

Exposed supply  
air diffuser with  
rotatable nozzles

## DXR



### Description and function

The DXR is a visibly installed supply air diffuser with a circular design, featuring aerodynamically shaped, rotatable nozzles on the front panel. It is designed for draught-free, flexible air diffusion with high induction. The 360-degree rotatable nozzles allow seamless adjustment of the ventilation pattern, offering horizontal, vertical, uni-directional, or swirl modes. The circular connection box includes environmentally friendly internal sound insulation and a commissioning damper equipped with measuring hoses for precise airflow measurement, ensuring low noise levels and accurate air volume control. Additionally, the damper blade is fitted with adjustment cords, simplifying commissioning and securing the damper to the desired airflow setting.

### Applications

The DXR is best suited for environments where flexible air diffusion is essential, such as offices, schools, restaurants, retail stores and fitness centers. The recommended maximum temperature difference ( $\Delta t$ ) is  $-10\text{ }^{\circ}\text{C}$ .

### Standard sizes

Ø100-400 mm.\*  
\* Inlet connection size.

### Airflow range

72 - 1.098 m<sup>3</sup>/h (20-305 l/s), see the diagrams below for further information.

### Materials

Casing, distribution plate and connection spigot from galvanised sheet steel. The casing is powder-coated in RAL 9003 color. The air duct connection is equipped with an EPDM rubber seal. Cleanable surface coated insulation from 100% recycled, non allergenic, hydrophobic PET material. Damper module of galvanised steel with cords of polyester. White nozzles are Polypropylene.

### Main characteristics

- High capacity supply air diffuser
- Aerodynamically shaped, rotatable nozzles
- Designed for visible installation
- Horizontal, vertical, uni-directional, or swirl air diffusion
- Silent operation
- Unique commissioning damper and measurement probe
- Easily accessible front plate

### T.1. Quick selection

Type	25 dB(A)		30 dB(A)	
	[l/s]	[m <sup>3</sup> /h]	[l/s]	[m <sup>3</sup> /h]
100	31	112	37	133
125	48	173	58	209
160	73	263	86	310
200	105	378	125	450
250	145	522	175	630
315	195	702	235	846
400	260	936	305	1098

<sup>\*)</sup> Data refer to a fully open damper.

Technical data

T.2. Correction  $K_{OK}$  [dB]

DXR	Medium frequency [Hz]							
	63	125	250	500	1000	2000	4000	8000
100	+2	+8	+10	0	-6	-11	-20	-31
125	-3	+8	+10	0	-5	-10	-19	-30
160	-1	+10	+9	+1	-4	-9	-18	-28
200	+5	+12	+8	0	-3	-10	-19	-32
250	+4	+13	+7	+1	-2	-10	-21	-36
315	+6	+13	+6	+1	-2	-11	-22	-33
400	+11	+7	+3	+3	-1	-6	-14	-25

Tol.  $\pm 3$  dB

T.3. Sound attenuation  $K_{OK}$  [dB]

DXR	Medium frequency [Hz]							
	63	125	250	500	1000	2000	4000	8000
100	+24	+12	+14	+15	+15	+16	+18	+20
125	+21	+11	+9	+13	+14	+14	+15	+19
160	+20	+8	+11	+13	+13	+13	+15	+18
200	+17	+7	+13	+12	+13	+11	+13	+13
250	+14	+3	+10	+11	+11	+10	+13	+16
315	+12	+3	+11	+12	+10	+10	+13	+16
400	+9	+2	+7	+9	+7	+8	+12	+14

Tol.  $\pm 3$  dB

The sound level is applicable at an equivalent sound absorption area of 10 m<sup>2</sup>.

Sound effect level:  $L_W$  [dB]

Sound level:  $L_{PA}$  [dB(A)]

Sound level  $L_{PA}$  [dB(A)] (see diagram 1-7)

Correction factor  $K_{OK}$  [dB] from table 2.

