

Exposed supply air diffuser with adjustable nozzles

DXR



Description

The DXR is an exposed supply air diffuser with adjustable nozzles. The unit consists of a front panel with plastic nozzles that rotates in 360°, and a back connection box with cleanable internal insulation and a commissioning damper with a measuring tube. DXR operates with a draught-free air distribution, at a low noise level. The simple rotation of the aerodynamically designed polypropylene nozzles results in a flexible air distribution, from horizontal to a vertical mode.

Area of use

best suitable for applications, where a flexible air distribution is required. E.g. fitness locations, offices, schools, etc. The unit consists of a front panel with plastic nozzles that rotates in 360°, and a back connection box with cleanable internal insulation and a commissioning damper with a measuring tube.

Recommended max. Δt : -10 °C.

Serial sizes

Ø100-400 mm.*

* Inlet connection size.

Airflow range

72 - 1098 m³/h (20-305 l/s), see the diagrams below for further information.

Main features

- 360° adjustable nozzles
- Exposed installation
- Flexible air distribution
- Aesthetic appearance
- Draught-free, silent operation
- Easily accessible front plate

T.1. Quick selection

Type	25 dB(A)		30 dB(A)	
	[l/s]	[m ³ /h]	[l/s]	[m ³ /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

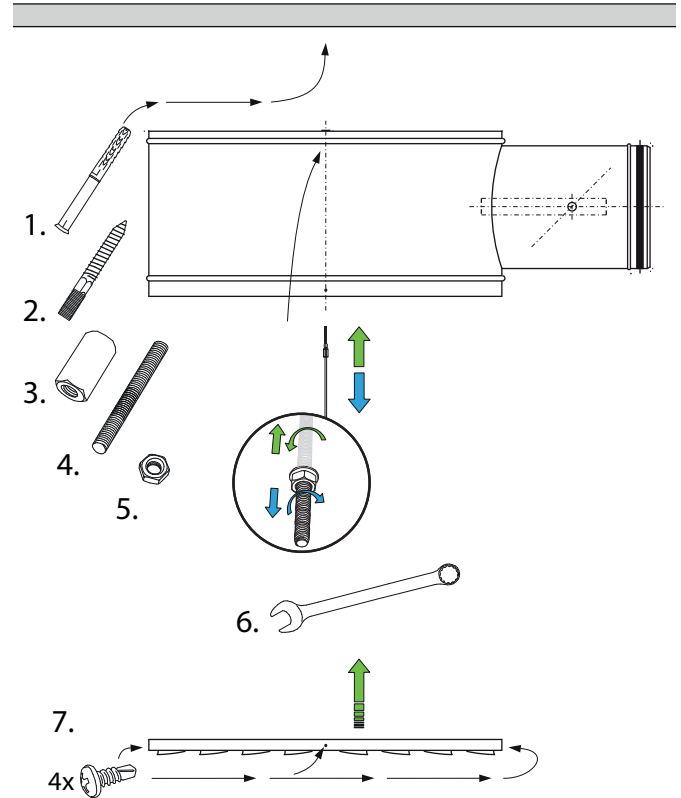
* Data refer to a fully open damper.

Material & finish

The front diffuser panel and the connection box is made of galvanized steel sheet. Commissioning damper in galvanized sheet steel, measuring tube in aluminum. The unit is powder coated in RAL 9003 white colour. Rotating nozzles in Polypropylene. Rubber sealing on the air connection.

Mounting

DXR is connected directly to the air duct system, and can be mounted pendant with a threaded rod, which is connected through a screw hole on top of the unit. Due to its height DXR is designed so it can be mounted flush against the ceiling.



Technical data

T.2.

DXR diffuser
Correction K_o 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. ± 3 dB

The sound level is applicable at an equivalent sound absorption area of 10 m^2 .

Sound power level: L_w [dB]

Sound level: L_A [dB(A)]

Sound level L_A [dB(A)] (see diagram 1-7)

Correction factor: K_o [dB]

Correction factor K_o [dB] from table 2.

$$L_w = L_{PA} + K_o$$

T.3.

DXR diffuser
Sound attenuation K_o 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. ± 3 dB

T.4.

