



Mineral wool silencer

MWS / MWK



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Mineral wool silencer MWS / MWK

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Mineral wool silencer MWS / MWK

Description

MWK-OB / MWS-OB



Silencing baffles type MWK-OB

Baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The baffle frame is made of galvanised sheet steel.

The mineral fibre boards are covered with unmetabolisable glass silk, i.e. no bacteria can deposit on the glass silk.

Manufactured according to the hygienic standards of VDI 6022, tested according to DIN EN ISO 7235 and non-flammable according to DIN EN 13501-1 class A1.

For use at a main interfering frequency of 500 Hz to 8000 Hz.

Baffle silencer type MWS-OB-...

Baffle silencer with integrated baffles type MWK-OB. The baffle frame and duct housing are made of galvanised sheet steel with airtight saddle joint, airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa. With flange profile M-30 on both sides. Manufactured according to the hygienic standards of VDI 6022.

For use at a main interfering frequency of 500 Hz to 8000 Hz.

MWK-LL / MWS-LL



Silencing baffles type MWK-LL

Baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The baffle frame and perforated plate are made of galvanised sheet steel.

The mineral fibre boards are covered with unmetabolisable glass silk, i.e. no bacteria can deposit on the glass silk.

Manufactured according to the hygienic standards of VDI 6022, tested according to DIN EN ISO 7235 and non-flammable according to DIN EN 13501-1 class A1.

For use at a main interfering frequency of 500 Hz to 8000 Hz.

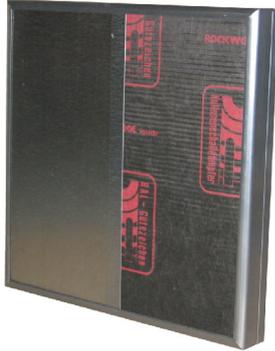
Baffle silencer type MWS-LL

Baffle silencer with integrated baffles type MWK-LL. The baffle frame, perforated plate and duct housing are made of galvanised sheet steel with airtight saddle joint, airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa. Flange profile M-30 on both sides. Manufactured according to the hygienic standards of VDI 6022.

For use at a main interfering frequency of 500 Hz to 8000 Hz.

Mineral wool silencer MWS / MWK

MWK-MB / MWS-MB



Silencing baffles type MWK-MB

Baffles with frame profile in nozzle design for substantial reduction of the pressure loss. Covered with resonance plate offset on one side, the baffle frame and sectioned sheet are made of galvanised sheet steel.

The mineral fibre boards are covered with unmetabolisable glass silk, i.e. no bacteria can deposit on the glass silk.

Manufactured according to the hygienic standards of VDI 6022, tested according to DIN EN ISO 7235 and non-flammable according to DIN EN 13501-1 class A1.

For use at a main interfering frequency of 63 Hz to 500 Hz.

Baffle silencer type MWS-MB

Baffle silencer with integrated baffles type MWK-MB. The baffle frame, sectioned sheet and duct housing are made of galvanised sheet steel with airtight saddle joint, airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa. Flange profile M -30 on both sides. Manufactured according to the hygienic standards of VDI 6022.

For use at a main interfering frequency of 63 Hz to 500 Hz.

MWK-LB / MWS-LB



Silencing baffles type MWK-LB

Baffles with frame profile in nozzle design for substantial reduction of the pressure loss. Covered with resonance plate and perforated plate offset on one side.

The baffle frame, sectioned sheet and perforated plate are made of galvanised sheet steel.

The mineral fibre boards are covered with unmetabolisable glass silk, i.e. no bacteria can deposit on the glass silk.

Manufactured according to the hygienic standards of VDI 6022, tested according to DIN EN ISO 7235 and non-flammable according to DIN EN 13501-1 class A1.

For use at a main interfering frequency of 63 Hz to 500 Hz.

Baffle silencer type MWS-LB

Baffle silencer with integrated baffles type MWK-LB. The baffle frame, duct housing, sectioned sheet and perforated plate are made of galvanised sheet steel with airtight saddle joint, airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa. With flange profile M-30 on both sides. Manufactured according to the hygienic standards of VDI 6022.

For use at a main interfering frequency of 63 Hz to 500 Hz.

Mineral wool silencer MWS / MWK

Baffles with frame profile in nozzle design significantly reduce pressure loss compared with conventional baffles. This gives high energy-saving in the operation of the system!

The baffles and baffle silencers are delivered in a hygienic design according to VDI 6022-1. The objective of the VDI 6022-1 "Hygienic planning, design, operation and maintenance of air-conditioning installations" is a hygienically impeccable interior air quality, i.e. avoidance of microbial contamination of the inhaled air. Accordingly, installation components must not emit any substances, fibres or odours hazardous to health, and must not promote the growth of microorganisms.

For maintenance, service, retrofitting, etc., inspection openings in sufficient number and size must be provided on-site.

Installation of baffles or silencers:

When baffles are delivered separately, the determined performance data are only reached if the manufacturer's installation instructions and the recognised technical rules are observed.

Attention:

The baffle height <200mm cannot be delivered in nozzle design. Design only possible in folded form!

Stainless steel model upon request. (not possible in nozzle design)

Construction

Jacket

- Galvanised sheet steel (-SV) (standard)

Frame

- Galvanised sheet steel (-SV) (standard)

Standards and directives

DIN EN ISO 7235

DIN EN 13501-1

VDI 6022-1

Model

- MWK-OB-... - Silencing baffle made of mineral fibre boards with sheet steel frame
- MWK-MB-... - Sound-absorbing baffle made of mineral fibre board with sheet steel frame, covered with resonance plate offset on one side
- MWK-LL-... - Silencing baffle made of mineral fibre board with sheet steel frame, both sides covered with perforated sheet steel.
- MWK-LB-... - Sound-absorbing baffle made of mineral fibre board with sheet steel frame, covered with resonance plate and perforated plate offset on one side.
- MWS-OB-... - Baffle silencer with integrated silencing baffles type MWK-OB-...
- MWS-MB-... - Baffle silencer with integrated silencing baffles type MWK-MB-...
- MWS-LL-... - Baffle silencer with integrated silencing baffles type MWK-LL-...
- MWS-LB-... - Baffle silencer with integrated silencing baffles type MWK-LB-...
- ...-100 - Baffle thickness 100 mm
- ...-200 - Baffle thickness 200 mm

Flange profile M2/M4 (upon request)

A powder coating in the RAL colour / DD coating is possible at an extra charge.

ATEX version available at an extra charge. If desired, also available as MWK-OB-...-300! Prices upon request.

Stainless steel model is also possible if desired. Prices upon request.

Model with angled frame is also possible if desired. Prices upon request.

Mineral wool silencer MWS / MWK

Models and dimensions

Dimensions

Silencing baffle type MWK-...

Detail X
at $D=100/200$ and $H2 \geq 200$

round design

for $H2 < 200$ and/or for $D=300$

rectangular design

$D=300$ is delivered with a fitted intake sheet
 $L1 = L2 + 50$ mm

Baffle silencer type MWS-...

Accessories - dimensions
Additional angled frame
(at an extra charge) (MWS-... only)

Detail Y

If the baffles are mounted suspended horizontally or suspended vertically, this mounting should be clarified beforehand with the manufacturing company.

To avoid damage during transport and simplify their handling on-site, multi-part baffles will be delivered as individual baffles. They are assembled on-site using the fishplates included in the delivery.

Mineral wool silencer MWS / MWK

Available sizes

L1=L2 (mm)	H1=H2 (mm)	D = 100 S = $\geq 40, \leq 100$ B1 (mm)	D = 200 S = $\geq 50, \leq 200$ B1 (mm)	n
500 750 1000 1250 1500 1750 2000 2250 2500 3000	250 500 750 1000 1250 1500 1750 2000 2250 2500 2750 3000	140 - 200	250 - 400	1
		280 - 400	500 - 800	2
		420 - 600	750 - 1200	3
		560 - 800	1000 - 1600	4
		700 - 1000	1250 - 2000	5
		840 - 1200	1500 - 2400	6
		980 - 1400	1750 - 2800	7
		1120 - 1600	2000 - 3200	8
		1260 - 1800	2250 - 3600	9
		1400 - 2000	2500 - 4000	10
		1540 - 2200	2750 - 4400	11
		1680 - 2400	3000 - 4800	12
		1820 - 2600	3250 - 5200	13
		1960 - 2800	3500 - 5600	14
		2100 - 3000	3750 - 6000	15
		2240 - 3200	4000 - 6400	16

All combined lengths, heights and widths available!

Division of the baffle silencer upon request!

Mineral wool silencer MWS / MWK

Division of baffle silencer type MWS-...

