

HRSI

Iris damper



DAMPERS &
MEASURING DAMPERS



13/04/2023



Iris damper HRSI



Quick facts

- Available in sizes Ø 80-800 mm
- Easy to adjust
- Air tightness class C
- Circular connection
- Measuring outlet for airflow
- Fully openable for cleaning of duct

Use

The design of the HRSI damper provides smooth and axial throttling resulting in a balanced flow pattern with low noise level. The damper is well suited for integration as it is compact. HRSI has air tightness class C.

HRSI is a damper intended for air flow regulation in circular ventilation ducts. The structure of the damper permits simple and reliable flow measurement. HRSI is suitable for installation where low sound values and cleanable ducts are required.

Material

The damper is made of hot-dip galvanized steel sheet or comes in a stainless version with controls of TPU and PC, measurement nipple of PP and rubber seals.

Mounting

- Mounted at an appropriate distance from sources of disturbance. The damper must not be loaded with the weight of the ducts.
- See the figure in the separate installation instructions.
- Installation in duct systems as other parts.
- For trouble-free measurement, the measurement accuracy is +/-5%
- When installed as per the figure, measurement accuracy is +/- 10%.

Specifications

Example: Iris damper HRSI - 160 - 1

Size

Ø D mm, (80-800)

Material

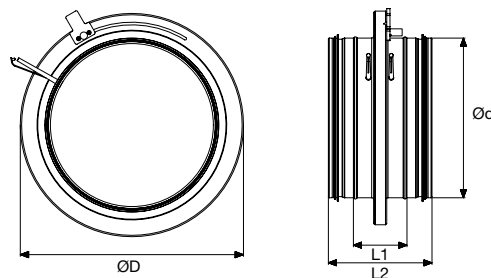
Galvanized sheet steel

= 1

Stainless steel EN 1.4404 (SS2343)

= 3

Dimensions

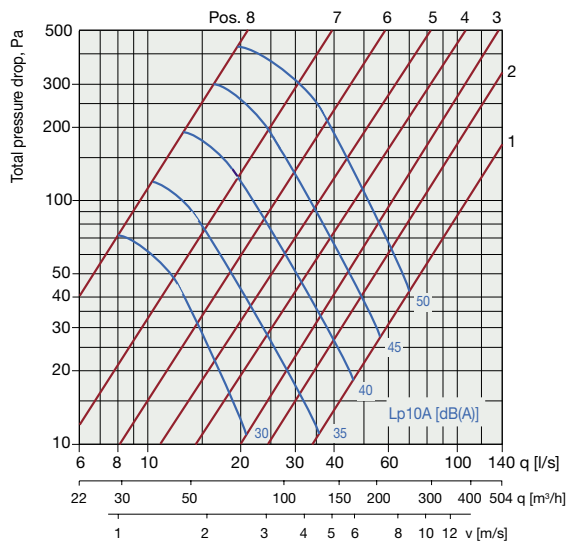


Size ød	øD	L1	L2	Weight kg
80	125	49	115	0,5
100	165	61	115	0,6
125	188	61	115	0,7
160	230	61	115	1,0
200	285	66	120	1,5
250	335	69	135	1,9
315	405	69	140	2,5
400	525	58	150	6,1
500	655	58	150	8,8
630	815	63	155	15,8
800	1015	65	285	24,8

