Valeo

Mono-pipe ventilation exhaust centrifugal units

Use

- Extract ventilation systems installed in high-rise buildings and premises.
- For buildings with mono-pipe ventilation system.
- For mounting in kitchens and bathrooms.
- Installation in casing for flush or surface mounting.

Air flow: up to 150 m³/h 42 l/s

Power: from 12 W

Noise level: from 27 dBA

Design

- The ventilation unit Valeo is designed for installation in a plastic or fire-proof casing.
- The front panel is made of snow-white UV-resistant plastic.
- Filter with filter class G4 for motor, impeller and ductwork system protection against soiling.
- The filter is easily accessible for service operations.
- The ventilation unit with motor is fixed inside the casing with special latches.
- Due to modern design and various colour modifications the front panel matches well with any interior.

Motor

- Two- or three-speed motor with centrifugal impeller. Minimum energy demand.
- Galvanized steel impeller with forward curved blades.
- Automatic maintaining of constant air flow depending on variable air resistance of the duct.
- Balanced turbine ensures low-noise operation.
- Best aerodynamic characteristics due to special scroll casing design.
- Ball bearings provide long service life.

Speed control

- Step speed control with an external speed controller, e.g. **CDP-3/5** model which is available upon order.
- Wide range of system controls with programmable parameters (timer, adjustible timer, internal switch, photo sensor, humidity sensor).

Options for 2 speed units

- **Timer (Valeo...T)**
  Depending on wiring connection the fan is off or runs permanently at low speed. The fan is turned to higher speed with external switch 50 s after activation. After turning the switch off the fan continues operating within 6 min at higher speed and then reverts to default operation mode.
- **Adjustible timer (Valeo...TR)**
  Depending on wiring connection the fan is off or runs permanently at low speed. If the fan is turned on with an external switch it switches to higher speed 0 to 150 s after switch activation. After turning the fan off it continues running at higher speed within 2 to 30 minutes and then reverts to previous mode. The fan run-out time and delay time for higher speed are regulated with the internal regulator.
- **Interval switch (Valeo...I)**
  Depending on wiring connection the fan is off or runs permanently at low speed. In interval mode regulated from 0.5 to 15 hours the fan switches periodically to higher speed for 10 minutes. The switch interval is adjusted with the internal regulator. If light in the room is turned on the fan switches to higher speed in 50 s. After light is off the fan reverts to interval mode operation.
- **Photo sensor (Valeo...F)**
  Depending on wiring connection the fan is off or runs permanently at low speed. If light in the room is turned with the external switch the fan switches to higher speed in 50 s. After light is off the fan continues running at higher speed within 2 to 30 min and then reverts to default operating mode.The fan run-out time and delay time for higher speed are regulated with the internal regulator.
- **Humidity sensor (Valeo...H)**
  Depending on wiring connection the fan is off or runs permanently at low speed. The fan switches to higher speed as relative humidity in the room increases from 60 % up to 90 % and switches off as humidity drops by 10 % below set level. If light in the room is turned on the fan switches to higher speed in 50 s. The run-out time is set by the internal regulator from 2 to 30 minutes.

Designation key

Series	Front panel	Air capacity according to speed	Option
Valeo	_: white plastic **Hi-Tech:** natural aluminium **Hi-Tech Gold:** aluminium in gold **Hi-Tech Chrome:** aluminium in chrome **Platinum:** grey aluminium lacquer **Vintage:** painted vintage **Gold:** electroplating on plastic in gold **Chrome:** electroplating on plastic in chrome	35/60; 35/100; 35/60/100; 60/100; 60/100/150;	**K:** fire damper **T:** timer **TR:** regulated timer **I:** interval switch **F:** photoelectronics **H:** humidity sensor

Accessories

Filter

Speed controller

BlauFlex AN

Clamp

Front panel modifications

- The standard snow white front panel can be replaced by the following models:

Platinum
Grey metallic

Hi-Tech
Natural brushed aluminium

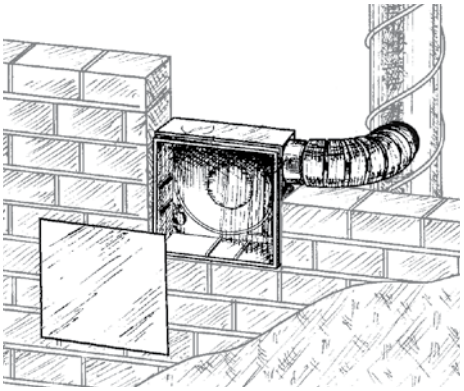
Hi-Tech Gold
Natural gold-coloured aluminium

