

BRTB

Single blade damper



DAMPERS &
MEASURING DAMPERS



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www.bevent-rasch.com



BEVENT RASCH

AIR SOLUTIONS – FOR A BETTER TOMORROW



Quick facts

- Pressure class B < 2500Pa
- Air tightness class 1-4
- Sizes Ø100-Ø630
- Galvanized sheet steel or Stainless steel
- Spiro or flange connection
- Service temperature max. 70 alt. 225°C (Air tightness class 1 and 2 only)
- Prepared for external insulation with max. thickness 50 mm
- Complete with bracket intended for actuator or with fitted lever control or actuator

Use

Regulation, adjustment or closing of air flows in air conditioning plants where the requirement of differential pressure over closed damper does not exceed 2500 Pa.

Sizes

100 – 630 mm, as per Swedish Standard SS 2609 (spiro connection).

Air tightness classes

According to AMA VVS & Kyl 12.

Class 1

Class 2

Class 3

Class 4

Service pressure

Max. 2500 Pa in differential pressure over closed damper.

Service temperature

Max. 225° C, see Specification on page 3.

Design

Single blade damper with spiro or flange connection complete with bracket intended for actuator or manual controlling, alt. with fitted lever control or actuator.

The damper is delivered prepared for external insulation with max. thickness 50 mm. If thicker insulation is required this must be specified on the order.

Material and surface treatment

Housing and parts in galvanised sheet steel as per environment class M2 in AMA VVS & Kyl 12. Alternative materials are available for higher environmental requirements.

Nylon or metal bearings and cellular plastic or nomexfill seals are used depending on the service requirements.

Spiro seal in EPDM rubber.

Accessories

Factory installed actuator

Lever control BRGA

Rod control BRSR

Cable control BRUR

Parallel coupling BRLA

Mating flange BRMO

Cast in frame BRIO



Specification

Example: **Single blade damper Pressure class B**
BRTB - 1 - 250 - 1 - 1 - 1 - 1

Air tightness classes

(according to AMA VVS & Kyl 12)

- Class 1 = 1
- Class 2 = 2
- Class 3 = 3
- Class 4 = 4*)

*) Not in size 100

Size

Nominal diameter, mm
 100 – 630

Connection

- Spiro (only up to 70°C) = 1
- Flange = 2

Material

- Galvanized sheet steel = 1
- Stainless AISI 3041 – EN 1.4301 = 2
- Stainless AISI 316L – EN 1.4404 = 3
- Special = 9

Max. service temperature

- 70°C = 1
- 225°C (only tightness class 1 and 2) = 2

Operation

- Bracket for actuator alt. hand control = 1
- Fitted lever control = 2
- Fitted actuator = 3

(the actuator is specified separately)

Technical data

See pages 4-5 for dimensioning diagram.

Size and weight

*) Alternative sizes can be delivered

Size Ø d	Spiro		Flange AA	Weight, kg	
	A	B		Spiro	Flange
100	145	231	220	1,2	2
125	138	223	210	1,4	2,2
160	138	223	210	1,5	2,5
200	138	223	210	1,7	3,3
250	138	223	210	2,0	3,7
315	138	223	210	2,6	5,2
400	218	310	295	4,5	8,2
500	218	310	295	6,0	10,5
630	218	310	295	7,0	13,6

d = Swedish Standard SS 2609
 For sizes of flange connection, see Accessories at www.bevent-rasch.com.

Torque in Nm for control spindle

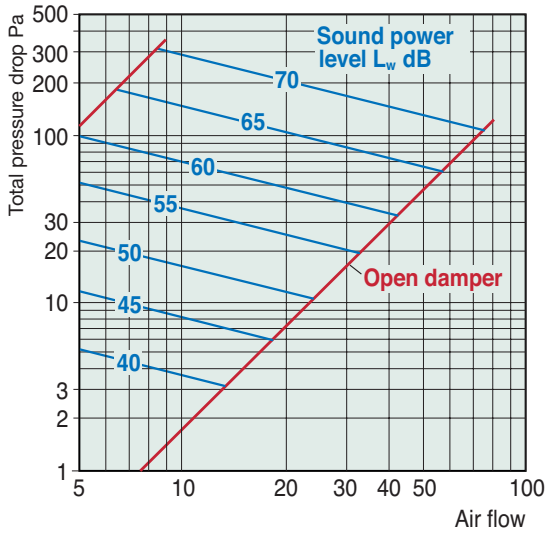
Size Ø d	Air tightness class			
	1	2	3	4
100	2	2	2	–
125	2	2	2	2
160	2	2	2	2
200	3	3	3	3
250	3	3	3	3
315	3	3	3	3
400	5	5	5	5
500	7	7	7	7
630	12	12	12	12

The values assume that consideration has been taken to the points reported under **Torque**, see General information about dampers at www.bevent-rasch.com.

