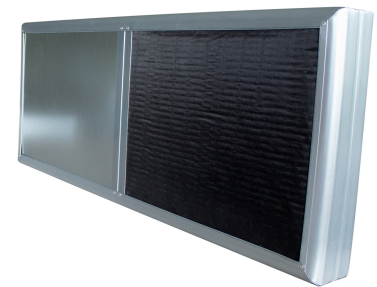
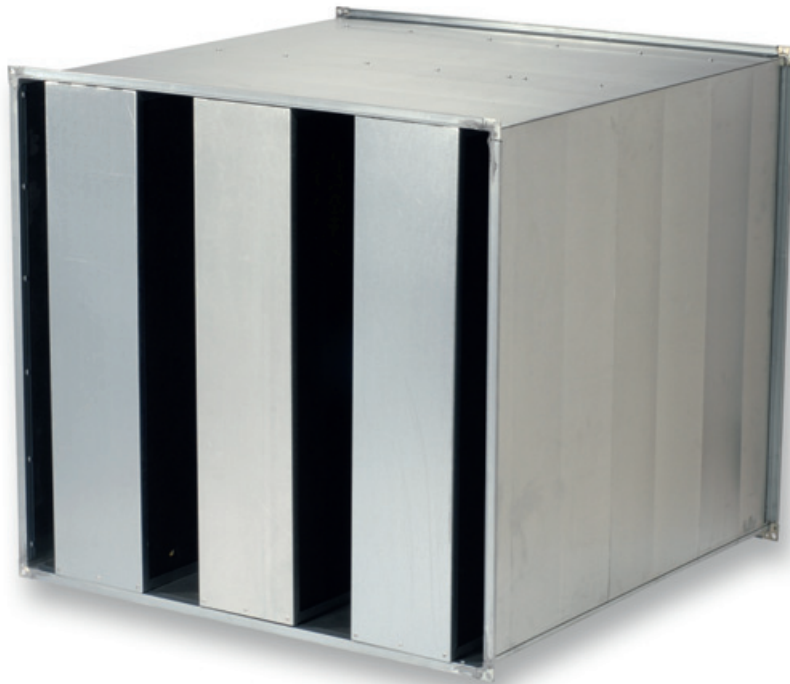


- Rectangular
- Galvanized steel



Rectangular sound attenuators type BTH-B2

Customized rectangular sound attenuators

Application

- **BTH-B2** silencers are designed to reduce sound generated from fans and airconditioning devices with maximum sound attenuation in the 250Hz octave band. The sound attenuation performance of the BTH-B2 silencers with built-in **B2** attenuation splitters are superior to classical absorption attenuators on frequencies of 63 to 500 Hz with equal length and width of splitters and equal splitter pattern pitch. In other frequency bands the BTH-B2 silencers are also well adapted to ventilation and air-conditioning system acoustic requirements
- 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
- B2 splitters are partly covered with galvanized steel strips
- Strips of galvanized sheet steel or cellulose foil run along the splitter length L
- The B2 splitter height en length are not interchangeable. The splitter L dimension shall always run in the direction of the propagation of sound

Order example

BTH-B2 BXHXL / d= ... / n= ...

Explanation

BTH-B2 : Silencer type with B2 Splitters with cellulose foil and sheet steel plates

BXHXL : Width X Height X Length

d=100 : Splitter thickness of 100mm

or

d=200 : Splitter thickness of 200mm

n= ... : Number of splitters

Prices

- Other dimensions available on our website / upon request

Attenuation values BTH-B2 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	8	12	14	12	12	9	8	40	12	24	36	42	38	34	27	22
50	4	6	10	13	12	10	8	6	50	10	18	30	39	36	32	24	20
60	3	5	9	12	12	10	7	6	60	9	15	27	36	34	28	21	16
66.7	3	4	8	12	12	10	7	5	66.7	9	14	25	36	34	28	21	16
70	2	4	8	12	12	10	7	5	70	8	14	24	34	34	28	21	15
75	2	4	8	12	12	10	7	5	75	8	12	22	34	34	28	21	15
80	2	4	8	11	12	10	6	4	80	6	12	22	33	34	28	20	14
87.5	2	4	7	11	12	10	6	4	87.5	6	10	21	33	34	28	20	13
90	2	4	6	10	12	10	6	4	90	4	10	20	32	34	28	20	12
100	2	3	6	10	12	10	6	4	100	4	9	18	32	34	28	20	12
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	8	16	24	28	25	23	18	15	40	16	32	48	50	50	46	36	30
50	7	12	20	26	24	21	16	13	50	14	24	40	50	48	42	32	26
60	6	10	18	24	23	19	14	11	60	12	20	36	48	46	38	28	22
66.7	6	9	17	24	23	19	14	11	66.7	12	18	34	48	46	38	28	22
70	5	9	16	23	23	19	14	10	70	10	18	32	46	46	38	28	20
75	5	8	15	23	23	19	14	10	75	10	16	30	46	46	38	28	20
80	4	8	15	22	23	19	13	9	80	8	16	30	44	46	38	26	18
87.5	4	7	14	22	23	19	13	9	87.5	8	14	28	44	46	38	26	18
90	3	7	13	21	23	19	13	8	90	6	14	26	42	46	38	26	16
100	3	6	12	21	23	19	13	8	100	6	12	24	42	46	38	26	16

