



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 mineral fibre boards are covered with unmetabolisable glass silk, i.e., no bacteria can deposit on the glass silk, and are not flammable according to DIN 4102 A1. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.

For use at a main interfering frequency between 500 Hz and 8000 Hz. The baffle plate thickness is 0.5 mm. The baffle frame is made of galvanised sheet steel.

Baffle silencer type MWS-OB-...

Baffle silencer with integrated baffles type MWK-OB. The baffle frame is made of galvanised sheet steel. Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max. Metu profile M30 on both sides. Manufactured 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 mineral fibre boards are covered with unmetabolisable glass silk, i.e., no bacteria can deposit on the glass silk, and are not flammable according to DIN 4102 A1. Both sides covered with perforated sheet steel $t = 0.5$ mm. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.

For use at a main interfering frequency between 500 Hz and 8000 Hz. The baffle plate thickness is 0.5 mm. The baffle frame and perforated sheet are made of galvanised sheet steel.

Baffle silencer type MWS-LL

Baffle silencer with integrated baffles type MLK-LL. The baffle frame and perforated sheet are made of galvanised sheet steel. Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max. Metu profile M30 on both sides. Manufactured to the hygienic standards of VDI 6022. For use at a main interfering frequency of 500 Hz to 8000 Hz.

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MWK-MB / MWS-MB



Silencing baffles type MWK-MB

Baffles with frame profile in nozzle design for substantial reduction of the pressure loss. The mineral fibre boards are covered with unmetabolisable glass silk, i.e., no bacteria can deposit on the glass silk, and are not flammable according to DIN 4102 A1. Covered with sheet steel $t = 0.5$ mm offset on one side. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.

For use at a main interfering frequency between 63 Hz and 500 Hz. The baffle plate thickness is 0.5 mm. The baffle frame and sectioned sheet are made of galvanised sheet steel.

Baffle silencer type MWS-MB

Baffle silencer with integrated baffles type MWK-MB. The baffle frame and sectioned sheet are made of galvanised sheet steel. Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max. Metu profile M30 on both sides. Manufactured 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. The mineral fibre boards are covered with unmetabolisable glass silk, i.e., no bacteria can deposit on the glass silk, and are not flammable according to DIN 4102 A1. Covered with sheet steel $t = 0.5$ mm offset on one side. Additionally with perforated cover $t = 0.5$ mm of the uncovered surface areas.

Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.

For use at a main interfering frequency between 63 Hz and 500 Hz. The baffle plate thickness is 0.5 mm. The baffle frame, sectioned sheet and perforated sheet are made of galvanised sheet steel.

Baffle silencer type MWS-LB

Baffle silencer with integrated baffles type MWK-LB. The baffle frame, sectioned sheet and perforated plate are made of galvanised sheet steel. Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max. Metu profile M30 on both sides. Manufactured 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 reduce the pressure loss by up to 55% 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 to VDI 6022. The objective of the VDI 6022 "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. The hygienic qualification tests and the data verified within the scope of the RAL quality inspection are basic quality characteristics of our sound isolation components.

The mineral wool silencers type MWS-... have been tested successfully by TÜV-Süd Life Service in accordance with the following rules:

- **VDI 6022, Sheet 1: Hygienic requirements of ventilation and air-conditioning systems**
- **VDI 6022, Sheet 2: Hygienic requirements of ventilation and air-conditioning systems - Measurement methods and investigations during hygienic controls and hygienic inspections**
- **DIN 1946, Sheet 2: Air-conditioning technology - Health requirements**

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)



The baffle silencers from SCHAKO have been awarded the RAL quality mark 595 by the RAL Quality Association. The SCHAKO KG is a member of the RAL Quality Association for Silencers

Construction

Jacket

- Galvanised sheet steel (-SV) (standard)

Frame

- Galvanised sheet steel (-SV) (standard)

Model

- MWK-OB-... - Silencing baffle made of mineral fibre boards with sheet steel frame
- MWK-MB-... - Silencing baffle made of mineral fibre board with sheet steel frame, covered with sheet steel 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-... - Silencing baffle made of mineral fibre board with sheet steel frame, covered with sheet steel offset on one side, with perforated cover of the uncovered surface areas.
- 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

METU profile M2/M4 (-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. For details, see ATEX list.

If desired, also available as MWK-OB-...-300! Prices upon request.

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

Model with additional film and corrugated wire is also possible if desired. Prices upon request.

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

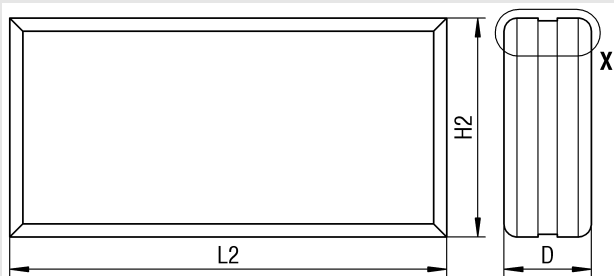
Attention: Stainless steel version is not available in nozzle design. Design only possible in folded form

Mineral wool silencer MWS / MWK

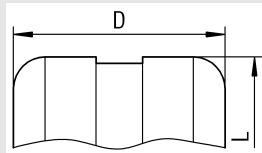
Models and dimensions

Dimensions

Silencing baffle type MWK-...

