

# MANDÍK®

## SILENCER

## SMR



These technical specification state a row of manufactured sizes and models of silencers (further only silencer) SMR. It is valid for production, designing, ordering, delivery, assembly and operation.

**I. CONTENT**

<b>II. GENERAL INFORMATION</b>	<b>3</b>
1. Description.....	3
2. Design.....	3
3. Dimensions, weights.....	4
<b>III. TECHNICAL DATA</b>	<b>9</b>
4. Pressure loss and attenuation in the frequency bands.....	9
<b>IV. MATERIAL, FINISHING</b>	<b>13</b>
5. Material.....	13
<b>V. INSPECTION, TESTING</b>	<b>13</b>
6. Inspection.....	13
<b>VI. PACKING, TRANSPORTATION, TAKE-OVER, STORAGE AND GUARANTEE</b>	<b>13</b>
7. Logistic terms.....	13
<b>VII. ASSEMBLY, ATTENDANCE, MAINTENANCE AND REVISIONS</b>	<b>13</b>
8. Assembly.....	13
<b>VIII. ORDERING INFORMATION</b>	<b>14</b>
9. Ordering key.....	14

## II. GENERAL INFORMATION

### 1. Description

Fig. 1 Silencer SMR



- 1.1. Silencers SMR are produced in absorptive design. They are intended for round ventilation systems ducts. Silencers reduce airborne noise transmitted by duct. Silencers are placed between noise source and protected room.

Silencers up to diameter 315 mm are connected to duct by using of reduction fixed to the silencer body. Silencers with diameter more than 315 mm are connected to duct by using of clutch NSL.

Silencer consist of the outer casing and inner perforated tube. This gap is filled by mineral wool with acoustic insulation properties. Insulation is coated by non woven fabric. Inner perforated tube is made of galvanized steel sheet.

- 1.2. Right damper function is secured under the following conditions:  
 a) Maximum air circulation speed is 12 m/s  
 b) Maximum pressure difference is 1500 Pa

Silencers are designed for macroclimatic areas with mild climate according to EN 60 721-3-3.

Silencers are suitable for systems without abrasive, chemical and adhesive particles.

Temperature in the place of installation is permitted to range from -20°C do +70°C

### 2. Design

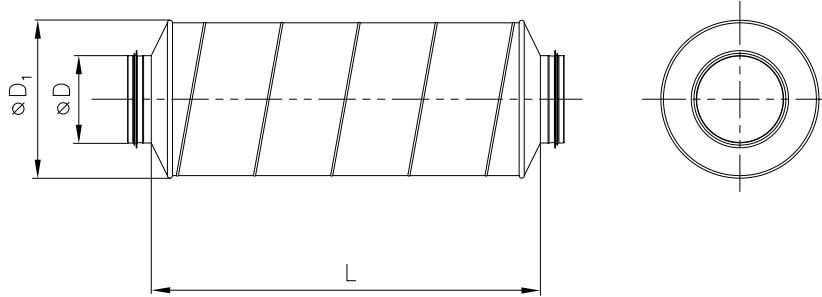
- 2.1. Silencers are produced with insulation thickness 50 mm SMR-50 or with insulation thickness 100 mm SMR-100. Silencer with insulation thickness 100 mm could be supply with central absorptive plate - design SMRB.

Silencers are produced depending on the nominal size in these lengths: 300, 500, 600, 900, 1000 1200 and 1500 mm.

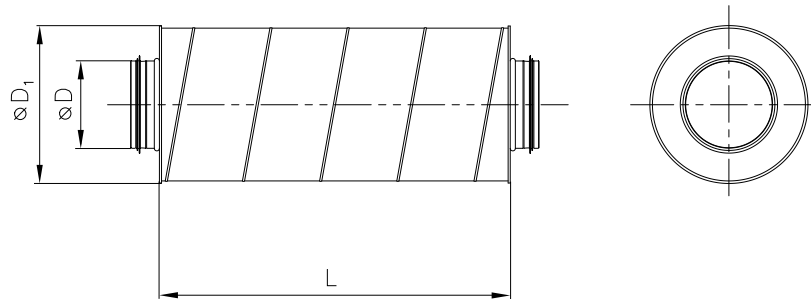
3. Dimensions and weights

Fig. 2

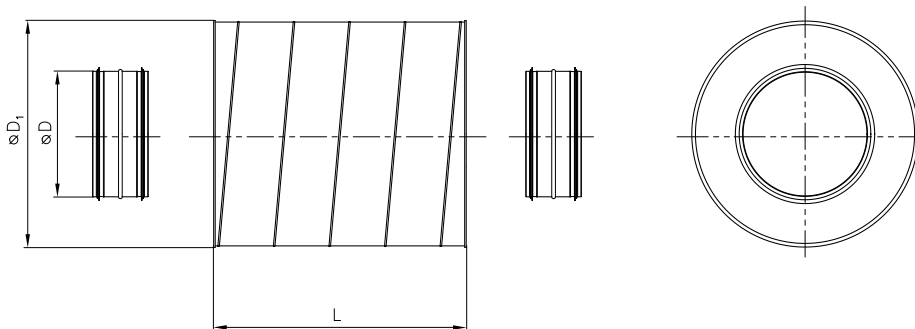
SMR-50 nominal dimension D=100, D=125, D=160, D=200, D=100, D=250, D=315