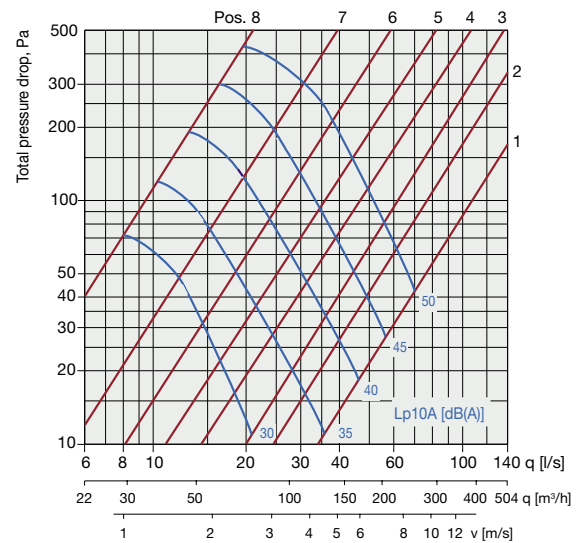


Dimensioning diagram

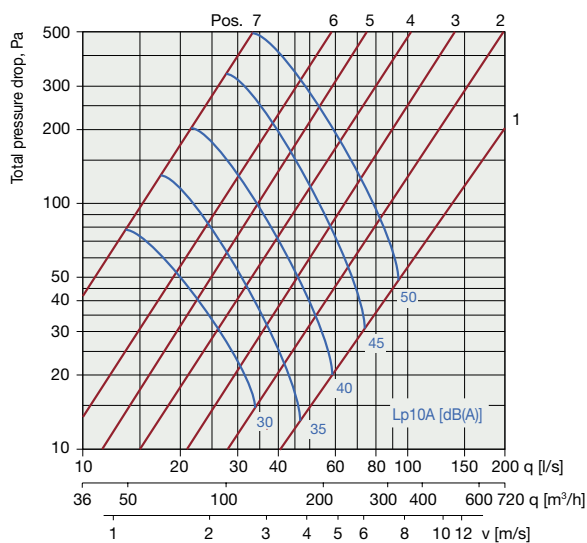
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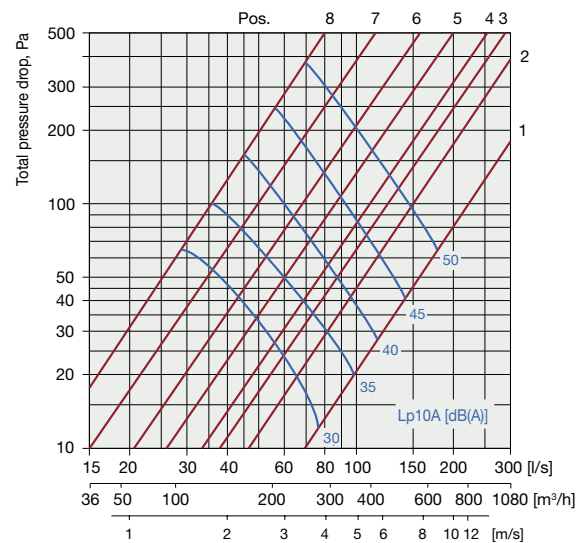
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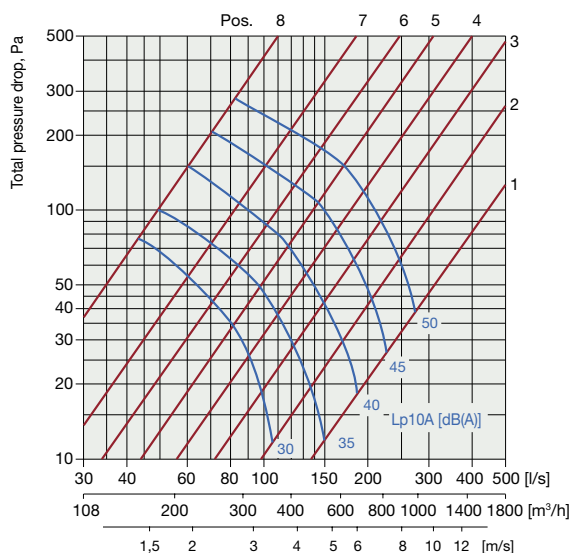
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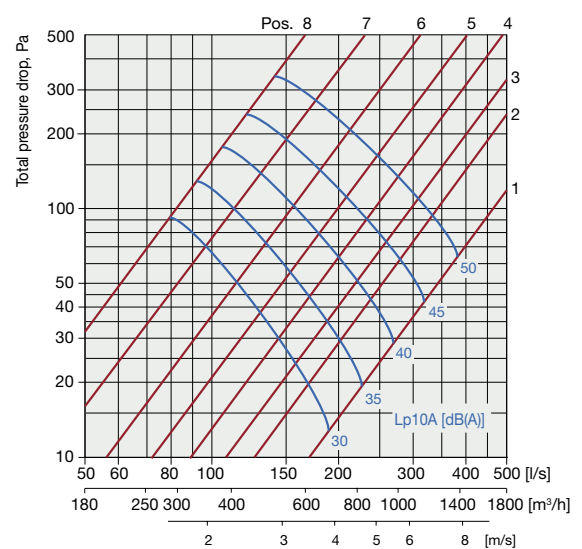
Size 160



Size 200



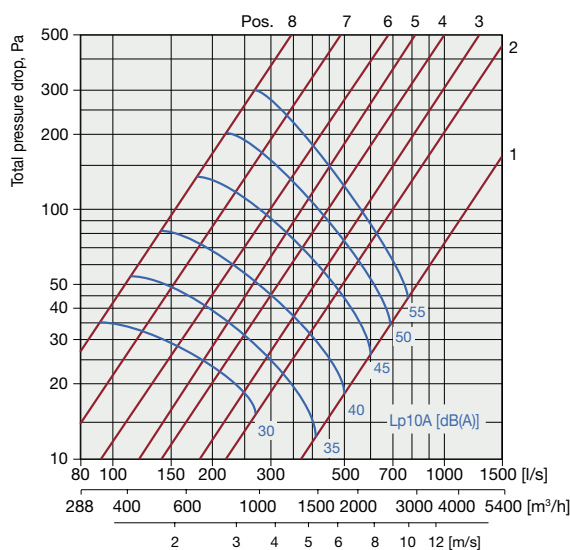
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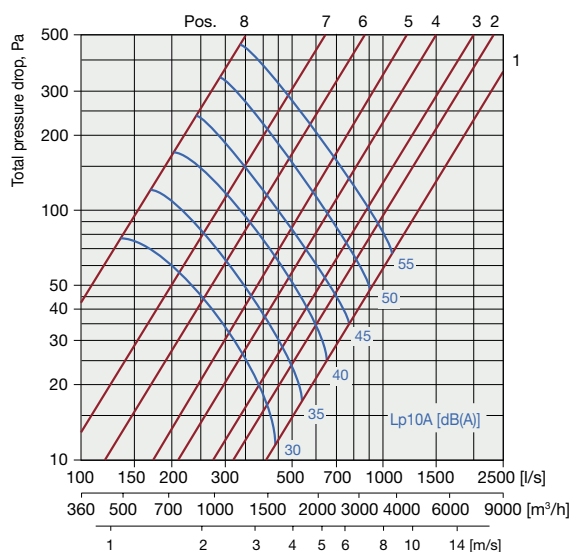


