

## ESRS 1-4 Rectangular silencers with sound-absorbing splitters



### Description

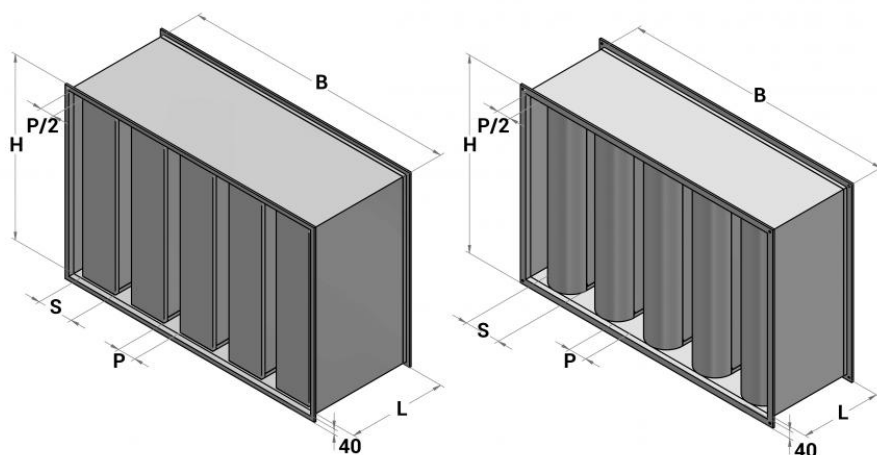
Rectangular silencer with sound-absorbing splitters to control noise in air conditioning, heating and ventilation systems.

### Characteristics

Material: galvanised steel structure with minimum thickness 1 mm.  
Splitters: mineral material with anti-flaking surface and micro-extended mesh.

### On request

Splitters with aerodynamic profile at air inlet and outlet.  
AISI 304 or AISI 316 stainless steel version.



### Operating data and Price list of ESRS1

S: splitter thickness 200 mm  
P: air passages 100 mm

Pa: pressure drop in Pascal for length 1200 mm.  
all dimensions are expressed in mm

dimension BxH	free surface	no. of splitters	speed (m/s)			length (mm)			
			8	10	12	600	900	1200	1500
			flow rate m <sup>3</sup> /h						
mm	mq		39 Pa	61 Pa	88 Pa	euro	euro	euro	euro
300x300	0,03	1	850	1050	1300	∨	∨	∨	∨
300x450	0,05	1	1250	1550	1950	∨	∨	∨	∨
300x600	0,06	1	1700	2100	2600	∨	∨	∨	∨
600x300	0,06	2	1700	2100	2600	∨	∨	∨	∨
600x450	0,09	2	2500	3150	3900	∨	∨	∨	∨
600x600	0,12	2	3450	4200	5200	∨	∨	∨	∨
600x900	0,18	2	5150	6300	7800	∨	∨	∨	∨
900x300	0,09	3	2500	3150	3900	∨	∨	∨	∨
900x450	0,14	3	3850	4750	5850	∨	∨	∨	∨
900x600	0,18	3	5150	6300	7800	∨	∨	∨	∨
900x900	0,27	3	7700	9450	11700	∨	∨	∨	∨
900x1050	0,32	3	8950	11000	13700	∨	∨	∨	∨
900x1200	0,36	3	10200	12600	15600	∨	∨	∨	∨
1200x450	0,18	4	5150	6300	7800	∨	∨	∨	∨
1200x600	0,24	4	6800	8400	10400	∨	∨	∨	∨
1200x750	0,3	4	8500	10500	13000	∨	∨	∨	∨
1200x900	0,36	4	10200	12600	15600	∨	∨	∨	∨
1200x1050	0,42	4	11900	14700	18200	∨	∨	∨	∨
1200x1200	0,48	4	13500	16800	20800	∨	∨	∨	∨
1200x1500	0,6	4	17000	20100	26000	∨	∨	∨	∨
1500x600	0,3	5	8500	10500	13000	∨	∨	∨	∨
1500x750	0,38	5	10600	13100	16250	∨	∨	∨	∨
1500x900	0,45	5	12750	15750	19500	∨	∨	∨	∨
1500x1200	0,6	5	17000	20100	26000	∨	∨	∨	∨
1500x1500	0,75	5	21300	26250	32500	∨	∨	∨	∨
1500x1800	0,9	5	25500	31500	39000	∨	∨	∨	∨
1800x600	0,36	6	10200	12600	15600	∨	∨	∨	∨
1800x750	0,45	6	12750	15750	19500	∨	∨	∨	∨
1800x900	0,54	6	15300	18900	23400	∨	∨	∨	∨
1800x1200	0,72	6	20400	25200	31200	∨	∨	∨	∨
1800x1500	0,9	6	25500	31500	39000	∨	∨	∨	∨
1800x1800	1,08	6	30600	37800	46800	∨	∨	∨	∨
1800x2100	1,26	6	35700	44000	54600	∨	∨	∨	∨
2100x900	0,63	7	17800	22000	27300	∨	∨	∨	∨
2100x1200	0,84	7	23800	29400	36400	∨	∨	∨	∨
2100x1500	1,05	7	29800	36700	45500	∨	∨	∨	∨
2100x1800	1,26	7	35700	44000	54600	∨	∨	∨	∨