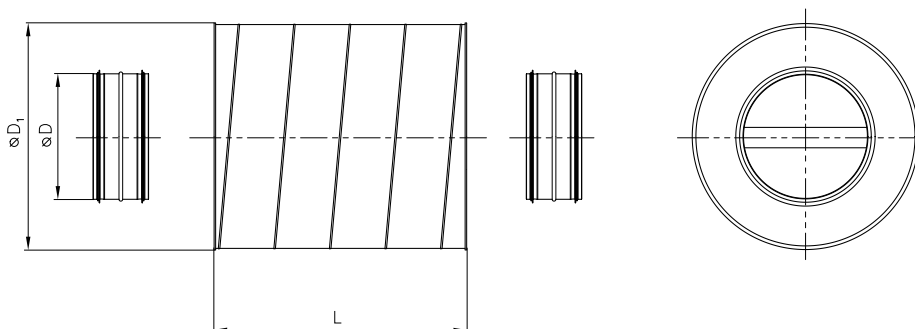
SMR-50 nominal dimension D=80, D=150, D=300, SMR-100 nominal dimension D≤300



SMR-50, SMR-100 nominal dimension D>315



SMRB



## 3.1. Dimensions and weights - silencers SMR-50

Tab. 3.1.1. Dimensions and weights- SMR-50

Nominal dimension	Ø D [mm]	Ø D <sub>1</sub> [mm]	L [mm]	Weight [kg]
SMR-50 80/300	80	180	300	2
SMR-50 80/500	80	180	500	3
SMR-50 80/600	80	180	600	3
SMR-50 80/900	80	180	900	5
SMR-50 80/1000	80	180	1000	6
SMR-50 80/1200	80	180	1200	7
SMR-50 100/300	100	200	300	2
SMR-50 100/500	100	200	500	3
SMR-50 100/600	100	200	600	3
SMR-50 100/900	100	200	900	5
SMR-50 100/1000	100	200	1000	6
SMR-50 100/1200	100	200	1200	7
SMR-50 125/300	125	224	300	3
SMR-50 125/500	125	224	500	4
SMR-50 125/600	125	224	600	4
SMR-50 125/900	125	224	900	7
SMR-50 125/1000	125	224	1000	7
SMR-50 125/1200	125	224	1200	9
SMR-50 150/300	150	250	300	4
SMR-50 150/500	150	250	500	4
SMR-50 150/600	150	250	600	6
SMR-50 150/900	150	250	900	8
SMR-50 150/1000	150	250	1000	8
SMR-50 150/1200	150	250	1200	10
SMR-50 160/300	160	250	300	3
SMR-50 160/500	160	250	500	5
SMR-50 160/600	160	250	600	6
SMR-50 160/900	160	250	900	8
SMR-50 160/1000	160	250	1000	8
SMR-50 160/1200	160	250	1200	10
SMR-50 200/300	200	315	300	4
SMR-50 200/500	200	315	500	6
SMR-50 200/600	200	315	600	7
SMR-50 200/900	200	315	900	10
SMR-50 200/1000	200	315	1000	11
SMR-50 200/1200	200	315	1200	12
SMR-50 250/500	250	355	500	9
SMR-50 250/600	250	355	600	11
SMR-50 250/900	250	355	900	14
SMR-50 250/1000	250	355	1000	12

