Munters ZLV Neo/ZLV Vario

Fresh air distributor

Fresh air distributor ZLV Neo

ZLV Neo for ultra-fine fresh air distribution across a large distribution radius, even at minimal air flow rate. ZLV Neo has been developed for equal pressure ventilation and negative pressure ventilation as well as for compact stable buildings (so-called mono-blocks).

The wave structure in the nozzle ensures the optimum fresh air control even with a minimal opening. This system can also be employed with equal pressure systems (additional fresh air fan required) where the discharge stables have large openings and in areas where leaks and wind influence come into play. The optionally available air conduction unit partially deflects the incoming fresh air at the distributor plate.

ZLV Neo including recirculation unit
optimal for temperatures down to -20°C/-4°F

Advantages ZLV Neo /ZLV Vario

- Flexible system for every type of stable and livestock quantities in diameters of Ø 650, 730, 820, 920 mm
- Ultra-fine fresh air distribution across a large distribution radius, also with minimal air flow rates
- Danger of ice formation also at extreme outside temperatures considerably reduced
- Winter, transitional and summer operation switch automatically (can be set centralized or de-centralized).
- Complete closing of the recirculation gap, thereby increasing maximum fresh air capacity.
- All components made from thermally-insulated polyurethane

Fresh air distributor ZLV Vario

Conventional recirculation systems are driven with a fixed area ratio setting between the fresh air and recirculating air. This results in a significant portion of the fan capacity (up to 50%) being guided via the permanently open recirculation gap even with summer ventilation.

ZLV Vario's sliding fan module makes it possible to variably adjust the recirculation gap. The advantage of this is that 100% of the fan capacity is available as fresh air capacity during summer operation. This means that the number of fresh air ducts required can be halved through the use of the ZLV-Vario.

ZLV Vario in transition mood
optimal for temperatures down to -50°C/-58°F

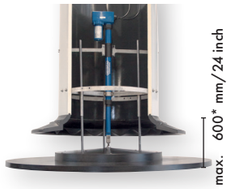
Munters ZLV Neo

Fresh air distributor

Technnical Specifications

Interior diameter Ø	Air flow Equal pressure ventilation	Negative pressure ventilation [40 Pa]
650 mm	10,500 (m^3/h)	10,000 (m^3/h)
730 mm	15,300 (m^3/h)	12,700 (m^3/h)
820 mm	20,300 (m^3/h)	15,600 (m^3/h)
920 mm	20,800 (m^3/h)	19,500 (m^3/h)

Fresh air distributor for motor drive (decentralized variant)



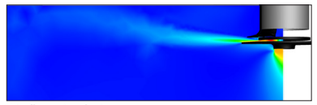
For the fresh air supply over the roof for decentralised control.

Several fresh air distributors are controlled via a central drive unit.

The optional recirculation air fan caters for a better intermix of fresh air with stable air.

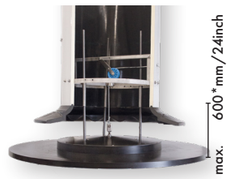
* incl. recirculation air fan + 296 mm/12 inch

- Exhaust nozzle provides for more than 20% air flow increase
- This allows flows in the stable with a length and width ratio of 1:1.5



Air flow simulation

Fresh air distributor for rope drive (centralized variant)



For the fresh air supply over the roof to the central control.

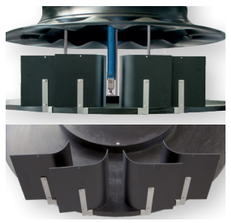
Regulation of the quantity of fresh air via adjustment of the distributor plate.

Every ZLV Neo is activated via a motor and is optionally available with recirculation air fan.

* incl. recirculation air fan + 296 mm/12 inch

- This allows flows in the stable with a length and width ratio of 1:1.5
- Easy to assemble
- Up to 8 fresh air distributors per motor

ZLV air conduction unit

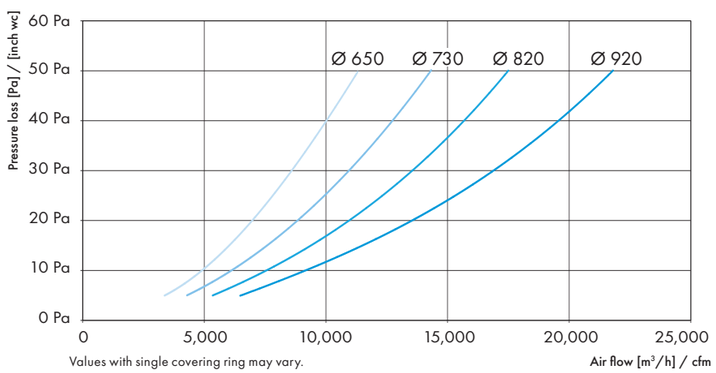


For partial deflection of the incoming fresh air at the distributor plate.