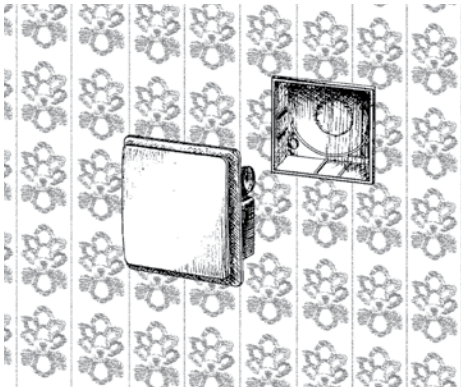
Hi-Tech Chrome
Natural mirror aluminium

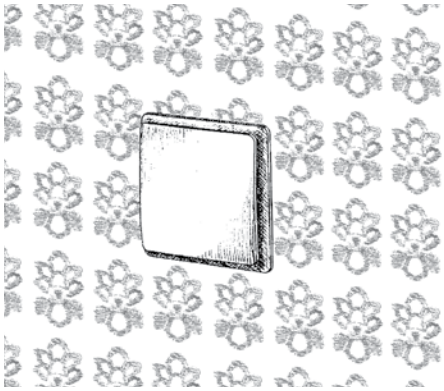
Mounting plastic casing for ventilation units Valeo

- **BP 80**: plastic casing for flush mounting.
- Made of quality ABS plastic and equipped with a gravity backdraft damper.
- Installed in wall or ceiling during general construction works by mounting brackets supplied as a standard.
- The casing is equipped with oblong slotted joints to facilitate mounting.
- Connection to main ventilation shaft with flexible air ducts.
- Exhaust spigot diameter 80 mm.
- After installation works cover the unit with a protecting cover to prevent dirt ingress.
- After finishing works install the unit Valeo inside the casing.
- For exhaust ventilation of neighbour rooms extra spigots may be connected to the casing.

Gravity backdraft damper







Mounting fireproof casing for the ventilation units Valeo

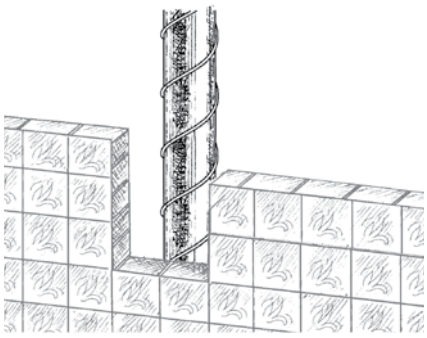
- **BF 80**: fireproof casing for flush mounting.
- Made of silicate plates based on calcium silicate and has high thermal insulating properties.
- Equipped with a fire-retarding damper to prevent fire and smoke expanding along air ducts. If temperature in the duct reaches 90°C the thermal fuse closes the damper.
- When the fan is off the fire-retarding damper serves as a backdraft damper.
- The fan casing is installed in wall or ceiling during general construction works by mounting brackets supplied as a standard.
- Connection to main ventilation shaft with flexible air ducts. Exhaust spigot diameter 80 mm.
- Power is supplied to the fan through a sealed electric lead-in on the casing.
- After installation works cover the unit with a protecting cover to prevent dirt ingress.
- After finishing works install the ventilation unit inside the casing and connect it to wiring system.
- For exhaust ventilation of neighbour rooms extra spigots may be connected to the casing on the left (**BFL** modification), on the right (**BFR** modification), on the bottom (**BFD** modification).