## Sound attenuation

silencer length mm	octave-band levels (Hz)							
	63	125	250	500	1 K	2 K	4 K	8 K
600	2	5	10	18	23	21	15	10
900	2	7	14	25	31	28	18	11
1200	3	8	18	32	39	35	22	13
1500	3	9	22	39	48	43	25	14
1800	4	10	26	46	50	50	29	15
2100	4	12	30	50	50	50	32	17

## Operating data and Price list of ESRS2

S: splitter thickness 200 mm.

P: air passages 150 mm.

Pa: pressure drop in Pascal for length 1200 mm.  
all dimensions are expressed in mm.

Prices on request.

dimensions BxH	free surface	no. of splitters	speed (m/s)		
			10	12	14
			flow rate m <sup>3</sup> /h		
mm	mq		46 Pa	66 Pa	90 Pa
350x300	0,045	1	1600	1950	2250
350x450	0,068	1	2400	2950	3350
350x600	0,09	1	3200	3900	4500
700x300	0,09	2	3200	3900	4500
700x450	0,135	2	4800	5850	6750
700x600	0,18	2	6400	7800	9000
700x750	0,225	2	8000	9750	11250
700x900	0,27	2	9600	11700	13500
1050x300	0,135	3	4800	5850	6750
1050x450	0,202	3	7200	8750	10100
1050x600	0,27	3	9600	11700	13500
1050x750	0,337	3	12000	14600	16850
1050x900	0,405	3	14400	17550	20250
1050x1050	0,472	3	16800	20450	23650
1050x1200	0,54	3	19200	23400	27000
1400x450	0,27	4	9600	11700	13500
1400x600	0,36	4	12800	15600	18000
1400x750	0,45	4	16000	19500	22500
1400x900	0,54	4	19200	23400	27000
1400x1050	0,63	4	22400	27300	31500
1400x1200	0,72	4	25600	31200	36000
1400x1500	0,9	4	32000	39000	45000
1750x600	0,45	5	16000	19500	22500
1750x750	0,562	5	20000	24400	28100
1750x900	0,675	5	24000	29250	33750
1750x1200	0,9	5	32000	39000	45000
1750x1500	1,125	5	40000	48750	56250
1750x1800	1,35	5	48000	58500	67500
2100x600	0,54	6	19200	23400	27000
2100x750	0,675	6	24000	29500	33750
2100x900	0,81	6	28800	35100	40500
2100x1200	1,08	6	38400	46800	54000
2100x1500	1,35	6	48000	58500	67500
2100x1800	1,62	6	57600	70200	81000
2100x2100	1,89	6	67200	81900	94500
2450x900	0,945	7	33600	40950	47250
2450x1200	1,26	7	44800	54600	63000
2450x1500	1,575	7	56000	68250	78750
2450x1800	1,89	7	67200	81900	94500

### Sound attenuation

silencer length	octave-band levels (Hz)							
	63	125	250	500	1 K	2 K	4 K	8 K
mm								
600	2	4	8	14	18	16	11	7
900	2	5	11	20	25	21	13	8
1200	2	6	15	26	31	26	16	9
1500	3	7	18	32	38	32	18	10
1800	3	8	21	37	45	37	21	11
2100	3	9	24	43	50	42	23	11
2400	4	10	27	49	50	48	26	12

### Operating data and Price list of ESR3

S: splitter thickness 200 mm.

P: air passages 200 mm.

Pa: pressure drop in Pascal for length 1200 mm.

all dimensions are expressed in mm.

