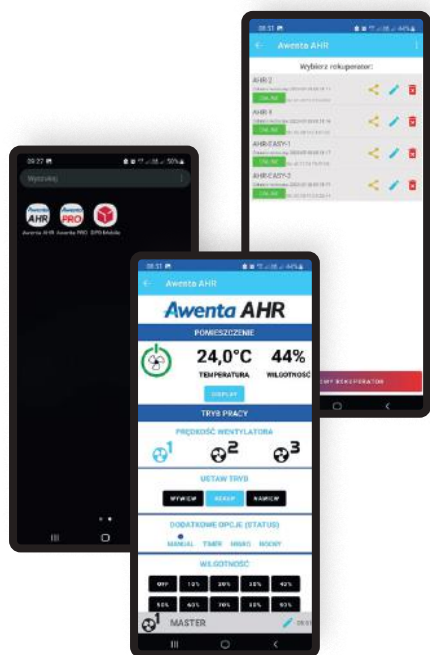


NIGHT (silent) mode
The night mode is activated at the user-set clock time, reducing the efficiency of the device.

AHRE160 EASY

NOVELTY

AHRE160



Awenta AHR app available on **Android**.

With the mobile app you can remotely manage your AHR family fans and external temperature, humidity sensor* without the need for a remote control.

EASY TO USE

The simplified interface allows quick and easy management of the AHR160 Easy and external temperature and humidity sensor*.

I	24 dB (A)	23 m ³ /h	4 W
II	34 dB (A)	36 m ³ /h	5 W
III	39 dB (A)	52 m ³ /h	7 W

*optional product, sold separately

Functionality of the application:

Master mode

- Switching on / off

- Gear shift

- Recuperation mode

- Supply air mode

- Exhaust mode

- Night mode (OFF or 8h)

- Ventilation mode (OFF or 30min)

- Synchronised operation - info

- Time to filter change

- Reset time until filter change

- Info Master/Slave

- Info current gear

Slave mode

- Information on synchronisation operation

- Time until filter change

- Reset of time until filter change

- Info Master/Slave

- Info of current gear

EQUIPMENT



Wi-Fi



Terminal block



3 speed



Remote control

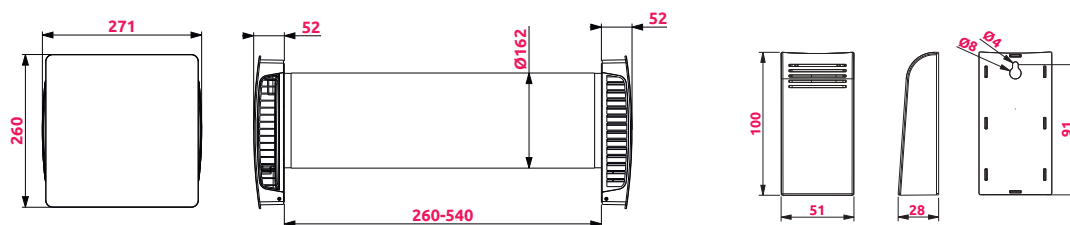


BALL BEARINGS



4 RAWLPLUGS AND SCREWS

DIMENSIONS





30 000 H



TIGHTNESS CLASS



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Main components are made of ABS plastic with addition of UV stabilizer increasing resistance to sunlight.



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Energy - saving brushless motor 24V DC.



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The AHR is equipped with two air purifying filters.



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The AHRE160 is equipped with an infrared remote control, enabling the device to be operated in the full range of changing operating modes, operating speed as well as switching on and off.



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Automatic shutters that cut off the air flow when the device is turned off and a soundproofed internal panel increase the comfort of use.