Nominal dimension	ØD [mm]	ØD <sub>1</sub> [mm]	L [mm]	Weight [kg]
SMR-50 250/1200	250	355	1200	17
SMR-50 250/1500	250	355	1500	20
SMR-50 300/500	300	400	500	13
SMR-50 300/600	300	400	600	15
SMR-50 300/900	300	400	900	16
SMR-50 300/1000	300	400	1000	19
SMR-50 300/1200	300	400	1200	22
SMR-50 300/1500	300	400	1500	25
SMR-50 315/500	315	400	500	11
SMR-50 315/600	315	400	600	12
SMR-50 315/900	315	400	900	16
SMR-50 315/1000	315	400	1000	16
SMR-50 315/1200	315	400	1200	19
SMR-50 315/1500	315	400	1500	25
SMR-50 355/600	355	450	600	13
SMR-50 355/900	355	450	900	18
SMR-50 355/1000	355	450	1000	20
SMR-50 355/1200	355	450	1200	22
SMR-50 355/1500	355	450	1500	27
SMR-50 400/600	400	500	600	15
SMR-50 400/900	400	500	900	20
SMR-50 400/1000	400	500	1000	22
SMR-50 400/1200	400	500	1200	25
SMR-50 400/1500	400	500	1500	31
SMR-50 450/600	450	560	600	23
SMR-50 450/900	450	560	900	27
SMR-50 450/1000	450	560	1000	29
SMR-50 450/1200	450	560	1200	31
SMR-50 450/1500	450	560	1500	36
SMR-50 500/600	500	600	600	32
SMR-50 500/900	500	600	900	42
SMR-50 500/1000	500	600	1000	51
SMR-50 500/1200	500	600	1200	59
SMR-50 500/1500	500	600	1500	72
SMR-50 560/900	560	560	900	31
SMR-50 560/1000	560	560	1000	34
SMR-50 560/1200	560	560	1200	39
SMR-50 630/900	630	710	900	34
SMR-50 630/1000	630	710	1000	39
SMR-50 630/1200	630	710	1200	42

If is requested a different size, please contact the company MANDÍK, a.s.

## 3.2. Dimensions and weights - silencers SMR-100

Tab. 3.2.1. Dimensions and weights - SMR-100

Nominal dimension	Ø D [mm]	Ø D <sub>1</sub> [mm]	L [mm]	Weight [kg]
SMR-100 100/500	100	300	500	6
SMR-100 100/600	100	300	600	7
SMR-100 100/900	100	300	900	9
SMR-100 100/1000	100	300	1000	11
SMR-100 100/1200	100	300	1200	12
SMR-100 125/300	125	315	300	5
SMR-100 125/500	125	315	500	8
SMR-100 125/600	125	315	600	8
SMR-100 125/900	125	315	900	11
SMR-100 125/1000	125	315	1000	13
SMR-100 125/1200	125	315	1200	13
SMR-100 150/300	150	355	300	5
SMR-100 150/500	150	355	500	9
SMR-100 150/600	150	355	600	10
SMR-100 150/900	150	355	900	13
SMR-100 150/1000	150	355	1000	15
SMR-100 150/1200	150	355	1200	18
SMR-100 160/300	160	355	300	7
SMR-100 160/500	160	355	500	9
SMR-100 160/600	160	355	600	10
SMR-100 160/900	160	355	900	14
SMR-100 160/1000	160	355	1000	14
SMR-100 160/1200	160	355	1200	17
SMR-100 200/300	200	400	300	8
SMR-100 200/500	200	400	500	12
SMR-100 200/600	200	400	600	12
SMR-100 200/900	200	400	900	16
SMR-100 200/1000	200	400	1000	16
SMR-100 200/1200	200	400	1200	20
SMR-100 250/500	250	450	500	16
SMR-100 250/600	250	450	600	14
SMR-100 250/900	250	450	900	20
SMR-100 250/1000	250	450	1000	17
SMR-100 250/1200	250	450	1200	24
SMR-100 250/1500	250	450	1500	28
SMR-100 315/500	315	500	500	14
SMR-100 315/600	315	500	600	16
SMR-100 315/900	315	500	900	21
SMR-100 315/1000	315	500	1000	22
SMR-100 315/1200	315	500	1200	26
SMR-100 315/1500	315	500	1500	35
SMR-100 355/600	355	560	600	26
SMR-100 355/900	355	560	900	29
SMR-100 355/1000	355	560	1000	33
SMR-100 355/1200	355	560	1200	33

Nominal dimension	Ø D [mm]	Ø D <sub>1</sub> [mm]	L [mm]	Weight [kg]
SMR-100 355/1500	355	560	1500	47
SMR-100 400/600	400	600	600	21
SMR-100 400/900	400	600	900	30
SMR-100 400/1000	400	600	1000	29
SMR-100 400/1200	400	600	1200	41
SMR-100 400/1500	400	600	1500	51
SMR-100 450/600	450	630	600	32
SMR-100 450/900	450	630	900	40
SMR-100 450/1000	450	630	1000	36
SMR-100 450/1200	450	630	1200	46
SMR-100 450/1500	450	630	1500	56
SMR-100 500/600	500	710	600	23
SMR-100 500/900	500	710	900	35
SMR-100 500/1000	500	710	1000	39
SMR-100 500/1200	500	710	1200	43
SMR-100 500/1500	500	710	1500	50
SMR-100 630/900	630	800	900	50
SMR-100 630/1000	630	800	1000	48
SMR-100 630/1200	630	800	1200	58
SMR-100 630/1500	630	800	1500	66
SMR-100 710/1000	710	900	1000	59
SMR-100 710/1200	710	900	1200	64
SMR-100 710/1500	710	900	1500	73
SMR-100 800/1000	800	1000	1000	73
SMR-100 800/1200	800	1000	1200	73
SMR-100 800/1500	800	1000	1500	77
SMR-100 900/1000	900	1120	1000	80
SMR-100 900/1200	900	1120	1200	88
SMR-100 900/1500	900	1120	1500	95

If is requested a different size, please contact the company MANDÍK, a.s.