Prices on request.

dimension BxH	free surface	no. of splitters	speed (m/s)		
			10	12	14
			flow rate m <sup>3</sup> /h		
mm	mq		37 Pa	54 Pa	73 Pa
400x300	0,06	1	2160	2592	3024
400x450	0,09	1	3240	3888	4536
400x600	0,120	1	4320	5184	6048
800x300	0,120	2	4320	5184	6048
800x450	0,180	2	6480	7776	9072
800x600	0,240	2	8640	10368	12096
800x750	0,300	2	10800	12960	15120
800x900	0,360	2	12960	15552	18144
1200x450	0,270	3	9720	11664	13608
1200x600	0,360	3	12960	15552	18144
1200x750	0,450	3	16200	19440	22680
1200x900	0,540	3	19440	23328	27216
1200x1050	0,630	3	22680	27216	31752
1200x1200	0,720	3	25920	31104	36228
1600x600	0,480	4	17280	20736	24192
1600x750	0,600	4	21600	25920	30240
1600x900	0,720	4	25920	31104	36288
1600x1200	0,960	4	34560	41472	48384
1600x1500	1,200	4	43200	51840	60480
2000x750	0,750	5	27000	32400	37800
2000x900	0,900	5	32400	38880	45360
2000x1200	1,200	5	43200	51840	60480
2000x1500	1,500	5	54000	64800	75600
2000x1800	1,800	5	64800	77760	90720
2400x900	1,080	6	38880	46656	54432
2400x1200	1,440	6	51840	62208	72576
2400x1500	1,800	6	64800	77760	90720
2400x1800	2,160	6	77760	93312	108864

### Sound attenuation

silencer length mm	octave-band levels (Hz)							
	63	125	250	500	1 K	2 K	4 K	8 K
600	1	3	7	12	15	13	9	5
900	2	4	10	17	21	17	11	6
1200	2	5	12	22	27	21	13	7
1500	2	6	15	27	32	26	15	7
1800	3	7	18	32	38	30	16	8
2100	3	7	21	37	43	34	18	9
2400	3	8	23	42	49	39	20	9
2700	3	9	26	47	50	43	22	10

### Operating data and Price list of ESRS4

S: splitter thickness 350 mm.

P: air passages 120 mm.

Pa: pressure drop in Pascal for length 1200 mm.

all dimensions are expressed in mm.

Prices on request.

dimension BxH	free surface	no. of splitters	speed (m/s)		
			8	10	12
			flow rate m <sup>3</sup> /h		
mm	mq		60 Pa	86 Pa	116 Pa
470x300	0,036	1	1050	1300	1550
470x450	0,054	1	1550	1950	2350
470x600	0,072	1	2050	2600	3100
940x300	0,072	2	2050	2600	3100
940x450	0,108	2	3100	3900	4650
940x600	0,144	2	4100	5200	6200
940x750	0,180	2	5150	6500	7750
940x900	0,216	2	6200	7800	9300
1410x450	0,162	3	4650	5850	6950
1410x600	0,216	3	6200	7800	9300
1410x750	0,27	3	7700	9750	11650
1410x900	0,324	3	9250	11700	13950
1410x1050	0,378	3	10800	13650	16250
1410x1200	0,432	3	12350	15600	18600
1880x600	0,288	4	8250	10400	12400
1880x750	0,36	4	10300	13000	15500
1880x900	0,432	4	12350	15600	18600
1880x1200	0,576	4	16500	20800	24800
1880x1500	0,72	4	20600	26000	31000
2350x750	0,45	5	12850	16250	19350
2350x900	0,54	5	15450	19500	23250
2350x1200	0,72	5	20600	26000	31000
2350x1500	0,9	5	25750	32500	38750
2350x1800	1,08	5	30900	39000	46500
2820x900	0,648	6	18550	23400	27900
2820x1200	0,864	6	24700	31200	37200
2820x1500	1,08	6	30900	39000	46500
2820x1800	1,296	6	37100	46800	55800

## Sound attenuation

silencer length mm	octave-band levels (Hz)							
	63	125	250	500	1 K	2 K	4 K	8 K
600	2	8	14	15	17	14	11	7
900	4	11	19	22	25	20	15	10
1200	6	14	24	29	32	26	20	13
1500	8	17	29	36	39	32	25	18
1800	10	21	34	43	46	38	30	19
2100	12	24	38	50	50	44	34	22
2400	14	27	43	50	50	50	39	25
2700	16	30	48	50	50	50	44	28