Attenuation values BTH-B2 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	7	15	17	18	16	10	8	60	8	21	45	50	50	46	32	24
75	2	7	14	14	13	10	6	5	75	8	21	40	44	39	28	18	15
100	2	6	12	12	10	7	4	4	100	8	18	34	38	32	21	14	12
125	2	4	10	10	10	6	4	4	125	8	14	28	32	30	20	14	12
150	2	4	8	10	9	6	4	4	150	4	12	26	28	27	16	10	10
175	2	4	8	10	9	6	4	4	175	4	11	25	28	27	16	10	10
200	2	3	8	10	9	6	4	4	200	4	9	24	28	27	16	10	10
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	5	14	30	34	35	31	21	16	60	10	28	50	50	50	50	42	32
75	5	14	27	29	26	19	12	10	75	10	28	50	50	50	38	24	20
100	5	12	23	25	21	14	9	8	100	10	24	46	50	42	28	18	16
125	5	9	19	21	20	13	9	8	125	10	18	38	42	40	26	18	16
150	3	8	17	19	18	11	7	7	150	6	16	34	38	36	22	14	14
175	3	7	17	19	18	11	7	7	175	6	14	34	38	36	22	14	14
200	3	6	16	19	18	11	7	7	200	6	12	32	38	36	22	14	14

Specifications

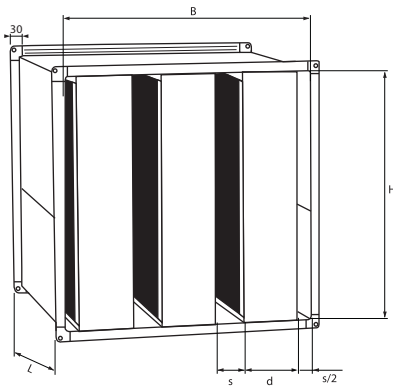
- L = Length in mm
- s = Distance between splitters in mm
- Hz = Frequency band in Hertz
- Sound attenuation capacities given in dB

Pressure losses BTH-B2 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
40	0	6	16	30	48	70	96	126	161	198	40	4	10	20	34	52	74	98	128	162
50	0	6	14	26	42	60	82	108	136	170	50	4	8	16	28	44	62	86	110	140
60	0	4	12	22	36	52	72	94	120	148	60	4	8	16	26	40	56	76	98	124
66.7	0	4	12	22	34	50	68	90	114	140	66.7	2	8	14	24	36	52	70	92	116
75	0	4	10	20	30	44	62	80	102	128	75	2	6	14	22	34	48	64	84	106
80	0	4	10	18	30	42	58	78	98	122	80	2	6	12	22	32	46	62	80	102
87.5	0	4	10	18	28	40	56	74	94	116	87.5	2	6	12	20	32	44	60	78	98
90	0	4	8	16	26	40	54	72	90	112	90	2	6	12	20	30	42	58	74	94
100	0	2	8	16	24	36	50	66	84	104	100	2	6	12	18	28	40	54	70	88
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
40	2	8	18	32	50	72	97	127	161	199	40	5	11	21	35	53	75	100	130	164
50	2	7	15	27	43	61	84	109	138	171	50	5	10	18	30	46	64	87	112	141
60	2	6	14	24	38	54	74	96	122	150	60	5	9	17	27	41	57	77	99	125
66.7	1	6	13	23	36	51	70	91	115	142	66.7	4	9	16	26	38	54	72	94	118
75	1	5	12	21	32	46	63	82	104	129	75	4	8	15	24	35	49	66	85	107
80	1	5	11	20	31	44	60	79	100	123	80	4	8	14	23	34	47	63	82	103
87.5	1	5	11	19	30	43	58	76	96	118	87.5	4	8	14	22	33	45	61	79	99
90	1	5	10	18	28	41	56	73	92	114	90	4	8	13	21	31	44	59	76	95
100	1	4	10	17	26	38	52	68	86	106	100	4	7	13	20	29	41	55	71	89

Pressure losses BTH-B2 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
- Pressure drop values can be reduced by 20% by adding 'option V' guides



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