This can be required under various construction conditions, for example when using the fresh air distributor close to a wall or with the installation of two fresh air distributors close to each other.

- With an air conduction unit, a ratio of 1:3 is possible.
- A quadratic configuration of air distribution is no longer essential

ZLV Neo air capacity



Values with single covering ring may vary.

Built-in fan
Optional for equal pressure operation

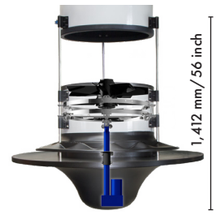
Munters ZLV Vario

Fresh air distributor

Technnical Specifications

Interior diameter Ø	Air flow Equal pressure ventilation
650 mm	10,500 (m^3/h)
730 mm	15,300 (m^3/h)
820 mm	20,300 (m^3/h)
920 mm	20,800 (m^3/h)

Fresh air distributor for motor drive (decentralized variant)

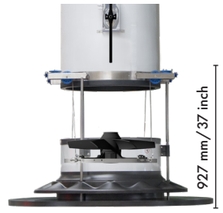


ZLV Vario automatically switches to winter, transition and summer mode. This makes 100% of fan output available as fresh air capacity during summer operation. Thus, the number of fresh air ducts required can be halved.

ZLV Vario delivers fresh air over the roof, with each ZLV activated by a motor.

- Automatic switching to winter, transition and summer mode.
- The danger of ice formation under extreme outside temperatures is considerably reduced

Fresh air distributor for rope drive (centralized variant)

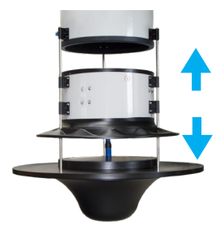


ZLV Vario automatically switches to winter, transition and summer mode. This makes 100% of fan output available as fresh air capacity during summer operation. Thus, the number of fresh air ducts required can be halved.

ZLV Vario feeds fresh air via the roof and is activated via a central motor unit.

- Automatic switching to winter, transition and summer mode.
- The danger of ice formation under extreme outside temperatures is considerably reduced

Sliding fan module on ZLV Vario



The sliding fan module on the ZLV Vario makes it possible to variably modify the recirculation gap and to close it completely, which increases the max. fresh air capacity per unit and reduces the fresh air ducts needed by 50% (compared to conventional recirculation systems).

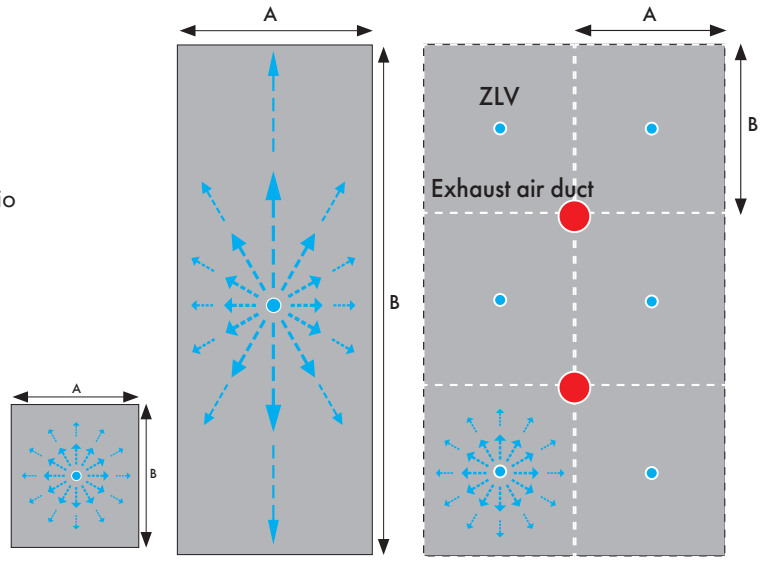
- Complete closing of the recirculation gap, thereby increasing maximum fresh air capacity.
- Automatic switching to winter, transition and summer mode.

