GERHMAN

Ventilation Grilles

Rho

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Exhaust Grilles

RHO R-TYPE

Description

Exhaust aluminium grilles with horizontal adjustable bars.

Characteristics

Material: aluminium

Finish: anodized aluminium, powder coated

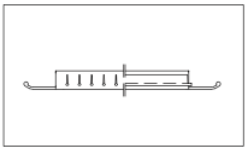
Installation: fixing by clips.

Standard Size	Effectife Area	Air Volume
W*H (mm)	(m^2)	(m^3/h)
200x100	0,0162	117
200x150	0,0237	213
250x100	0,0203	183
250x150	0,0297	267
300x150	0,0357	321
300x200	0,0482	434
500x250	0,0995	896
600x300	0,1392	1253
750x300	0,1755	1580
1000x500	0,3951	3556

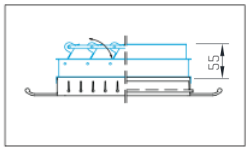
Options

- plenum galvanized;
- plenum isolated.

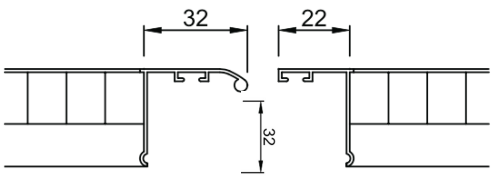
Standard



Damper controlled



Frame Options



Selection table

RHO R-TYPE

Return Grille Selection Table

Neck Size Wxh (mm)	Effective Area m2	Air Velocity m/s								
		1,5	2,0	2,5	3,0	4,0	5,0	6,0	7,0	8,0
100 x 100	0,008	43	58	72	86	115	144	173	202	230
100 x 150	0,0121	65	87	109	131	174	218	261	305	348
100 x 200	0,0162	87	117	146	175	233	292	350	408	467
100 x 250	0,0203	110	146	183	219	292	365	438	512	585
100 x 300	0,0244	132	176	220	264	351	439	527	615	703
150 x 150	0,0177	96	127	159	191	255	319	382	446	510
150 x 200	0,0237	128	171	213	256	341	427	512	597	683
150 x 250	0,0297	160	214	267	321	428	535	642	748	855
150 x 300	0,0357	193	257	321	386	514	643	771	899	1028
150 x 350	0,0417	225	300	375	450	600	751	901	1051	1201
150 x 400	0,0477	258	343	429	515	687	859	1030	1202	1374
150 x 450	0,0537	290	387	483	580	773	967	1160	1353	1547
150 x 500	0,0597	322	430	537	645	860	1075	1290	1504	1719
150 x 600	0,069	373	497	621	745	994	1242	1490	1739	1987
200 x 200	0,032	173	230	288	346	461	576	691	806	922
200 x 250	0,0401	217	289	361	433	577	722	866	1011	1155
200 x 300	0,0482	260	347	434	521	694	868	1041	1215	1388
200 x 350	0,0563	304	405	507	608	811	1013	1216	1419	1621
200 x 400	0,0644	348	464	580	696	927	1159	1391	1622	1855
200 x 450	0,0725	392	522	653	783	1044	1305	1566	1827	2088
200 x 500	0,0806	435	580	725	870	1161	1451	1741	2031	2321
200 x 600	0,0932	503	671	839	1007	1342	1678	2013	2349	2684
200 x 700	0,1094	591	788	985	1182	1575	1969	2363	2757	3151
200 x 750	0,1175	635	846	1058	1269	1692	2115	2538	2961	3384
200 x 800	0,1256	678	904	1130	1356	1809	2261	2713	3165	3617
250 x 250	0,0495	267	356	446	535	713	891	1069	1247	1426
250 x 300	0,0595	321	428	536	643	857	1071	1285	1499	1714
250 x 350	0,0695	375	500	626	751	1000	1251	1501	1751	2002
250 x 400	0,0795	429	572	716	859	1145	1431	1717	2003	2290
250 x 500	0,0995	537	716	896	1075	1433	1791	2149	2507	2866
250 x 600	0,115	621	828	1035	1242	1656	2070	2484	2898	3312
250 x 700	0,135	729	972	1215	1458	1944	2430	2916	3402	3888
250 x 750	0,145	783	1044	1305	1566	2088	2610	3132	3654	4176
250 x 800	0,155	837	1116	1395	1674	2232	2790	3348	3906	4464
250 x 1000	0,195	1053	1404	1755	2106	2808	3510	4212	4914	5616
300 x 300	0,072	389	518	648	778	1037	1296	1555	1814	2074
300 x 350	0,0841	454	606	757	908	1211	1514	1817	2119	2422
300 x 400	0,0962	519	693	866	1039	1385	1732	2078	2424	2771
300 x 450	0,1083	585	780	975	1170	1560	1949	2339	2729	3119
300 x 500	0,1204	650	867	1084	1300	1734	2167	2601	3034	3468
300 x 600	0,1392	752	1002	1253	1503	2004	2506	3007	3508	4009