Division in width, height or length for >1500 mm

Division table MWS		Baffle silencer			
		Width			
		140-1500	1501-3000	3001-4500	4501-6400
Height	150-1500	A	B	E	G
	1501-3000	C	D	F	H

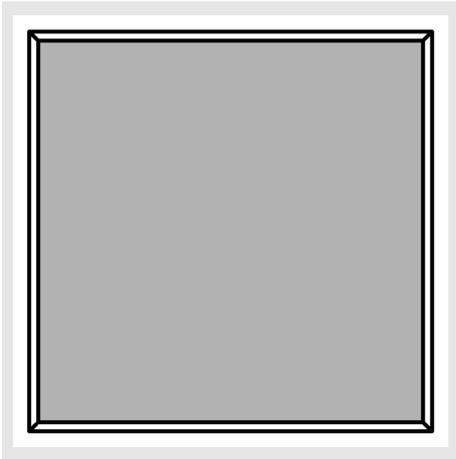
No.	Division			Model
	in width	in height	in length	
A	1-part	1-part	2-part if L > 1500	MWS1-B1H1
B	2-part	1-part	2-part if L > 1500	MWS2-B2H1
C	1-part	2-part	2-part if L > 1500	MWS3-B1H2
D	2-part	2-part	2-part if L > 1500	MWS4-B2H2
E	3-part	1-part	2-part if L > 1500	MWS5-B3H1
F	3-part	2-part	2-part if L > 1500	MWS6-B3H2
G	4-part	1-part	2-part if L > 1500	MWS7-B4H1
H	4-part	2-part	2-part if L > 1500	MWS8-B4H2

Mineral wool silencer MWS / MWK

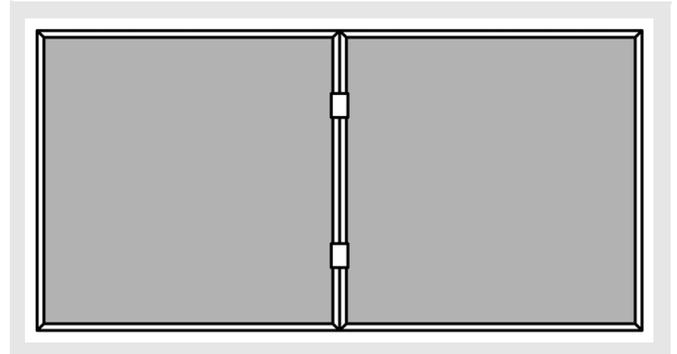
Division of mineral wool baffles (MWK)

Division table MWK for sound-absorbing baffles			
		Length	
		0-1500	1501-3000
Height	150-1500	A	B
	1501-3000	C	D

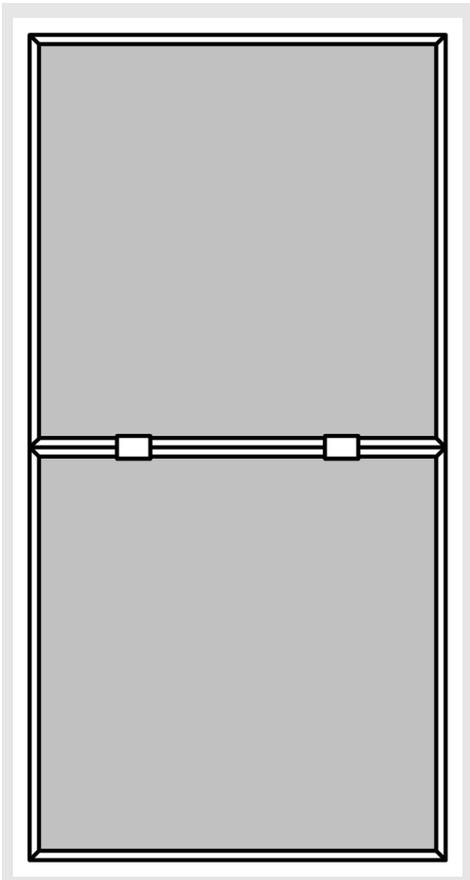
Division A



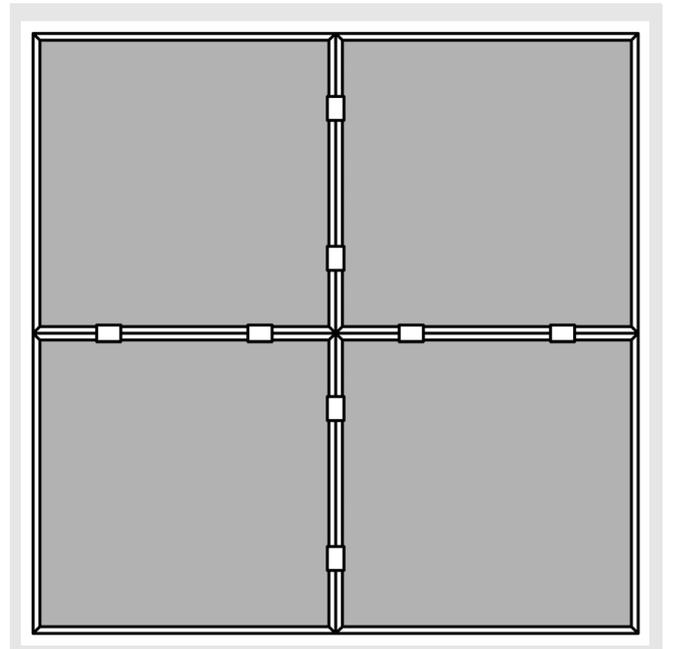
Division B



Division C



Division D



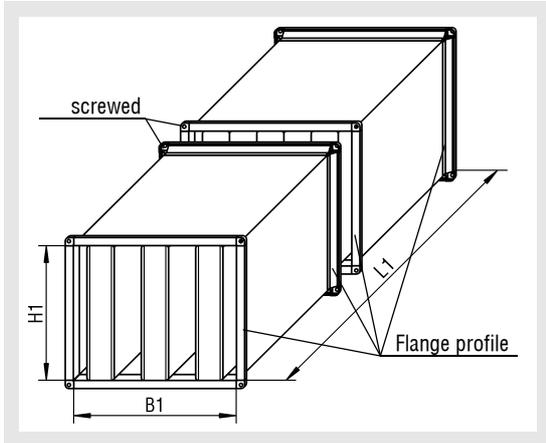
If the baffles are mounted suspended horizontally or suspended vertically, this mounting should be clarified beforehand with the manufacturing company. To avoid damage during transport and simplify their handling on site, multi-part baffles will be delivered as individual baffles. They are assembled on site using the connecting elements included in the delivery.

Mineral wool silencer MWS / MWK

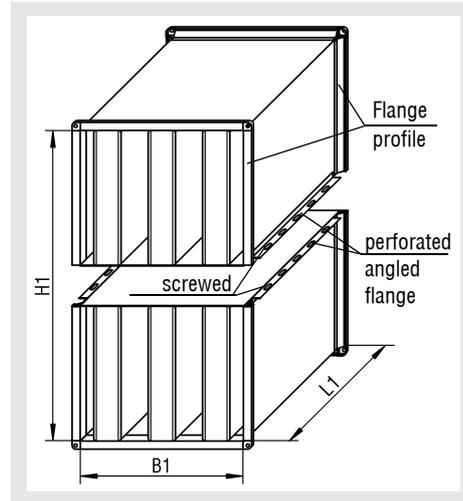
Baffle silencer in divided design

When using divided designs of silencer and baffles, a stable installation must be ensured on-site, since the components cannot have any load-bearing function.

