

08



Overpressure dampers



Volume control dampers



Throttling, shut-off and non-return dampers



Mechanical flow rate controllers

Air flow control units

Overpressure dampers are used to equalize the pressures between adjacent rooms and for automatic interruption of air supply or air exhaust.

Volume control dampers regulate the air flow volume in ventilating ducts and air conditioning devices.

Throttling, shut-off and non-return dampers and flow rate controllers are used for control the air flow volume in ventilating ducts.

VENTILATING GRILLES,
VENTILATING VALVES

CIRCULAR DIFFUSERS,
SQUARE DIFFUSERS

SWIRL DIFFUSERS,
VARIABLE SWIRL
DIFFUSERS

SLOT DIFFUSERS,
ROUND DUCT DIFFUSERS

AIR DISPLACEMENT
UNITS

SUPPLY AIR NOZZLES

EXTERNAL ELEMENTS

AIR FLOW
CONTROL UNITS

SOUND ATTENUATORS,
SOUND ATTENUATING
LOUVRES

Overview

Overpressure dampers

Overpressure dampers are used to equalize the pressures between adjacent rooms and for automatic interruption of air supply or air exhaust. Steel (Types JNŽ) or aluminium (Types ANŽ) overpressure dampers can be produced.

Overpressure dampers



JNŽ-6



ANŽ-3, ANŽ-4



JNŽ-6W

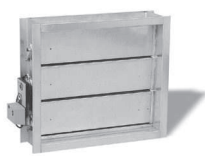
Volume control dampers

Volume control dampers regulate the air flow volume in ventilating ducts and air conditioning devices. We produce several construction types with manual, motor or pneumatic regulation.

Volume control dampers



RŽ-1



RŽ-2



RŽ-3



RŽ-1/G

Throttling, shut off and non return dampers, flow rate controllers

They are used to control the air flow volume in ventilating ducts.



RŽ-7

Throttling, shut off and non return dampers



DL



DL-2



ZL-2



RSK

Mechanical flow rate controllers



MRP-1



MRP-2



MRP-3



MRP-4

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Throttling, shut-off and non-return dampers

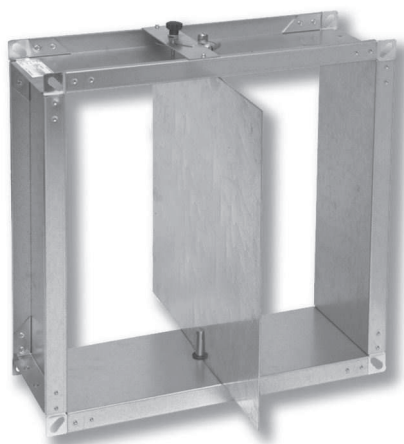
■ Throttling dampers DL

Application

Throttling damper is designed for regulation of air flow volume. It is constructed to fit square ducts.

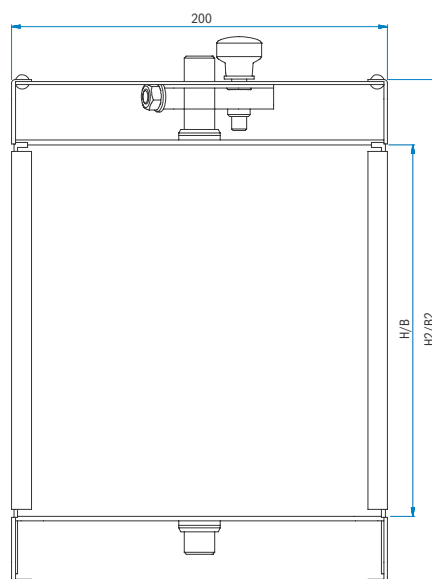
Description

Damper consists of housing and blade, both made of galvanised sheet steel and mechanism for altering the blade angel. All dampers can be outside insulated.