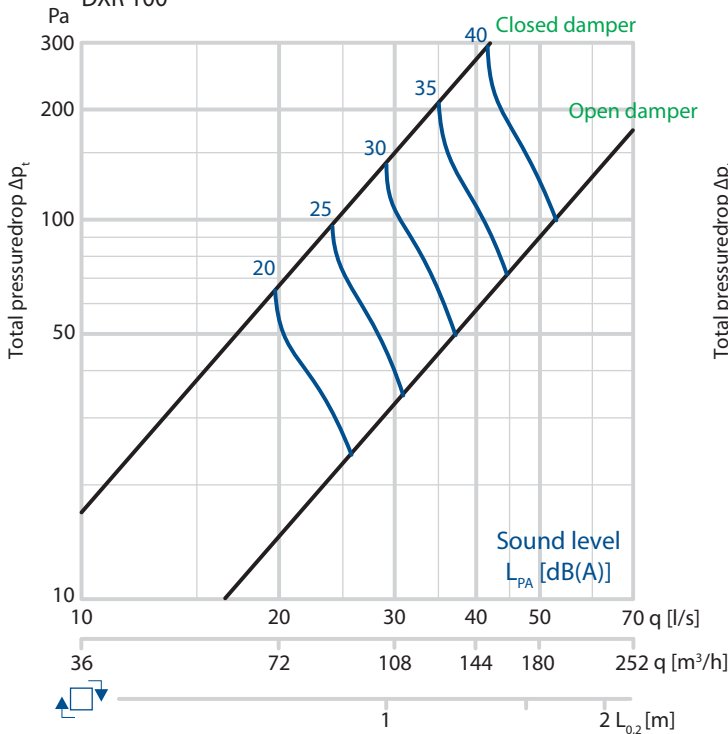
Room volume [m ³]	Room type	Correction [dB]
25	hard	+ 2
25	attenuated	- 2
150	hard	- 3
150	normal	- 5
150	attenuated	- 7

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

Diagrams

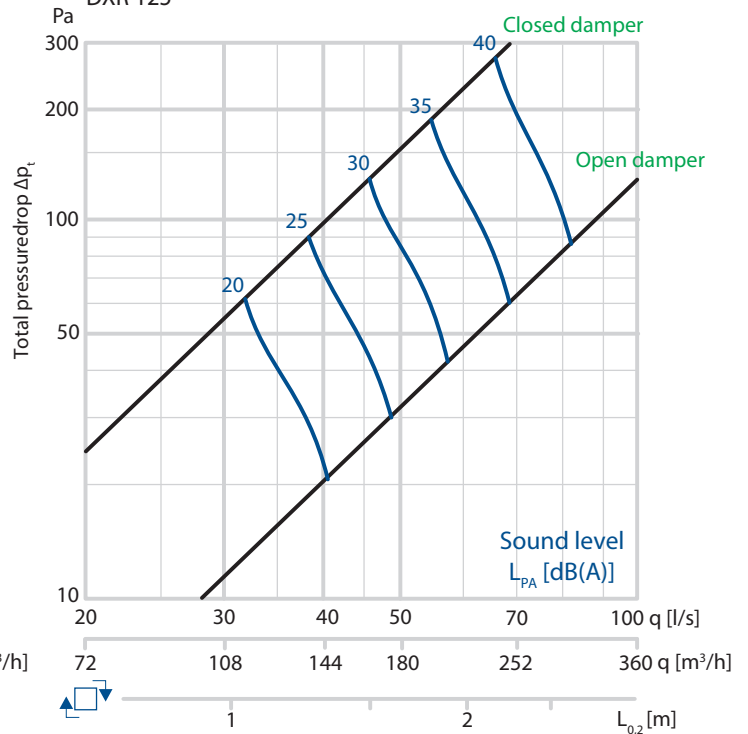
D.1.