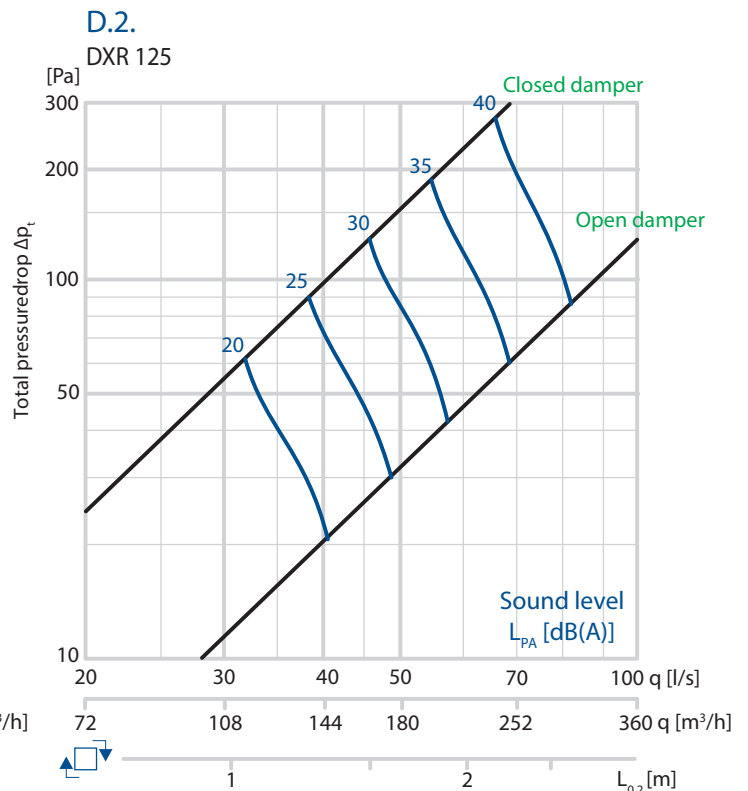
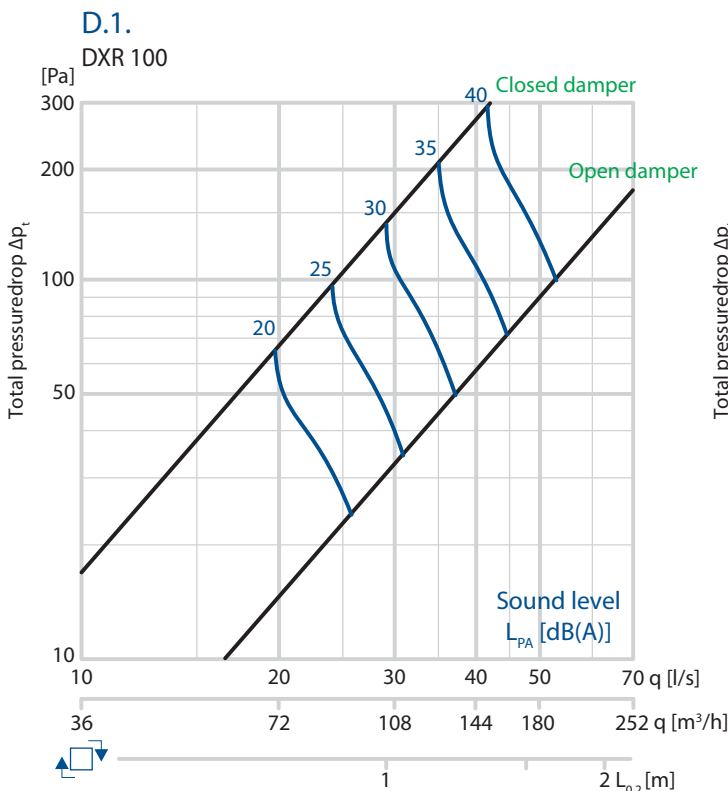
$$L_W = L_{PA} + K_{OK}$$