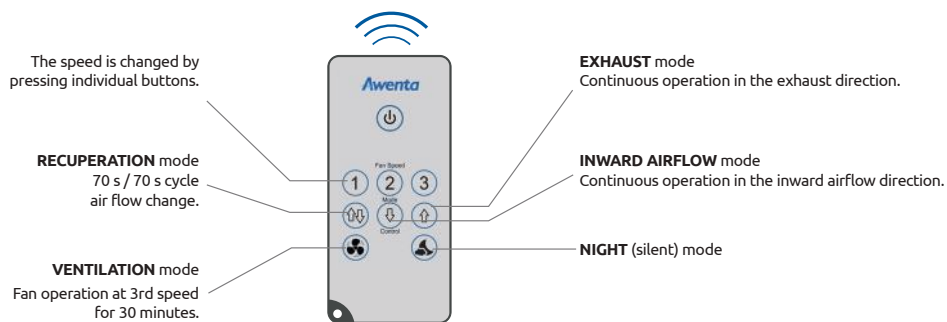
8

The wireless temperature and humidity sensor enables automatic operation of the device, which, based on the measurements, adjusts the operating speed. Sensor functionality available only via smartphone application.



For thick walls it is possible to obtain longer isolation duct AHR160KO-075 at length 750 mm.

*optional product, sold separately



RECUPERATION mode

The direction of airflow is changed every 70 seconds.



AIR SUPPLY / EXHAUST mode

Continuous operation in the inward or exhaust airflow direction at the room.



NIGHT (silent) mode

The night mode is activated for 8 clock hours, reducing the efficiency of the device



VENTILATION mode

Fan operation at 3rd speed for 30 minutes in the currently selected direction (mode)

