KOUDHÈ Airconditioning Warmtepompen Ventilatie

Circular silencer

Description

GD: Circular straight silencer, of galvanised steel sheet, consisting of outer sheathing, the sound transparent perforated inner pipe, in between the non-flammable absorption material sheathed with a filter liner (in accordance with DIN 4102) ≈ 50 mm thick.
End caps with male couplings with EPDM rubber gasket seals.
Medium temperature to 100 °, air flow speed up to 30 m/s.

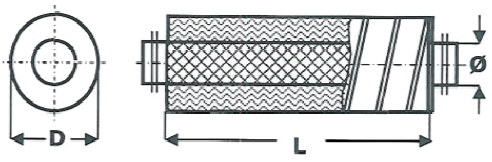
Dimensions:
Ø 80 to 315 in the lengths 300, 600, 900 and 1200 mm
Ø 355 to 500 in the lengths 600, 900 and 1200 mm
Ø 560 to 630 in the lengths 900 and 1200 mm

GD100 : As above, but absorption material ☐ 100 mm thick.

Dimensions:
Ø 80 to 315 in the lengths 300, 600, 900 and 1200 mm
Ø 355 to 500 in the lengths 600, 900 and 1200 mm
Ø 560 to 630 in the lengths 900 and 1200 mm
Ø 710 and 800 in the lengths 1200 mm

Pressure loss: $\Delta p = \zeta \times ½ \times \rho_1 \times v^2$

Thereby
Δp Total pressure loss in Pa
ρ_1 Density of the air in front of the silencer in kg/m³
v Air flow speed in m/s



Dimensions packing thickness 50 mm

Octave band (Hz)												
Ø	D (mm)	L (mm)	63	125	250	500	1000	2000	4000	8000	Weight (kg) ~	Mean Total pressure-loss coefficient ζ
Insertion attenuation (dB)												
80	180	300	4	6	5	10	27	47	43	15	2	0.413
80	180	600	4	9	13	20	38	50	45	24	3	
80	180	900	4	11	22	42	49	50	48	33	5	
80	180	1200	4	13	31	50	50	50	50	42	7	
100	200	300	3	8	7	10	25	37	36	12	2	0.283
100	200	600	4	9	11	19	33	45	40	19	4	
100	200	900	4	10	15	28	40	50	44	27	7	
100	200	1200	4	10	20	37	48	50	48	34	8	
125	224	300	3	4	7	11	15	14	14	11	3	0.220
125	224	600	4	6	10	19	28	33	25	18	4	
125	224	900	4	9	14	27	42	50	35	24	7	
125	224	1200	4	11	17	36	46	50	46	31	9	
160	250	300	1	2	5	9	17	14	16	8	3	0.161
160	250	600	2	4	8	16	26	26	23	10	6	
160	250	900	3	5	11	23	35	39	30	12	9	
160	250	1200	4	6	15	30	44	50	38	14	11	
200	300	300	0	2	5	12	11	10	10	9	4	0.150
200	300	600	0	3	7	16	22	20	13	10	7	
200	300	900	1	5	10	19	32	31	16	11	10	
200	300	1200	2	6	12	22	42	41	20	13	12	

250	355	300	1	1	3	8	10	9	4	4	5	0.125
250	355	600	1	2	6	13	19	15	8	6	9	
250	355	900	2	3	9	17	26	21	13	8	12	
250	355	1200	2	4	12	21	34	27	17	10	15	
315	400	600	0	1	4	10	12	7	4	4	10	0.100
315	400	900	1	2	6	15	21	15	8	7	15	
315	400	1200	1	3	7	21	27	22	13	10	24	
400	500	600	1	1	4	10	11	5	1	2	8	0.074
400	500	900	1	2	5	13	15	8	3	2	24	
400	500	1200	1	2	7	16	20	11	4	3	34	
450	560	600	1	1	4	10	12	4	2	2	9	0.065
450	560	900	1	2	5	13	13	6	4	3	27	
450	560	1200	1	2	7	16	17	8	5	3	38	
500	600	600	1	1	3	10	8	2	2	2	10	0.056
500	600	900	1	2	4	13	11	3	4	2	30	
500	600	1200	2	2	6	16	14	4	5	3	43	

Dimensions packing thickness 100 mm

Octave band (Hz)												
Ø	D (mm)	L (mm)	63	125	250	500	1000	2000	4000	8000	Weight (kg) ~	Mean Total pressure-loss coefficient ζ
Insertion attenuation (dB)												
80	280	300	4	13	13	16	36	46	43	13	4	0.534
80	280	600	4	15	21	33	47	50	45	23	6	
80	280	900	4	18	30	50	50	50	48	32	9	
80	280	1200	5	20	39	50	50	50	50	41	10	
100	300	300	3	12	14	22	33	36	34	10	5	0.366
100	300	600	4	14	18	29	39	44	39	18	10	

100	300	900	5	17	23	36	46	50	44	26	11	
100	300	1200	6	19	28	43	50	50	49	34	12	
125	315	300	2	12	18	22	23	22	19	12	6	0.281
125	315	600	3	13	19	31	33	34	29	17	8	
125	315	900	3	14	20	34	43	46	39	22	12	
125	315	1200	4	14	21	37	50	50	49	27	13	
160	355	300	2	7	8	20	16	16	13	7	7	0.208
160	355	600	3	8	12	24	26	27	21	10	10	
160	355	900	4	10	16	28	37	39	30	12	14	
160	355	1200	5	11	19	33	47	50	38	15	16	
200	400	300	1	5	7	9	9	14	12	5	8	0.158
200	400	600	2	7	11	19	20	22	14	9	11	
200	400	900	3	9	15	30	32	30	17	13	15	
200	400	1200	4	12	18	32	43	41	20	17	21	
250	450	300	2	4	6	8	9	9	3	3	9	0.120
250	450	600	3	5	10	16	19	15	8	6	12	
250	450	900	4	6	14	24	26	21	13	8	20	
250	450	1200	5	7	17	31	34	28	17	10	25	
315	500	300	3	7	17	27	29	21	11	9	9	0.090
315	500	600	2	5	13	20	21	14	8	6	12	
315	500	900	2	5	13	20	21	14	8	6	18	
315	500	1200	3	7	17	27	29	21	11	9	24	
400	600	600	1	4	10	12	11	6	2	2	14	0.067
400	600	900	2	5	11	17	15	9	3	2	41	
400	600	1200	3	6	13	23	20	12	4	3	47	
450	560	600	2	5	11	16	9	4	2	2	15	
450	560	900	3	6	12	21	15	8	4	3	24	
450	560	1200	3	7	14	23	16	8	5	3	35	
500	710	600	2	5	11	14	7	2	3	2	17	0.050
500	710	900	3	6	12	20	10	3	4	3	26	
500	710	1200	3	7	14	23	17	4	5	3	39	
560	760	1200	2	4	8	12	10	7	5	4		
630	800	900	3	3	8	16	6	3	3	3	49	0.038
630	800	1200	2	3	10	19	10	4	3	3	57	
710	900	900	2	3	9	13	5	2	3	2	55	0.033
710	900	1200	2	3	10	17	9	3	3	3	64	
800	1000	1200	3	3	10	15	7	3	3	4	72	0.028