### 3.3. Dimensions and weights - silencers SMRB

Tab. 3.3.1. Dimensions and weights - SMRB

Nominal dimension	Ø D [mm]	Ø D <sub>1</sub> [mm]	L [mm]	Weight [kg]
SMRB 315/600	315	500	600	15
SMRB 315/900	315	500	900	22
SMRB 315/1200	315	500	1200	29
SMRB 400/600	400	600	600	20
SMRB 400/900	400	600	900	30
SMRB 400/1200	400	600	1200	40
SMRB 500/900	500	710	900	40
SMRB 500/1200	500	710	1200	53
SMRB 630/1200	630	800	1200	62
SMRB 630/1500	630	800	1500	78
SMRB 800/1200	800	1000	1200	80
SMRB 800/1500	800	1000	1500	99

If is requested a different size, please contact the company MANDÍK, a.s.



### III. TECHNICAL DATA

#### 4. Pressure loss and attenuation in the frequency bands

##### 4.1. Pressure loss and attenuation - SMR-50

Tab. 4.1.1. Pressure loss and attenuation - SMR-50

Nominal dimension	Pressure loss [Pa]					Attenuation in octave bands						
	Velocity [m/s]					Attenuation [dB]						
	2	4	8	10	12	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]
SMR-50 80/300	0,43	1,74	6,95	10,86	15,64	6	15	29	45	50	26	28
SMR-50 80/500	0,44	1,77	7,07	11,04	15,90	9	18	32	48	53	29	31
SMR-50 80/600	0,45	1,80	7,18	11,22	16,16	11	19	33	49	54	30	32
SMR-50 80/900	0,48	1,93	7,72	12,06	17,37	13	32	36	52	57	33	35
SMR-50 80/1000	0,50	2,01	8,03	12,54	18,06	14	23	37	53	58	34	36
SMR-50 80/1200	0,60	2,41	9,64	15,06	21,69	16	25	39	54	60	35	37
SMR-50 100/300	0,36	1,42	5,68	8,88	12,79	5	13	26	41	44	22	24
SMR-50 100/500	0,36	1,44	5,76	9,00	12,96	8	16	29	44	47	26	27
SMR-50 100/600	0,37	1,47	5,88	9,18	13,22	9	17	30	45	49	27	29
SMR-50 100/900	0,40	1,61	6,45	10,08	14,52	12	19	32	48	51	29	31
SMR-50 100/1000	0,42	1,68	6,72	10,50	15,12	13	21	34	49	52	30	32
SMR-50 100/1200	0,60	2,41	9,64	15,06	21,69	15	23	35	50	54	32	34
SMR-50 125/300	0,29	1,15	4,61	7,20	10,37	4	11	22	37	41	19	21
SMR-50 125/500	0,29	1,17	4,68	7,32	10,54	7	14	26	40	44	22	24
SMR-50 125/600	0,30	1,20	4,80	7,50	10,80	8	15	27	41	45	24	25
SMR-50 125/900	0,34	1,34	5,38	8,40	12,10	11	18	29	44	47	26	28
SMR-50 125/1000	0,35	1,41	5,64	8,82	12,70	12	19	31	45	49	27	29
SMR-50 125/1200	0,50	2,02	8,06	12,60	18,14	14	21	32	46	50	29	31
SMR-50 150/300	0,34	1,34	5,38	8,40	12,10	4	11	23	34	36	18	19
SMR-50 150/500	0,34	1,36	5,45	8,52	12,27	7	14	26	37	39	21	22
SMR-50 150/600	0,35	1,39	5,57	8,70	12,53	8	15	27	39	41	22	23
SMR-50 150/900	0,38	1,54	6,14	9,60	13,82	11	18	29	42	43	25	26
SMR-50 150/1000	0,40	1,61	6,45	10,08	14,52	12	19	30	42	44	26	27
SMR-50 150/1200	0,46	1,82	7,30	11,40	16,42	14	21	32	44	46	27	28
SMR-50 160/300	0,24	0,96	3,84	6,00	8,64	3	9	20	33	35	16	18
SMR-50 160/500	0,25	0,99	3,96	6,18	8,90	6	12	23	36	38	19	21
SMR-50 160/600	0,25	1,02	4,07	6,36	9,16	7	14	24	37	39	21	22
SMR-50 160/900	0,29	1,15	4,61	7,20	10,37	10	16	26	40	42	23	25
SMR-50 160/1000	0,31	1,23	4,92	7,68	11,06	11	17	28	41	43	24	26
SMR-50 160/1200	0,41	1,63	6,53	10,20	14,69	13	19	29	42	44	26	27
SMR-50 200/300	0,17	0,67	2,69	4,20	6,05	2	7	16	31	31	15	16
SMR-50 200/500	0,17	0,69	2,76	4,32	6,22	5	10	19	34	34	18	19
SMR-50 200/600	0,18	0,72	2,88	4,50	6,48	6	11	20	35	35	19	20
SMR-50 200/900	0,22	0,86	3,46	5,40	7,78	8	13	23	38	38	22	23
SMR-50 200/1000	0,24	0,94	3,76	5,88	8,47	9	15	24	39	39	23	24
SMR-50 200/1200	0,34	1,34	5,38	8,40	12,10	11	17	26	41	41	25	26
SMR-50 250/500	0,18	0,74	2,96	4,62	6,65	4	9	18	29	27	15	16
SMR-50 250/600	0,19	0,77	3,07	4,80	6,91	5	11	19	30	28	16	18
SMR-50 250/900	0,23	0,91	3,65	5,70	8,21	8	13	22	33	31	19	20
SMR-50 250/1000	0,25	0,99	3,96	6,18	8,90	9	14	23	33	32	20	21