Air volume m^3/h

Selection table

RHO R-TYPE

Return Grille Selection Table

Neck Size Wxh (mm)	Effective Area m2	Air Velocity m/s								
		1,5	2,0	2,5	3,0	4,0	5,0	6,0	7,0	8,0
300 x 700	0,1634	882	1176	1471	1765	2353	2941	3529	4118	4706
300 x 750	0,1755	948	1264	1580	1895	2527	3159	3791	4423	5054
300 x 800	0,1876	1013	1351	1688	2026	2701	3377	4052	4727	5403
300 x 900	0,2118	1144	1525	1906	2287	3050	3812	4575	5337	6099
350 x 350	0,0973	525	701	876	1051	1401	1751	2102	2452	2802
350 x 400	0,1113	601	801	1002	1202	1603	2003	2404	2805	3205
350 x 450	0,1253	677	902	1128	1353	1804	2255	2706	3158	3609
350 x 500	0,1393	752	1003	1254	1504	2006	2507	3009	3510	4011
350 x 600	0,1611	870	1160	1450	1740	2320	2900	3480	4060	4640
350 x 700	0,1891	1021	1362	1702	2042	2723	3404	4085	4765	5446
350 x 750	0,2031	1097	1462	1828	2194	2925	3656	4387	5118	5849
350 x 800	0,2171	1172	1563	1954	2345	3126	3908	4689	5471	6252
350 x 900	0,2451	1324	1765	2206	2467	3529	4412	5294	6177	7059
350 x 1000	0,2731	1475	1966	2458	2949	3933	4916	5899	6882	7865
400 x 400	0,128	691	922	1152	1382	1843	2304	2765	3226	3686
400 x 500	0,1602	865	1153	1442	1730	2307	2884	3460	4037	4614
400 x 600	0,1873	1011	1349	1686	2023	2697	3371	4046	4720	5394
400 x 700	0,2197	1186	1582	1977	2373	3164	3955	4746	5536	6327
400 x 800	0,2521	1361	1815	2269	2722	3630	4538	5445	6353	7260
400 x 900	0,2845	1536	2048	2561	3073	4097	5121	6145	7169	8194
400 x 1000	0,3169	1711	2282	2852	3423	4563	5704	6845	7986	9127
500 x 500	0,2	1080	1440	1800	2160	2880	3600	4320	5040	5760
500 x 600	0,2335	1261	1681	2102	2522	3362	4203	5044	5884	6725
500 x 750	0,2941	1588	2118	2647	3176	4235	5294	6353	7411	8470
500 x 1000	0,3951	2134	2845	3556	4267	5689	7112	8534	9957	11379
600 x 600	0,2694	1455	1940	2425	2910	3879	4849	5819	6789	7759
600 x 750	0,3398	1835	2447	3058	3670	4893	6116	7340	8563	9786
600 x 900	0,4097	2212	2950	3687	4425	5899	7375	8850	10324	11799
600 x 1000	0,4538	2451	3267	4084	4901	6335	8168	9802	11436	13069
600 x 1200	0,5387	2909	3879	4848	5818	7757	9697	11636	13575	15514
750 x 750	0,4315	2330	3107	3884	4660	6214	7767	9320	10874	12427
750 x 900	0,5203	2810	3746	4683	5619	7492	9365	11238	13112	14985
750 x 1000	0,5795	3129	4172	5216	6259	8345	10431	12517	14603	16690
750 x 1200	0,6853	3701	4934	6168	7401	9868	12335	14802	17270	19737
750 x 1500	0,8629	4660	6213	7766	9319	12426	15532	18639	21745	24852
900 x 900	0,6239	3369	4492	5615	6738	8984	11230	13476	15722	17968
900 x 1000	0,6949	3752	5003	6254	7505	10007	12508	15010	17511	20013
900 x 1200	0,8217	4437	5916	7395	8874	11832	14791	17749	20707	23665
1000 x 1000	0,777	4196	5594	6993	8392	11189	13986	16738	19580	22378
1000 x 1200	0,9189	4962	6616	8270	9924	13232	16540	19848	23156	26464
1200 x 1200	1,0866	5868	7824	9779	11735	15647	19559	23471	27382	31294

Air volume m^3/h

Supply Grilles

RHO S-TYPE

Description

Supply aluminium grilles with vertical and horizontal adjustable bars.

Characteristics

Material: aluminium.

Finish: anodized aluminium, powder coated

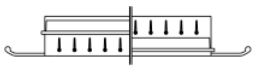
Installation: fixing by clips.

