

# VALLOX 99 MV CF

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A quiet and low ventilation unit  
that keeps air flows always in balance



**VALLOX**  
HOME *of* FRESH AIR

# A NEW VENTILATION UNIT WITH CONSTANT FLOW FANS

**MyVALLOX**  
99 MV CF

*The Vallox 99 MV CF ventilation unit with constant flow fans can compensate for pressure differences, keeping air flows constant in any circumstances.*

The pressure difference caused by factors such as winds and temperature differences increases with the height of the building. Pressure changes in the apartment can cause various problems for the residents and the building. Such problems may include the misting of windows and the migration of smells between apartments. An uncontrolled pressure difference may also result in impurities entering the indoor air and moisture accumulating in the structures of the building.

The constant flow fans of the Vallox 99 MV CF ventilation unit keep air flows in balance in windy conditions and any other circumstances

that affect pressure differences. Pressure ratios remain constant during the defrosting of the heat recovery cell and regardless of the heat recovery bypass status. A ventilation unit equipped with a constant flow fan enables precise compensation for separate extractions.

## Quick to install and start up


The installation and startup of Vallox 99 MV CF is easy. With constant flow fans, the traditional fan curves practically become straight lines (see p. 4), which makes it easy to define the desired air flows. This makes startup easier and saves the installer's time and money.

When the constant flow feature is integrated into the fan of the unit, no separate

installation work on the duct system is needed. When the anemometer measuring the air flow is in the fan, there is no fear of blocked measuring tubes either.

The ceiling mounting plate (optional) enables installing the duct system even before the ventilation unit is brought to the site. The white-painted ceiling mounting plate finishes off the installation and there is no need to install time-consuming covering strips.

The air flows remain constant regardless of changes in pressure losses caused by wind, dirty filters or valves, the condensation or freezing of the HR cell and the defrost cycles.



Vallox 99 MV CF is an excellent apartment ventilation solution, particularly for high buildings; regardless of windy conditions, the constant flow fans always keep air flows at the originally set level.



# MyVALLOX

## 99 MV

### A low and quiet unit suits small apartments

In small apartments, in particular, it is often difficult to find a place for the ventilation unit. However, residents often want a place for a laundry tower in the bathroom of the apartment. The dimensions of the constant flow model Vallox 99 MV CF and the basic model Vallox 99 MV are identical. They are the lowest ventilation units on the market and they fit on top of a laundry tower without problems.

The Vallox 99 MV models are so quiet that space-consuming additional soundproofing is not necessarily needed even in demanding circumstances. The careful optimisation of air flows, carefully selected components and excellent soundproofing of the frame ensure the tested\* quietness of the unit.

With Vallox 99 MV units, the sound pressure level remains below 38 dB even when the air flow is above 70 l/s (LpA dB(A) 10m<sup>2</sup>). For this reason, it can be installed in larger apartments than other ventilation units with similar air volumes. Being able to install the same ventilation unit in all the apartments of a building, regardless of their size, enables easier ventilation design, procurement, maintenance and user instruction.

### All modern MyVallox features

The Vallox 99 MV CF and Vallox 99 MV ventilation units are both controlled with the method that suits the location best, such as an apartment-specific control panel or through a cooker hood. The unit can also be connected to the cloud service or house automation.

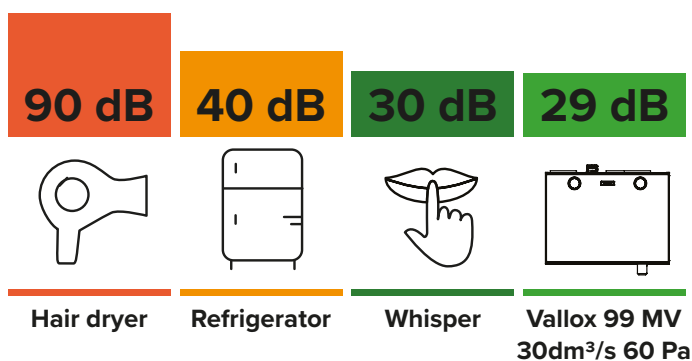
The ventilation can also be set to be partly or fully controlled based on the integrated air quality sensors. With the carbon dioxide and humidity sensors, ventilation is boosted automatically and energy efficiently based on the need.

The efficient heat recovery of the unit ensures energy efficiency. In addition, the partial bypass of the heat recovery cell keeps the supply air temperature even also in spring and autumn.

\* Sound pressure levels have been tested in accordance with the ISO 5135:1997 and ISO 3741:2010 standards.

A low ventilation unit is easy to place on top of a laundry tower in the bathroom, for instance.

Thanks to the good soundproofing of the ventilation unit frame, there is no need to install it inside a cabinet for additional soundproofing.



The Vallox 99 MV models are quieter than a whisper. The low sound pressure level is enabled by the air technical design by Vallox.