Dimensioning diagram, contd.

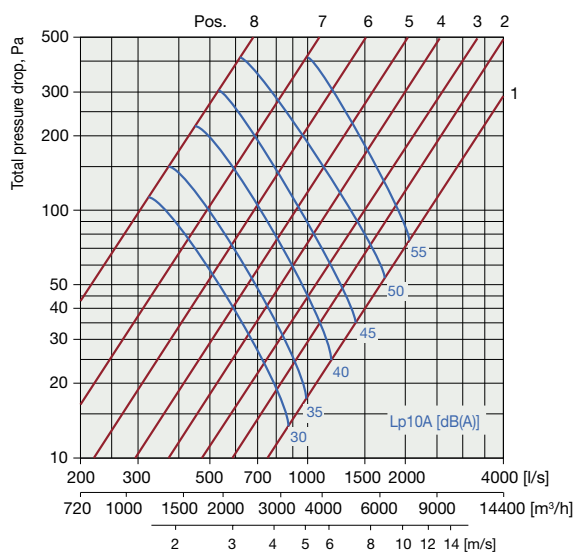
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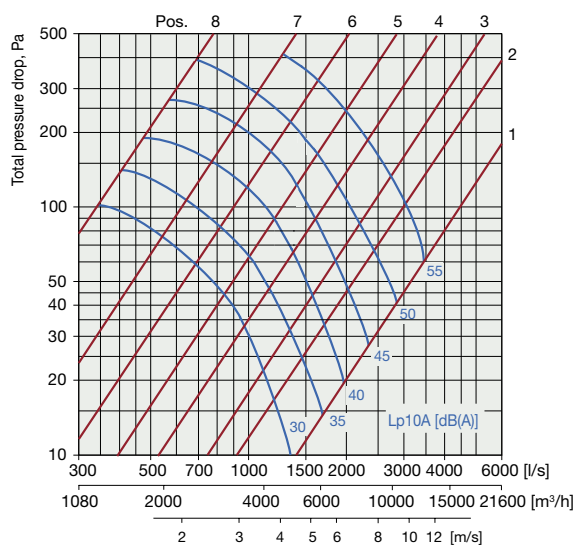
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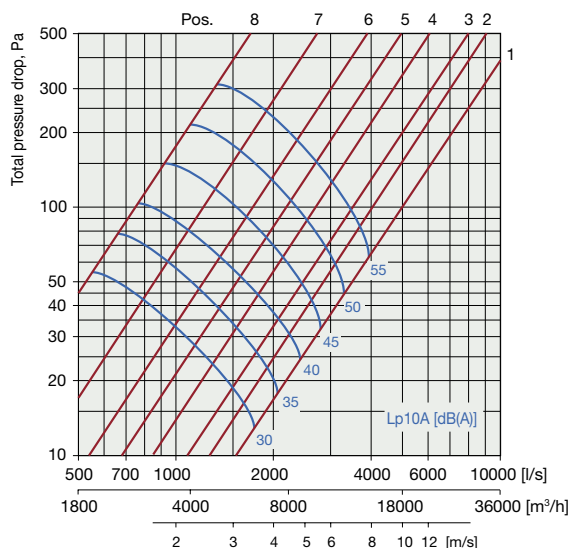
Size 500



Size 630



Size 800



Calculate the sound power level L_W per octave band using the formula below. Where L_{p10A} is taken from the diagrams and K_{ok} from the correction table.

$$L_W = L_{p10A} + K_{ok}$$

Dim	Frequency							
	63	125	250	500	1000	2000	4000	8000
80	9	11	8	3	-2	-8	-12	-22
100	14	11	6	1	-4	-13	-13	-20
125	11	10	4	-1	-7	-11	-9	-13
160	12	12	6	-1	-8	-11	-13	-18
200	12	8	3	-3	-6	-9	-12	-18
250	11	9	4	-2	-5	-9	-14	-19
315	14	6	1	-3	-4	-8	-13	-19
400	11	7	0	-4	-6	-7	-10	-13
500	10	7	-1	-5	-7	-9	-10	-13
630	10	6	-1	-4	-7	-9	-10	-12
800	8	6	-1	-4	-6	-9	-10	-12