

ESRS Rectangular silencers with sound-absorbing splitters



Description

Rectangular silencer with sound-absorbing splitters to control noise in air conditioning, heating and ventilation systems. The splitters, with an aerodynamic profile at the inlet and outlet, allow low pressure drops with excellent attenuation performances.

Characteristics

External structure: 0.8 m thick galvanised steel frame, 30 mm flange for lengths up to 6 m, 40 mm flange for longer lengths. Splitters: sound-absorbing splitters with 0.8 m thick galvanised steel frame, 50 kg/m³ density rock wool with anti-flaking surface and micro-extended mesh.

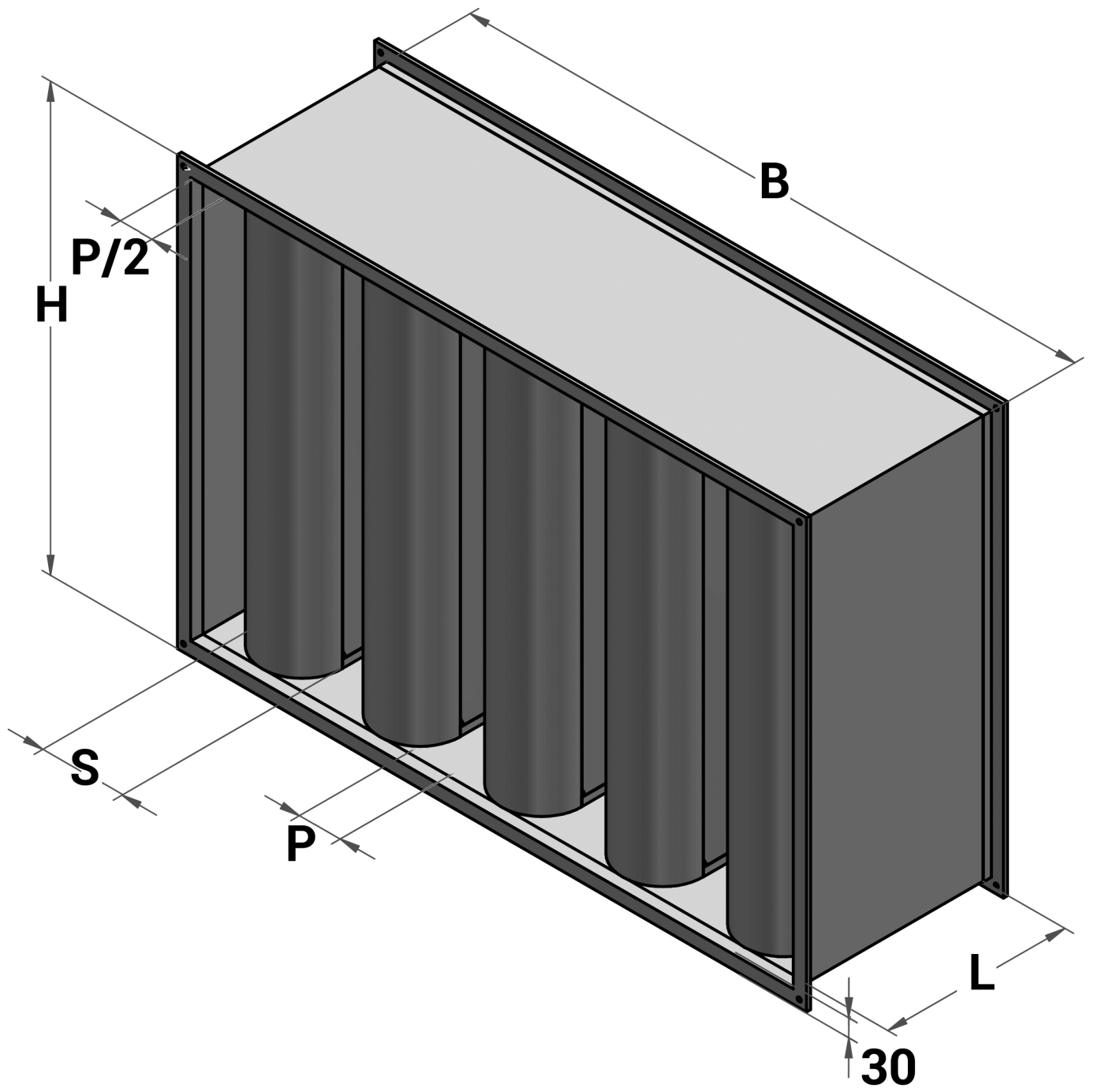
Models

- ESRS-1- Versione standard con spessore setti 200 mm e passaggio aria 100 mm
- ESRS-2- Versione a richiesta con spessore setti 200 mm e passaggio aria 150 mm

On request

AISI 304 or AISI 316 stainless steel version.

Hygienic version with VDI 60/22 certified insulation.



Operating data
and Price List -
ESRS-1

- 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.