## Information in the Vallox MySelecta product selection software

The up-to-date unit and calculation information required for ventilation design can be found in the Vallox MySelecta product selection software.

Both Vallox 99 MV models can be found in the MagiCAD for AutoCAD and MagiCAD for Revit software.

## Technical support assists professionals

The technical support of Vallox assists professionals in the field throughout the entire lifespan of the product.

The technical support team will assist in matters related to ventilation design and the installation, setup, and warranty servicing of the unit.



### HIGH-RISE BUILDING VISIO

- The 24-storey Visio reaches to the impressive height of 98 metres above the sea level.
- It is located near the sea in the Kalasatama area in Helsinki, in the southwest corner of REDI Mall.
- 240 rental apartments, facilities for a daycare centre and communal areas (including a sauna and a roof terrace).
- Energy class A: the energy-efficiency of the building is ensured by means such as high-quality extract air heat recovery.
- Each of the 240 apartments in the high-rise building has a **Vallox 99 MV CF** ventilation unit with constant flow fans.
- The building will be completed in early 2024.

Source: SRV

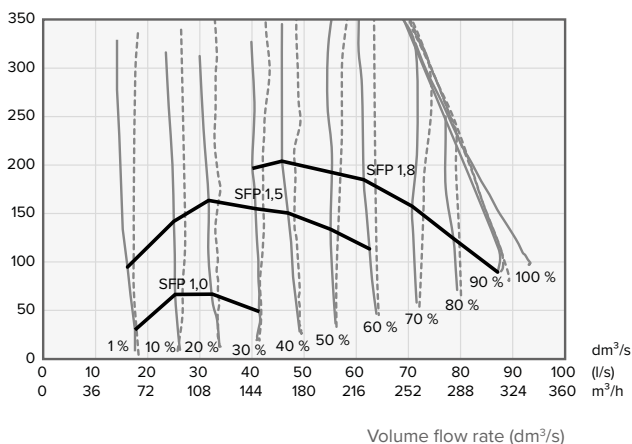
*'Certain laws of nature apply to high buildings. Vallox 99 MV CF has been a solution for the management of pressure differences in building Visio. Even though there is a ventilation unit in every apartment in the building, the installation and startup of the units has been quick and easy.'*

*Harri Hirvonen, Building Technology Manager, SRV Rakennus Oy*

## Air volumes

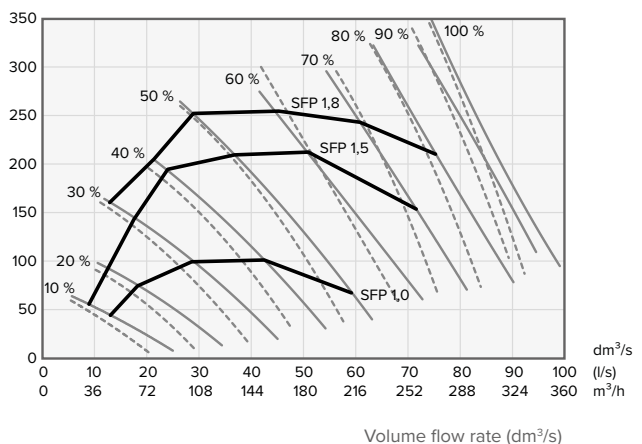
### Vallox 99 MV CF

Pressure loss in the ducts. Total pressure (Pa)

