



DTVB SUPPLY AIR VALVE

AIR MANAGEMENT SYSTEMS

PRODUCT PROPERTIES

The **DTVB** is a supply air valve for ceiling mounting in offices, houses and hotel rooms.

The air discharged from the valve is mixed thoroughly with the room air thus providing a draught-free air supply.

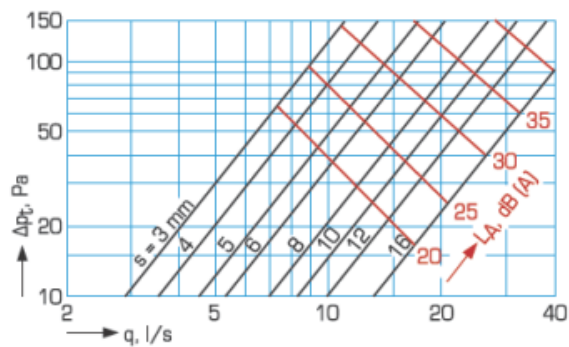
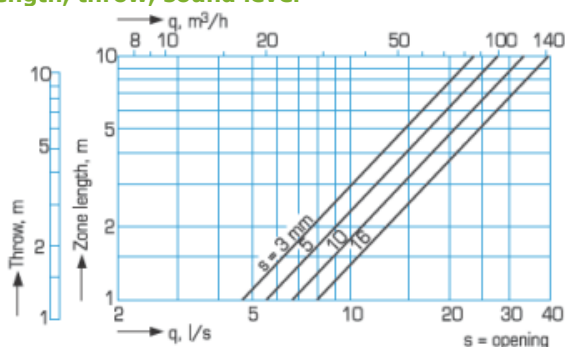
- Supply air valve intended for installation in the ceiling
- Manufactured of steel

Quick selection

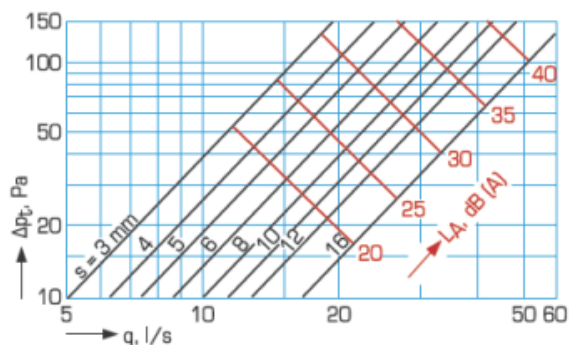
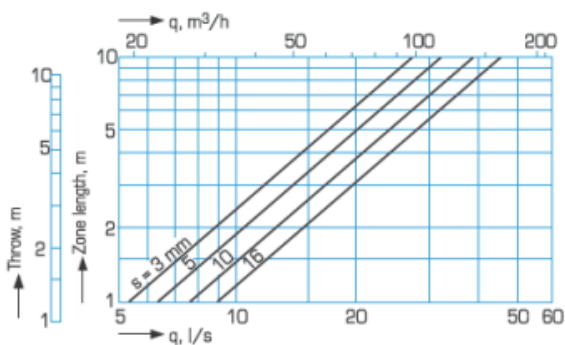
Diffuser	Connection	Air flow range l/s (m³/h) at noise level		
Size	mm	25 dB	30 dB	35 dB
DTVB100	100	21	27 (97)	32
DTVB125	125	28	33 (119)	42

Air flow, zone length, throw, sound level

DTVB100



DTVB125



LIABILITY:

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PLEASE NOTICE:

The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine the physical properties. These properties are also dependent on humidity and the temperature of the air inside and outside of the H.V.A.C. system.

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Sound power level

Size	Connection	Correction of sound attenuation (dB) at Hz							
		63	125	250	500	1000	2000	4000	8000
100	Straight	2	-3	-3	0	-1	-1	-9	-16
100	Angle	4	-2	-3	-1	-1	-1	-7	-14
125	Straight	3	2	1	1	0	-3	-9	-12

Sound power levels by octave bands are obtained by adding to total sound pressure level L_{p10A} , dB(A) the corrections K_{oct} presented in the table according to the following formula: $L = L_{A10} + K_{ok}$
Correction K_{oct} is average value in range of use of DTVB unit.

Air stream diffusion

$$B_v = I_{0,2} \times 0,1$$

$$B_h = I_{0,2} \times 1,0 \quad \text{where } I_{0,2} = 1,2 \times \text{zone length}$$

Note! In installations when DTVB is mounted with angle duct DGEZ-43 the sound power level will increase by 3 dB(A).

Sound attenuation, dimensions and weights

Sound attenuation

Size	Connection	Sound attenuation in dB at							
		63	125	250	500	1000	2000	4000	8000
100	Straight	25	22	17	13	12	11	11	11
100	Angle	27	23	18	14	12	11	11	12
125	Straight	25	20	15	12	11	9	9	9

The average sound attenuation ΔL from duct to room including the end reflection of the connecting duct in ceiling installation, is obtained in the table above.