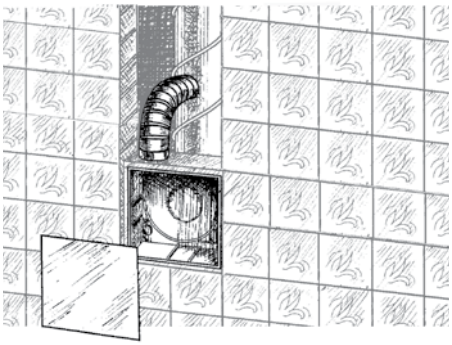
Fire-retarding damper

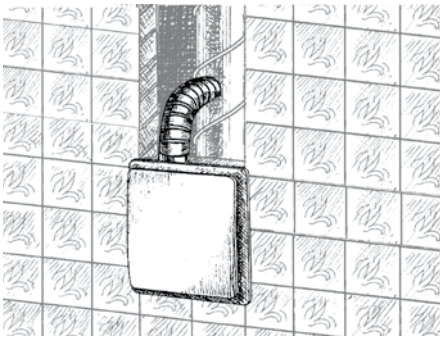
BFL 80

BFR 80

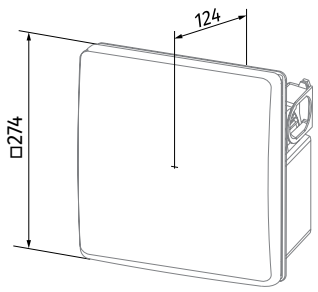
BFD 80

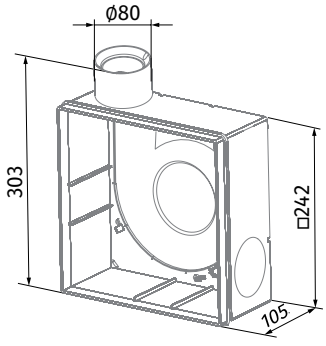


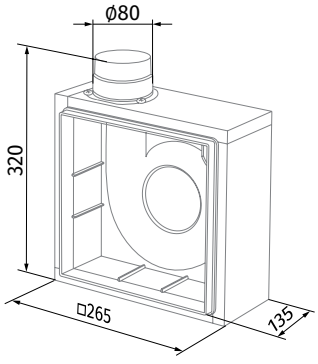




Overall dimensions [mm]