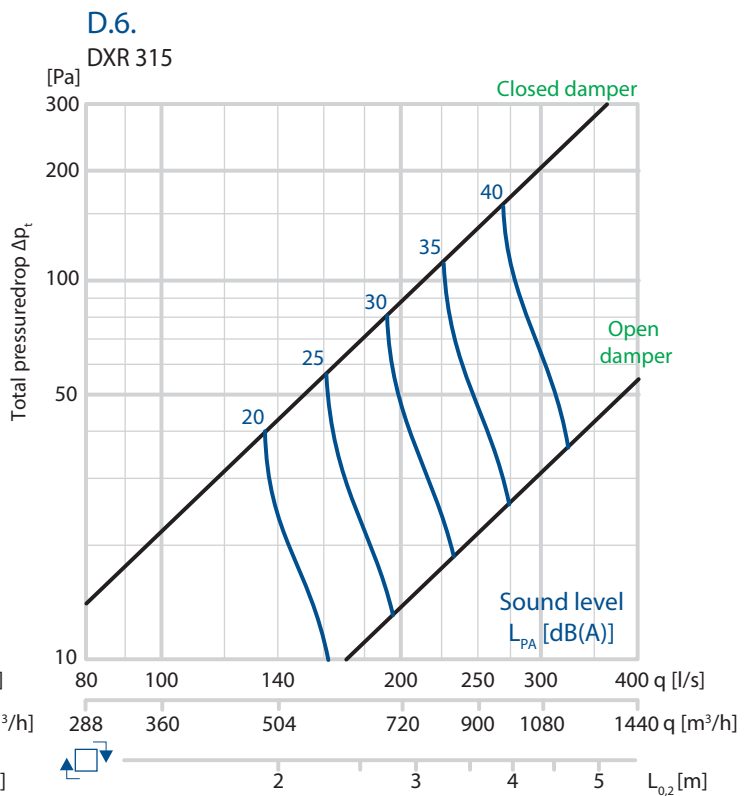
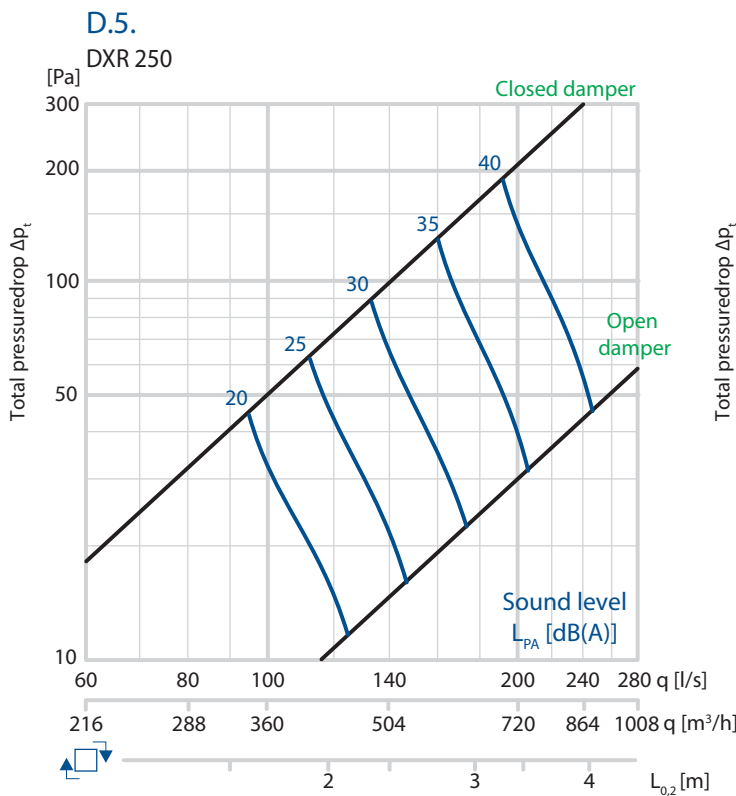
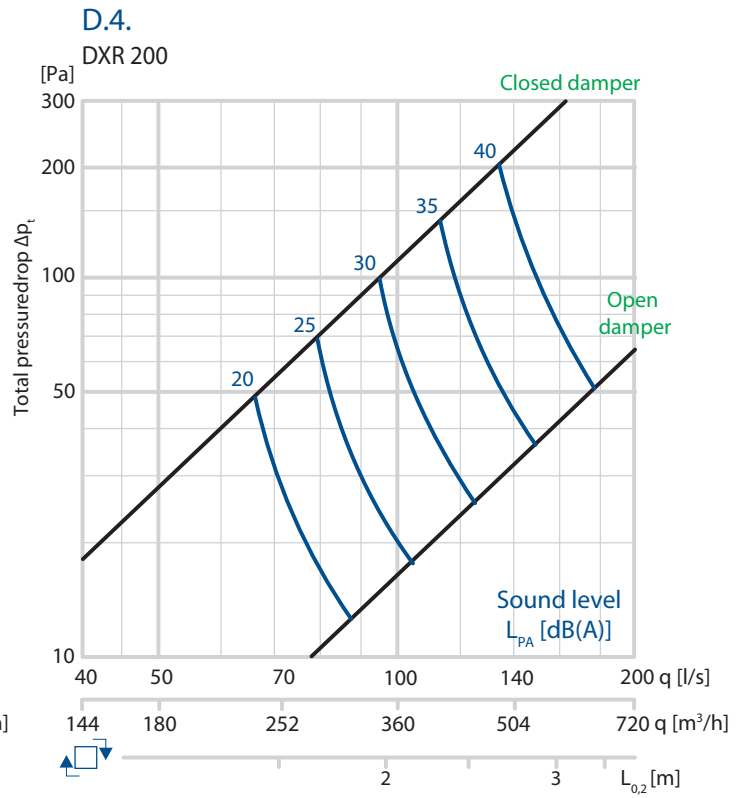
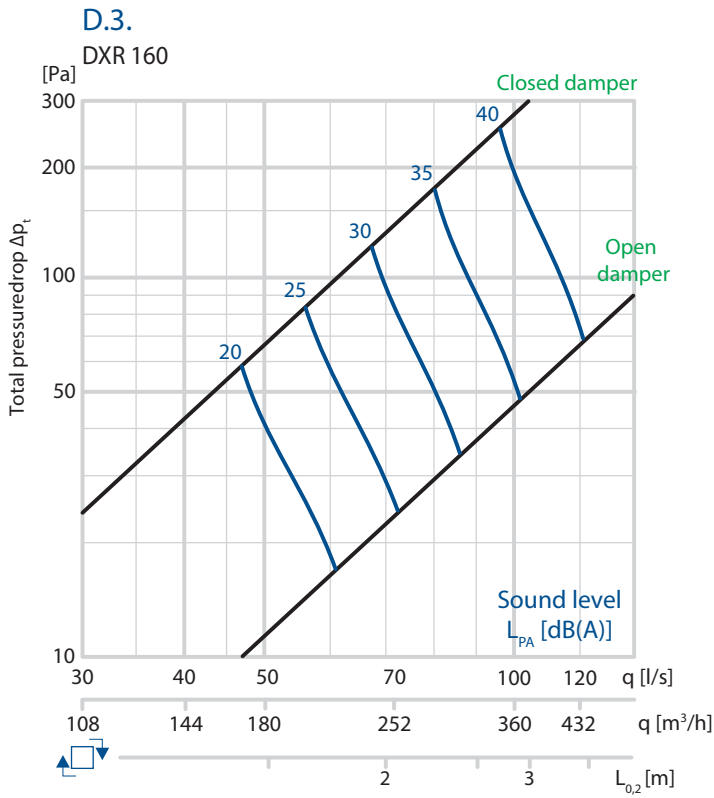
T.4.