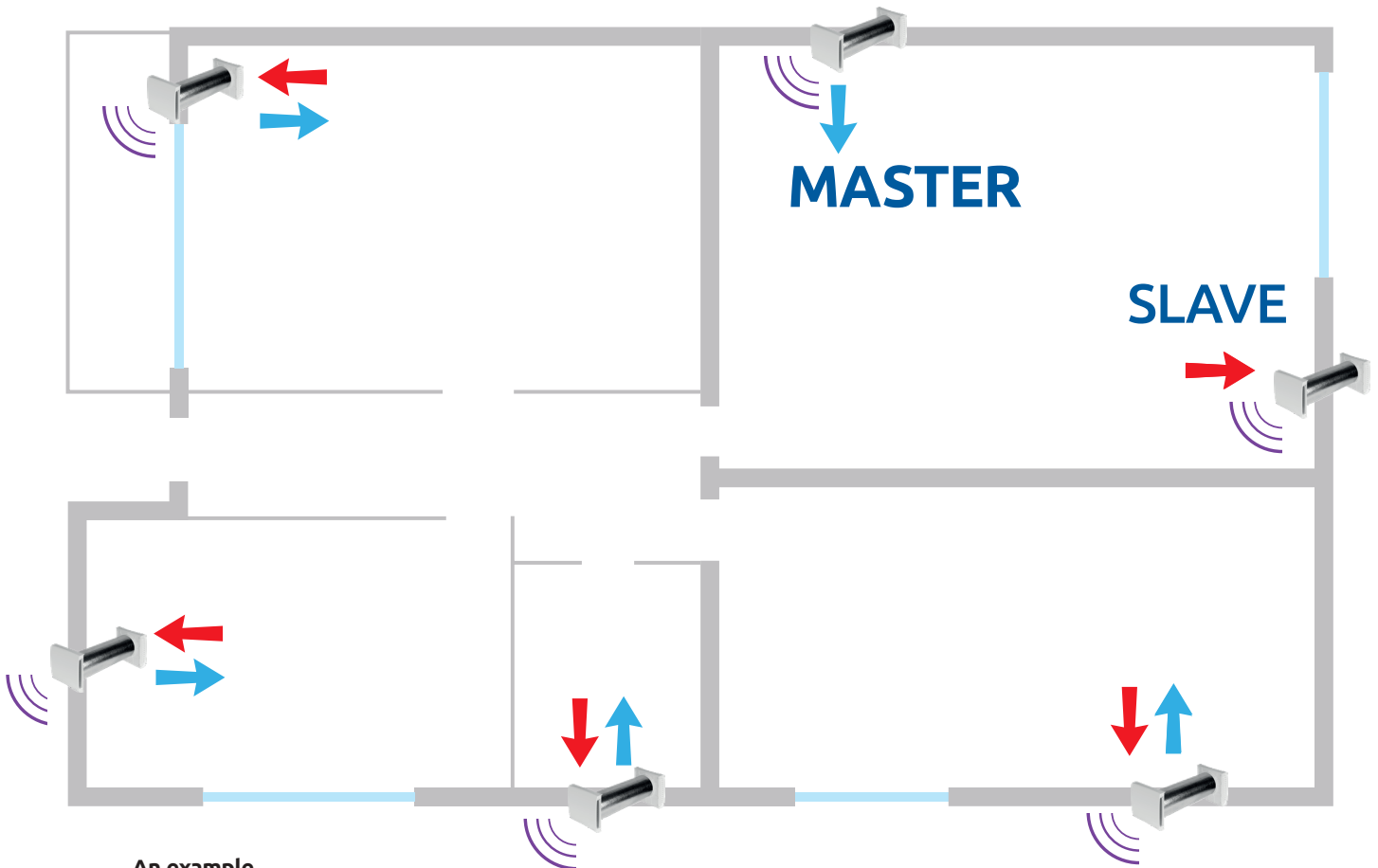
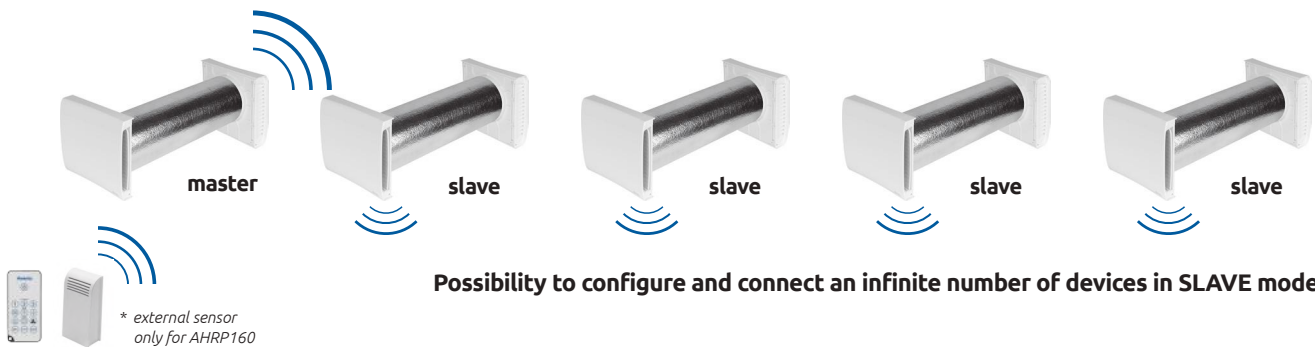
Switching off by pressing the remote control button again or when changing to a speed other than 3rd.

AHR160 PLUS, AHR160 EASY

AHRP160, AHRE160

The AHR series has the ability to connect several devices installed in one or more rooms with the possibility of pairing them via wireless communication. No hassle of connecting devices with a power cord. Connection

possible in various modes, e.g. both units only supply or only exhaust and alternate operation, one unit blows in and the other blows out.



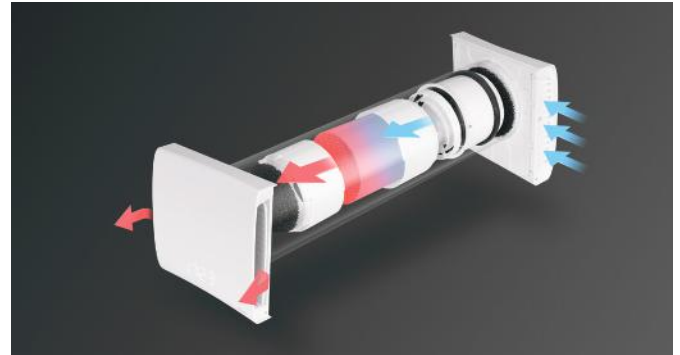
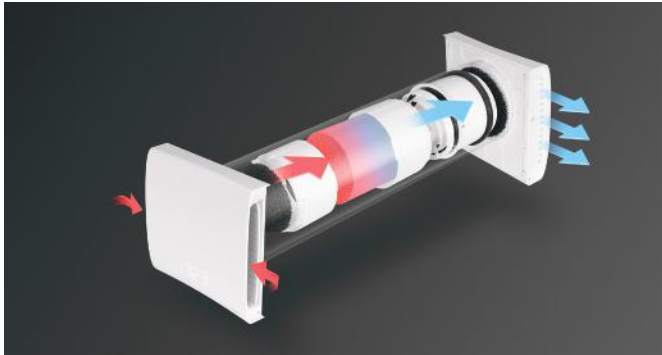
An example of AHR devices arrangement



