



## 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 m<sup>3</sup>/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

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### 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

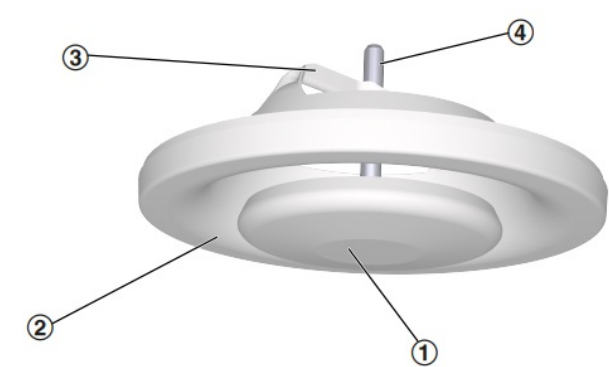
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Extract air valves extract air from rooms and lead it into the extract air part of the air conditioning system.

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
- ④ Threaded spindle with lock nut

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 – 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 mm		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)]
<b>100</b>	10	36	8	<15	14	<15	30	16
<b>100</b>	15	54	19	<15	32	19	67	26
<b>100</b>	20	72	33	22	56	27	119	33
<b>100</b>	25	90	52	28	88	32	186	39
<b>125</b>	15	54	9	<15	13	<15	22	<15
<b>125</b>	20	72	15	<15	23	<15	40	19
<b>125</b>	25	90	24	<15	36	18	62	24
<b>125</b>	30	108	35	18	52	23	90	29

LVS/160, sound power level and total differential pressure

NS			Airway width = 5 mm		Airway width = -5 mm		Airway width = -10 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)]
<b>160</b>	20	72	9	<15	24	<15	43	17
<b>160</b>	25	90	14	<15	38	18	67	24
<b>160</b>	30	108	20	<15	55	23	96	29
<b>160</b>	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	
	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)]
<b>200</b>	25	90	4	<15	9	<15	21	<15
<b>200</b>	35	126	9	<15	17	<15	41	20
<b>200</b>	45	162	14	<15	28	16	68	27
<b>200</b>	50	180	18	<15	34	19	84	30

## Sizing example

### Given data

q<sub>v</sub> = 25 l/s (90 m³/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)

	LVS	/	160
	1		2

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

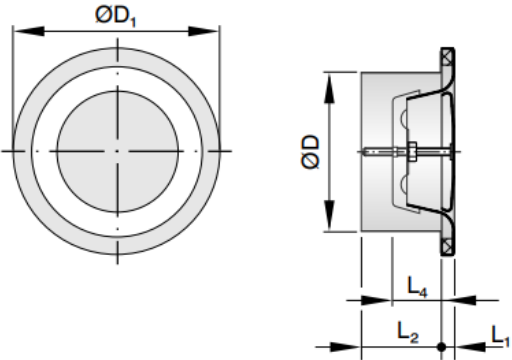
Order example: LVS/160

Nominal size 160

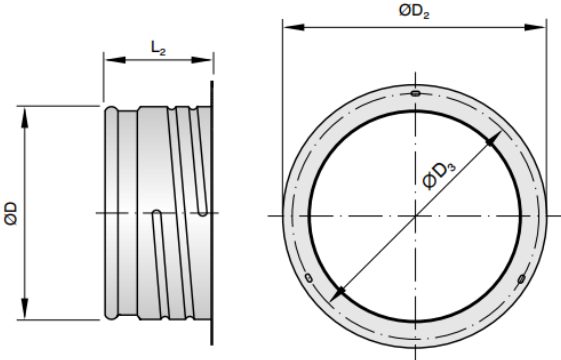
NS	ØD <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>4</sub>	ØD	ØD <sub>2</sub>	ØD <sub>3</sub>	m
	mm	mm	mm	mm	mm	mm	mm	kg
100	132	8	50	32	99	122	114	0.2
125	162	9	50	38	124	148	140	0.29
160	192	10	50	43	159	184	176	0.44
200	245	11	50	52	199	225	217	0.59

LVS

LVS



Installation subframe for LVS and Z-LVS



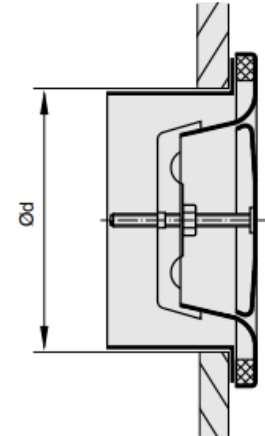
Installation and commissioning

- 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

NS	Ød mm
100	104
125	129
160	164
200	204

Installation flush with the wall or ceiling, with installation subframe



Setting range