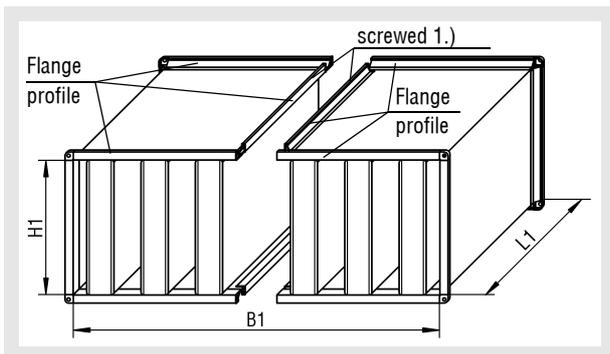
Divided length



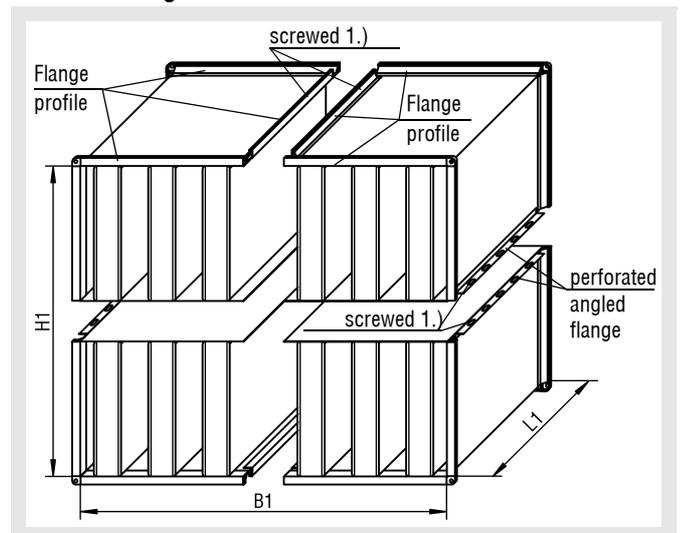
Sectioned height



Sectioned width



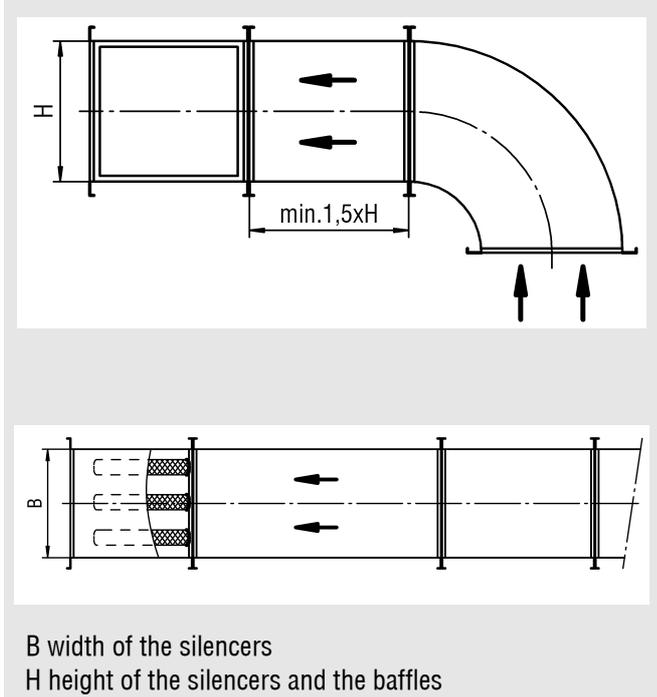
Width and height divided



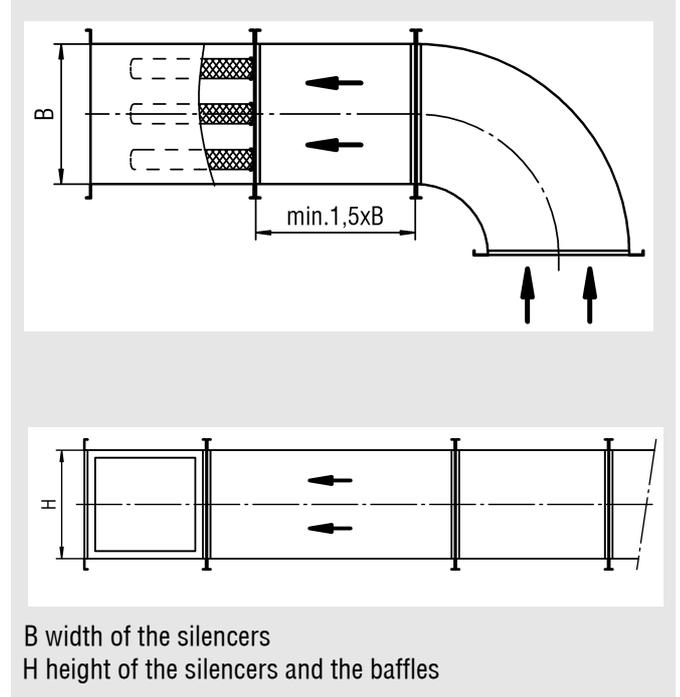
1.) Screw clamps are supplied loose.

Mineral wool silencer MWS / MWK

Flow pattern conditions according to connecting pieces,



Flow pattern conditions according to connecting pieces,



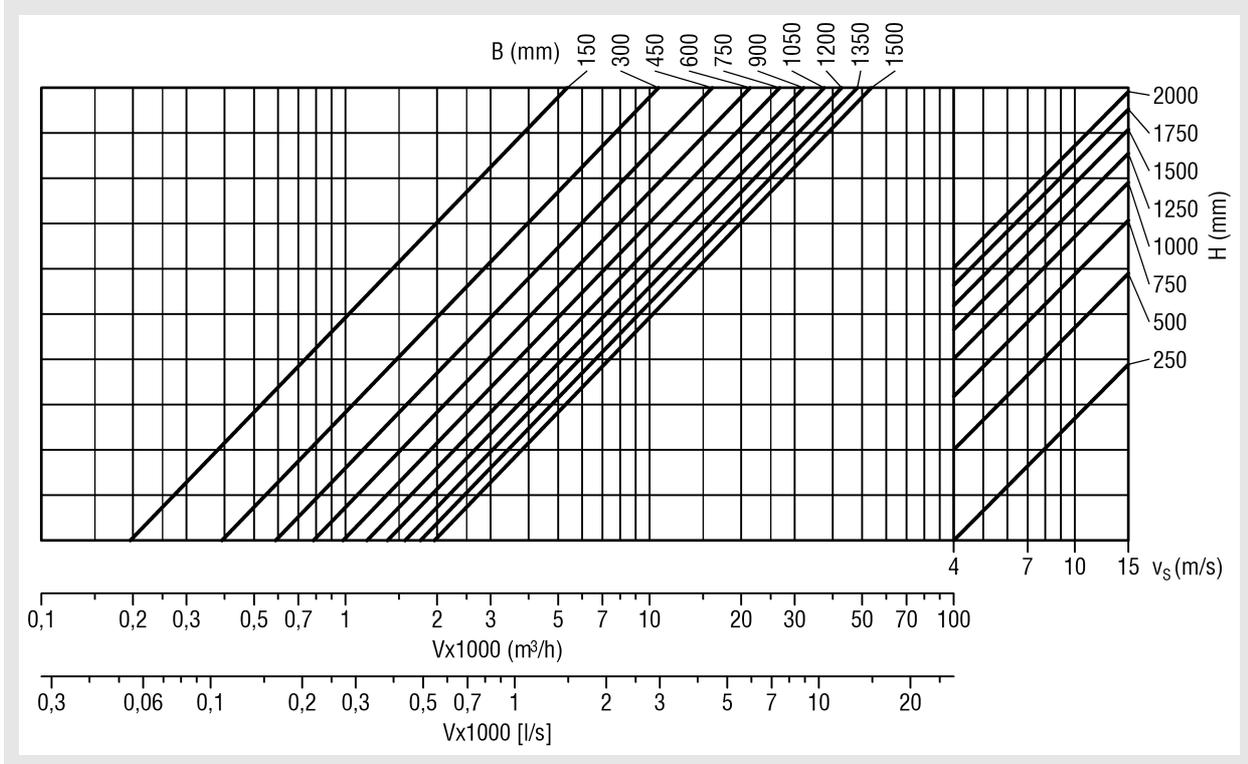
Flow pattern according to connecting pieces min. 1.5 x largest length of the silencer cross-section (B or H). In general, it must be taken into account that when determining the pressure loss and flow generated noise, it is assumed that the flow pattern through the silencer is homogeneous and uniform. A turbulent flow pattern in the silencers can result in damage to the sound-absorbing baffles.