Nominal dimension	Pressure loss [Pa]					Attenuation in octave bands						
	Velocity [m/s]					Attenuation [dB]						
	2	4	8	10	12	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]
SMR-50 250/1200	0,35	1,39	5,57	8,70	12,53	11	17	25	35	34	21	23
SMR-50 250/1500	0,40	1,58	6,34	9,90	14,26	12	18	26	37	35	23	24
SMR-50 300/500	0,15	0,59	2,34	3,66	5,27	4	8	16	25	23	13	15
SMR-50 300/600	0,16	0,62	2,50	3,90	5,62	5	10	18	27	25	14	16
SMR-50 300/900	1,90	7,58	30,30	47,40	68,26	7	12	20	30	27	17	18
SMR-50 300/1000	0,21	0,84	3,34	5,22	7,52	8	13	21	30	28	18	19
SMR-50 300/1200	0,31	1,24	4,95	7,74	11,15	10	15	23	32	30	20	21
SMR-50 300/1500	0,37	1,50	5,99	9,36	13,48	12	17	24	34	32	21	23
SMR-50 315/500	0,12	0,50	2,00	3,12	4,49	4	7	14	23	21	13	14
SMR-50 315/600	0,13	0,53	2,11	3,30	4,75	5	8	16	25	19	14	15
SMR-50 315/900	0,17	0,67	2,69	4,20	6,05	7	11	18	28	21	17	18
SMR-50 315/1000	0,19	0,75	3,00	4,68	6,74	8	12	19	28	22	18	19
SMR-50 315/1200	0,29	1,15	4,61	7,20	10,37	10	14	21	30	24	19	21
SMR-50 315/1500	0,35	1,39	5,57	8,70	12,53	12	16	23	32	26	21	22
SMR-50 355/600	0,11	0,43	1,73	2,70	3,89	4	9	16	22	17	13	14
SMR-50 355/900	0,14	0,57	2,27	3,54	5,10	7	11	19	25	19	16	17
SMR-50 355/1000	0,16	0,64	2,57	4,02	5,79	8	12	20	26	21	17	18
SMR-50 355/1200	0,26	1,05	4,19	6,54	9,42	10	15	22	27	22	18	20
SMR-50 355/1500	0,33	1,33	5,34	8,34	12,01	11	16	23	29	24	20	21
SMR-50 400/600	0,09	0,37	1,50	2,34	3,37	4	8	15	20	15	12	13
SMR-50 400/900	0,13	0,52	2,07	3,24	4,67	6	10	18	23	17	15	16
SMR-50 400/1000	0,15	0,59	2,34	3,66	5,27	8	12	19	24	18	16	17
SMR-50 400/1200	0,25	1,00	3,99	6,24	8,99	9	14	21	25	20	17	19
SMR-50 400/1500	0,33	1,31	5,22	8,16	11,75	11	15	22	27	22	19	20
SMR-50 450/600	0,08	0,34	1,34	2,10	3,02	4	8	16	18	13	12	12
SMR-50 450/900	1,20	4,80	19,20	30,00	43,20	6	11	18	21	16	15	15
SMR-50 450/1000	0,14	0,56	2,23	3,48	5,01	7	12	19	22	17	16	16
SMR-50 450/1200	0,24	0,96	3,84	6,00	8,64	9	14	21	23	18	17	17
SMR-50 450/1500	0,31	1,25	4,99	7,80	11,23	11	16	23	25	20	19	19
SMR-50 500/600	0,07	0,29	1,15	1,80	2,59	3	7	14	17	11	11	12
SMR-50 500/900	0,11	0,43	1,73	2,70	3,89	6	9	16	20	14	13	14
SMR-50 500/1000	0,12	0,50	2,00	3,12	4,49	7	11	17	21	15	14	15
SMR-50 500/1200	0,23	0,91	3,65	5,70	8,21	9	13	19	22	17	16	17
SMR-50 500/1500	0,30	1,21	4,84	7,56	10,89	10	14	20	24	18	17	19
SMR-50 560/900	0,10	0,39	1,57	2,46	3,54	6	9	15	19	13	12	14
SMR-50 560/1000	0,12	0,47	1,88	2,94	4,23	7	10	16	20	14	13	15
SMR-50 560/1200	0,22	0,87	3,49	5,46	7,86	9	13	18	21	15	15	16
SMR-50 630/900	0,09	0,36	1,42	2,22	3,20	5	8	14	18	11	12	13
SMR-50 630/1000	0,11	0,43	1,73	2,70	3,89	6	10	16	18	12	13	14
SMR-50 630/1200	0,21	0,84	3,34	5,22	7,52	8	12	17	20	14	14	15

