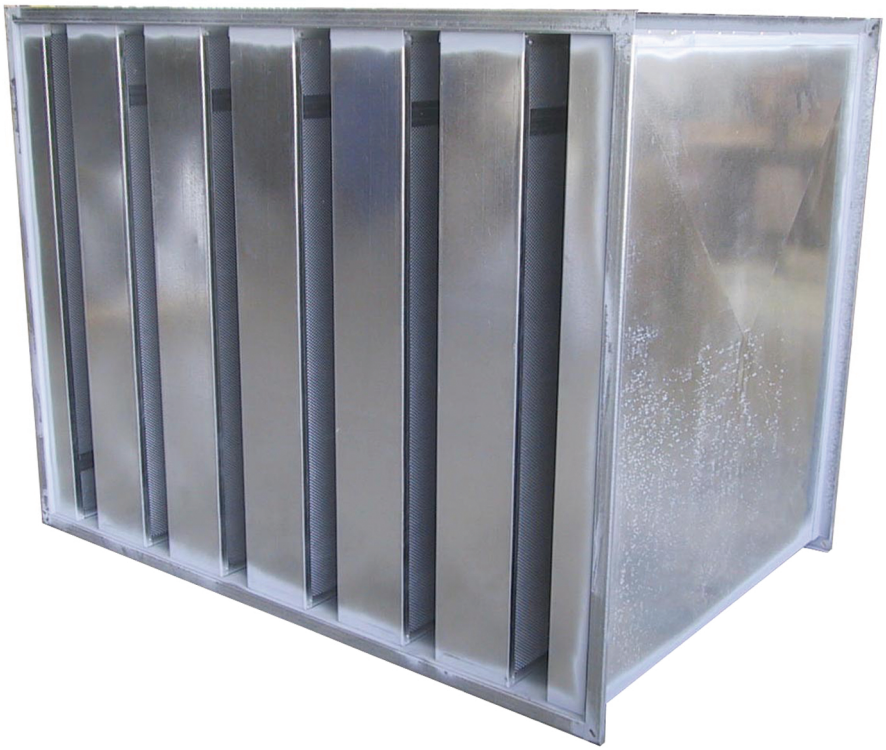

Rectangular sound attenuator type BTC

Rectangular sound attenuator in galvanised steel

Application

- The sound attenuators are used to absorb the noise in air conditioning or ventilation ducts

Composition

- Casing in galvanized steel, thickness 1,0 mm
- Metu flange 30 mm up to 6,0 m of perimeter or flange 40 mm over 6,1 m of perimeter
- Acoustic baffles with casing in galvanized steel thickness 0,6 mm (baffles 200 mm thick), thickness 0,8mm for other baffles
- Acoustic material in mineral wool 60Kg /m³ with protection against erosion by glass fibre, fire resistance M0 and non combustible material used in A,B and C class in accordance council directive 96/98/EC on Marine Equipment (Rina)
- Acoustic data tested in accordance to ISO 11691 (test report N°142976)
- Pressure loss data tested in accordance to ISO 7244 (test report N° 136363)
- Noise of sound attenuator tested in accordance to ISO 23741 (test report N° 149877)
- **BTC-A** : with baffles totally in protected mineral wool, suitable to absorb the noise at medium high frequencies (250÷8k Hz)
- **BTC-O** : with baffles half covered with galvanized steel, suitable to absorb the noise at low frequence (125 Hz) (on request with galvanized plate with perforated stripes)
- Baffles thickness 100,200,300 mm with possibility of aerodynamic profile
- Extended metal sheet protection for acoustic material
- Plastic and extended metal sheet protection for acoustic material, especially for hospital, pharmaceutic or microelectronic industries

Mounting

Duct Mounted

Options

- Other glass fibre protection available
- Casing in stainless steel on request

Order example

(QTY)=1no (Dimensions W X H X L)=600mm x 300mm x 1500mm Long (Model)=BTC
(Description)=Rectangular Silencer (Accesories)=With Duct Flanges

V : speed referred to the sections BxH [m/s]
Δ**pt** : total pressure drop [Pa]
LwA : sound power level weight A [dB(A)]
200/100 : baffle thickness / distance between baffles; rapport between free area / total area = 33%
200/150 : baffle thickness / distance between baffles; rapport between free area / total area = 43%
200/200 : baffle thickness / distance between baffles; rapport between free area / total area = 50%

Pressure loss						
BTC	200/100		200/150		200/200	
V (m/s)	Δpt Pa	LwA dB (A)	Δpt Pa	LwA dB (A)	Δpt Pa	LwA dB (A)
1	5	<20	<5	<20	<5	<20
2	21	32	10	23	7	25
3	47	44	23	36	17	37
4	78	52	42	44	28	43
5	125	57	63	51	45	50
6	88	57	64	54		
7	120	61	84	58		
8	150	65	110	61		
9	140	64				

