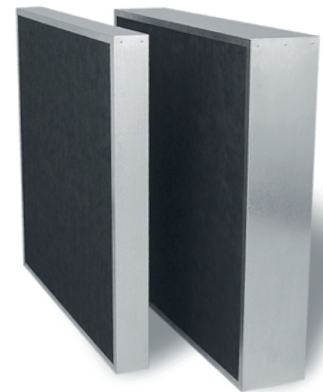
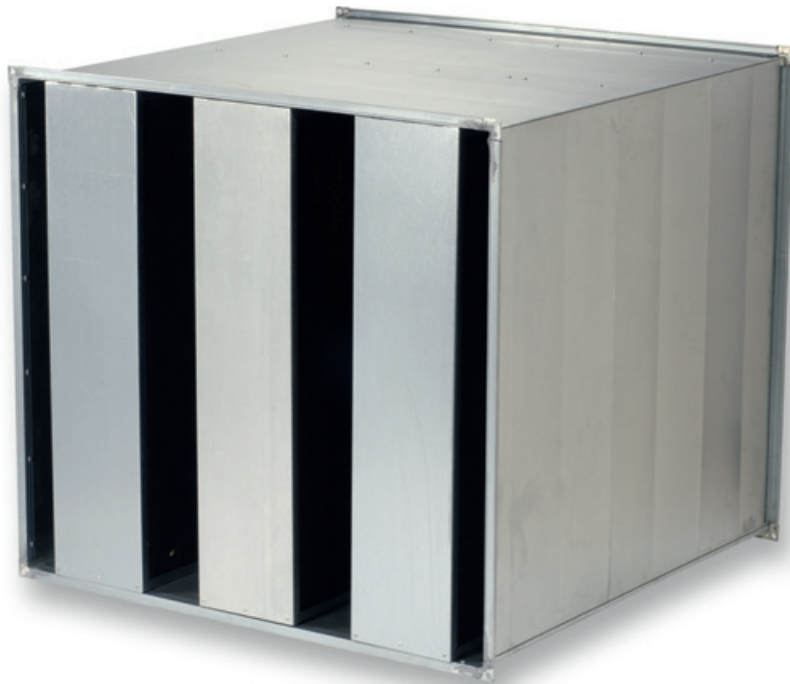


- Rectangular
- Galvanized steel



Rectangular sound attenuators type BTH-B3

Customized rectangular sound attenuators

Application

- **BTH-B3** silencers are suitable to attenuate industrial machinery noises and special applications in the air-conditioning engineering. BTH-B3 silencers with built-in **B3** attenuation dampers provide very efficient attenuation in the 500 to 4000Hz frequency range
- Silencers with Splitter thickness $d=100\text{mm}$ is suitable for smaller air flow rates as well as in the case where high degree attenuation is required in the high frequency range.
- Splitter thickness of 200mm is suitable for large air flow rates as well as in the case where high degree attenuation is required in the low frequency range.
- Standard version silencers with cellulose foil or galvanized steel sheet plates are suitable for velocities up to 20m/s between the splitters

Composition

- The attenuation housing is made of galvanized sheet steel
- Splitters with frames of galvanized steel and fillings with highly efficient absorption material are build into the housing
- Filling exposed surface is protected with cellulose foil
- They are designed to be incombustible class A1, Euroclass DIN EN 13501-1
- The B3 splitter height and length are not interchangeable. The splitter L dimension shall always run in the direction of the propagation of sound

Order example

BTH-B3 BXHXL / d= ... / n= ...

Explanation

BTH-B3 : Silencer type with B3 Splitters with cellulose foil

BXHXL : Width X Height X Length

d=100 : Splitter thickness of 100mm

or

d=200 : Splitter thickness of 200mm

n= ... : Number of splitters

Prices

- Available upon request

Attenuation values BTH-B3 Splitter thickness d=100mm																	
L=500 mm - d=100									L=1500 mm - d=100								
s [mm]	[Hz]								s [mm]	[Hz]							
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
40	4	6	11	14	16	18	14	11	40	10	20	33	44	48	50	40	33
50	3	5	10	13	16	16	12	9	50	9	15	28	39	46	48	34	27
60	2	4	8	12	15	15	10	8	60	8	12	26	36	45	45	32	24
66.7	2	4	8	11	15	15	10	8	66.7	8	12	24	34	45	45	32	24
70	2	4	8	11	15	15	10	8	70	8	10	22	33	45	45	32	22
75	2	4	7	10	15	15	10	8	75	6	10	21	32	45	45	32	22
80	2	3	6	10	15	15	10	7	80	6	9	20	32	45	45	30	21
87.5	2	3	6	10	15	15	10	7	87.5	6	9	18	30	45	45	30	21
90	2	2	6	10	15	15	10	6	90	4	8	16	28	45	45	30	20
100	2	2	4	9	15	15	10	6	100	4	8	14	27	45	45	30	20