Dimensions BxH	Face Area	Free Area	Nr. of Fins				Lenght (m) (mm)			
				Face Velocity (m/s)						
				2,5	3,5	4				
				Flow Rate m³/h			600	900	1200	1500
mm	mq	mq		33 Pa	63 Pa	78 Pa	€	€	€	€
300x300	0,09	0,03	1	810	1135	1300	-	-	-	-
300x450	0,135	0,05	1	1215	1705	1945	-	-	-	-
300x600	0,18	0,06	1	1620	2270	2595	-	-	-	-
600x300	0,18	0,06	2	1620	2270	2595	-	-	-	-
600x450	0,27	0,09	2	2430	3405	3890	-	-	-	-
600x600	0,36	0,12	2	3240	4540	5185	-	-	-	-
600x900	0,54	0,18	2	4860	6805	7780	-	-	-	-
900x300	0,27	0,09	3	2430	3405	3890	-	-	-	-
900x450	0,405	0,14	3	3645	5105	5835	-	-	-	-
900x600	0,54	0,18	3	4860	6805	7780	-	-	-	-
900x900	0,81	0,27	3	7290	10210	11665	-	-	-	-
900x1050	0,945	0,32	3	8505	11910	13610	-	-	-	-
900x1200	1,08	0,36	3	9720	13610	15555	-	-	-	-
1200x450	0,54	0,18	4	4860	6805	7780	-	-	-	-
1200x600	0,72	0,24	4	6480	9075	10370	-	-	-	-
1200x750	0,9	0,3	4	8100	11340	12960	-	-	-	-
1200x900	1,08	0,36	4	9720	13610	15555	-	-	-	-
1200x1050	1,26	0,42	4	11340	15680	18145	-	-	-	-
1200x1200	1,44	0,48	4	12960	18145	20740	-	-	-	-
1200x1500	1,8	0,6	4	16200	22680	25920	-	-	-	-
1500x600	0,9	0,3	5	8100	11340	12960	-	-	-	-
1500x750	1,125	0,38	5	10125	14175	16200	-	-	-	-
1500x900	1,35	0,45	5	12150	17010	19440	-	-	-	-
1500x1200	1,8	0,6	5	16200	22680	25920	-	-	-	-
1500x1500	2,25	0,75	5	20250	28350	32400	-	-	-	-
1500x1800	2,7	0,9	5	24300	34020	38880	-	-	-	-
1800x600	1,08	0,36	6	9720	13610	15555	-	-	-	-
1800x750	1,35	0,45	6	12150	17010	19440	-	-	-	-
1800x900	1,62	0,54	6	14580	20415	23330	-	-	-	-
1800x1200	2,16	0,72	6	19440	27220	31105	-	-	-	-
1800x1500	2,7	0,9	6	24300	34020	38880	-	-	-	-
1800x1800	3,24	1,08	6	29160	40825	46660	-	-	-	-
1800x2100	3,78	1,26	6	34020	47630	54435	-	-	-	-
2100x900	1,89	0,63	7	17010	23815	27220	-	-	-	-

2100x1200	2,52	0,84	7	22680	31755	36290	-	-	-	-
2100x1500	3,15	1,05	7	28350	39690	45360	-	-	-	-
2100x1800	3,78	1,26	7	34020	47630	54435	-	-	-	-

Sound Attenuation

Silencer Length	Octave Bands (Hz)							
mm	63	125	250	500	1 K	2 K	4 K	8 K
600	3	4	9	16	20	21	13	7
900	4	6	14	25	31	34	20	11
1200	6	9	19	34	43	46	27	15
1500	7	11	24	43	>50	>50	32	18
1800	9	14	29	>50	>50	>50	36	20
2100	10	16	34	>50	>50	>50	39	22

Pressure Drops and Noise Generated

Face Section Velocity	Pressure Drop	Generated Noise
V (m/s)	Dpt Pa	Lwa dB(A)
1	5	<20
2	21	32
3	47	44
4	78	52
5	125	57

Weights (Kg)

Dimensions BxH	Lenght (m) (mm)			
	600	900	1200	1500
mm	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)
300x300	12	18	24	29
300x450	16	23	29	36
300x600	19	27	36	44
600x300	21	31	40	50
600x450	26	38	49	61
600x600	32	45	59	73
600x900	42	60	78	96
900x300	30	43	57	70
900x450	37	53	69	86
900x600	44	63	82	101
900x900	59	83	107	132
900x1050	65	93	120	147
900x1200	73	102	132	162
1200x450	48	69	89	110
1200x600	57	81	105	129
1200x750	66	93	212	149
1200x900	75	106	117	168
1200x1050	84	118	152	187
1200x1200	93	130	168	206
1200x1500	110	155	200	144
1500x600	69	99	128	158
1500x750	80	114	147	181
1500x900	91	129	166	204
1500x1200	112	158	204	249
1500x1500	134	188	242	195
1500x1800	155	217	279	341
1800x600	82	117	151	186
1800x750	95	134	173	213
1800x900	107	151	195	240
1800x1200	132	186	240	293
1800x1500	158	221	284	347
1800x1800	183	255	328	400
1800x2100	208	290	372	453
2100x900	124	174	225	276
2100x1200	152	214	275	337

2100x1500	181	253	326	398
2100x1800	210	293	376	459