Mineral wool silencer MWS / MWK

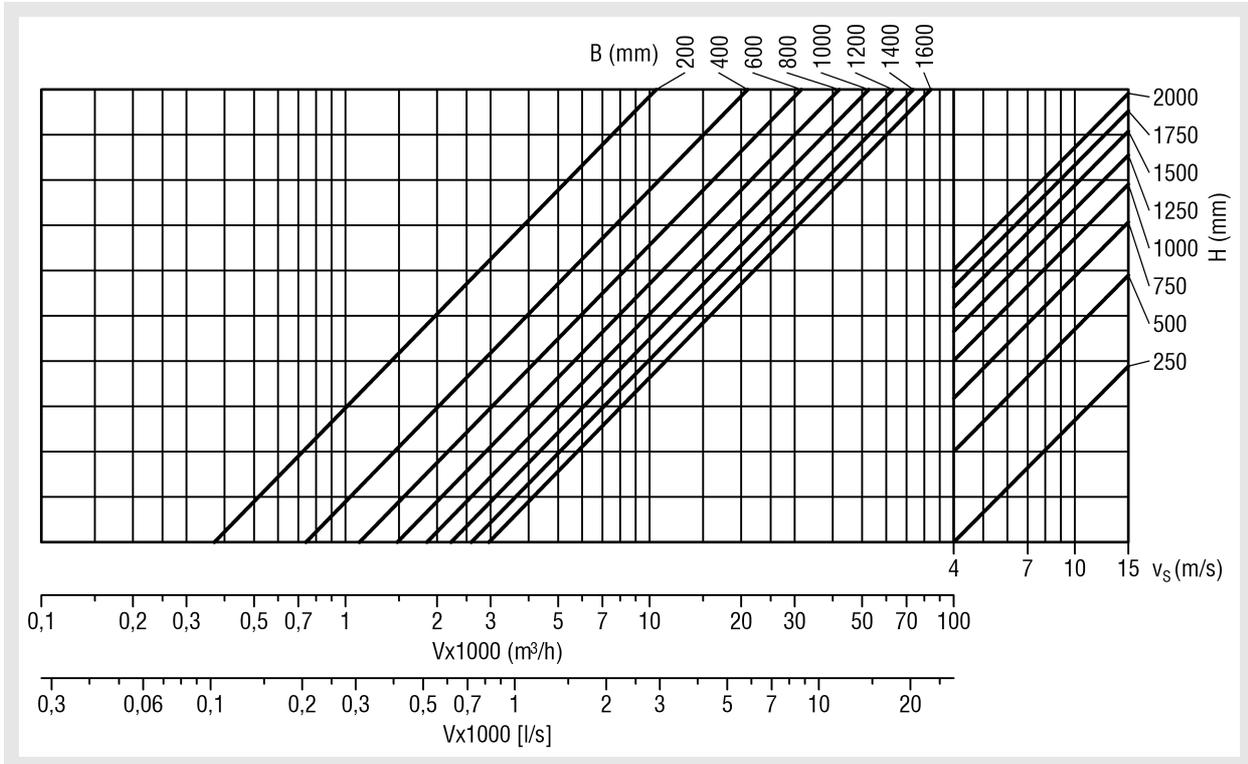
Technical data

Gap velocity and volumetric flow

MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 100/50 (baffle width/gap width)

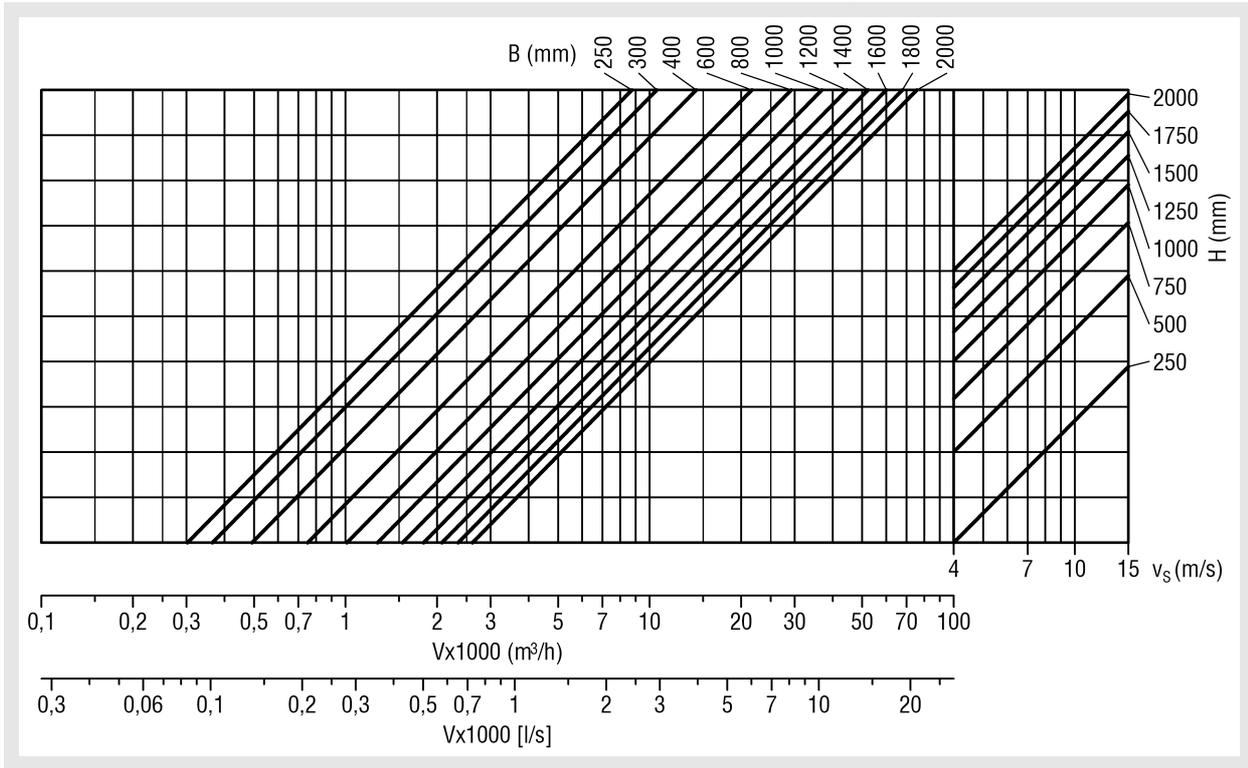


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 100/100 (baffle width/gap width)

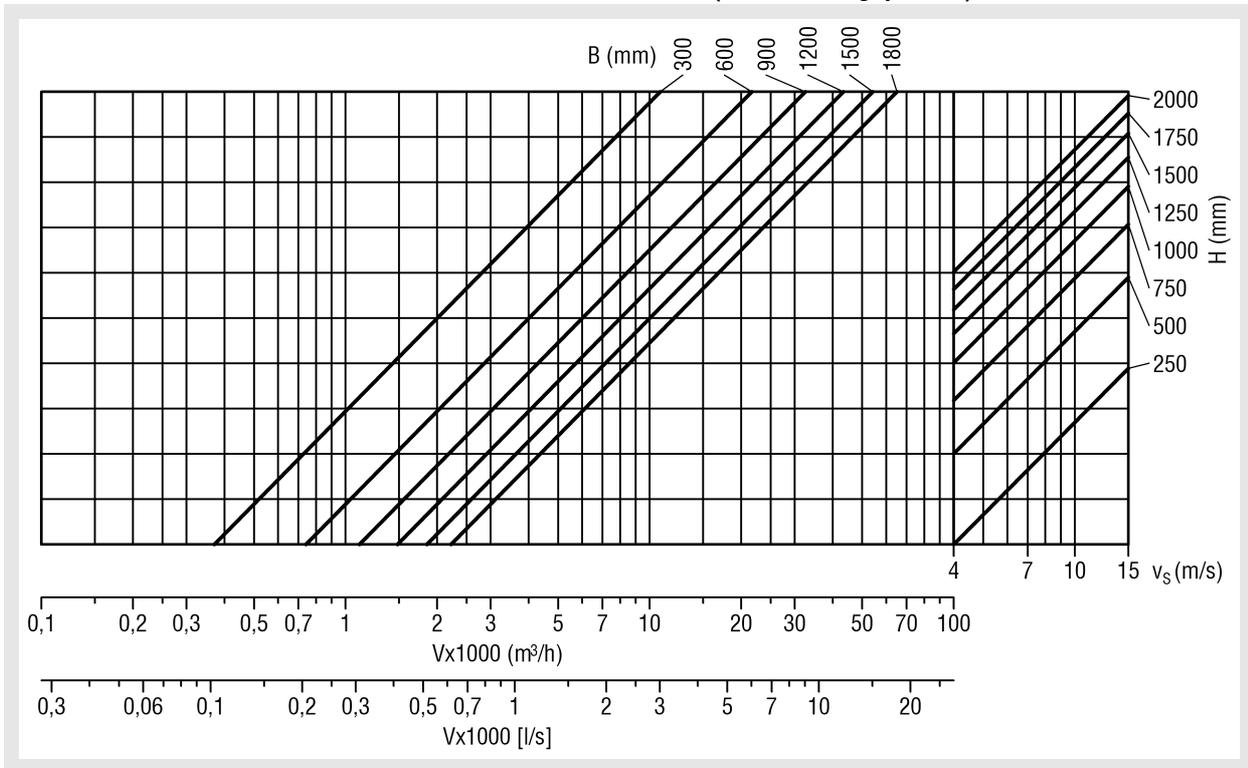


Mineral wool silencer MWS / MWK

MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 200/50 (baffle width/gap width)

