

Acoustics



Description

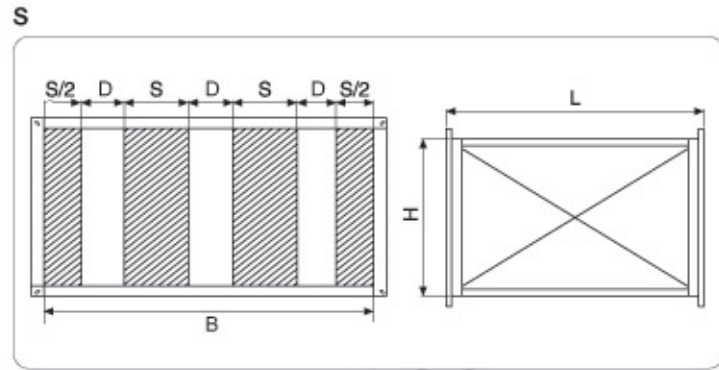
- S:** rectangular sound attenuators
- casing and baffles in galvanised steel
 - baffles thickness 200 mm
 - half standard lateral baffles to stiffen the structure
 - acoustic material in rock wool 50 kg/m³ coated with black glass veil
 - fire-resistance class A1 according to EN 13501-1
 - acoustic tests according to ISO EN 11691 standard
 - suitable for attenuation from 250 to 8k Hz
 - quick-fit flange from 30 mm up to 6 m of perimeter or max 2 m of depth or 40 mm for larger sizes

Modules

- S..A: baffle 200 mm, space 100 mm
- S..B: baffle 200 mm, space 150 mm
- S..C: baffle 200 mm, space 200 mm

Special executions

- STV: acoustic material with certificate of hygiene according to VDI 6022 (glass tissue coating) (list price +10%)
- SR: like S but with baffles covered with micro-expanded mesh
- SO: like S but with baffles covered half in galvanised sheet metal with perforated bands specifically for 125 Hz
- SOR: like SO but with remaining half of the baffles coated with micro-expanded mesh
- ..N: baffles with aerodynamic profiles
- S100: with baffles measuring 100 mm



pressure drop and noise generated

V	200/100		200/150		200/200	
	Δp_t	LwA	Δp_t	LwA	Δp_t	LwA
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	-	-	-	-	110*	61

*work point not recommended

V: velocity referring to the section BxH [m/s]
 Δp_t : total pressure drop [Pa] referring to L=1000mm (L= 2000 +25%)
 LwA: sound pressure level [dB(A)]

Data variation for baffles with aerodynamic profiles
 Δp_t : -25%
 LwA: -10%

Type S attenuation table

Baffle Thickness [mm]	Distance baffles [mm]	Length [mm]	Frequencies (Hz)							
			63*	125	250	500	1k	2k	4k	8k
200	100	500	2	4	11	16	21	19	14	7
		1000	4	9	19	29	40	38	25	13
		1500	5	12	28	44	50	50	33	17
		2000	6	16	36	50	50	50	44	23
200	150	500	2	4	8	13	16	14	9	6
		1000	2	7	15	23	30	26	15	9
		1500	3	9	21	33	42	38	21	12
		2000	4	12	28	43	50	50	28	14
200	200	500	1	3	7	11	14	12	7	6
		1000	2	6	13	17	25	21	12	8
		1500	3	8	17	25	35	30	16	11
		2000	4	11	23	32	46	40	21	14

*calculated attenuation data

Unchanged attenuation for all frequencies with attenuators lined with micro-expanded mesh or perforated sheet or glass tissue