## 4.2. Pressure loss and attenuation SMR-100

Tab. 4.2.1. Pressure loss and attenuation - SMR-100

Nominal Dimension	Pressure loss [Pa]					Attenuation in octave bands						
	Velocity [m/s]					Attenuation [dB]						
	2	4	8	10	12	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]
SMR-100 100/500	0,26	1,04	4,15	6,48	9,33	20	29	40	44	52	27	27
SMR-100 100/600	0,28	1,13	4,53	7,08	10,20	21	30	44	48	53	29	28
SMR-100 100/900	0,34	1,34	5,38	8,40	12,10	22	34	52	57	57	32	31
SMR-100 100/1000	0,35	1,40	5,61	8,76	12,61	22	34	55	60	58	33	33
SMR-100 100/1200	0,37	1,50	5,99	9,36	13,48	24	37	58	64	61	34	34
SMR-100 125/300	0,19	0,77	3,07	4,80	6,91	17	24	38	42	51	26	28
SMR-100 125/500	0,25	0,99	3,96	6,18	8,90	18	26	36	42	49	25	25
SMR-100 125/600	0,27	1,08	4,34	6,78	9,76	18	26	36	42	49	25	25
SMR-100 125/900	0,33	1,31	5,22	8,16	11,75	20	30	48	55	54	29	30
SMR-100 125/1000	0,34	1,36	5,45	8,52	12,27	20	31	51	58	55	31	31
SMR-100 125/1200	0,36	1,46	5,84	9,12	13,13	21	34	54	62	58	31	33
SMR-100 150/300	0,18	0,72	2,88	4,50	6,48	15	21	33	37	44	23	25
SMR-100 150/500	0,24	0,94	3,76	5,88	8,47	20	29	40	44	52	27	27
SMR-100 150/600	0,26	1,04	4,15	6,48	9,33	17	25	36	41	43	23	24
SMR-100 150/900	0,31	1,25	4,99	7,80	11,23	18	28	44	50	47	26	27
SMR-100 150/1000	0,33	1,31	5,22	8,16	11,75	18	28	47	53	48	28	28
SMR-100 150/1200	0,35	1,40	5,61	8,76	12,61	24	37	58	64	61	34	34
SMR-100 160/300	0,17	0,67	2,69	4,20	6,05	16	21	29	34	41	20	23
SMR-100 160/500	0,23	0,91	3,65	5,70	8,21	17	23	28	34	39	19	20
SMR-100 160/600	0,25	1,01	4,03	6,30	9,07	17	24	32	38	40	21	21
SMR-100 160/900	0,31	1,23	4,92	7,68	11,06	18	27	40	47	44	24	25
SMR-100 160/1000	0,32	1,29	5,15	8,04	11,58	19	28	43	50	45	25	26
SMR-100 160/1200	0,35	1,38	5,53	8,64	12,44	20	31	46	54	48	26	28
SMR-100 200/300	0,16	0,64	2,57	4,02	5,79	13	18	27	29	36	18	21
SMR-100 200/500	0,20	0,82	3,26	5,10	7,34	14	20	25	28	34	17	18
SMR-100 200/600	0,23	0,91	3,65	5,70	8,21	14	21	29	33	35	19	19
SMR-100 200/900	0,28	1,12	4,49	7,02	10,11	15	25	38	42	39	22	22
SMR-100 200/1000	0,30	1,18	4,72	7,38	10,63	16	25	41	45	40	23	24
SMR-100 200/1200	0,32	1,28	5,11	7,98	11,49	17	28	43	48	43	24	26
SMR-100 250/500	0,17	0,67	2,69	4,20	6,05	11	17	22	26	29	15	16
SMR-100 250/600	0,19	0,77	3,07	4,80	6,91	12	18	26	30	30	17	17
SMR-100 250/900	0,24	0,98	3,92	6,12	8,81	13	22	34	39	34	20	20
SMR-100 250/1000	0,26	1,04	4,15	6,48	9,33	14	22	37	42	35	21	22
SMR-100 250/1200	0,28	1,13	4,53	7,08	10,20	15	25	40	46	38	22	23
SMR-100 250/1500	0,31	1,25	4,99	7,80	11,23	16	29	44	51	42	23	26
SMR-100 315/500	0,14	0,57	2,27	3,54	5,10	10	16	17	22	25	13	14
SMR-100 315/600	0,19	0,78	3,11	4,86	7,00	14	17	21	26	26	15	15
SMR-100 315/900	0,21	0,84	3,34	5,22	7,52	12	20	39	35	30	18	19
SMR-100 315/1000	0,23	0,93	3,72	5,82	8,38	12	21	32	38	31	19	20
SMR-100 315/1200	0,26	1,05	4,19	6,54	9,42	14	24	35	42	34	22	23
SMR-100 315/1500	0,12	0,47	1,88	2,94	4,23	15	28	39	47	38	21	25
SMR-100 355/600	0,11	0,44	1,77	2,76	3,97	10	15	20	23	23	13	14
SMR-100 355/900	0,17	0,66	2,65	4,14	5,96	11	19	28	32	27	16	18
SMR-100 355/1000	0,18	0,71	2,84	4,44	6,39	11	19	31	35	28	18	19
SMR-100 355/1200	0,20	0,81	3,23	5,04	7,26	13	22	34	39	31	18	21