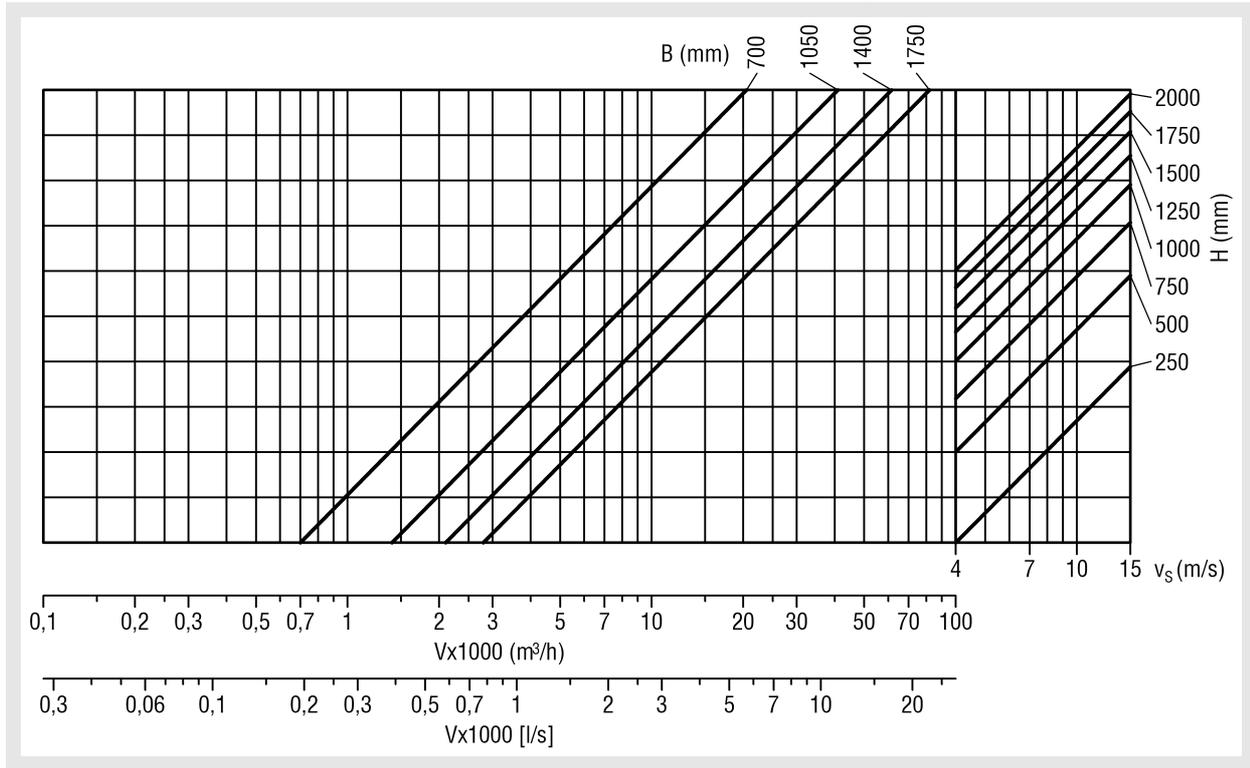


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 200/100 (baffle width/gap width)



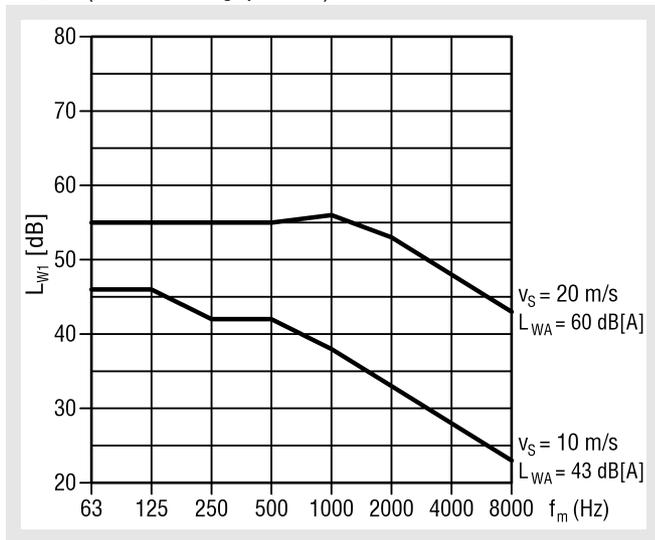
Mineral wool silencer MWS / MWK

MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 200/200 (baffle width/gap width)

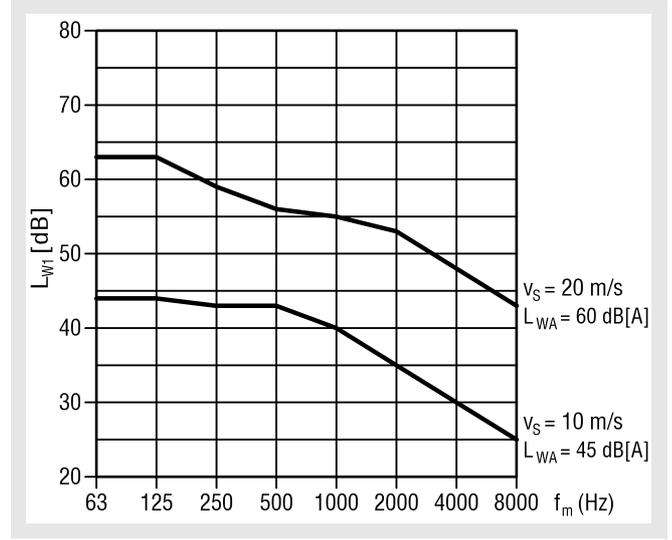


Flow generated noise

MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
100/50 (baffle width/gap width)

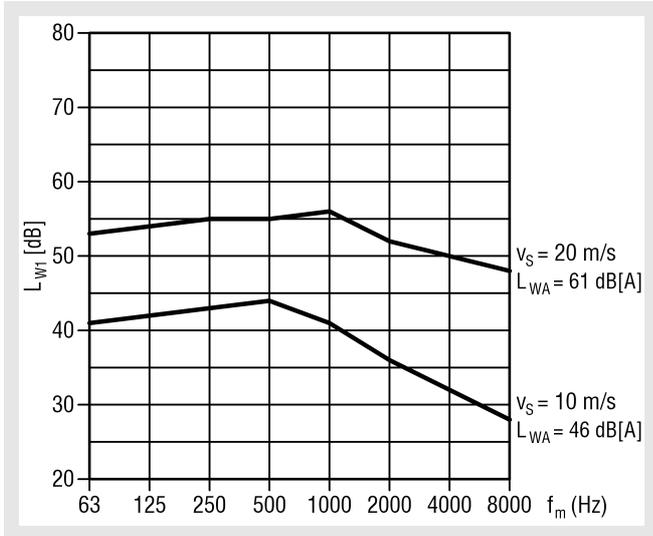


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
100/100 (baffle width/gap width)

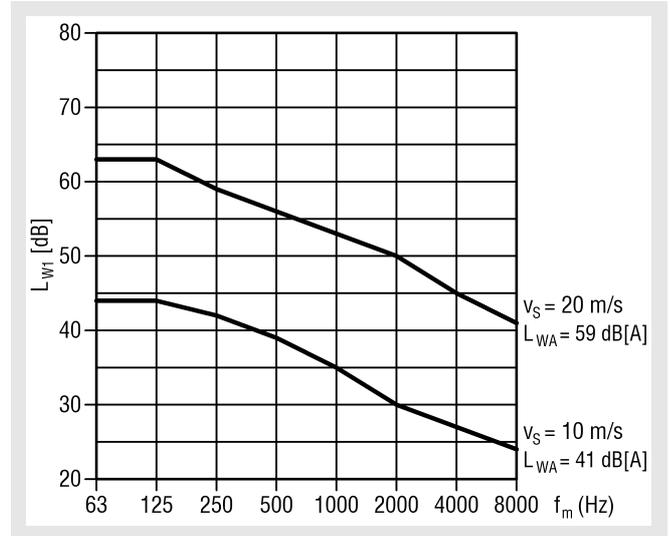


Mineral wool silencer MWS / MWK

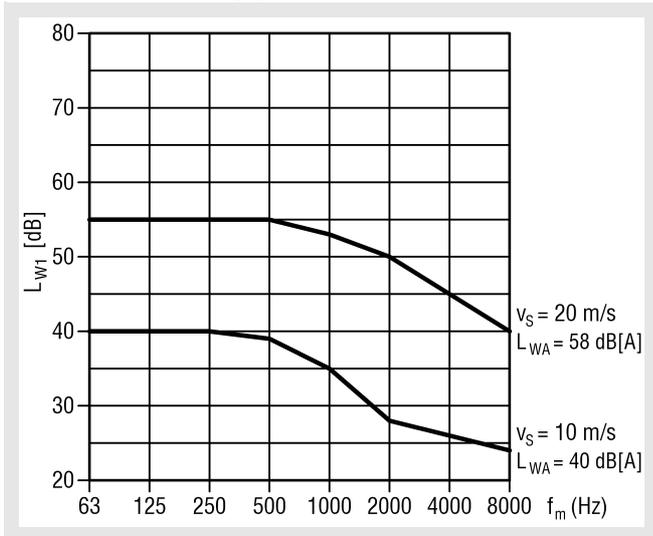
MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
200/50 (baffle width/gap width)



MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
200/200 (baffle width/gap width)



MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
200/100 (baffle width/gap width)



Correction factor (for flow generated noise)

Duct cross-section (m ²)	KF [dB]
0,053	-13
0,1	-10
0,2	-7
0,25	-6
0,3	-5
0,4	-5
0,5	-3
0,8	-1
1	0
1,5	2
2	3
2,5	4
4,1	6
8	9
10	10

$$L_W = L_{W1} + KF$$

Mineral wool silencer MWS / MWK

Insertion loss and pressure loss MWS-OB-... and MWS-LL-... 100

		D_e (dB/Okt)								Δp_t (Pa)								
		f_m (Hz)								v_s (m/s)								
		63	125	250	500	1000	2000	4000	8000	6	7	8	9	10	11	12	13	
L=500	S (mm)	50	1	3	7	12	25	30	18	14	15	18	23	29	34	41	49	57
		60	1	2	6	11	23	27	16	13	13	15	19	24	29	36	41	48
		70	0	2	5	10	22	25	14	11	11	13	17	21	25	31	36	42
		80	0	1	4	9	20	22	13	10	<10	12	15	19	23	27	32	37
		90	0	1	3	8	19	20	11	9	<10	<10	13	17	20	24	28	33
		100	0	1	2	7	17	18	10	7	<10	<10	12	15	18	22	26	30
L=1000	S (mm)	50	2	6	16	26	48	48	33	26	17	21	26	32	39	47	55	64
		60	2	5	15	24	45	45	30	24	15	17	22	27	33	40	47	55
		70	1	5	13	22	43	43	28	20	13	15	19	24	29	35	40	47
		80	1	4	12	20	40	41	26	18	11	13	17	21	26	31	36	42
		90	1	4	11	19	38	39	24	15	<10	12	15	19	23	28	32	37
		100	1	3	9	18	36	37	22	13	<10	11	13	17	21	25	29	34
L=1500	S (mm)	50	3	9	21	37	50	50	42	31	19	23	28	36	43	52	61	70
		60	2	8	19	34	50	50	39	27	16	19	24	30	37	44	51	60
		70	2	7	17	32	50	50	36	24	14	16	21	26	32	38	45	52
		80	2	6	16	30	50	50	34	21	12	15	18	23	28	34	39	46
		90	2	5	14	28	50	50	32	19	<10	13	16	21	25	30	36	41
		100	1	4	13	26	50	49	30	16	<10	12	15	19	23	28	32	38
L=2000	S (mm)	50	3	11	18	41	50	50	50	38	20	24	30	38	46	56	66	77
		60	3	10	25	38	50	50	46	34	17	20	26	32	39	47	55	63
		70	3	9	23	36	50	50	42	30	15	18	22	28	34	41	48	57
		80	2	8	20	34	50	50	39	26	13	16	20	25	30	36	42	50
		90	2	7	18	32	50	50	36	23	12	14	17	22	27	32	38	44
		100	2	7	16	31	50	50	34	20	<10	<10	16	20	24	29	34	40
L=2500	S (mm)	50	4	12	31	44	50	50	50	41	22	26	32	41	49	60	71	83
		60	3	13	28	42	50	50	50	37	18	22	27	35	41	51	59	67
		70	3	13	26	40	50	50	48	33	16	19	24	30	36	43	51	60
		80	3	12	23	38	50	50	45	30	14	17	21	26	32	39	45	53
		90	2	10	21	36	50	50	41	26	13	15	19	24	29	35	40	48
		100	2	8	19	34	50	50	37	23	11	13	17	22	26	32	37	43
L=3000	S (mm)	50	5	16	38	>50	>50	>50	>50	>50	24	29	35	45	54	66	78	91
		60	4	14	34	>50	>50	>50	>50	49	20	24	30	39	45	56	65	74
		70	4	13	31	>50	>50	>50	>50	43	18	21	26	33	40	47	56	66
		80	4	11	29	>50	>50	>50	>50	38	15	19	23	29	35	43	50	58
		90	4	9	25	50	>50	>50	>50	34	14	17	21	26	32	39	44	53
		100	2	7	23	47	>50	>50	>50	29	12	14	19	24	29	35	41	47

Mineral wool silencer MWS / MWK

Insertion loss and pressure loss MWS-MB-... and MWS-LB-... 100

		D_e (dB/Okt)								Δp_t (Pa)								
		f_m (Hz)								v_s (m/s)								
		63	125	250	500	1000	2000	4000	8000	6	7	8	9	10	11	12	13	
L=500	S (mm)	50	1	4	9	13	19	19	15	13	15	18	23	29	34	41	49	57
		60	1	4	8	12	17	17	13	11	13	15	19	24	29	36	41	48
		70	1	3	7	11	16	15	12	10	11	13	17	21	25	31	36	42
		80	0	3	6	10	14	13	10	8	<10	12	15	19	23	27	32	37
		90	0	2	6	9	13	12	9	7	<10	<10	13	17	20	24	28	33
		100	0	2	5	9	12	11	8	6	<10	<10	12	15	18	22	26	30
L=1000	S (mm)	50	2	7	19	33	45	40	24	19	17	21	26	32	39	47	55	64
		60	2	7	17	30	40	34	20	16	15	17	22	27	33	40	47	55
		70	2	6	16	28	36	30	17	14	13	15	19	24	29	35	40	47
		80	2	5	15	25	32	25	15	12	11	13	17	21	26	31	36	42
		90	1	5	14	23	28	22	13	11	<10	12	15	19	23	28	32	37
		100	1	4	12	22	25	18	11	9	<10	11	13	17	21	25	29	34
L=1500	S (mm)	50	3	11	27	43	50	50	31	22	19	23	28	36	43	52	61	70
		60	3	10	25	40	50	46	27	19	16	19	24	30	37	44	51	60
		70	2	9	23	37	48	40	23	17	14	16	21	26	32	38	45	52
		80	2	8	21	34	44	35	20	14	12	15	18	23	28	34	39	46
		90	2	7	19	32	40	30	17	12	<10	13	16	21	25	30	36	41
		100	2	6	18	30	36	25	14	10	<10	12	15	19	23	28	32	38
L=2000	S (mm)	50	4	14	34	49	50	50	38	28	20	24	30	38	46	56	66	77
		60	3	13	31	46	50	50	32	24	17	20	26	32	39	47	55	63
		70	3	12	28	43	50	48	28	20	15	18	22	28	34	41	48	57
		80	3	11	26	40	50	42	24	17	13	16	20	25	30	36	42	50
		90	2	10	24	37	48	36	20	14	12	14	17	22	27	32	38	44
		100	2	9	22	35	44	31	17	12	<10	13	16	20	24	29	34	40
L=2500	S (mm)	50	5	15	38	50	50	50	45	31	22	26	32	41	49	60	71	83
		60	4	15	35	50	50	50	39	27	18	22	27	35	41	51	59	67
		70	4	14	32	47	50	50	34	24	16	19	24	30	36	43	51	60
		80	3	13	30	44	50	47	29	21	14	17	21	26	32	39	45	53
		90	3	13	28	42	50	41	25	18	13	15	19	24	29	35	40	48
		100	3	12	26	39	49	35	21	15	11	13	17	22	26	32	37	43
L=3000	S (mm)	50	5	20	49	50	50	50	40	40	24	29	35	45	54	66	78	91
		60	5	18	45	50	50	50	49	34	20	24	30	39	45	56	65	74
		70	4	16	41	50	50	50	41	31	18	21	26	33	40	47	56	66
		80	4	14	38	50	50	50	36	25	15	19	23	29	35	43	50	58
		90	4	13	34	50	50	50	31	22	14	17	21	26	32	39	44	53
		100	4	11	32	50	50	45	25	18	12	14	19	24	29	35	41	47