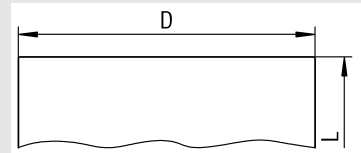


Detail X at D=100/200 and H2≥200



round design

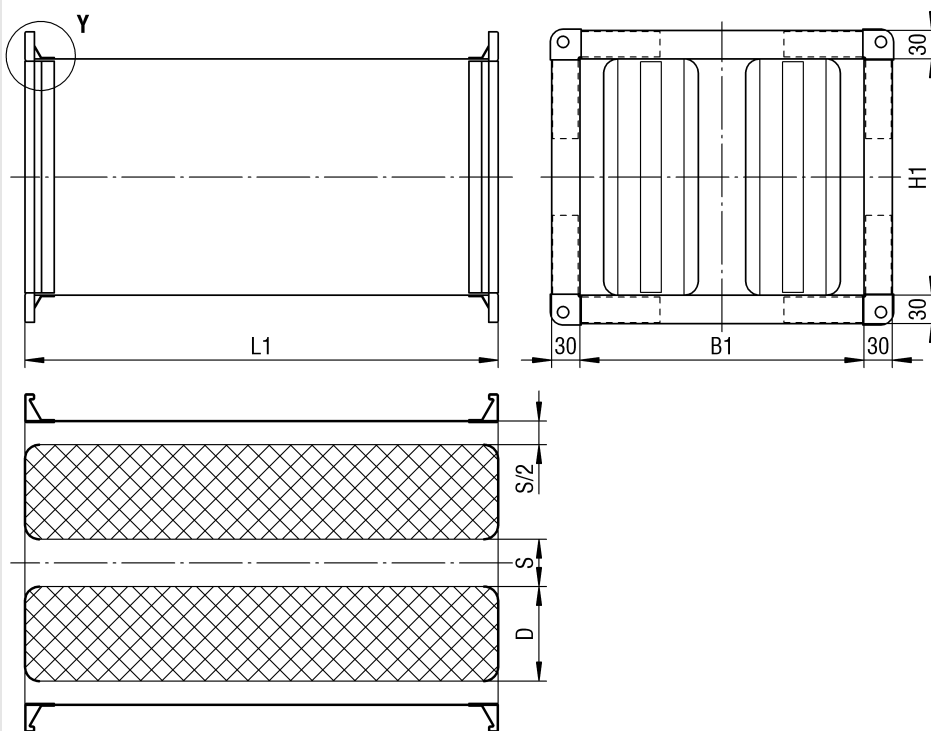
for H2<200 and/or for D=300



rectangular design

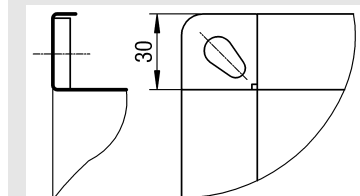
D=300 is delivered with a fitted intake sheet
L1=L2 + 50 mm

Baffle silencer type MWS-...



Dimensions of accessories 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.

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Available sizes

L1=L2 (mm)	H1=H2 (mm)	D = 100 S = ≥ 40 , ≤ 100 B1 (mm)	D = 200 S = ≥ 50 , ≤ 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!

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Division of baffle silencer type MWS-...

If the silencer dimensions are in the limiting area with respect to all three dimensions (L/H/B), we reserve the right to change the silencer division. This will limit the weights and dimensions for each individual part to sizes suitable for mounting.

		Width											
		140-300	301-800	801-1200	1201-1500	1501-1600	1601-1900	1901-2000	2001-2500	2501-3000	3001-3500	3501-5000	5001-6400
Height	150-800	A	A	A	A	A	A	B	B	B	B	E	G
	801-1100	A	A	A	A	A	A	B	B	B	B	E	G
	1101-1200	A	A	A	A	A	B	B	B	B	B	E	G
	1201-1500	A	A	A	A	B	B	B	B	B	B	E	G
	1501-2000	A	A	A	B	B	B	B	B	B	D	F	H
	2001-2500	C	C	C	C	C	C	C	D	D	D	F	H
	2501-3000	C	C	C	C	C	C	C	D	D	D	F	H

No.	Division			
	in width	in height	in length	Model
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

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Division of silencing baffles type MWK-...

	Length							
	500-750	751-1000	1001-1250	1251-1500	1501-2000	2001-2500	2504-2999	3000
Height	200-500	A	A	A	A	B	B	B
	501-750	A	A	A	A	B	B	E
	751-1000	A	A	C	C	B	B	E
	1001-1150	A	C	C	C	B	D	E
	1151-1250	A	C	C	C	B	D	F
	1251-1500	C	C	C	C	D	D	F
	1501-2000	C	C	C	D	D	D	F
	2001-2500	C	C	D	D	D	D	F
	2501-3000	F	F	F	F	F	F	F

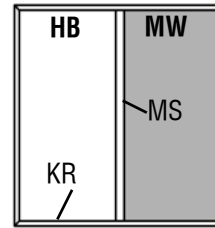
No.	Division		
	in width	in height	in length
A	no	no	1 piece
B	no	yes	2 individual baffles
C	yes	no	2 individual baffles
D	yes	yes	4 individual baffles
E	no	yes	3 individual baffles
F	yes	yes	6 individual baffles

baffles will be divided, depending on size, into individual baffles of H and/or L dimensions during manufacture

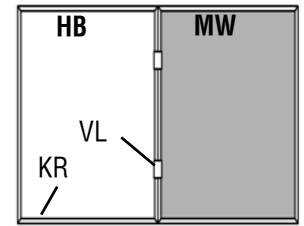
If the baffles are mounted suspended horizontally or suspended vertically, this mounting should be clarified beforehand with the manufacturing company.