Nominal dimension	Pressure loss [Pa]					Attenuation in octave bands						
	Velocity [m/s]					Attenuation [dB]						
	2	4	8	10	12	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]
SMR-100 355/1500	0,23	0,93	3,72	5,82	8,38	14	26	38	44	35	19	24
SMR-100 400/600	0,08	0,32	1,27	1,98	2,85	9	15	18	21	20	12	11
SMR-100 400/900	0,13	0,53	2,11	3,30	4,75	11	18	26	30	24	14	14
SMR-100 400/1000	0,15	0,59	2,34	3,66	5,27	11	18	29	33	25	16	16
SMR-100 400/1200	0,17	0,68	2,73	4,26	6,13	12	22	32	37	28	16	17
SMR-100 400/1500	0,20	0,80	3,19	4,98	7,17	14	26	36	42	32	17	20
SMR-100 450/600	0,05	0,19	0,77	1,20	1,73	9	14	16	18	17	10	10
SMR-100 450/900	0,10	0,40	1,61	2,52	3,63	10	17	24	27	21	13	13
SMR-100 450/1000	0,12	0,46	1,84	2,88	4,15	10	18	27	30	22	15	15
SMR-100 450/1200	0,14	0,56	2,23	3,48	5,01	11	21	30	34	25	15	16
SMR-100 450/1500	0,17	0,67	2,69	4,20	6,05	13	25	34	39	29	16	19
SMR-100 500/600	0,02	0,08	0,31	0,48	0,69	8	13	14	15	15	10	9
SMR-100 500/900	0,07	0,29	1,15	1,80	2,59	10	16	22	24	19	13	13
SMR-100 500/1000	0,09	0,35	1,38	2,16	3,11	10	17	25	27	20	14	14
SMR-100 500/1200	0,11	0,44	1,77	2,76	3,97	11	20	28	31	23	15	16
SMR-100 500/1500	0,14	0,56	2,23	3,48	5,01	13	24	32	36	27	16	19
SMR-100 630/900	0,02	0,10	0,38	0,60	0,86	8	15	20	22	17	11	11
SMR-100 630/1000	0,04	0,14	0,58	0,90	1,30	9	15	23	25	18	12	12
SMR-100 630/1200	0,06	0,24	0,96	1,50	2,16	10	18	26	29	21	13	14
SMR-100 630/1500	0,09	0,36	1,46	2,28	3,28	11	22	29	34	25	14	17
SMR-100 710/1000	0,02	0,08	0,31	0,48	0,69	8	14	20	23	16	11	10
SMR-100 710/1200	0,04	0,17	0,69	1,08	1,56	9	17	23	27	18	11	12
SMR-100 710/1500	0,07	0,30	1,19	1,86	2,68	11	21	26	30	22	12	15
SMR-100 800/1000	0,01	0,04	0,15	0,24	0,35	8	14	20	22	15	10	10
SMR-100 800/1200	0,03	0,13	0,54	0,84	1,21	9	17	22	25	18	11	12
SMR-100 800/1500	0,06	0,25	1,00	1,56	2,25	10	21	26	30	22	12	15
SMR-100 900/1000	0,00	0,01	0,04	0,06	0,09	7	13	19	20	13	9	10
SMR-100 900/1200	0,03	0,11	0,42	0,66	0,95	8	16	22	24	16	10	11
SMR-100 900/1500	0,06	0,23	0,92	1,44	2,07	10	20	26	29	20	11	14