30 000 H



TIGHTNESS CLASS



EXHAUST

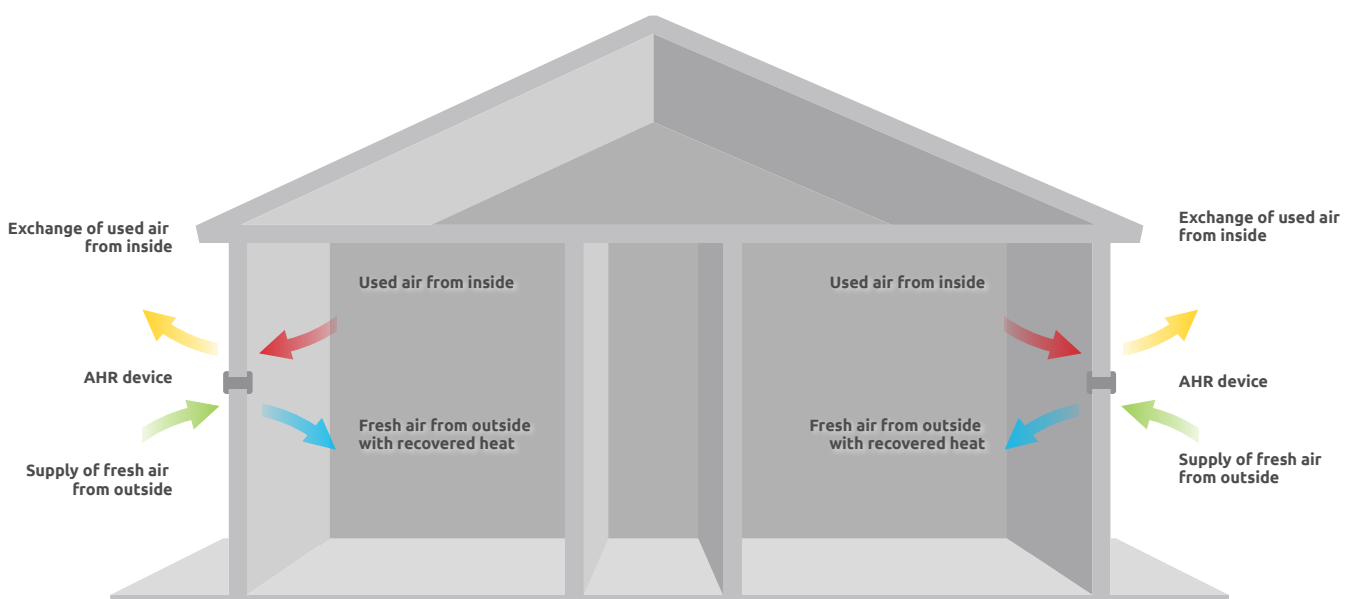
During exhaust operation, the heat is stored in a ceramic heat exchanger. After the exchanger is completely warmed up, it automatically changes the direction of operation.

AIRFLOW

The heat accumulated in the exchanger is collected by the supply air stream and then transferred to the room. After the exchanger cools down, it automatically changes the direction of operation.

The optimal one-way operation time is determined by the temperature readings from sensors located upstream and downstream of the heat exchanger.

The principle of AHR devices operation



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