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.

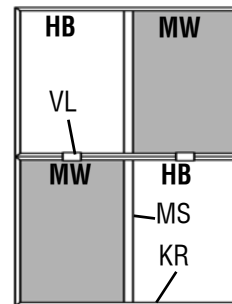
Division A



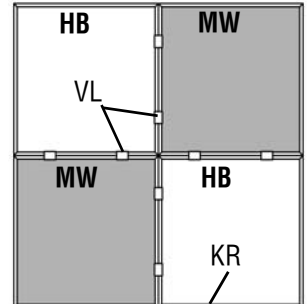
Division B



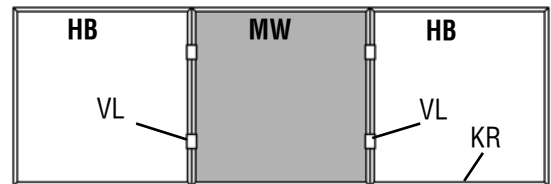
Division C



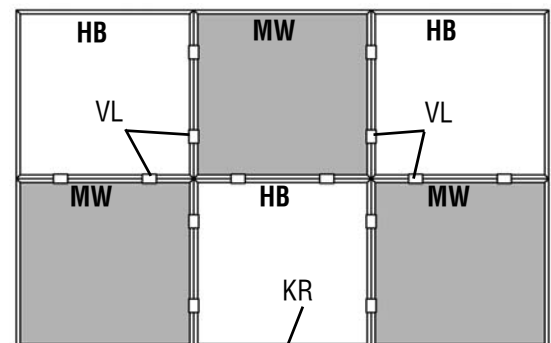
Division D



Division E



Division F



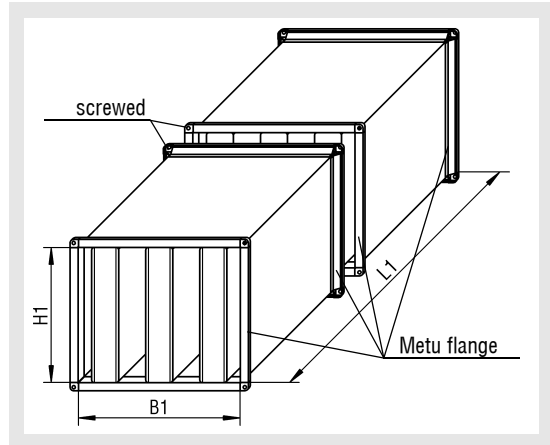
- HB = Sectioned sheet
- MW = Mineral wool
- MS = Central partition
- KR = Baffle frame
- VL = Fishplate

Mineral wool silencer MWS / MWK

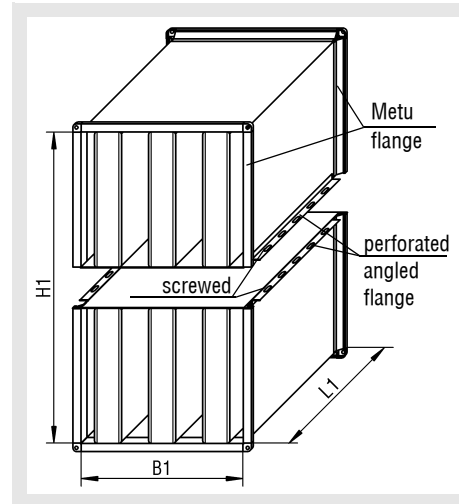
Baffle silencer in divided design

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.