Dimensions:

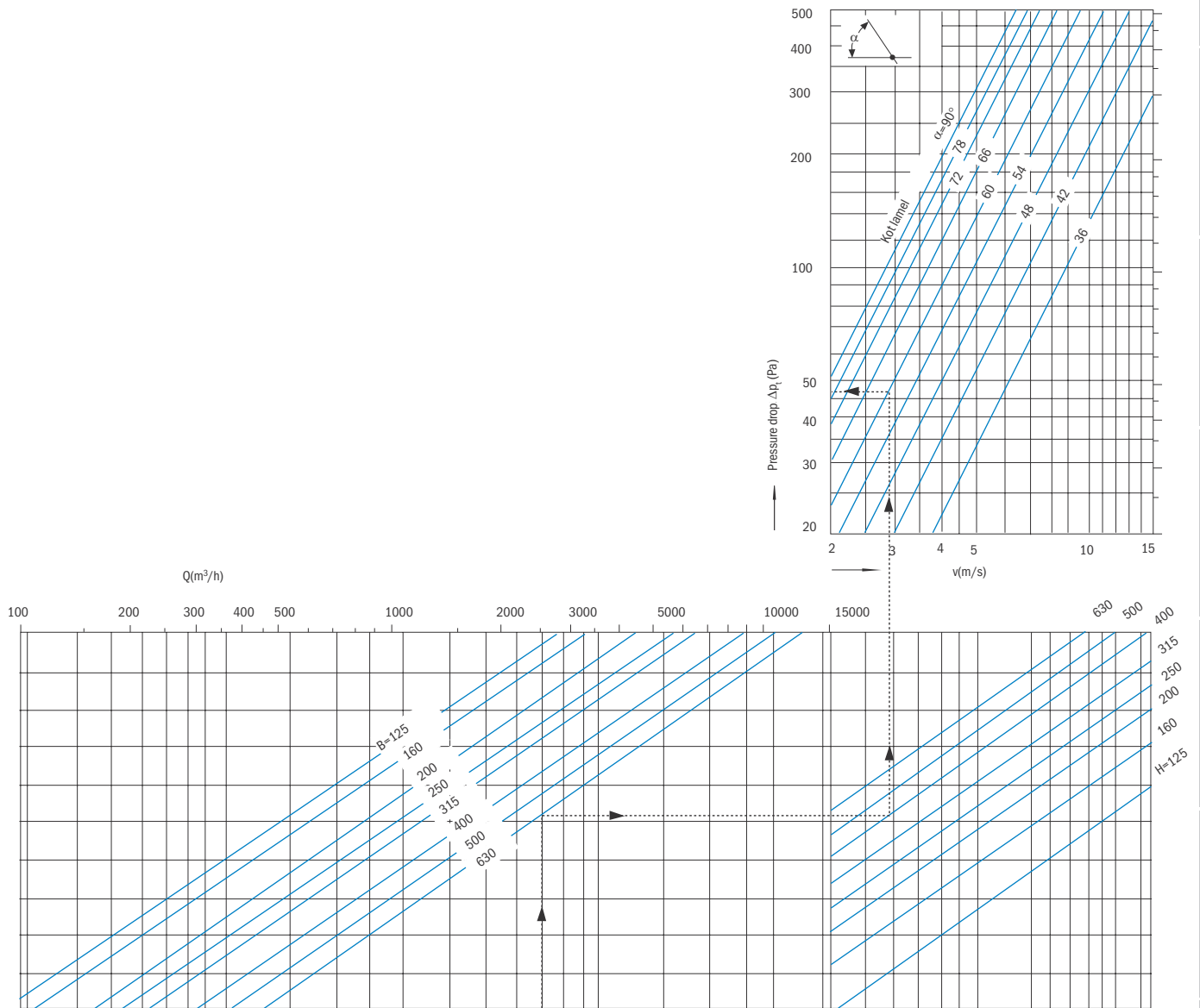
B	H	B2	H2
125	125	185	190
	160		190
160	125	220	225
	160		225
200	125	260	190
	160		225
	200		265
250	125	310	190
	160		225
	200		265
	250		315
315	125	375	190
	160		225
	200		265
	250		315
315	315	375	380
	125		190
	160		225
	200		265
400	250	460	315
	315		380
	400		465
	125		190
	160		225
500	200	560	265
	250		315
	315		380
	400		465
	500		565
	600		665
630	125	690	190
	160		225
	200		265
	250		315
	315		380
	400		465
	500		565
600	665		



Designations of motors:

- B1** (LM 24A)
- B2** (LM 220A)
- B3** (LM 24A SR) - continuous regulation

Pressure drop diagram



Pressure drop with 0° blade angle is negligible.