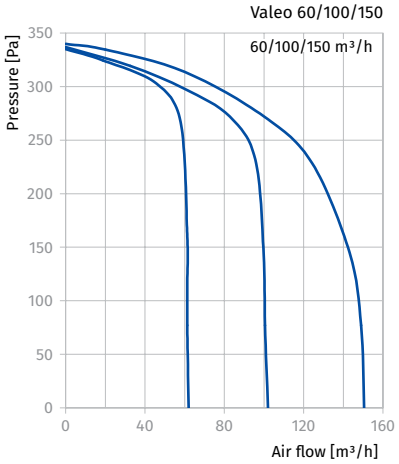


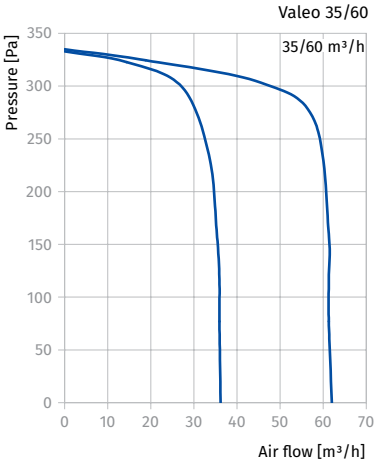


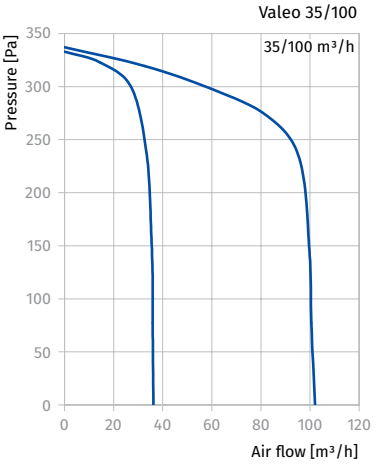


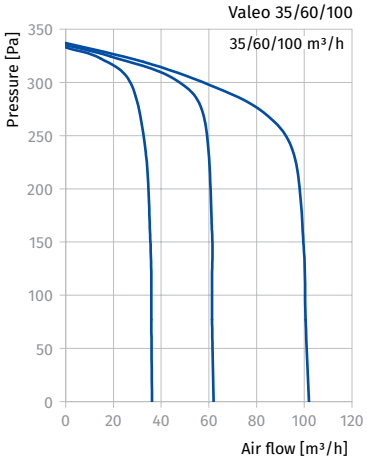
Technical data

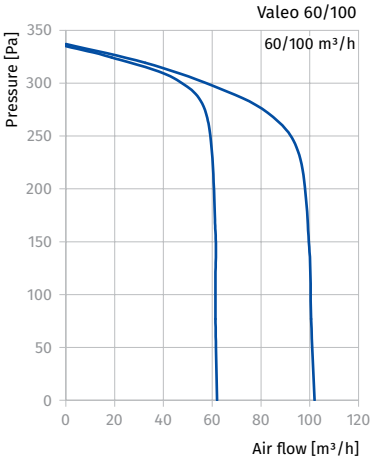
Parameters	Valeo 60/100/150	Valeo 35/60	Valeo 35/100	Valeo 35/60/100	Valeo 60/100
Speeds	3	2	2	3	2
Voltage [V / 50 Hz]	220-240	220-240	220-240	220-240	220-240
Power [W]	17/27/48	12/17	12/27	12/17/27	17/27
Current [A]	0.14/0.18/0.21	0.12/0.14	0.12/0.18	0.12/0.14/0.18	0.14/0.18
Cable cross section [mm²]	4x1.5	3x1.5	3x1.5	4x1.5	3x1.5
Maximum air flow [m³/h (l/s)]	63 (18) 102 (28) 150 (42)	35 (10) 63 (18)	35 (10) 102 (28)	35 (10) 63 (18) 102 (28)	63 (18) 102 (28)
RPM [min⁻¹]	1350/1830/2640	890/1350	890/1830	890/1350/1830	1350/1830
Sound pressure at 3 m [dBA]	30/35.2/43.7	26.6/30	26.6/35.2	26.6/30/35.2	30/35.2
Max. transported air temperature [°C]	50	50	50	50	50
SEC class	-	-	-	-	-
Ingress protection rating	-	-	-	-	-
Motor IP rating	IP44	IP44	IP44	IP44	IP44
ErP	-	-	-	-	-











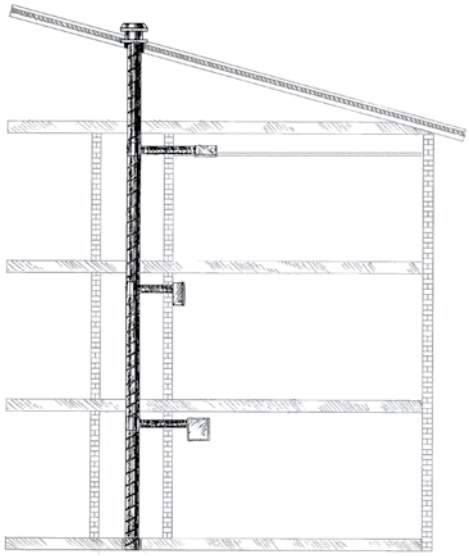
- The abrupt curves show high pressure performance and constant air flow of several VALEO fans integrated into a single ventilation shaft.
  - available pressure up to 270 Pa at 35 m³/h;
  - available pressure up to 260 Pa at 60 m³/h;
  - available pressure up to 220 Pa at 100 m³/h.

Calculation of basic ventilation shaft diameter for mono-pipe ventilation systems

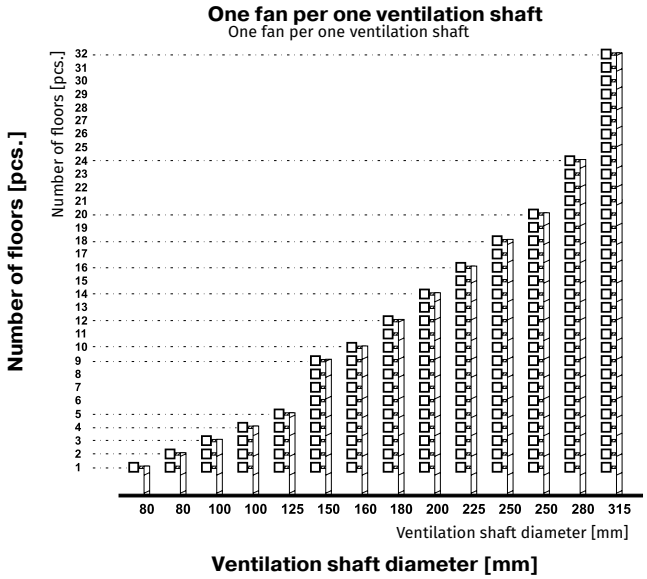
- The charts below display dependence of ventilation shaft dimensions as a function of number of storeys in high-rise buildings with mono-pipe ventilation system.