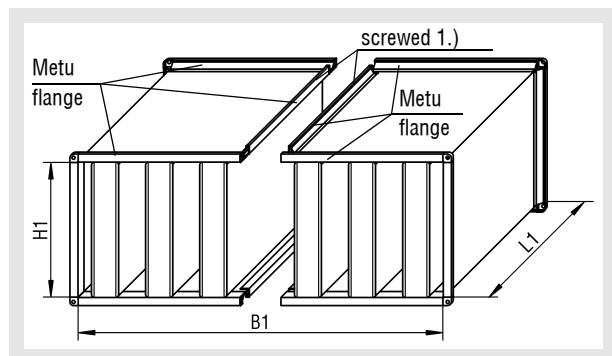
Divided length



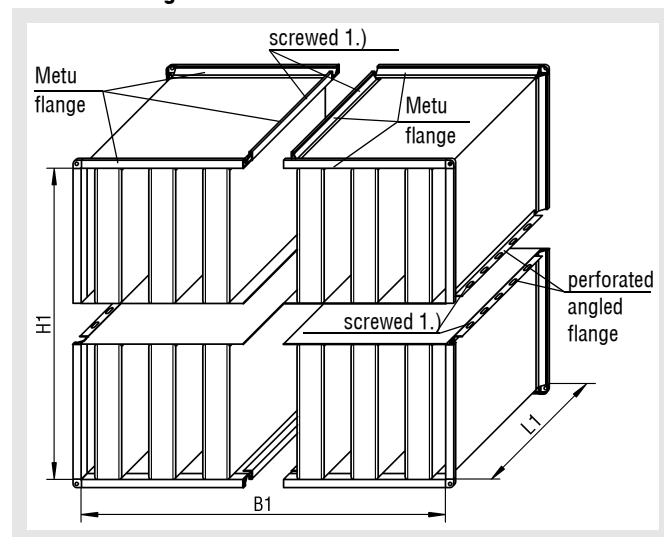
Sectioned height



Divided width



Width and height divided



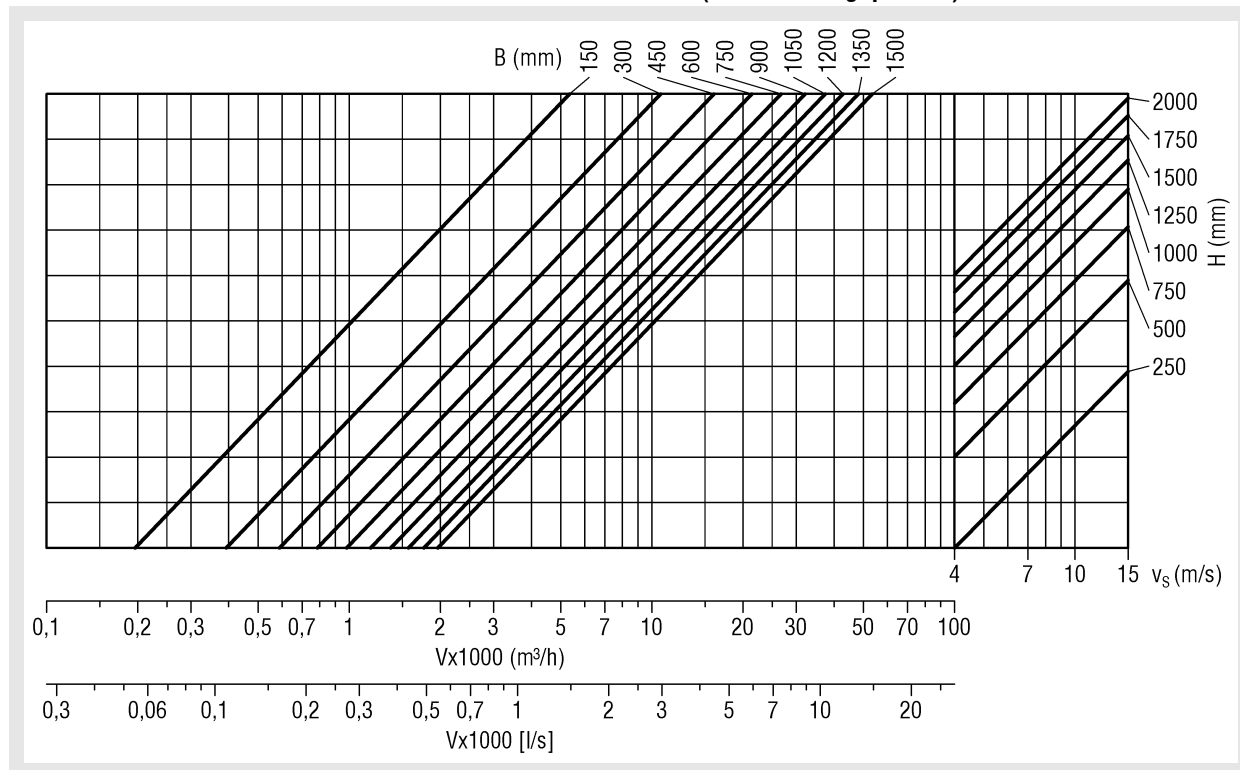
1.) Screw clamps are supplied loose.