Selection table and price list

Parameters	V= m/s	Δpt=(Pa)
Module A	4.2	80
Module B	5.7	80
Module C	6.8	80

No. baffles	mod. A 200/100			mod. B 200/150			mod. C 200/200		
	B	H	Flow rate (m³/h)	B	H	Flow rate (m³/h)	B	H	Flow rate (m³/h)
3	600	300	2720	700	300	4300	800	300	5870
4	900	300	4080	1050	300	6460	1200	300	8810
5	1200	300	5440	1400	300	8610	1600	300	11750
6	1500	300	6800	1750	300	10770	2000	300	14680
7	1800	300	8160	2100	300	12920	2400	300	17620
8	2100	300	9520	2450	300	15080	2800	300	20560
9	2400	300	10880	2800	300	17230	3200	300	23500
3	600	500	4530	700	500	7180	800	500	9790
4	900	500	6800	1050	500	10770	1200	500	14680
5	1200	500	9070	1400	500	14360	1600	500	19580
6	1500	500	11340	1750	500	17950	2000	500	24480
7	1800	500	13600	2100	500	21540	2400	500	29370
8	2100	500	15870	2450	500	25130	2800	500	34270
9	2400	500	18140	2800	500	28720	3200	500	39160
3	600	700	6350	700	700	10050	800	700	13700
4	900	700	9520	1050	700	15080	1200	700	20560
5	1200	700	12700	1400	700	20100	1600	700	27410
6	1500	700	15870	1750	700	25130	2000	700	34270
7	1800	700	19050	2100	700	30160	2400	700	41120
8	2100	700	22220	2450	700	35190	2800	700	47980
9	2400	700	25400	2800	700	40210	3200	700	54830
3	600	900	8160	700	900	12920	800	900	17620
4	900	900	12240	1050	900	19390	1200	900	26430
5	1200	900	16320	1400	900	25850	1600	900	35250
6	1500	900	20410	1750	900	32310	2000	900	44060
7	1800	900	24490	2100	900	38780	2400	900	52870
8	2100	900	28570	2450	900	45240	2800	900	61680
9	2400	900	32650	2800	900	51710	3200	900	70500
10	600	1000	9070	700	1000	14360	800	1000	19580
4	900	1000	13600	1050	1000	21540	1200	1000	29370
5	1200	1000	18140	1400	1000	28720	1600	1000	39160
6	1500	1000	22680	1750	1000	35910	2000	1000	48960
7	1800	1000	27210	2100	1000	43090	2400	1000	58750
8	2100	1000	31750	2450	1000	50270	2800	1000	68540
9	2400	1000	36280	2800	1000	57450	3200	1000	78330
3	600	1200	10880	700	1200	17230	800	1200	23500
4	900	1200	16320	1050	1200	25850	1200	1200	35250
5	1200	1200	21770	1400	1200	34470	1600	1200	47000
6	1500	1200	27210	1750	1200	43090	2000	1200	58750
7	1800	1200	32650	2100	1200	51710	2400	1200	70500
8	2100	1200	38100	2450	1200	60320	2800	1200	82250
9	2400	1200	43540	2800	1200	68940	3200	1200	94000
3	600	1500	13600	700	1500	21540	800	1500	29370
4	900	1500	20410	1050	1500	32310	1200	1500	44060
5	1200	1500	27210	1400	1500	43090	1600	1500	58750
6	1500	1500	34020	1750	1500	53860	2000	1500	73440
7	1800	1500	40820	2100	1500	64630	2400	1500	88120
8	2100	1500	47620	2450	1500	75410	2800	1500	102810
9	2400	1500	54430	2800	1500	86180	3200	1500	117500
3	600	1800	16320	700	1800	25850	800	1800	35250
4	900	1800	24490	1050	1800	38780	1200	1800	52870
5	1200	1800	32650	1400	1800	51710	1600	1800	70500
6	1500	1800	40820	1750	1800	64630	2000	1800	88120
7	1800	1800	48980	2100	1800	77560	2400	1800	105750
8	2100	1800	57150	2450	1800	90490	2800	1800	123370
9	2400	1800	65310	2800	1800	103420	3200	1800	141000
3	600	2000	18140	700	2000	28720	800	2000	39160
4	900	2000	27210	1050	2000	43090	1200	2000	58750
5	1200	2000	36280	1400	2000	57450	1600	2000	78330
6	1500	2000	45360	1750	2000	71820	2000	2000	97920
7	1800	2000	54430	2100	2000	86180	2400	2000	117500
8	2100	2000	63500	2450	2000	100540	2800	2000	137080
9	2400	2000	72570	2800	2000	114910	3200	2000	156670

Delivery: 2-3 weeks depending on versions