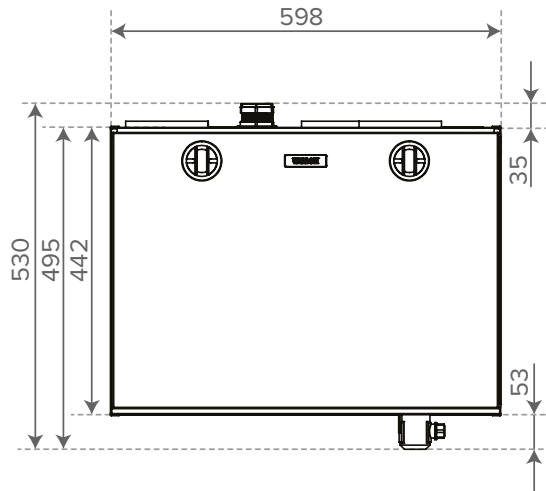


### Vallox 99 MV

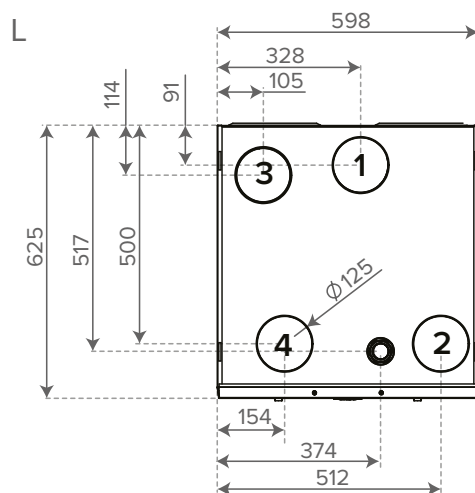
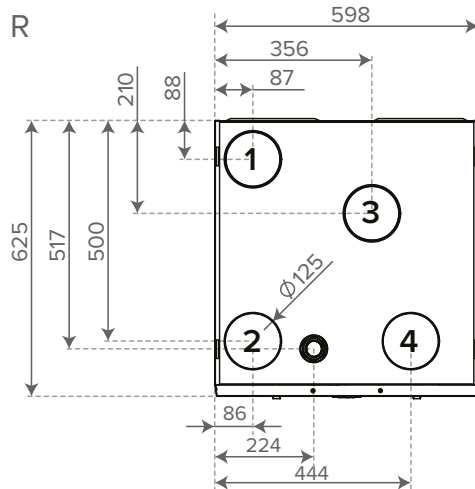
Pressure loss in the ducts. Total pressure (Pa)



## Dimensions and duct outlets



1. Supply air
2. Extract air
3. Exhaust air
4. Outdoor air



Technical specifications	CONSTANT FLOW MODEL	BASIC MODEL
	Vallox 99 MV CF	Vallox 99 MV
Indicative maximum floor area of the apartment¹	130 m²	
Dimensions (W x H x D) without a siphon	598 x 442 x 625 mm	
Weight	59 kg	
Duct outlets	4 x ø 125 mm	
Maximum extract airflow <sup>2</sup> (dm³ / s / 100 Pa)	93	99
Maximum supply airflow <sup>2</sup> (dm³/s / 100 Pa)	88	92
Specific energy consumption (SEC) in a cold climate	A+	
SEC average climate	A	
Annual efficiency of heat recovery from extract air*	76 %	
Supply air efficiency	81%	
Specific fan power* of the ventilation unit (kW/ m³/h) SFP	1.15	1.12
Type of heat exchanger	Cross-counter flow	
Heat recovery bypass	Automatic	
Post-heating	Electrical resistor, 900 W	
Pre-heating	-	
Additional heating	Electrical resistor, 900 W	
Control options		
Control methods	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	
Compatible cooker hood	Delico PTD EC, KTD A, X-Line PTXP MC, PTXPA MC, KTXA	
Fans		
Fan type	Constant Flow (CF) constant flow fan	Basic fan
Supply air	0.085 kW, 0.75 A EC	
Extract air	0.085 kW, 0.75 A EC	
Other features	Integrated anemometer	-
Defrosting		
Defrosting automatics	●	
HRU cell bypass	●	
Accessories		
Ceiling mounting plate	▲	
Attic floor penetration plate	▲	
Carbon dioxide sensor	● ▲	
Humidity sensor	● ▲	
VOC sensor	▲	
Fireplace switch function	●	
● = Standard delivery ▲ = Accessory		
*Working point defined in the Ecodesign Directive (2009/125/EC), Southern Finland, Helsinki-Vantaa TRY year 2012.		
1) The floor areas provided are indicative. The dimensioning must be based on a ventilation plan designed by a professional.		
2) The actual airflow during operation is around 50-60% of the maximum airflow.		

## AIR FLOWS ALWAYS IN BALANCE

- The constant flow fans of the Vallox 99 MV CF model keep air flows stable.

## ENERGY-SAVING EC FANS

- Similar to all MyVallox units, the Vallox 99 MV model features low-energy EC fans.

## LOWEST UNIT IN THE MARKET

- Fits easily into small spaces, such as on top of a laundry tower in the bathroom.

## MODERN FEATURES

- Includes all the modern features of MyVallox ventilation units.
- Integrated carbon dioxide and humidity sensors, optional VOC sensor.
- Diverse control options.

## MADE IN FINLAND

- Designed and manufactured in Loimaa, Finland, with over 50 years of experience.



## TESTED QUIETNESS

- Air flow control grilles even out the air flow to the fan blade and reduce the fan's tonal noise, particularly at low frequencies.
- The detailed design of air flows inside the unit reduces the pressure loss and the noise level.
- The soundproofing of the frame enhances the quietness of the ventilation.
- No additional soundproofing is, necessarily, needed.

## EFFICIENT HEAT RECOVERY

- Efficient heat recovery with partial bypass enables energy-efficient ventilation.



## QUICK TO INSTALL, EASY TO USE

- When setting up Vallox 99 MV CF, the desired air flows are easy to configure from the graph.
- An optional ceiling or wall mounting plate makes installation easier.
- Easy to use and maintain.



# VALLOX

[www.vallox.com](http://www.vallox.com)

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