Mineral wool silencer MWS / MWK

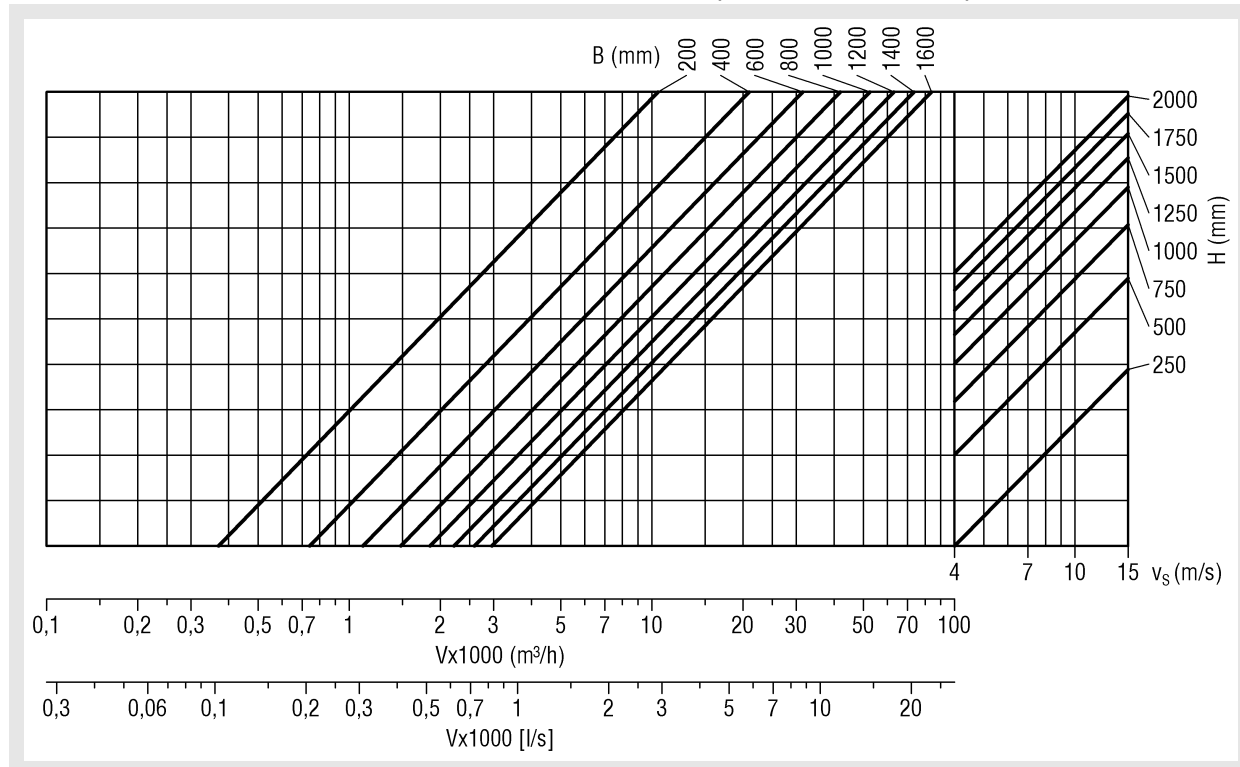
Technical data

Gap velocity and volumetric flow

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

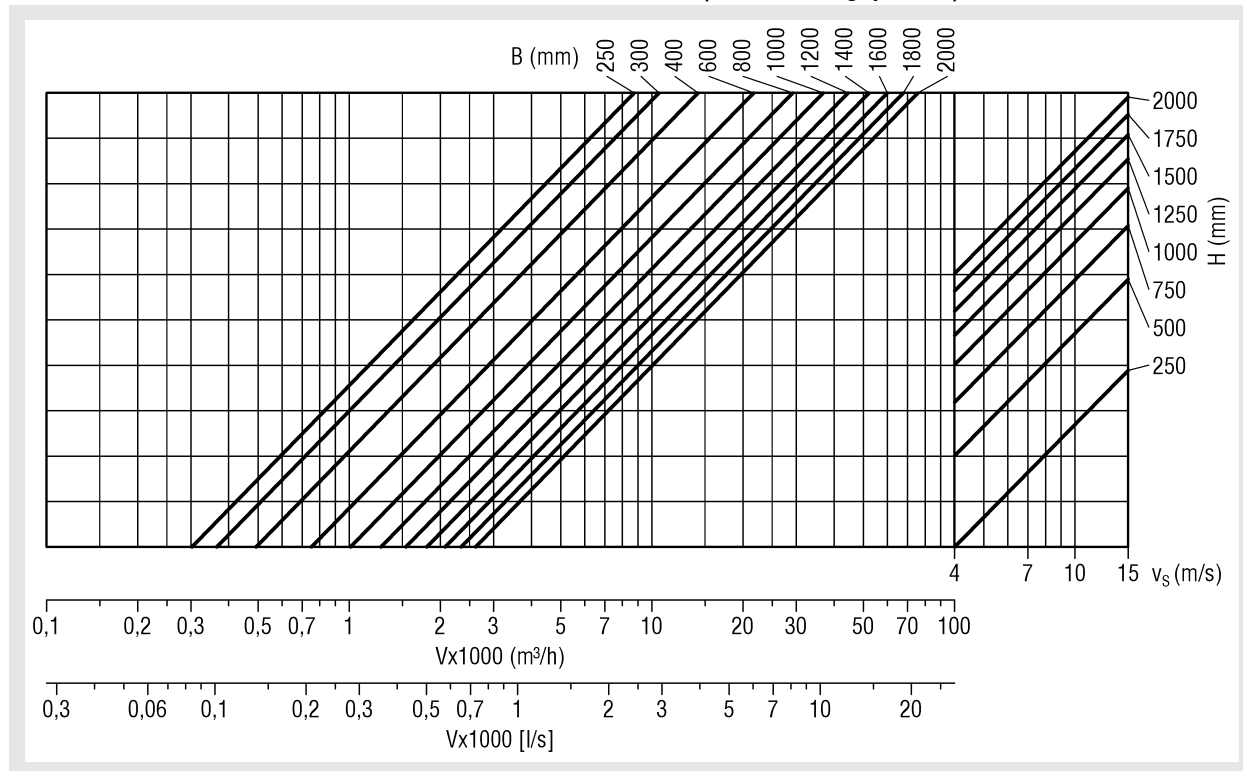


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 100/100 (baffle width/gap width)