Mineral wool silencer MWS / MWK

Insertion loss and pressure loss MWS-OB-... and MWS-LL-... 200

		D_e (dB/Okt)								Δp_t (Pa)								
		f_m (Hz)								v_s (m/s)								
		63	125	250	500	1000	2000	4000	8000	6	7	8	9	10	11	12	13	
L=500	S (mm)	50	4	6	14	25	40	38	23	20	15	18	22	28	34	41	48	56
		60	3	5	12	23	36	34	21	18	14	16	20	25	31	37	43	51
		80	2	4	10	20	29	27	18	13	12	14	17	22	26	31	37	43
		100	1	3	9	18	23	21	16	10	<10	12	15	19	23	28	32	38
		120	1	3	8	16	21	19	12	8	<10	11	13	17	21	25	29	34
		140	1	2	7	14	18	16	9	7	<10	10	12	15	19	23	26	31
		160	1	2	7	12	16	14	7	6	<10	<10	11	14	17	21	24	29
		180	1	2	6	11	15	13	7	6	<10	<10	11	13	16	20	23	27
		200	1	2	6	10	14	11	7	6	<10	<10	10	13	15	18	21	25
L=1000	S (mm)	50	5	9	19	31	46	44	29	24	18	20	26	33	39	48	55	64
		60	5	8	18	30	44	43	28	22	16	18	23	29	36	43	50	58
		80	3	8	16	30	42	42	27	18	13	16	19	25	30	37	42	49
		100	2	7	15	29	40	41	26	15	12	14	17	22	26	32	37	44
		120	2	7	14	27	36	36	21	12	<10	12	15	19	24	29	33	39
		140	2	6	13	25	33	31	17	11	<10	11	14	18	21	26	31	36
		160	2	5	13	23	30	27	14	9	<10	10	13	16	20	24	28	33
		180	2	5	12	21	27	23	13	8	<10	<10	12	15	19	23	26	31
		200	1	4	11	19	25	20	11	7	<10	<10	12	14	17	21	25	29
L=1500	S (mm)	50	6	11	23	37	>50	>50	36	27	19	23	28	36	44	52	61	74
		60	5	11	23	37	50	50	36	25	17	20	26	33	39	47	55	64
		80	4	11	22	35	50	50	35	22	15	17	22	27	33	40	46	54
		100	3	10	22	34	49	50	34	19	13	15	19	24	29	35	41	48
		120	3	10	20	33	46	46	28	16	12	14	17	22	26	32	37	44
		140	2	9	19	32	44	42	23	13	<10	13	15	20	24	29	34	40
		160	2	8	17	31	41	37	19	11	<10	12	14	18	22	27	31	37
		180	2	7	16	28	38	32	16	9	<10	11	13	17	21	25	29	34
		200	2	6	15	26	34	26	13	8	<10	10	13	16	19	23	27	32
L=2000	S (mm)	50	7	14	28	43	>50	>50	43	31	21	25	31	39	47	56	67	84
		60	6	14	28	43	50	50	42	29	19	22	28	35	42	51	58	66
		80	5	14	28	42	50	50	41	26	16	18	23	30	36	43	50	58
		100	4	13	28	41	50	50	40	23	14	16	20	26	32	38	44	51
		120	4	12	26	41	50	50	34	19	13	15	18	23	29	35	40	46
		140	3	11	23	40	47	47	28	16	11	14	17	21	26	31	37	43
		160	3	10	22	39	44	42	23	13	<10	13	15	20	24	29	34	39
		180	3	9	20	37	43	37	20	11	<10	12	15	18	22	27	32	37
		200	3	8	19	34	42	32	16	9	<10	11	14	17	21	25	30	35
L=2500	S (mm)	50	7	17	33	50	>50	>50	>50	35	22	26	33	41	50	60	73	93
		60	7	17	34	50	50	50	49	32	20	23	30	37	45	54	63	73
		80	6	16	35	49	50	50	47	29	17	19	25	31	38	46	53	60
		100	5	16	36	49	50	50	46	26	15	17	22	27	33	40	47	55
		120	5	15	31	48	50	50	38	22	13	16	19	25	30	36	42	49
		140	4	13	30	48	50	50	31	18	12	14	17	23	27	33	39	46
		160	4	12	29	45	48	47	26	15	<10	13	16	21	25	31	36	42
		180	3	12	27	42	47	43	22	13	<10	12	15	19	23	29	33	39
		200	3	9	25	42	50	38	19	10	<10	12	14	18	22	27	31	37
L=3000	S (mm)	50	11	20	41	>50	>50	>50	>50	49	24	29	36	45	55	66	80	102
		60	9	20	41	>50	>50	>50	>50	45	22	25	33	41	50	59	69	80
		80	7	20	40	>50	>50	>50	>50	40	19	21	28	34	42	51	58	66
		100	5	18	40	>50	>50	>50	>50	34	17	19	24	30	36	44	52	61
		120	5	18	36	>50	>50	>50	50	29	14	18	21	28	33	40	46	54
		140	4	16	31	>50	>50	>50	34	20	13	15	19	25	30	36	43	51
		160	4	14	31	>50	>50	>50	34	20	11	14	18	23	28	34	40	46
		180	4	13	29	50	>50	>50	29	16	>10	13	17	21	25	32	36	43
		200	4	11	27	47	>50	47	23	14	>10	13	15	20	24	30	34	41

Mineral wool silencer MWS / MWK

Insertion loss and pressure loss MWS-MB-... and MWS-LB-... 200

		D_e (dB/Okt)								Δp_t (Pa)								
		f_m (Hz)								v_s (m/s)								
		63	125	250	500	1000	2000	4000	8000	6	7	8	9	10	11	12	13	
L=500	S (mm)	50	3	7	22	21	26	25	18	12	15	18	22	28	34	41	48	56
		60	2	6	19	18	22	21	14	10	14	16	20	25	31	37	43	51
		80	2	5	15	14	18	15	11	8	12	14	17	22	26	31	37	43
		100	2	4	13	12	16	13	9	7	<10	12	15	19	23	28	32	38
		120	1	3	11	11	14	11	8	7	<10	11	13	17	21	25	29	34
		140	1	3	10	9	12	9	7	6	<10	10	12	15	19	23	26	31
		160	1	3	8	8	11	8	7	6	<10	<10	11	14	17	21	24	29
		180	1	4	8	8	10	8	7	5	<10	<10	11	13	16	20	23	27
		200	1	4	7	7	10	9	7	5	<10	<10	10	13	15	18	21	25
L=1000	S (mm)	50	7	17	34	36	41	43	29	23	18	20	26	33	39	48	55	64
		60	5	15	30	31	36	36	24	19	16	18	23	29	36	43	50	58
		80	4	13	26	26	30	27	18	14	13	16	19	25	30	37	42	49
		100	4	12	23	23	27	23	15	12	12	14	17	22	26	32	37	44
		120	3	11	21	20	24	19	13	11	<10	12	15	19	24	29	33	39
		140	2	10	19	17	21	16	11	9	<10	11	14	18	21	26	31	36
		160	2	9	17	16	19	13	10	8	<10	10	13	16	20	24	28	33
		180	2	9	16	15	17	12	9	7	<10	<10	12	15	19	23	26	31
		200	2	9	14	14	15	11	9	7	<10	<10	12	14	17	21	25	29
L=1500	S (mm)	50	8	24	45	49	>50	>50	36	27	19	23	28	36	44	52	61	74
		60	6	22	40	43	47	44	30	23	17	20	26	33	39	47	55	64
		80	5	20	35	35	41	36	23	17	15	17	22	27	33	40	46	54
		100	4	19	32	32	38	31	19	14	13	15	19	24	29	35	41	48
		120	4	17	28	28	34	27	16	12	12	14	17	22	26	32	37	44
		140	4	16	25	24	29	22	13	11	<10	13	15	20	24	29	34	40
		160	3	14	23	21	26	18	11	10	<10	12	14	18	22	27	31	37
		180	3	14	21	20	24	16	11	9	<10	11	13	17	21	25	29	34
		200	3	13	19	18	21	13	10	8	<10	10	13	16	19	23	27	32
L=2000	S (mm)	50	10	29	49	>50	>50	>50	45	33	21	25	31	39	47	56	67	84
		60	8	27	45	48	50	48	37	27	19	22	28	35	42	51	58	66
		80	6	25	40	41	48	41	28	21	16	18	23	30	36	43	50	58
		100	5	24	38	38	45	37	24	17	14	16	20	26	32	38	44	51
		120	5	22	34	33	40	32	20	15	13	15	18	23	29	35	40	46
		140	5	20	30	29	35	27	16	13	11	14	17	21	26	31	37	43
		160	4	19	27	26	31	23	14	12	<10	13	15	20	24	29	34	39
		180	4	18	25	25	28	20	13	11	<10	12	15	18	22	27	32	37
		200	4	17	24	24	26	17	12	10	<10	11	14	17	21	25	30	35
L=2500	S (mm)	50	11	31	>50	>50	>50	>50	>50	38	22	26	33	41	50	60	73	93
		60	9	29	50	50	50	50	43	33	20	23	30	37	45	54	63	73
		80	8	27	49	50	50	46	35	28	17	19	25	31	38	46	53	60
		100	7	26	48	48	50	42	30	25	15	17	22	27	33	40	47	55
		120	6	24	43	42	47	37	25	20	13	16	19	25	30	36	42	49
		140	6	22	38	37	41	31	20	16	12	14	17	23	27	33	39	46
		160	5	21	34	33	37	27	17	13	<10	13	16	21	25	31	36	42
		180	5	19	32	31	34	25	16	13	<10	12	15	19	23	29	33	39
		200	5	18	30	30	31	22	15	13	<10	12	14	18	22	27	31	37
L=3000	S (mm)	50	14	43	>50	>50	>50	>50	>50	49	24	29	36	45	55	66	80	102
		60	11	40	>50	>50	>50	>50	>50	41	22	25	33	41	50	59	69	80
		80	9	36	>50	>50	>50	>50	41	31	19	21	28	34	42	51	58	66
		100	7	34	>50	>50	>50	>50	34	25	17	19	24	30	36	44	52	61
		120	7	31	50	50	>50	49	29	22	14	18	21	28	33	40	46	54
		140	7	29	45	43	>50	40	23	20	13	15	19	25	30	36	43	51
		160	5	25	41	38	47	32	20	18	11	14	18	23	28	34	40	46
		180	5	25	38	36	43	29	20	16	>10	13	17	21	25	32	36	43
		200	5	23	34	32	38	23	18	14	>10	13	15	20	24	30	34	41