4.3. Pressure loss and attenuation - SMRB

Tab. 4.3.1. Pressure loss and attenuation - SMRB

Nominal dimension	Pressure loss [Pa]					Attenuation in octave bands						
	Velocity [m/s]					Attenuation [dB]						
	2	4	8	10	12	125 [Hz]	250 [Hz]	500 [Hz]	1000 [Hz]	2000 [Hz]	4000 [Hz]	8000 [Hz]
SMRB 315/600	4,8	9,0	30,0	51,0	66,0	7	15	18	26	34	24	24
SMRB 315/900	7,2	13,5	45,0	76,5	99,0	11	18	26	37	40	28	29
SMRB 315/1200	9,6	18,0	60,0	102,0	132,0	15	21	33	41	46	40	44
SMRB 400/600	3,6	7,2	24,0	40,8	51,0	8	9	16	22	24	19	19
SMRB 400/900	5,4	10,8	36,0	61,2	76,5	11	14	22	34	32	23	24
SMRB 400/1200	7,2	14,4	48,0	81,6	102,0	11	21	30	38	43	28	32
SMRB 500/900	3,6	7,2	24,3	34,2	47,7	8	12	19	27	21	19	19
SMRB 500/1200	4,8	9,6	32,4	45,6	63,6	10	16	26	35	29	22	25
SMRB 630/1200	2,4	8,4	26,4	39,6	60,0	8	11	23	38	23	19	19
SMRB 630/1500	3,0	10,5	33,0	49,5	75,0	10	15	23	39	26	20	23
SMRB 800/1200	1,2	4,8	19,2	34,8	57,6	5	9	17	23	21	16	17
SMRB 800/1500	1,5	6,0	24,0	43,5	72,0	5	12	19	26	23	18	20

#### IV. MATERIAL, FINISHING

##### 5. Material

- 5.1. Casing and inner perforated tube are made of galvanized steel sheet.
- 5.2. Acoustic absorber is made of mineral wool coated by non woven fabric.

#### V. INSPECTION, TESTING

##### 6. Inspection, testing

- 6.1. The appliance is constructed and preset by the manufacturer, its operation is dependent on proper installation and adjustment.

#### VI. PACKING, TRANSPORTATION, TAKE-OVER, STORAGE AND GUARANTEE

##### 7. Logistic terms

- 7.1. Silencers are transported by box freight vehicles without direct weather impact. Silencers must be protected against mechanical damages when transported and manipulated.
- 7.2. Silencers must be stored indoor in environment without any aggressive vapours, gases or dust. Indoor temperature must be in the range from -5°C to +40°C and relative humidity max. 80%.

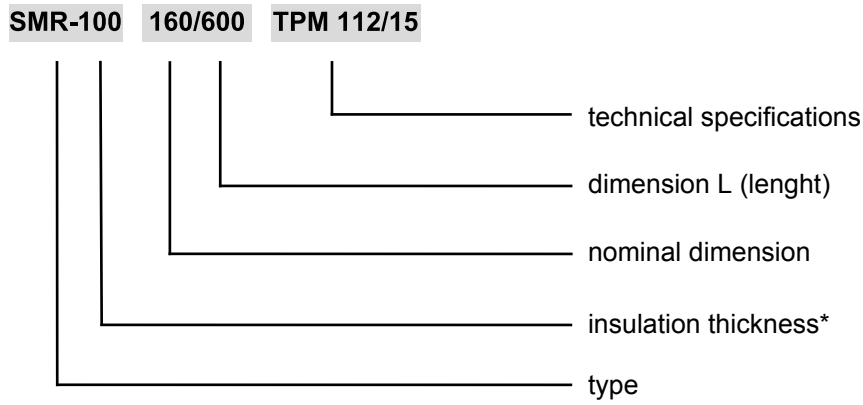
#### VII. ASSEMBLY, ATTENDANCE, MAINTENANCE AND REVISIONS

##### 8. Assembly

- 8.1. All effective safety standards and directives must be observed during silencers assembly.
- 8.2. The assembly consists of installation of the damper into the air duct.

VIII. ORDERING INFORMATION

9. Ordering key



\* Silencers SMRB are made with only the insulation thickness 100 mm. In order not specified.

MANDÍK, a.s.  
Dobříšská 550  
26724 Hostomice  
Czech Republic  
Tel.: +420 311 706 706  
E-Mail: [mandik@mandik.cz](mailto:mandik@mandik.cz)  
[www.mandik.com](http://www.mandik.com)

---

The producer reserves the right for innovations of the product. For actual product information see  
[www.mandik.com](http://www.mandik.com)