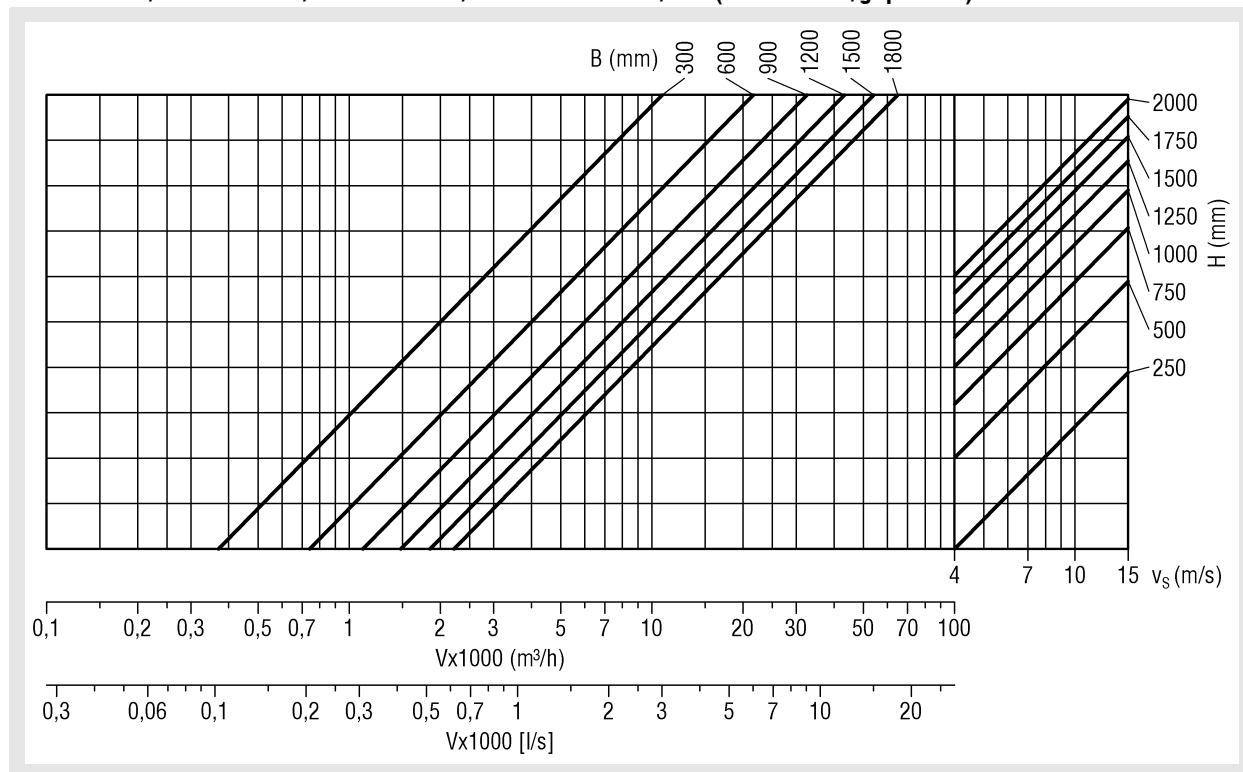


Mineral wool silencer MWS / MWK

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

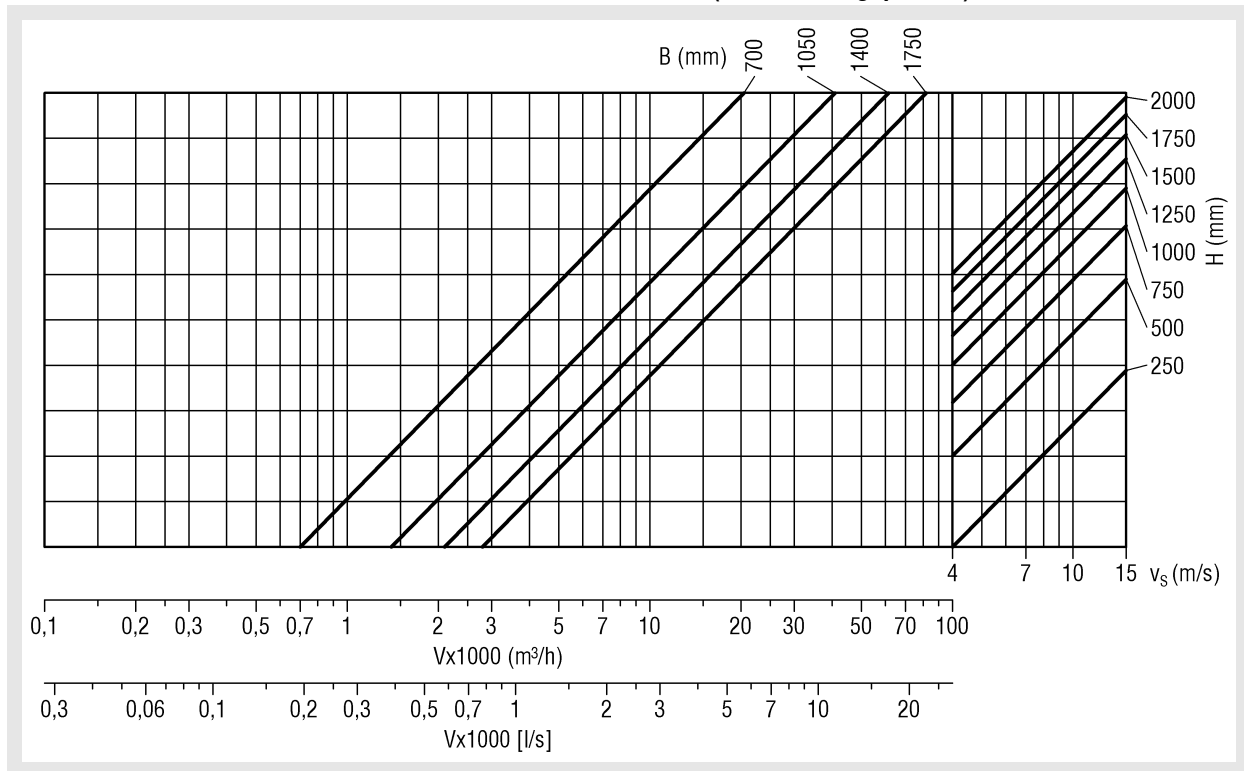


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-... 200/100 (baffle width/gap width)



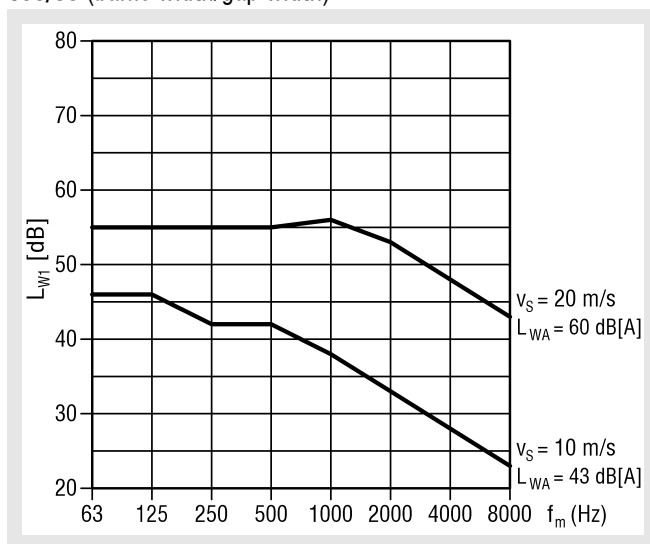
Mineral wool silencer MWS / MWK