Dimensions and weights

Size	A	B	C	D 1)	Smin	Smax	Weight
	mm	mm	mm	mm	mm	Mm	kg
100	155	140	65	100	3	16	0,45
125	185	165	70	125	3	16	0,58

1) Nominal connection diameter

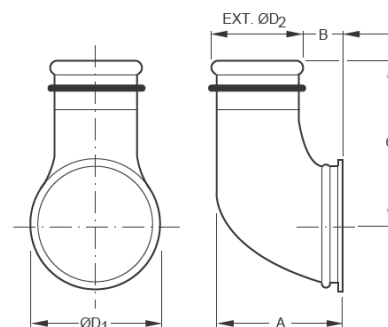
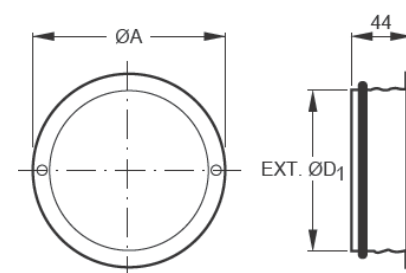
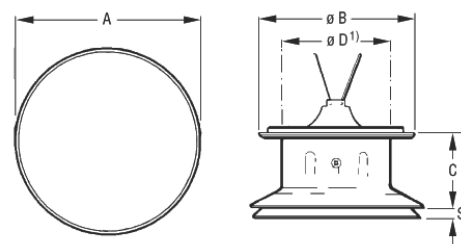
Mounting ring DGEZ-01, insertion connection

Size	A	D1	Hole 1)	Weight
	mm	mm	mm	kg
100	125	99.3	110	0.1
125	150	124.3	135	0.1

1) Tolerance ± 5 mm

Angle duct DGEZ-43

Size	A	B	C	D1	D2	Weight
	mm	mm	mm	mm	mm	kg
100-080	120	39	148	125	79.3	0.4
100-100	140	39	98	125	99.3	0.4
120-100	146	45	120	140	99.3	0.5



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DTVB SUPPLY AIR VALVE

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Installation, adjustment, application and function, material

Application and function

The **DTVB** is a supply air valve for one-way air diffusion and ceiling mounting. The valve is suitable for use in small premises, such as offices, houses and hotel rooms. The air discharged from the valve is mixed thoroughly with the room air thus providing a draught-free air supply. The direction of air diffusion and the air flow are adjustable.

The design of the **DTVB** minimizes the risk of dust deposits forming on the ceiling surface. The valve is easy to install and easy to keep clean since it has large, smooth surfaces.

Material and surface finish

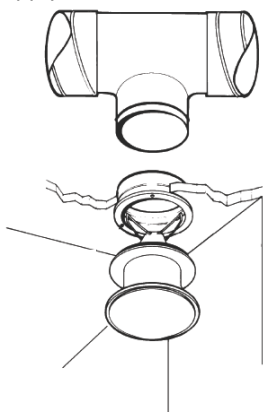
The valve is made from hot-dip galvanized steel sheet. Visible parts are powder-coated for a high surface finish and good impact and scratch resistance. Standard colour White RAL 9003. Other colours on request.

Instructions

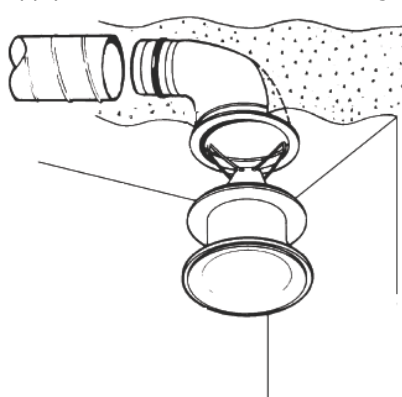
Directions for installation, adjustment and care are set out in detail in our technical instruction which accompanies each product.

Installation

Supply air valve connected to a mounting ring

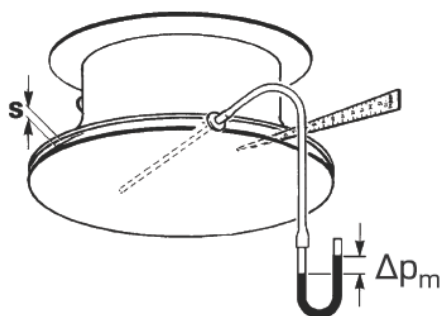


Supply air valve connected to an angle duct



Adjustment

s	k	
	100	125
3	0.9	-
4	1.2	2.0
5	1.4	2.3
6	1.7	2.6
7	1.9	3.0
8	2.1	3.3
10	2.6	4.0
12	3.1	4.7
16	4.1	6.0
20	-	-



$$q = k \sqrt{\Delta p_m}$$

(l/s) (Pa)

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