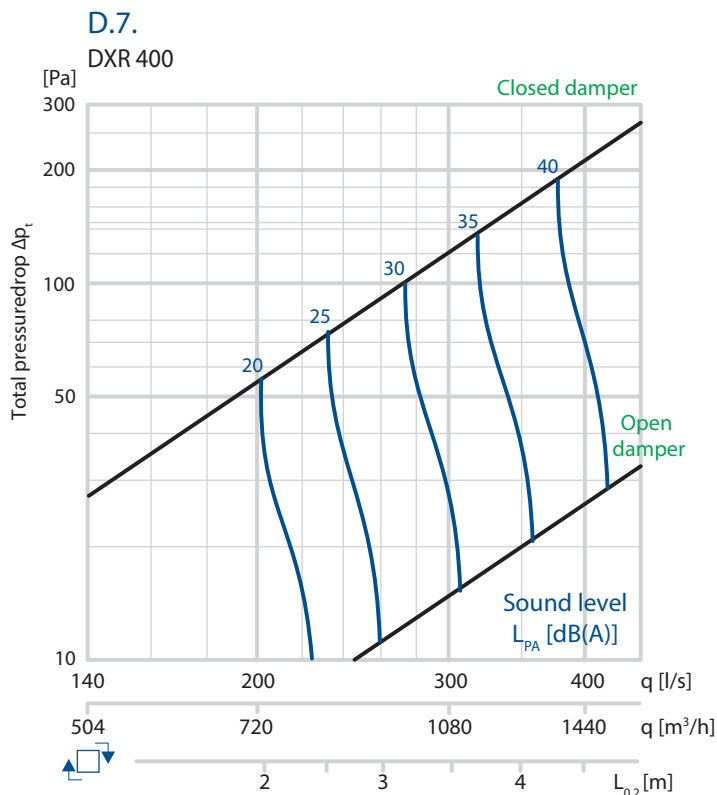
Room volume [m <sup>3</sup> ]	Room type	Correction [dB]
25	hard	+ 2
25	attenuated	- 2
150	hard	- 3
150	normal	- 5
150	attenuated	- 7