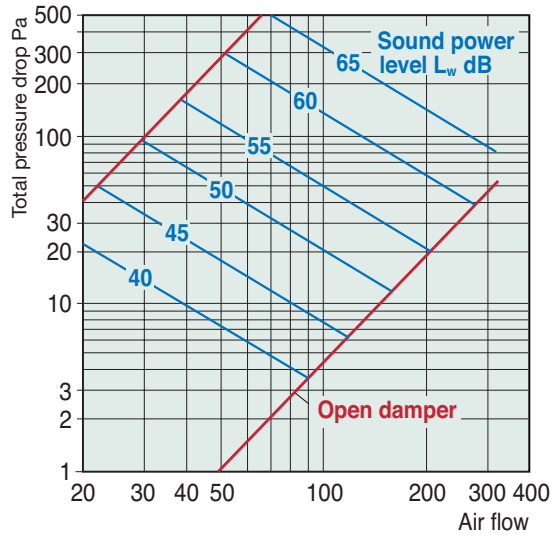


Dimensioning diagram

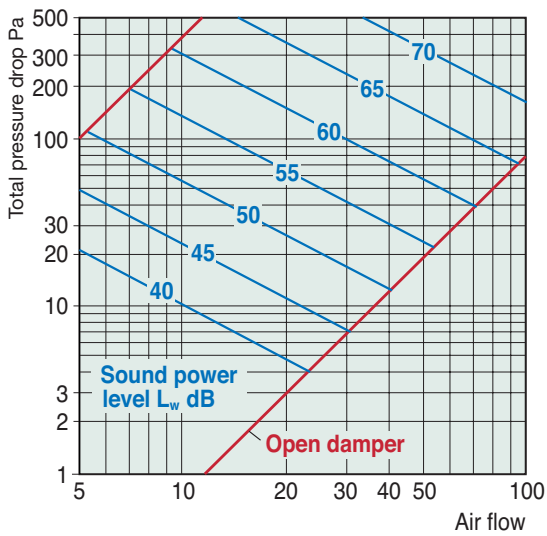
Size 100



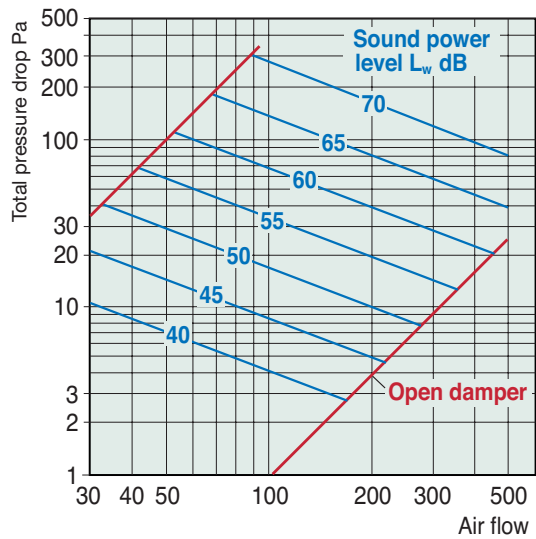
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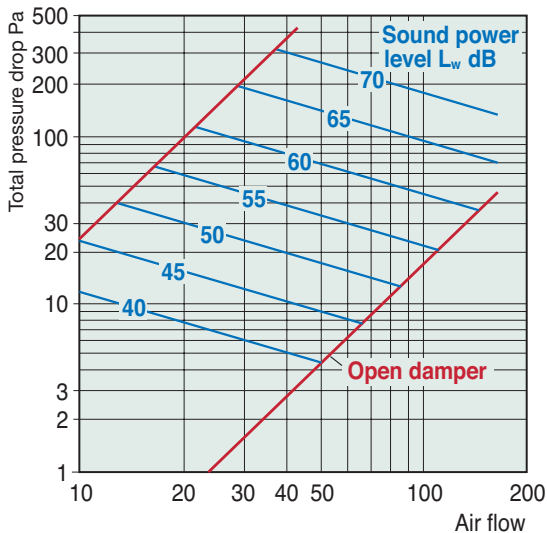
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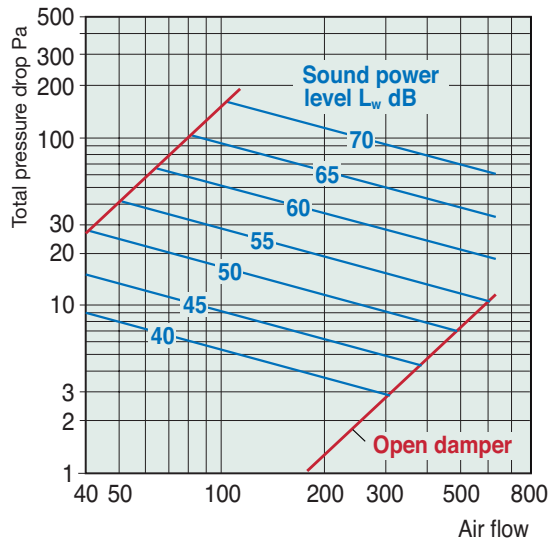
Size 250