Attenuation values BTH-B3 Splitter thickness d=100mm																	
L=1000 mm - d=100									L=2000 mm - d=100								
s [mm]	[Hz]								s [mm]	[Hz]							
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
40	7	13	22	29	32	35	27	22	40	14	26	44	50	50	50	40	44
50	6	10	19	26	31	32	23	18	50	12	20	38	50	50	50	46	36
60	5	8	17	24	30	30	21	16	60	10	16	34	48	50	50	42	32
66.7	5	8	16	23	30	30	21	16	66.7	10	16	32	46	50	50	42	32
70	5	7	15	22	30	30	21	15	70	10	14	30	44	50	50	42	30
75	4	7	14	21	30	30	21	15	75	8	14	28	42	50	50	42	30
80	4	6	13	21	30	30	20	14	80	8	12	26	42	50	50	40	28
87.5	4	6	12	20	30	30	20	14	87.5	8	12	24	40	50	50	40	28
90	3	5	11	19	30	30	20	13	90	6	10	22	38	50	50	40	26
100	3	5	9	18	30	30	20	13	100	6	10	18	36	50	50	40	26

Attenuation values BTH-B3 Splitter thickness d=200mm																	
L=500 mm - d=200									L=1500 mm - d=200								
s [mm]	[Hz]								s [mm]	[Hz]							
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
60	2	8	13	19	23	20	13	10	60	6	22	39	50	50	50	39	30
75	2	8	12	15	17	14	10	7	75	6	22	38	45	50	44	30	21
100	2	6	10	12	14	12	9	6	100	4	18	32	38	42	38	27	18
125	1	4	8	11	13	12	9	6	125	3	12	26	33	39	38	27	18
150	1	3	6	10	11	10	6	4	150	3	9	16	30	33	30	18	10
175	1	3	5	9	10	9	6	3	175	3	8	16	28	30	28	16	10
200	1	2	4	8	8	8	4	3	200	3	8	14	22	26	22	14	9

Attenuation values BTH-B3 Splitter thickness d=200mm																	
L=1000 mm - d=200									L=2000 mm - d=200								
s [mm]	[Hz]								s [mm]	[Hz]							
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
60	4	15	26	38	46	41	26	20	60	8	30	50	50	50	50	40	40
75	4	15	25	30	34	29	20	14	75	8	30	50	50	50	50	40	28
100	3	12	21	25	28	25	18	12	100	6	24	42	50	50	50	36	24
125	2	8	17	22	26	25	18	12	125	4	16	34	44	50	50	36	24
150	2	6	11	20	22	20	12	7	150	4	12	22	40	44	40	24	14
175	2	6	10	18	20	18	11	7	175	4	11	21	37	41	37	22	13
200	2	5	9	15	17	15	9	6	200	4	10	18	30	34	30	18	12

Specifications

- L = Length in mm
- s = Distance between splitters in mm
- Hz = Frequency band in Hertz
- Sound attenuation capacities D given in dB

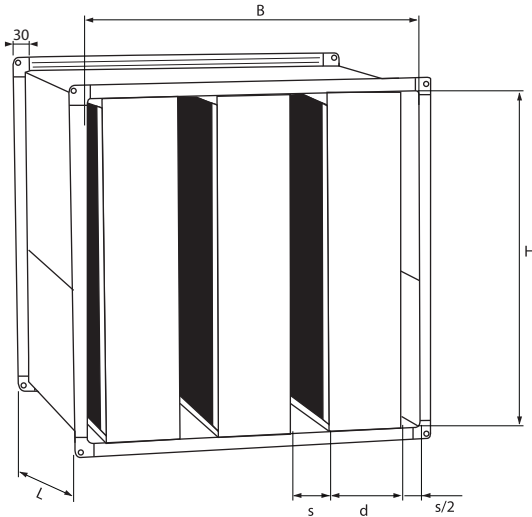
Pressure losses BTH-B3 Splitter thickness d=100mm																					
L=500 mm - d=100											L=1500 mm - d=100										
s [mm]	v (m/s)										s [mm]	v (m/s)									
	2	4	6	8	10	12	14	16	18	20		2	4	6	8	10	12	14	16	18	20
40	0	6	16	30	48	70	96	126	161	198	40	4	10	20	34	52	74	98	128	162	200
50	0	6	14	26	42	60	82	108	136	170	50	4	8	16	28	44	62	86	110	140	172
60	0	4	12	22	36	52	72	94	120	148	60	4	8	16	26	40	56	76	98	124	152
66.7	0	4	12	22	34	50	68	90	114	140	66.7	2	8	14	24	36	52	70	92	116	144
75	0	4	10	20	30	44	62	80	102	128	75	2	6	14	22	34	48	64	84	106	130
80	0	4	10	18	30	42	58	78	98	122	80	2	6	12	22	32	46	62	80	102	124
87.5	0	4	10	18	28	40	56	74	94	116	87.5	2	6	12	20	32	44	60	78	98	120
90	0	4	8	16	26	40	54	72	90	112	90	2	6	12	20	30	42	58	74	94	116
100	0	2	8	16	24	36	50	66	84	104	100	2	6	12	18	28	40	54	70	88	108