Sound attenuation values										
	T	D	L [mm]	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
BTC-A	300	100	500	7	13	16	21	21	13	10
			1000	11	20	28	36	35	21	16
			1500	15	30	41	50	50	31	23
			2000	18	37	50	50	50	39	29
BTC-A	300	150	500	6	9	12	16	13	9	7
			1000	13	15	19	27	26	15	10
			1500	16	21	28	40	36	21	14
			2000	23	27	35	50	49	27	17
BTC-A	300	200	500	5	8	10	13	9	7	5
			1000	10	11	16	22	18	11	8
			1500	12	16	23	32	24	15	11
			2000	17	19	29	41	33	19	13
BTC-A	200	100	500	4	10	15	20	18	12	6
			1000	7	19	28	38	35	20	12
			1500	9	26	40	50	50	29	15
			2000	11	35	50	50	50	37	21
BTC-A	200	150	500	3	8	11	14	13	8	5
			1000	5	15	21	28	25	14	8
			1500	6	20	29	39	35	19	10
			2000	7	27	39	50	47	25	13
BTC-A	200	200	500	2	6	9	12	10	6	5
			1000	5	12	16	23	19	10	7
			1500	6	15	22	32	26	13	9
			2000	7	21	29	43	35	17	11
BTC-A	100	50	500	3	6	16	29	35	22	15
			1000	4	13	32	41	47	33	24
			1500	5	16	45	50	50	50	36
			2000	6	26	50	50	50	50	45
BTC-A	100	100	500	2	4	10	19	20	11	6
			1000	4	8	20	34	39	22	11
			1500	5	10	27	50	50	30	14
			2000	6	13	37	50	50	39	19

Standard baffles in mineral wool with black glass net

	T	D	L [mm]	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
BTC-OP	300	100	500	7	12	15	18	17	11	9
			1000	14	20	25	27	25	16	13
			1500	18	29	37	42	39	24	19
			2000	25	37	47	50	47	29	23
BTC-OP	300	150	500	5	9	11	13	10	8	7
			1000	11	16	18	20	16	12	10
			1500	13	22	26	30	23	17	14
			2000	19	29	33	37	29	21	17
BTC-OP	300	200	500	5	7	9	11	8	7	5
			1000	10	13	15	16	12	10	8
			1500	12	17	21	24	17	14	10
			2000	17	23	27	29	21	17	13
BTC-OP	200	100	500	4	10	15	18	15	10	5
			1000	8	18	26	27	23	15	9
			1500	10	25	38	42	35	22	11
			2000	13	33	49	50	43	27	16
BTC-OP	200	150	500	3	8	11	12	10	7	4
			1000	7	15	18	20	17	13	8
			1500	9	20	26	29	24	17	10
			2000	11	27	33	37	31	23	13
BTC-OP	200	200	500	3	7	9	10	8	6	5
			1000	6	12	15	15	12	9	7
			1500	7	16	21	22	17	12	10
			2000	9	21	27	27	21	15	11
BTC-OP	100	50	500	3	8	18	28	27	19	14
			1000	6	17	31	38	42	29	20
			1500	7	22	46	50	50	35	31
			2000	9	31	50	50	50	50	37
BTC-OP	100	100	500	2	5	12	16	15	10	8
			1000	5	11	20	26	25	15	9
			1500	6	13	29	33	37	22	14
			2000	7	19	37	49	47	27	15

Baffles with half section covered with galvanized sheet plate with perforated stripes

	T	D	L [mm]	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
BTC-O	300	100	500	9	9	11	14	13	8	7
			1000	18	15	19	20	19	12	10
			1500	23	22	28	32	29	18	14
			2000	31	28	35	38	35	22	17
BTC-O	300	150	500	6	7	8	10	8	6	5
			1000	14	12	14	15	12	9	8
			1500	16	17	20	23	17	13	11
			2000	24	22	25	28	22	16	13
BTC-O	300	200	500	6	5	7	8	6	5	4
			1000	13	10	11	12	9	8	6
			1500	15	13	16	18	13	11	8
			2000	21	17	20	22	16	13	10
BTC-O	200	100	500	5	8	11	14	11	8	4
			1000	10	14	20	20	17	11	7
			1500	13	19	29	32	26	17	8
			2000	16	25	37	38	32	20	12
BTC-O	200	150	500	4	6	8	9	8	5	3
			1000	9	11	14	15	13	10	6
			1500	11	15	20	22	18	13	8
			2000	14	20	25	28	23	17	10
BTC-O	200	200	500	4	5	7	8	6	5	4
			1000	8	9	11	11	9	7	5
			1500	9	12	16	17	13	9	8
			2000	11	16	20	20	16	11	8
BTC-O	100	50	500	4	6	14	21	20	14	11
			1000	8	13	23	29	32	22	15
			1500	9	17	35	38	38	26	23
			2000	11	23	38	38	38	38	28
BTC-O	100	100	500	3	4	9	12	11	8	6
			1000	6	8	15	20	19	11	7
			1500	8	10	22	25	28	17	11
			2000	9	14	28	37	35	20	11

Baffles with half section covered with galvanized sheet plate