The sound level  $L_{PA}$  dB(A) applies to an equivalent surface of 10 m<sup>2</sup>, which corresponds to an attenuation of 4 dB in a 25 m<sup>3</sup> room with normal attenuation.

Diagrams





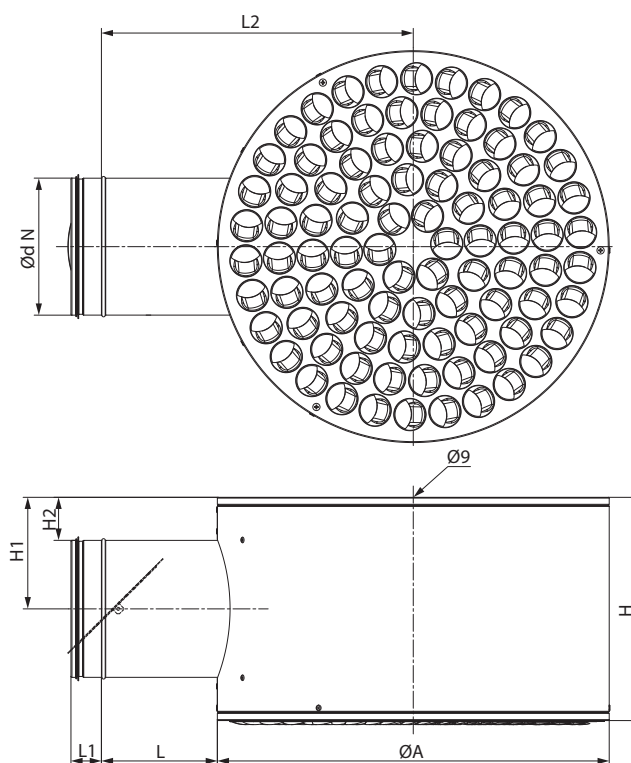


### Dimensions

#### T.5.

Ød N	ØA	H	H1	H2	L	L1	L2	Weight (kg)
100	305	200	100	50,5	91,5	35	244	2,5
125	390	225	112	50	111	35	306	3,7
160	455	260	129,5	50	135	35	362,5	5,2
200	600	300	149,5	50	169	35	469	8,2
250	660	350	174,5	50	184	55	514	10,5
315	720	420	209,5	52,5	232	55	592	
400	780	500				71		

The indicated sizes are shown in mm.



### Specification

Ordering code:	DXR -XXX
Product name:	DXR
Size [Ød, mm]:	100 125 160 200 250 315 400
Example:	DXR-250