Mineral wool silencer MWS / MWK

Legend

B1	(mm)	=	Silencer width
H1	(mm)	=	Silencer height
L1	(mm)	=	Silencer length
H2	(mm)	=	Baffle height
L2	(mm)	=	Baffle length
S	(mm)	=	Gap width
D	(mm)	=	Baffle width
V	(m ³ /h)	=	Volumetric flow
v _s	(m/s)	=	Gap velocity
f _m	(Hz)	=	Octave centre frequency
L _W	[dB]	=	Sound power level
L _{WA}	[dB(A)]	=	A-rated sound power level
L _{W1}	[dB]	=	Sound power level, relative to 1 m ² of duct cross-section
KF	(-)	=	Correction factor
D _e	(dB/Okt)	=	Insertion loss
Δp _t	(Pa)	=	Pressure loss
n	(-)	=	Number of baffles

Mineral wool silencer MWS / MWK

Order code MWK

01	02	03	04	05	06	07
Type	Model	Height	Length	Baffle thickness	Material	Paint
Example						
MWK	-OB	-1000	-1000	-100	-SV	-0000

Sample

MWK-OB-1000-1000-100-SV-0000

Mineral wool sound-absorbing baffle I without mineral fibre board cover I Height 1000 mm I Length 1000 mm I Baffle thickness 100 mm I Galvanised sheet steel I without coating

Order details

01 - Type

MWK = Mineral wool sound-absorbing baffle

02 - Model

- OB = without mineral fibre board cover (standard)
- MB = with sheet cover (offset on one side)
- LL = with complete perforated sheet cover
- LB = with sheet and perforated plate cover (offset on one side)

03 - Height

xxxx = freely selectable (always with 4 digits in mm), min.
0150 mm,
max. 3000 mm

04 - Length

xxxx = freely selectable (always with 4 digits in mm), min.
0500 mm,
max. 3000 mm

05 - Baffle thickness

100 = 100 mm
200 = 200 mm

06 - Material

SV = Galvanised sheet steel (standard)

07 - Paint

0000 = Without paint (standard)

Mineral wool silencer MWS / MWK

Order code MWS

01	02	03	04	05	06	07	08
Type	Model	Width	Height	Length	Baffle thickness	Number of baffles	Material
Example							
MWS	-OB	-0250	-1500	-1250	-200	-01	-SV

09	10
Paint	Profile connection frame
-0000	-M3

Sample

MWS-OB-0250-1500-1250-200-01-SV-0000-M3

Mineral wool baffle silencer I without mineral fibre board cover I width 250 mm I height 1500 mm I length 1250 mm I baffle thickness 200 mm I number of baffles 01 I galvanised sheet steel I without coating I with flange profile M3

Order details

01 - Type

MWS = Mineral wool baffle silencer

02 - Model

OB = without mineral fibre board cover (standard)
 MB = with sheet cover (offset on one side)
 LL = with complete perforated sheet cover
 LB = with sheet and perforated plate cover (offset on one side)

03 - Width

xxxx = freely selectable (always with 4 digits in mm), min. 0140 mm, max 6400 mm

04 - Height

xxxx = freely selectable (always with 4 digits in mm), min. 0150 mm, max. 3000 mm

05 - Length

xxxx = freely selectable (always with 4 digits in mm), min. 0500 mm, max. 3000 mm

06 - Baffle thickness

100 = 100 mm
 200 = 200 mm

07 - Number of baffles

xx = 1-16 baffles

08 - Material

SV = Galvanised sheet steel (standard)

09 - Paint

0000 = Without paint (standard)

10 - Profile connection frame

M3 = Flange profile M3 (standard)

Mineral wool silencer MWS / MWK

Specification texts

Silencing baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The mineral fibre boards, weight per unit volume $> 30 \text{ kg/m}^3$, are covered with unmetabolisable glass silk and are non-flammable according to DIN EN 13501-1 class 1. The baffle frame is made of galvanised sheet steel.

Baffles measured according to DIN EN ISO 7235. Manufactured according to the hygienic standards of VDI 6022-1.

Product: SCHAKO type **MWK-OB-100/-200**

Silencing baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The mineral fibre boards, weight per unit volume $> 30 \text{ kg/m}^3$, are covered with unmetabolisable glass silk and are non-flammable according to DIN EN 13501-1 class 1. Covered with resonance plate offset on one side. The baffle frame and sectioned sheet are made of galvanised sheet steel.

Baffles measured according to DIN EN ISO 7235. Manufactured according to the hygienic standards of VDI 6022-1.

Product: SCHAKO type **MWK-MB-100/-200**

Silencing baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The mineral fibre boards, weight per unit volume $> 30 \text{ kg/m}^3$, are covered with unmetabolisable glass silk and are non-flammable according to DIN EN 13501-1 class 1. Both sides covered with a perforated plate. The baffle frame and perforated sheet are made of galvanised sheet steel.

Baffles measured according to DIN EN ISO 7235. Manufactured according to the hygienic standards of VDI 6022-1.

Product: SCHAKO type **MWK-LL-100/-200**

Silencing baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The mineral fibre boards, weight per unit volume $> 30 \text{ kg/m}^3$, are covered with unmetabolisable glass silk and are non-flammable according to DIN EN 13501-1 class 1. With resonance plate and perforated plate cover offset on one side. The baffle frame, sectioned sheet and perforated sheet are made of galvanised sheet steel.

Baffles measured according to DIN EN ISO 7235. Manufactured according to the hygienic standards of VDI 6022-1.

Product: SCHAKO type **MWK-LB-100/-200**

Material:

- Galvanised sheet steel (standard) (-SV)

Baffle silencer with integrated baffles type MWS-OB-... with frame profile in nozzle design and with mineral fibre boards covered with unmetabolisable glass silk - weight per unit volume $> 30 \text{ kg/m}^3$, non-flammable according to EN 13501-1 class 1.

Duct housing made of galvanised sheet steel with airtight saddle joint. Airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa.

Flange profile M3 on both sides. Manufactured according to the hygienic standards of VDI 6022-1. The baffle frame is made of galvanised sheet steel.

Product: SCHAKO type **MWS-OB-100/-200**

Baffle silencer, with integrated baffles type MWS-MB-... with frame profile in nozzle design and with mineral fibre boards covered with unmetabolisable glass silk - weight per unit volume $> 30 \text{ kg/m}^3$, non-flammable according to DIN EN 13501-1 class 1. Duct housing made of galvanised sheet steel with airtight saddle joint. Airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa.

Flange profile M3 on both sides. Manufactured according to the hygienic standards of VDI 6022-1. The baffle frame and sectioned sheet are made of galvanised sheet steel.

Product: SCHAKO type **MWS-MB-100/-200**

Baffle silencer, with integrated baffles type MWS-LL-... with frame profile in nozzle design and with mineral fibre boards covered with unmetabolisable glass silk - weight per unit volume $> 30 \text{ kg/m}^3$, non-flammable.

Duct housing made of galvanised sheet steel with airtight saddle joint. Airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa.

Flange profile M3 on both sides. Manufactured according to the hygienic standards of VDI 6022-1. The baffle frame and perforated plate are made of galvanised sheet steel.

Product: SCHAKO type **MWS-LL-100/-200**

Baffle silencer with integrated baffles type MWS-LB-... with frame profile in nozzle design and with mineral fibre boards covered with unmetabolisable glass silk - weight per unit volume $> 30 \text{ kg/m}^3$, non-flammable according to EN 13501-1 class 1.

Duct housing made of galvanised sheet steel with airtight saddle joint. Airtightness class C according to DIN EN 15727, internal pressure up to max. 1000 Pa.

Flange profile M3 on both sides. Manufactured according to the hygienic standards of VDI 6022-1. The baffle frame, sectioned sheet and perforated plate are made of galvanised sheet steel.

Product: SCHAKO type **MWS-LB-100/-200**

Material:

- Galvanised sheet steel (standard) (-SV)

Accessories:

- Flange profile M2/ M4 (-M2/-M4)