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

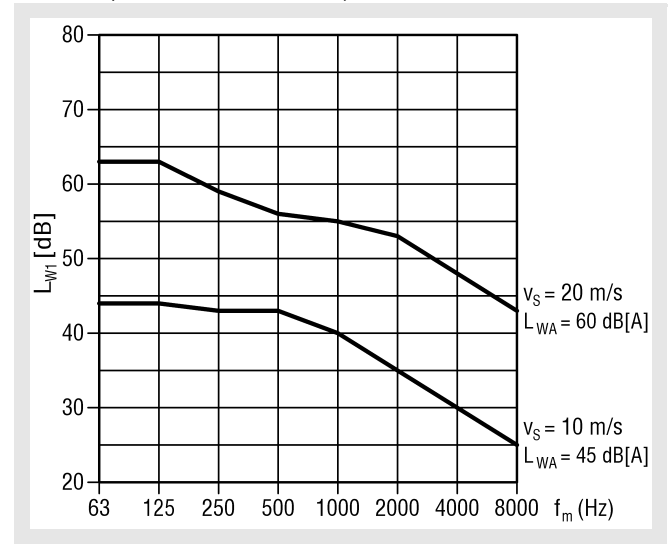


Flow generated noise according to DIN 45 646

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

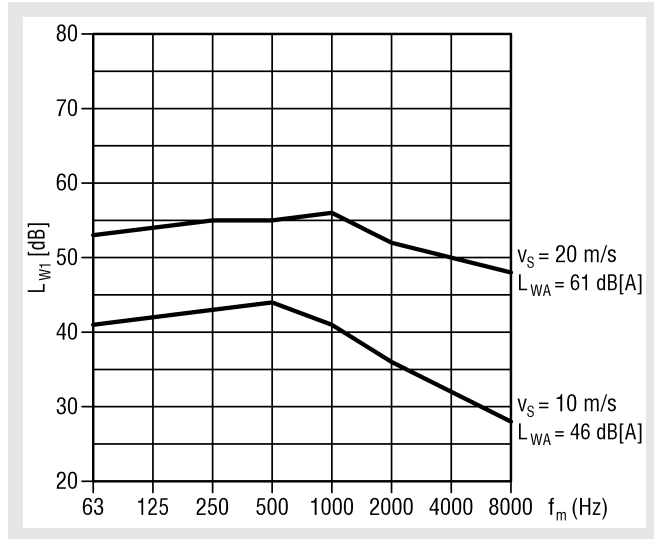


MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
100/100 (baffle width/gap width)