DXR 100

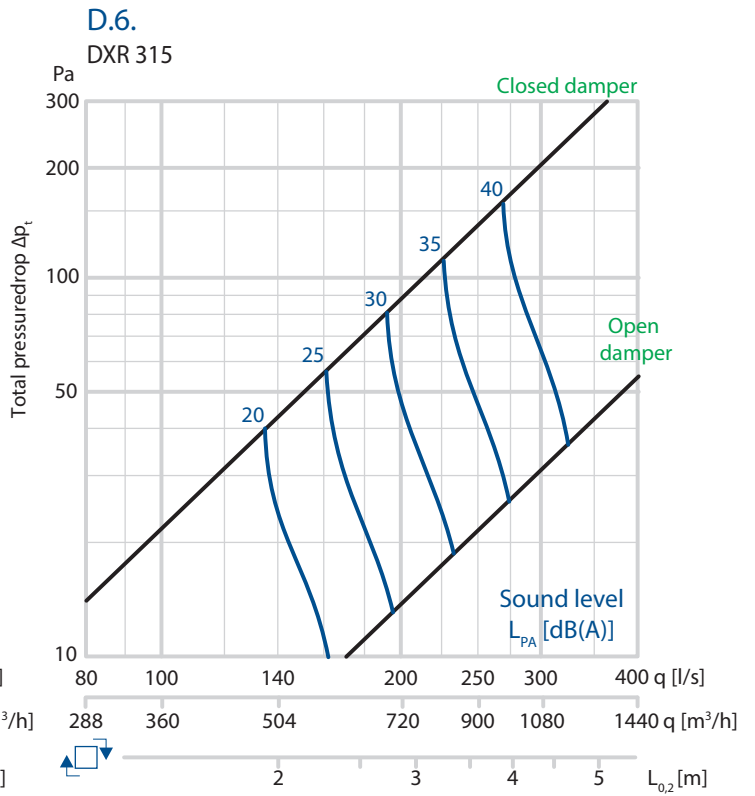
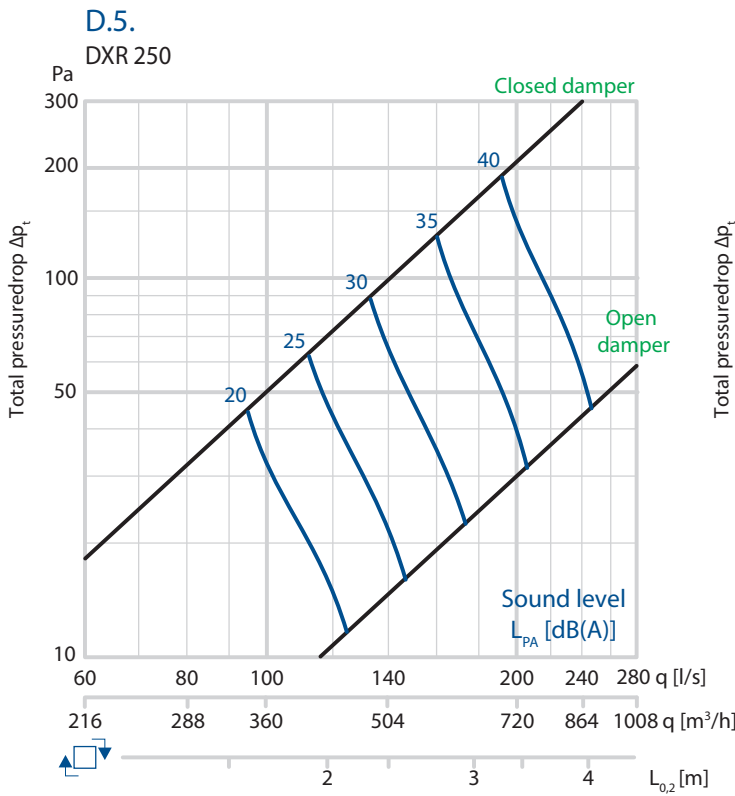
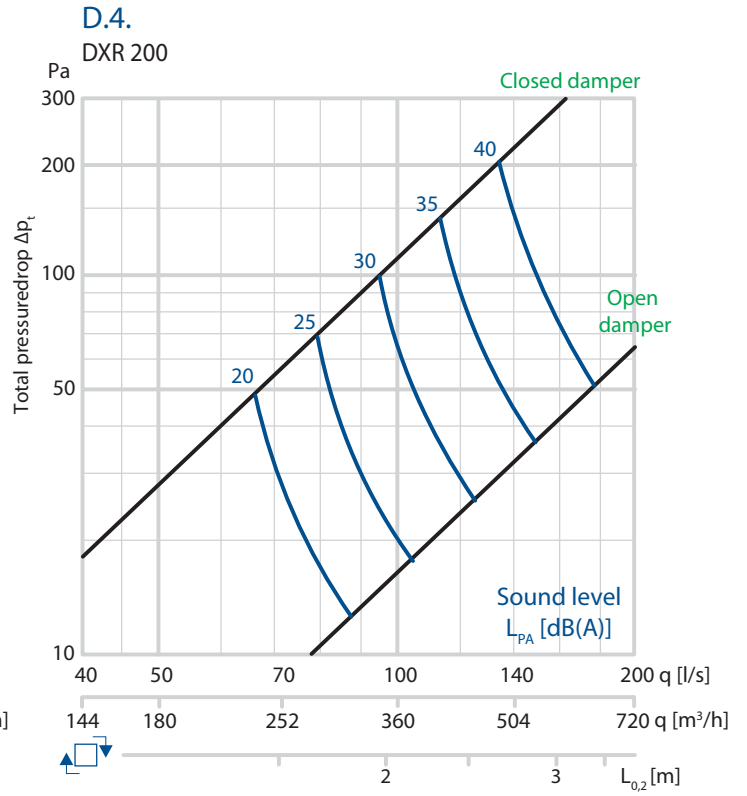
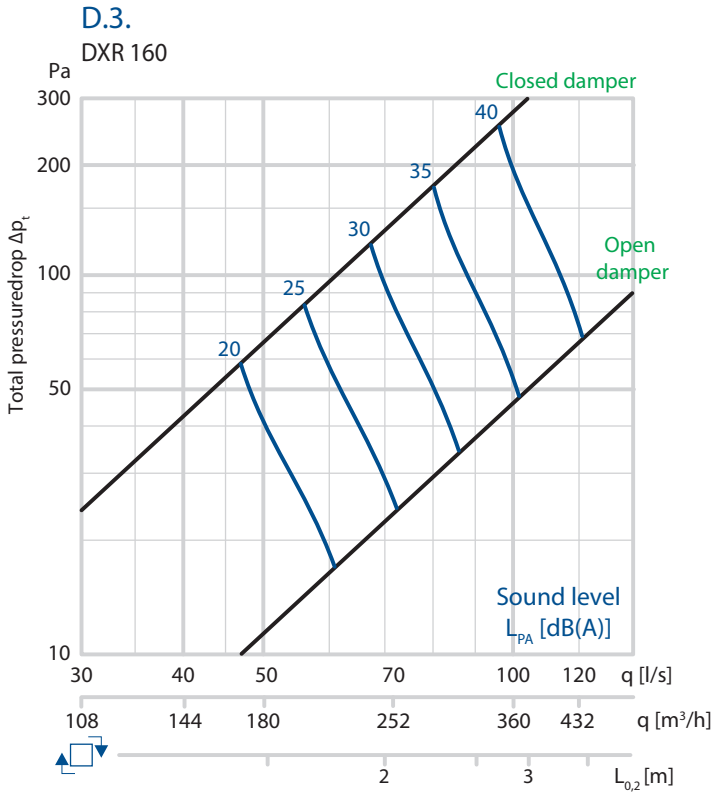


