



VLV / VLD Submittal

NAD Klima
144 rue Léger, Sherbrooke (Qué) J1L 1L9
(819) 780-0111 • 1 866 531-1739
info@nadklima.com

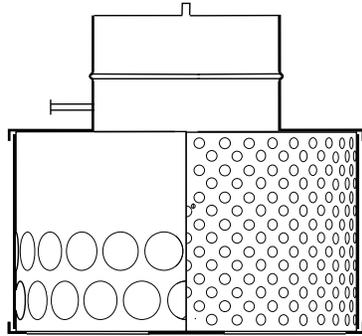
NAD Klima Ontario
2840, Argentia Road, Unit 6, Mississauga (Ont) L5N 8G4
(416) 860-1067
ontario@nadklima.com

Date

Project

Engineer

Contractor



VLD

VLV

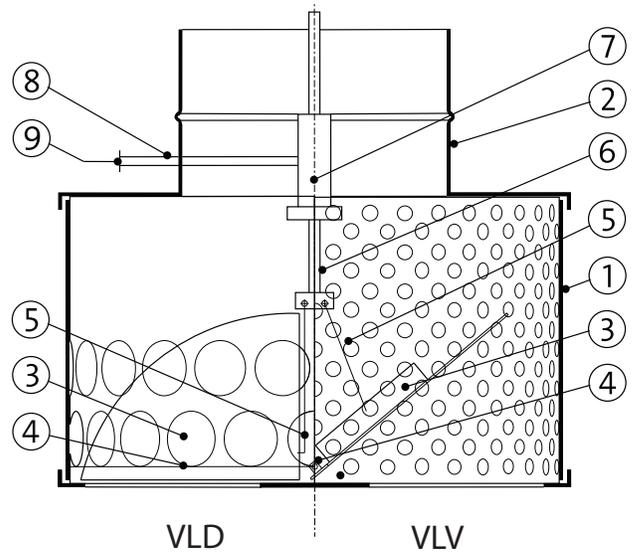
The diffusers

- Air diffuser with adjustable jets.
- Made of steel and aluminum.
- Adjustable blades guiding the air flow.
- **VLD** - plarge hole in the outer wall.
- **VLV** - perforated wall.
- Adjustment of the blades manually, by cables or motorized.
- Galvanized finish or powder coated polyester-based TGIC-free.
- RAL colour chosen by client.
- Connected directly to an air duct.

Configuration

The VLD / VLV consists of an outer surface (1) made of stainless steel with large holes or a perforated plate, a coupling collar (2) and four guide blades (3) modulating the diffuser according to the desired air flow (4). The blades are interconnected (5) to a rack gear (6), which is manually or mechanically activated.

All of these parts form a system that can be connected directly to a circular duct without a plenum.



VLD

VLV

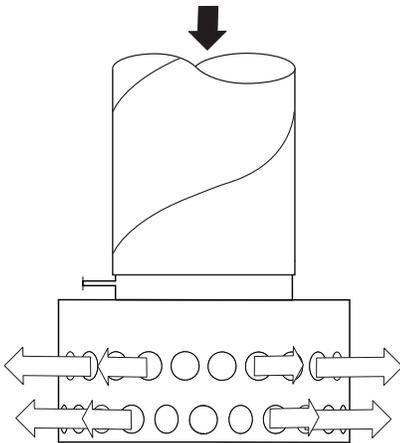
VLV-VLD - Mode of operation

Cooling mode / horizontal jet

The internal and external sources of heat, which originate, for example, from production and / or solar radiation, must be removed by the ventilation system. To do this, the cold air circulating horizontally allows a high induction of warm air above a workstation, without creating drafts.

When the blades are closed, air entering the diffuser exits horizontally through the side wall.

