



# LVS

## FOR EXTRACT AIR

Circular disc valves with manually adjustable annular gap

- Nominal sizes 100, 125, 160, 200 mm
   Volume flow rate range 10 50 l/s or 36 180 m³/h
   Diffuser face made of formed sheet steel, powder-coated
- For variable and constant volume flows For ceiling and wall installation
- Easy to install
- Volume flow rate balancing by simply turning the valve disc
- Inexpensive solution for small rooms

General information 

### Application

- Disc valves are used as extract air devices in small rooms
   For variable and constant volume flows
- For walls and suspended ceilings

## Special features

- Continuous volume flow rate balancing by turning the valve disc
- Easy to install

## Nominal sizes

• 100, 125, 160, 200

### Parts and characteristics

- Valve disc with threaded spindle and lock nut
  Valve casing including cross bar with orifice for the threaded spindle
  Installation subframe that accommodates the disc valve

## Materials and surfaces

- Valve casing and valve disc made of sheet steel
  Installation subframe, threaded spindle and lock nut made of galvanised steel
- Foam seal
- Valve casing and valve disc powder-coated, similar to RAL 9010

## Standards and guidelines

• Sound power level of the air-regenerated noise measured according to EN ISO 5135

### Maintenance

- Low maintenance as construction and materials are not subject to wear
   Inspection and cleaning to VDI 6022

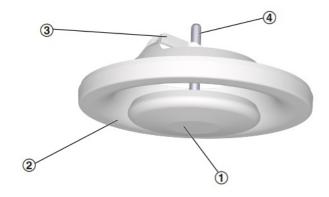
# **TECHNICAL INFORMATION**

Function, Technical Data, Quick sizing, Specification text, Order code

Extract air valves extract air from rooms and lead it into the extract air part of the air conditioning system.

Type LVS disc valves have a valve disc that can be turned. This simplifies the volume flow rate balancing adjustment during commissioning.

## Schematic illustration



- 1 Valve disc
- ② Valve casing
- ③ Cross bar
- Threaded spindle with lock nut

Nominal sizes	100, 125, 160, 200 mm
Minimum volume flow rate	10 - 25 l/s or 36 - 90 m <sup>3</sup> /h
Maximum volume flow rate	25 - 50 l/s or 90 - 180 m³/h

Quick sizing tables provide a good overview of the volume flow rates and corresponding sound power levels and differential pressures.

LVS/100, LVS/125, sound power level and total differential pressure

NS			Airway width = 5 mm		Airway	width = 0	Airway width = -5 mm		
	q <sub>v</sub> [l/s]	q <sub>v</sub> [m³/h]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	
100	10	36	8	<15	14	<15	30	16	
100	15	54	19	<15	32	19	67	26	
100	20	72	33	22	56	27	119	33	
100	25	90	52	28	88	32	186	39	
125	15	54	9	<15	13	<15	22	<15	
125	20	72	15	<15	23	<15	40	19	
125	25	90	24	<15	36	18	62	24	
125	30	108	35	18	52	23	90	29	

## LVS/160, sound power level and total differential pressure

NC	NS		Airway width = 5 mm		Airway	width = -5 mm	Airway width = -10 mm		
NS	q <sub>v</sub> [l/s]	q <sub>v</sub> [m³/h]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	
160	20	72	9	<15	24	<15	43	17	
160	25	90	14	<15	38	18	67	24	
160	30	108	20	<15	55	23	96	29	
160	35	126	27	16	75	27	131	34	

## LVS/200, sound power level and total differential pressure

NS			Airway width = 5 mm		Airway	width = -5 mm	Airway width = -15 mm		
NS	q <sub>v</sub> [l/s]	q <sub>v</sub> [m³/h]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	Δpt [Pa]	LWA [dB(A)]	
200	25	90	4	<15	9	<15	21	<15	
200	35	126	9	<15	17	<15	41	20	
200	45	162	14	<15	28	16	68	27	
200	50	180	18	<15	34	19	84	30	

# Sizing example Given data

 $q_V = 25 \text{ l/s } (90 \text{ m}^3/\text{h})$ Extract air valve Maximum sound power level 30 dB(A)

# **Quick sizing**

Type LVS Selectable nominal sizes: 125, 160, 200 Selected: LVS/125

### Specification text

Circular disc valves as extract air devices, preferably for small rooms. For installation into walls and suspended ceilings. Ready-to-install component which consists of a valve casing with cross bar, a valve disc with threaded spindle, and an installation subframe. The valve disc can be turned for volume flow rate balancing. The valve setting can be fixed with a lock nut. Spigots are suitable for ducting according to EN 1506 or EN 13180. Sound power level of the air-regenerated noise measured according to EN ISO 5135.

### Special features

- Continuous volume flow rate balancing by turning the valve disc
- Easy to install

#### Materials and surfaces

- Valve casing and valve disc made of sheet steel
- Installation subframe, threaded spindle and lock nut made of galvanised steel
- Foam seal
- Valve casing and valve disc powder-coated, similar to RAL 9010

### Technical data

• Nominal sizes: 100, 125, 160, 200 mm

Minimum volume flow rate: 10 – 25 l/s or 36 – 90 m³/h

• Maximum volume flow rate: 25 to 50 l/s or 90 to 180 m³/h

## Sizing data

• Volume flow rate q<sub>v</sub> [m³/h] (information required for sizing)



1 TypeLVS Disc valve 2 Nominal size [mm]100, 125, 160, 200

Order example: LVS/160

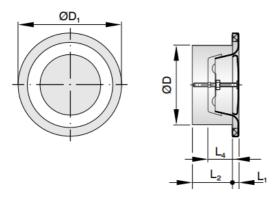
Nominal 160

Dimensions

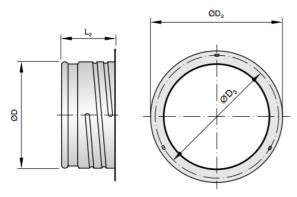
NC	Ø <b>D</b> 1	Lı	L <sub>2</sub>	L <sub>4</sub>	ØD	Ø <b>D</b> 2	ØDз	m
IVS	mm	mm	mm	mm	mm	mm	mm	kg
100	132	8	50	32	99	122	114	0.2
125	162	9	50	38	124	148	140	0.29
160	192	10	50	43	159	184	176	0.44
200	245	11	50	52	199	225	217	0.59

LVS

# LVS



# Installation subframe for LVS and Z-LVS



Product details

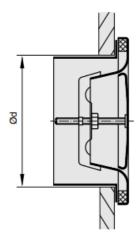
## Installation and commissioning

- Installation flush with the wall or ceiling
  Perform volume flow rate balancing by turning the valve disc, then tighten the lock nut to fix the valve disc in the required position
  These are only schematic diagrams to illustrate installation details.

Installation opening



Installation flush with the wall or ceiling, with installation subframe



# Setting range