Pressure losses BTH-B3 Splitter thickness d=100mm																					
L=1000 mm - d=100											L=2000 mm - d=100										
s [mm]	v (m/s)										s [mm]	v (m/s)									
	2	4	6	8	10	12	14	16	18	20		2	4	6	8	10	12	14	16	18	20
40	2	8	18	32	50	72	97	127	161	199	40	5	11	21	35	53	75	100	130	164	202
50	2	7	15	27	43	61	84	109	138	171	50	5	10	18	30	46	64	87	112	141	174
60	2	6	14	24	38	54	74	96	122	150	60	5	9	17	27	41	57	77	99	125	153
66.7	1	6	13	23	36	51	70	91	115	142	66.7	4	9	16	26	38	54	72	94	118	145
75	1	5	12	21	32	46	63	82	104	129	75	4	8	15	24	35	49	66	85	107	132
80	1	5	11	20	31	44	60	79	100	123	80	4	8	14	23	34	47	63	82	103	126
87.5	1	5	11	19	30	43	58	76	96	118	87.5	4	8	14	22	33	45	61	79	99	121
90	1	5	10	18	28	41	56	73	92	114	90	4	8	13	21	31	44	59	76	95	117
100	1	4	10	17	26	38	52	68	86	106	100	4	7	13	20	29	41	55	71	89	109

Pressure losses BTH-B3 Splitter thickness d=200mm																					
L=500 mm - d=200											L=1500 mm - d=200										
s [mm]	v (m/s)										s [mm]	v (m/s)									
	2	4	6	8	10	12	14	16	18	20		2	4	6	8	10	12	14	16	18	20
60	0	6	16	32	50	72	100	130	164	204	60	4	10	20	34	52	76	102	132	168	206
75	0	6	14	28	44	64	88	116	146	180	75	4	8	18	30	48	68	90	118	150	184
100	0	4	12	24	38	54	76	98	126	154	100	4	8	16	26	40	58	78	102	128	158
125	0	4	10	20	34	48	66	88	110	136	125	4	8	14	24	36	52	70	90	114	140
150	0	4	10	18	30	44	60	78	100	124	150	2	6	12	22	32	46	64	82	104	128
175	0	4	10	18	28	42	58	76	96	118	175	2	6	12	20	32	44	60	78	98	122
200	0	2	8	16	26	38	52	68	86	106	200	2	6	12	18	28	40	54	70	88	110
L=1000 mm - d=200											L=2000 mm - d=200										
s [mm]	v (m/s)										s [mm]	v (m/s)									
	2	4	6	8	10	12	14	16	18	20		2	4	6	8	10	12	14	16	18	20
60	2	8	18	33	51	74	101	131	166	205	60	5	11	21	36	54	77	104	134	169	208
75	2	7	16	29	46	66	89	117	148	182	75	5	10	19	32	49	69	92	120	151	185
100	2	6	14	25	39	56	77	100	127	156	100	5	9	17	28	42	59	80	103	130	159
125	1	6	12	22	35	50	68	89	112	138	125	4	9	15	25	38	53	71	92	115	141
150	1	5	11	20	31	45	62	80	102	126	150	4	8	14	23	34	48	65	83	105	129
175	1	5	11	19	30	43	59	77	97	120	175	4	8	14	22	33	46	62	80	100	123
200	1	4	10	17	27	39	53	69	87	108	200	4	7	13	20	30	42	56	72	90	111

Specifications

- L = Length in mm
- s = Distance between splitters in mm
- Vs = Air velocity between splitters in m/s
- Pressure drop values Dp are given in Pa



Specifications

- s = Distance between splitters in mm
- B X H X L = Width X Height X Length in mm
- d= Splitter thickness 100 or 200 in mm