VLD with closed blades

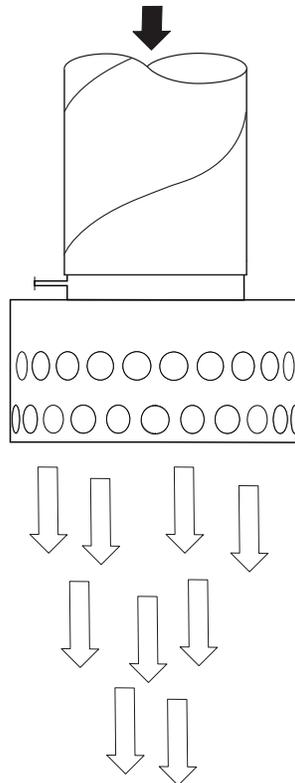


Heating mode / vertical jet with the VLD diffuser

When the four blades are opened, the hot air is blown with high momentum into the work area. The same flow will be achieved with the VLV diffuser.

By gradually opening the four blades, the flow will be directed downwards until it reaches a vertical pattern.

VLD with opened blades



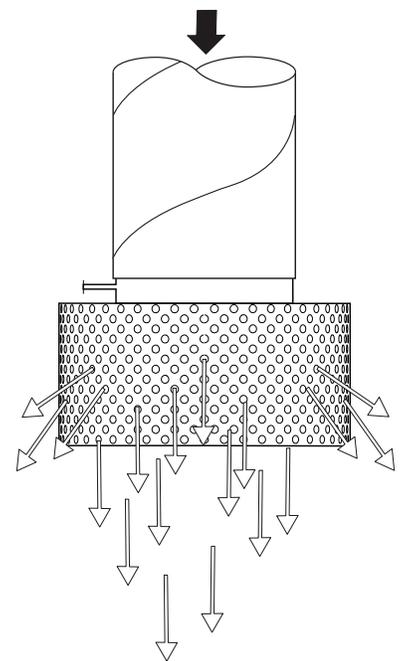
Stale air discharge with the VLV (cleanup) diffuser

In high temperature working areas, it is possible to create a temperate zone.

In production areas with harmful substances, pollutants must be evacuated without being mixed with ambient air. This is achieved by diffusion through displacement distribution.

Both applications are realized through a partial opening of the blades. The flow expansion can be modified by changing blade position.

VLV with closed blades (low speed)

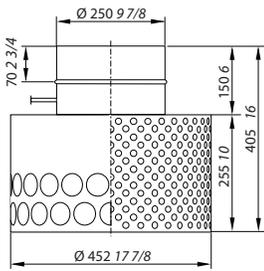


The blades rotation axis produce a helical flow, especially when the blades are between 0° and 45° .

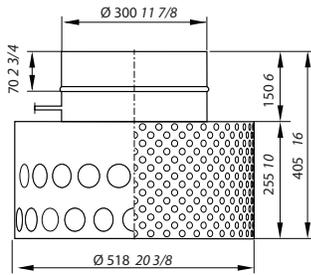
At low speed, and when the VLV blades are completely closed, the output speed will be relatively small and will produce a local displacement distribution (pollution control).

VLV - VLD - Dimensions

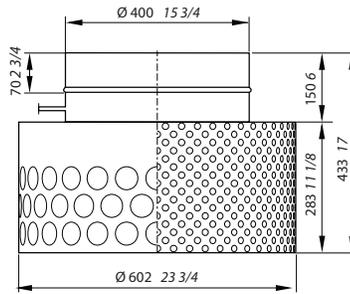
DN 250 mm in



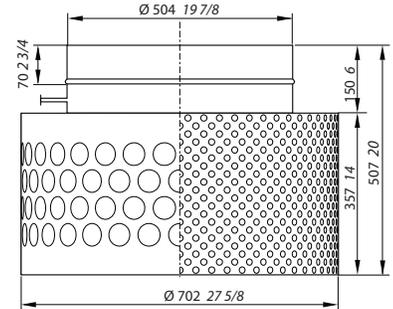
DN 315



DN 400



DN 500



VLV - VLD - Codification

VLD, VLV			Product
250, 315, 400, 500			Nominal dimension
C = Cable adjustment H = Hand adjustment M = Motorized adjustment			Adjustment
XXXX = Galvanized steel 9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Mat (Standard metallic grey) ____ = RAL color (write the RAL color number)			Diffuser color
VLD	250	A - XXXX	Example

Note: The VLV galvanized steel will be painted Silver Matte color (00SM)