Definition of symbols

- Q (m³/h)** Air flow
- v (m/s)** Air velocity in the duct
- Δp_{cel} (Pa)** pressure drop difference

Ordering key

DL / R B1 x H1

- R** Manual control
- B** Power driven but without actuator
- B1** Actuator LM 24A
- B2** Actuator LM 230A
- B3** Actuator LM 24A SR (continuous regulation)

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EXTERNAL ELEMENTS

AIR FLOW
CONTROL UNITS

SOUND ATTENUATORS,
SOUND ATTENUATING
LOUVERES

Throttling dampers
DL-1, DL-2

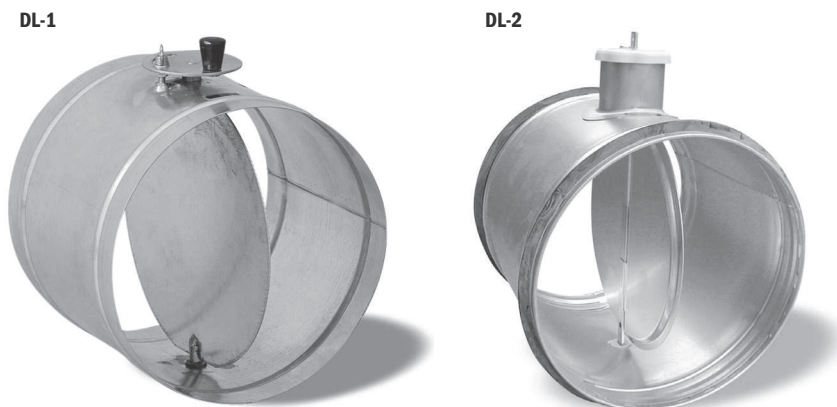
Application

Throttling damper is designed for regulation of air flow volume. It is constructed to fit round and spiro ducts.

Description

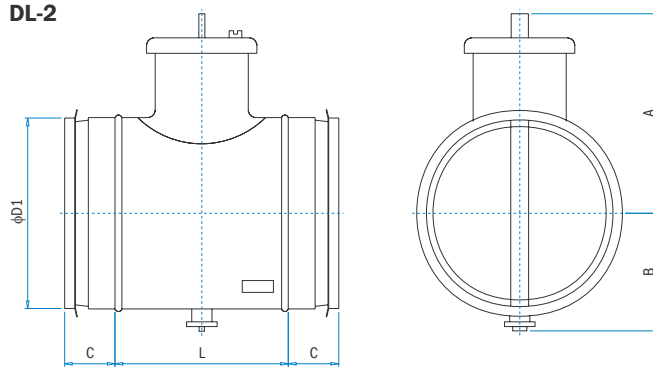
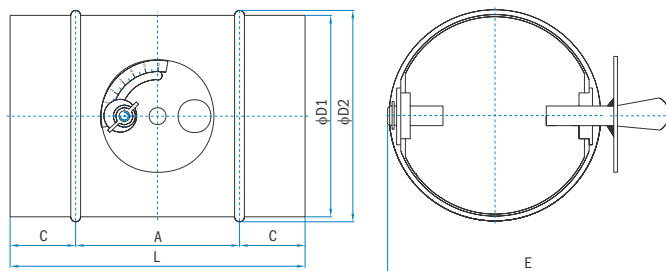
Throttling damper consists of housing and blade, both made of galvanised sheet steel and mechanism for altering the blade angle. All dampers can be insulated.

On the outer side, DL-2 is fitted with a rubber seal.



DL-1

DL-2



Dimensions for DL-1

Size	100	125	160	200	250	315	400	500	630
$\Phi D1$	98	123	158	198	248	312	397	496	626
$\Phi D2$	104	129	164	204	254	318	403	502	632
A	100		105			170			
C	40				50		80		
L	180		230			270		330	
E	147	173	207	247	297	362	449	548	678