Munters ZLV Neo/ZLV Vario

Fresh air distributor

Planning and design

Planning starts with an even distribution of the fresh air distributors (ZLV). Near equal sized rectangles ensure an optimum distribution of fresh air. The fresh air distributor can be employed both in negative pressure systems and in equal pressure systems (integration of additional fan). The side ratio A:B should not exceed 1:1.5. With an air conduction unit, a ratio of 1:3 is possible.

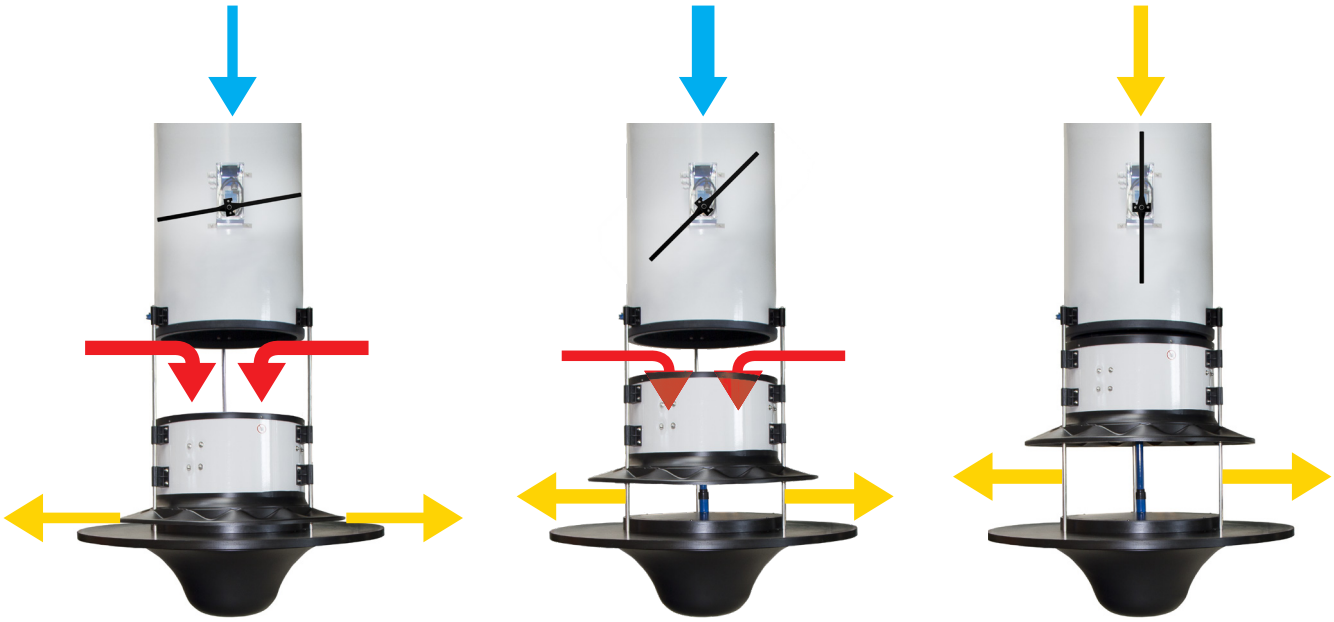


Throwing ranges*

Ø 650 mm / 26 inch up to 13 m / 43 ft.
Ø 730 mm / 29 inch up to 16 m / 53 ft.
Ø 820 mm / 32 inch up to 20 m / 66 ft.
Ø 920 mm / 36 inch up to 22 m / 72 ft.

Design of the fresh air duct:
Rain hood with protective bird grid and top PUR nozzle, 3 m / 10 ft. air duct

ZLV Vario operating modes



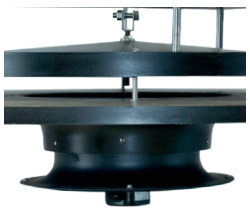
Winter operation

Transitional operation

Summer operation

Extras + accessories

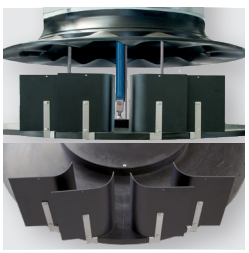
Rain hood incl.
Protective bird grid



Recirculation air fan

Electric motor with 450
stroke V4 230 V / V6 24 V

SLRK control
160 VA without transformer



ZLV air conduction unit

Find your nearest Munters office at **www.munters.com**

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