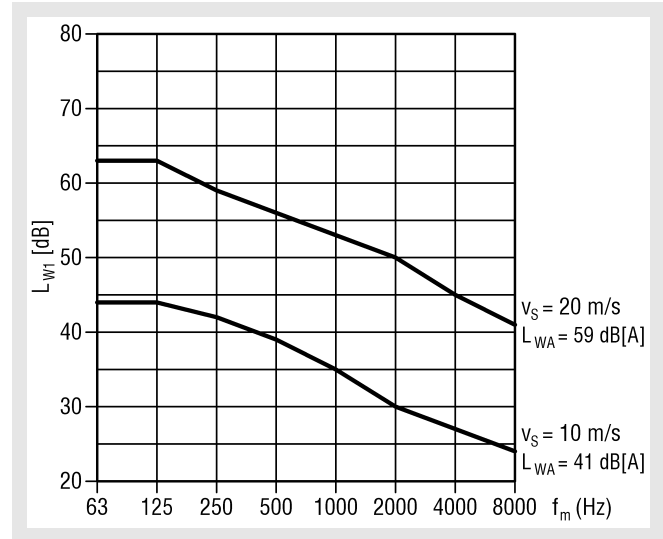


Mineral wool silencer MWS / MWK

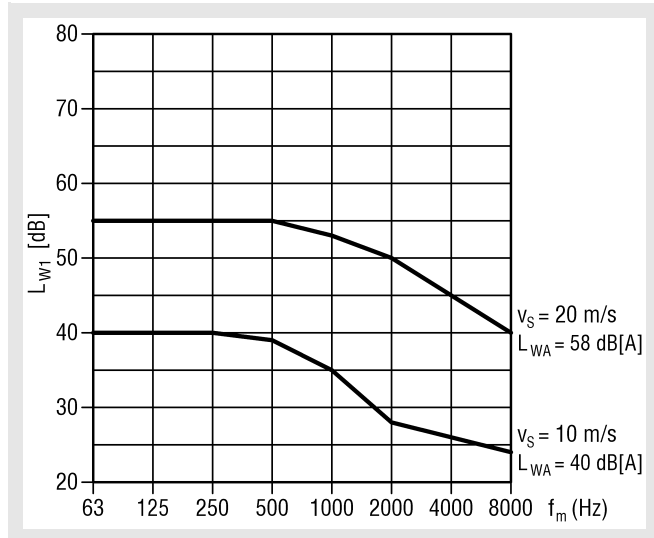
MWK-OB-... / MWS-OB-... / MWK-MB-... / MWS-MB-...
200/50 (baffle width/gap width)



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(A)]
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

$$L_W = L_{w1} + KF$$

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

		D _e (dB/oct)								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

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

D_e (dB/oct)	Δp_t (Pa)
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Mineral wool silencer MWS / MWK

		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	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

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

D_e (dB/oct)	Δp_t (Pa)
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Mineral wool silencer MWS / MWK

		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

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

Mineral wool silencer MWS / MWK

MWS-LB-... 200Legend

			D _e (dB/oct)								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 Metu 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 = Metu 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 4102 A1. The baffle frame is made of galvanised sheet steel. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.
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 4102 A1. Covered with sheet steel $t = 0.5 \text{ mm}$ offset on one side. The baffle frame and sectioned sheet are made of galvanised sheet steel. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.
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 4102 A1. Both sides covered with perforated sheet steel $t = 0.5 \text{ mm}$. The baffle frame and perforated sheet are made of galvanised sheet steel. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.
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 4102 A1. Covered with sheet steel $t = 0.5 \text{ mm}$ offset on one side. Additionally with perforated cover $t = 0.5 \text{ mm}$ of the uncovered surface areas. The baffle frame, sectioned sheet and perforated sheet are made of galvanised sheet steel. Baffles measured to ISO/DIS 7235 and to DIN 45646. Manufactured to the hygienic standards of VDI 6022.
Product: SCHAKO type **MWK-LB-100/-200**

Material:

- Galvanised sheet steel (standard) (-SV)

Mineral wool silencer MWS / MWK

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 kg/m³, non-flammable according to DIN 4102 A1.

Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max.

Metu profile M30 on both sides. Manufactured to the hygienic standards of VDI 6022. The baffle frame is made of galvanised sheet steel.

TÜV SÜD Life Service inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

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

Material:

- Galvanised sheet steel (standard) (-SV)

Accessories:

- METU profile M2/ M4 (-M2/-M4)

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 kg/m³, non-flammable according to DIN 4102 A1. Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max.

Metu profile M30 on both sides. Manufactured to the hygienic standards of VDI 6022. The baffle frame and sectioned sheet are made of galvanised sheet steel.

TÜV SÜD Life Service inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

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 kg/m³, non-flammable according to DIN 4102 A1.

Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max.

Metu profile M30 on both sides. Manufactured to the hygienic standards of VDI 6022. The baffle frame and perforated sheet are made of galvanised sheet steel.

TÜV SÜD Life Service inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

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 kg/m³, non-flammable according to DIN 4102 A1.

Duct housing made of 1.0 mm thick galvanised sheet steel with airtight saddle joint. Internal pressure up to 1000 Pa max.

Metu profile M30 on both sides. Manufactured to the hygienic standards of VDI 6022. The baffle frame, sectioned sheet and perforated sheet are made of galvanised sheet steel.

TÜV SÜD Life Service inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

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