Dimensions for DL-2

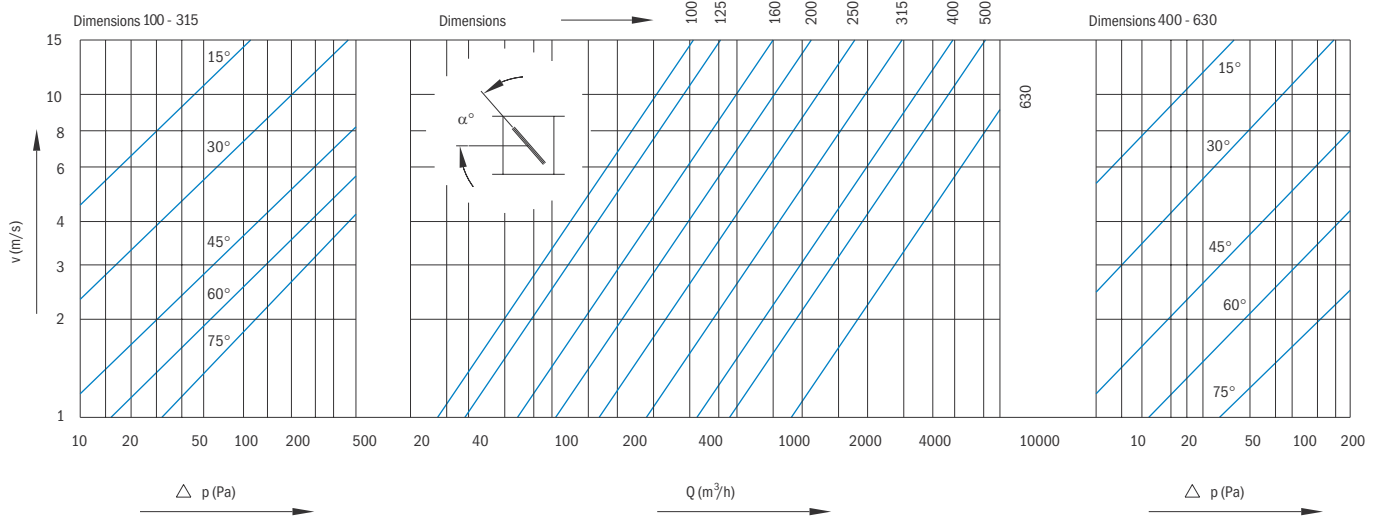
Size	80	100	125	140	150	160	180	200	225	250	280	315	400	500	630
$\Phi D1$	78	98	123	138	148	158	178	198	223	248	278	313	398	498	628
A	105	115	125	135	140	145	155	165	175	190	205	220	295	345	410
B	55	65	75	85	90	95	105	115	125	140	155	170	215	265	330
C	40												65		
L	100					130					130				

Ordering key

DL-1 / R Size 200

- R** Manual control
- B** Power driven but without actuator
- B1** Actuator LM 24A
- B2** Actuator LM 230A
- B3** Actuator LM 24A SR (continuous regulation)
- J1** Actuator DAN 1.N (24 V)
- J2** Actuator DAN 2.N (230 V)
- J3** Actuator DMN 1.2N (24 V continuous regulation)
- 1, 2** Throttling damper type

Pressure drop diagram



$$L_{WA} = L_{NAZ} + L1 + L2 \text{ (dB(A))}$$

Table of L_{NAZ}

Size	α°	Frequency (Hz)						
		125	250	500	1000	2000	4000	8000
100	15	37	26	22	18	11	11	10
	30	43	32	28	24	19	19	18
	45	48	43	38	34	31	30	31
315	60	54	51	48	46	45	43	42
	75	58	55	54	52	52	51	50
400	15	39	29	24	20	14	14	12
	30	46	35	31	27	22	22	21
	45	52	47	42	38	35	34	34
630	60	59	56	53	51	50	48	47
	75	64	62	61	59	59	59	58

Definition of symbols

- Q (m³/h)** Air flow
- v (m/s)** Air velocity in the duct
- Δp_{cel} (Pa)** Pressure drop difference
- L_{WA} (dB(A))** Sound power level

Diagram of L2

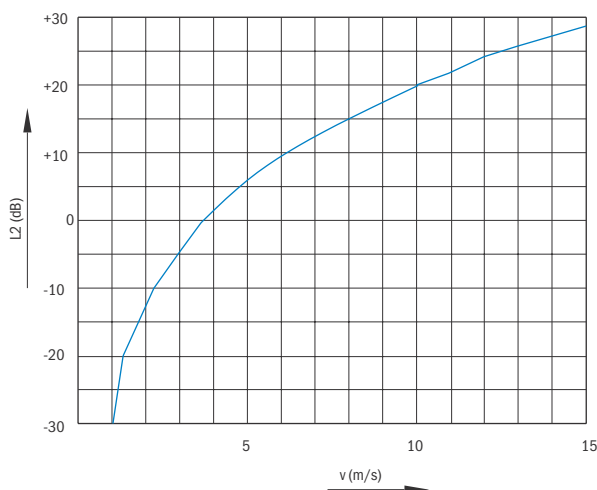


Table of L1

Size	100	125	160	200	250	315	400	500	630
L1 (dB)	-2	-1	0	+1	+2	+3	+4	+5	+6