D.2.

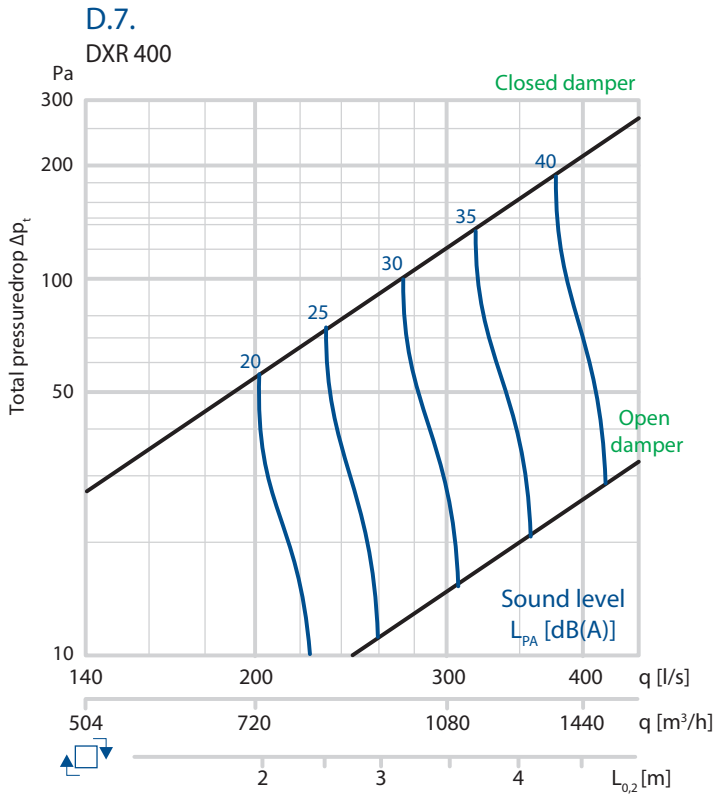
DXR 125



Diagrams



Diagrams

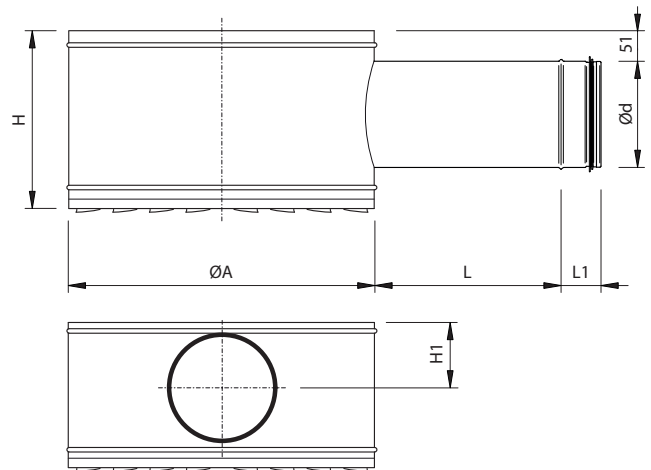


Dimensions

T.5.

Type	$\varnothing A$	$\varnothing d$	L	L1	H	H1
100	305	99	175	35	206	101
125	385	124	205	35	233	113
160	465	159	256	34	261	131
200	630	199	226	34	306	151
250	715	249	246	54	361	176
315	795	314	296	54	428	208
400	960	399	375	75	508	251

The indicated sizes are shown in mm.



Specification

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