60 m³/h

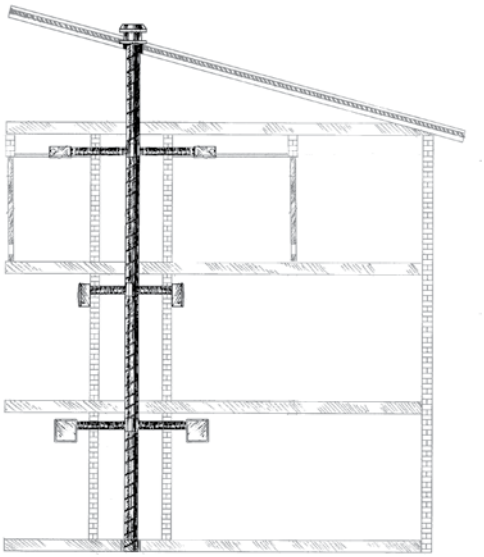
Exhaust ventilation of bathrooms and WC



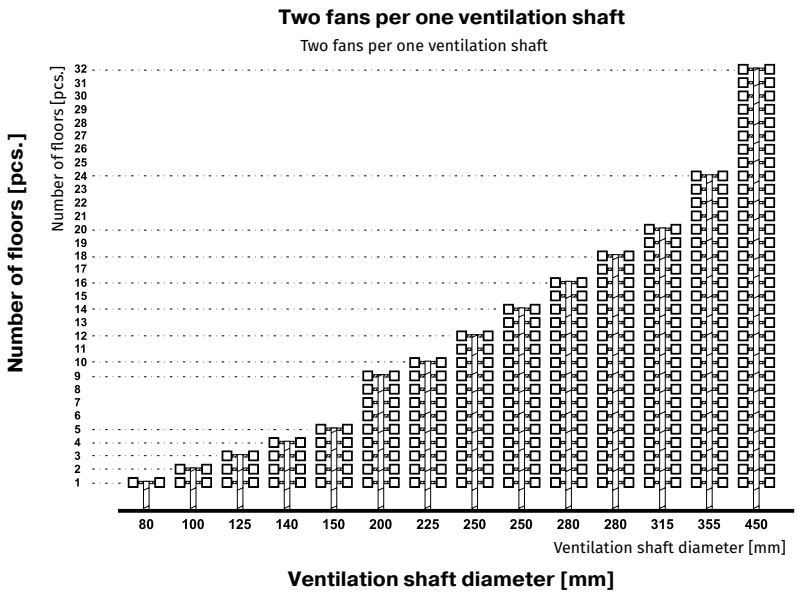
- One fan per each floor, rated air flow 60 m³/h for full operation mode of all fans.



60 m³/h



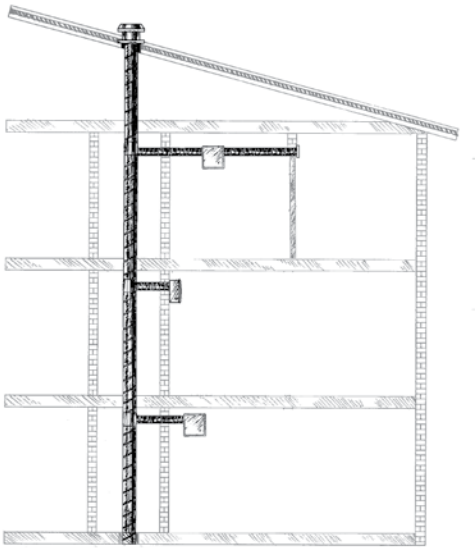
- Two fans per each floor, rated air flow 60 m³/h for full operation mode of all the fans.