Size 160



Size 315





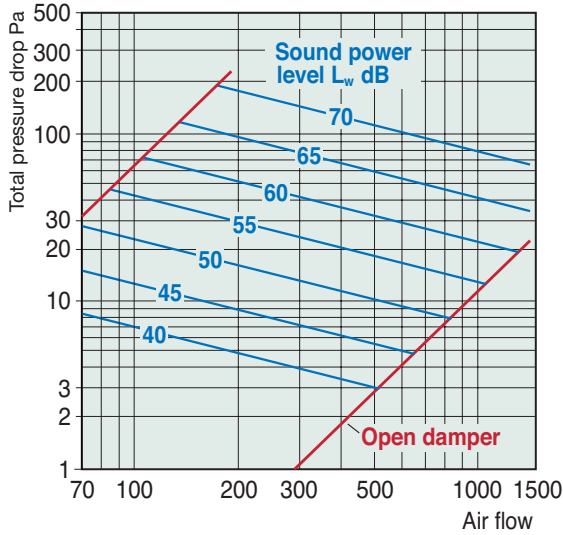
Sound data

Correction of sound power level, L_{Wok} , in octave band

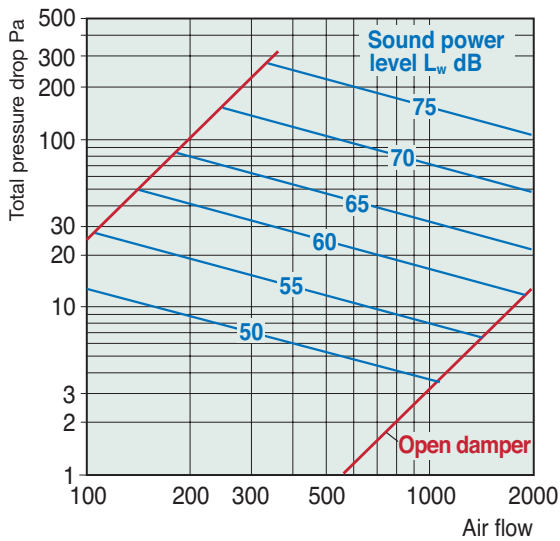
$$L_{Wok} = L_w + K_{ok}$$

Dim Ø mm	Centre frequency Hz							
	63	125	250	500	1000	2000	4000	8000
100	-5	-5	-8	-13	-21	-29	-35	-39
125	-6	-6	-7	-15	-19	-26	-35	-27
160	-5	-5	-8	-14	-17	-24	-32	-28
200	-5	-6	-8	-15	-21	-24	-25	-30
250	-4	-7	-9	-14	-20	-21	-23	-23
315	-4	-7	-11	-15	-20	-22	-25	-22
400	-5	-7	-11	-16	-20	-23	-23	-24
500	-3	-9	-14	-18	-19	-22	-29	-25
630	-3	-10	-16	-20	-21	-20	-20	-23
Tol. ± dB	2	2	2	2	2	2	2	2

Size 400



Size 500



Size 630