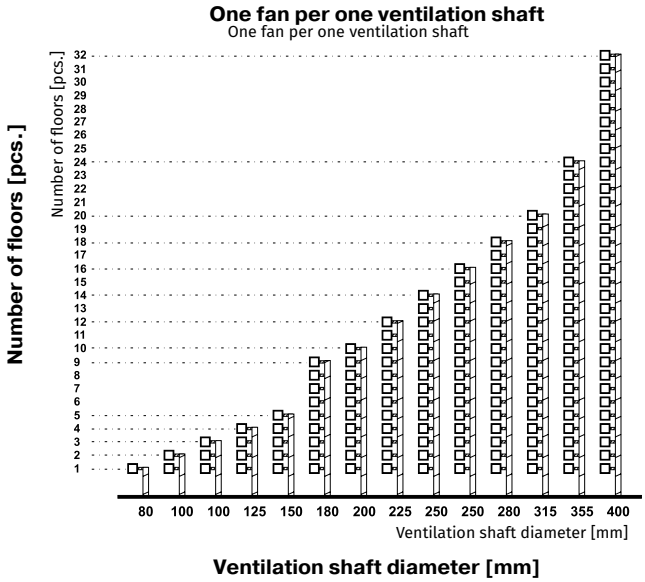
Calculation of basic ventilation shaft diameter for mono-pipe ventilation systems

- The charts below display dependence of ventilation shaft dimensions as a function of number of storeys in high-rise buildings with mono-pipe ventilation system.

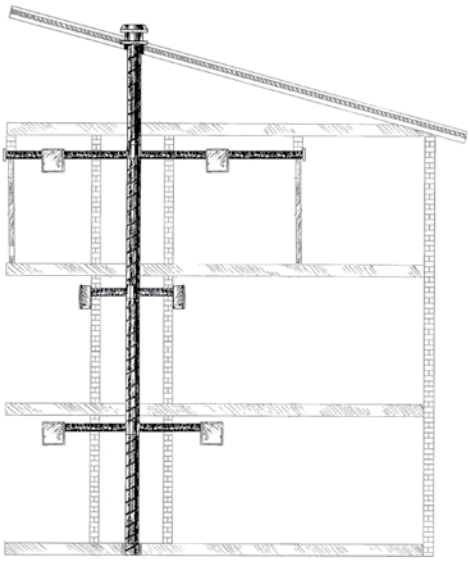
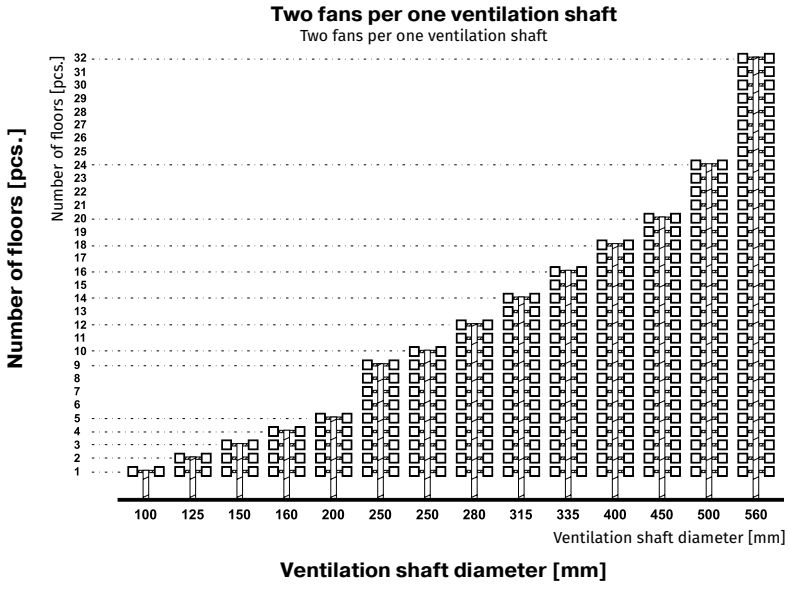
100 m³/h — Exhaust ventilation of kitchens or room-to-room ventilation



- One fan per each floor, rated air flow for kitchen 100 m³/h for full operation mode of all fans.
- For synchronous room-to-room ventilation: 60 m³/h for bathroom and 40 m³/h for WC.



100 m³/h



- Two fans per each floor, rated air flow for kitchen 100 m³/h for full operation mode of all the fans.
- For synchronous room-to-room ventilation: 60 m³/h for bathroom and 40 m³/h for WC.