Standard Size W*H (mm)	Effective Area (m^2)	Air Volume (m^3/h)
200*100	0,0134	150
200*150	0,0201	200
250*100	0,0167	160
250*150	0,0251	250
300*150	0,0301	300
300*200	0,0402	450
500*250	0,09	810
600*300	0,149	1400
750*300	0,185	1800
1000*500	0,373	3500

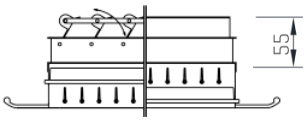
Options

- plenum galvanized;
- plenum isolated.

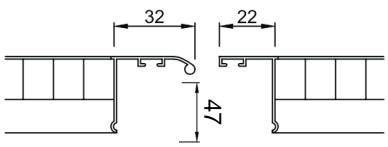
Standard



Damper controlled



Frame Options



Selection table

RHO S-TYPE

Grille size [mm]			Air flow rate																	
		m³/h	100	150	200	250	300	350	400	500	600	700	800	900	1000	1250	1500	2000	2500	3000
	A_k [m²]	l/s	(28)	(42)	(56)	(69)	(83)	(97)	(111)	(139)	(167)	(194)	(222)	(250)	(278)	(347)	(417)	(556)	(694)	(833)
H=100		L_{WA} [dB(A)]	20	32	41	47														
	200x100	V_k [m/s]	2,4	3,6	4,8	5,9														
	(0,012)	Δp_t [Pa]	4	10	17	26														
		$L_{0,2}$ [m]	4,5	6,6	8,7	10,6														
		L_{WA} [dB(A)]		21	29	35	41	45	49											
	300x100	V_k [m/s]		2,3	3	3,7	4,5	5,2	6											
	(0,018)	Δp_t [Pa]		4	7	10	15	21	27											
		$L_{0,2}$ [m]		3,9	5,1	6,2	7,4	8,5	9,7											
		L_{WA} [dB(A)]		<20	21	27	33	37	41	48										
	400x100	V_k [m/s]		1,7	2,2	2,7	3,3	3,8	4,4	5,5										
	(0,025)	Δp_t [Pa]		2	4	6	8	11	14	23										
		$L_{0,2}$ [m]		4,3	5,7	7	8,3	9,6	10,9	13,5										
		L_{WA} [dB(A)]			<20	21	27	31	35	42	47									
	500x100	V_k [m/s]			1,7	2,1	2,6	3	3,4	4,3	5,2									
	(0,032)	Δp_t [Pa]			2	3	5	7	9	14	20									
		$L_{0,2}$ [m]			5	6,1	7,3	8,4	9,6	11,9	14,2									
		L_{WA} [dB(A)]			<20	<20	22	26	30	37	42	47								
	600x100	V_k [m/s]			1,4	1,8	2,1	2,5	2,8	3,6	4,3	5								
	(0,039)	Δp_t [Pa]			2	2	3	5	6	10	14	19								
		$L_{0,2}$ [m]			4,5	5,5	6,6	7,6	8,7	10,7	12,8	14,7								
		L_{WA} [dB(A)]					<20	<20	23	29	35	39	43	47	50					
	800x100	V_k [m/s]					1,6	1,8	2,1	2,6	3,2	3,7	4,2	4,7	5,3					
	(0,053)	Δp_t [Pa]					2	3	3	5	8	10	13	17	21					
		$L_{0,2}$ [m]					5,6	6,5	7,4	9,1	10,8	12,5	14,2	15,9	17,6					
H=150		L_{WA} [dB(A)]			<20	22	27	32	36	42	48									
	300x150	V_k [m/s]			1,8	2,2	2,6	3,1	3,5	4,4	5,3									
	(0,032)	Δp_t [Pa]			2	4	5	7	9	14	21									
		$L_{0,2}$ [m]			5,1	6,2	7,3	8,5	9,7	12	14,3									
		L_{WA} [dB(A)]				<20	<20	24	28	34	40	44	48							
	400x150	V_k [m/s]				1,6	1,9	2,2	2,6	3,2	3,8	4,5	5,1							
	(0,043)	Δp_t [Pa]				2	3	4	5	8	11	15	20							
		$L_{0,2}$ [m]				5,2	6,2	7,2	8,2	10,1	12	13,9	15,8							
		L_{WA} [dB(A)]					<20	<20	22	28	34	38	42	46	49					
	500x150	V_k [m/s]					1,5	1,8	2	2,5	3	3,5	4	4,5	5					
	(0,055)	Δp_t [Pa]					2	2	3	5	7	9	12	15	19					
		$L_{0,2}$ [m]					5,4	6,3	7,2	8,9	10,6	12,2	13,9	15,5	17,2					
		L_{WA} [dB(A)]						<20	<20	23	29	33	37	41	44	50				
	600x150	V_k [m/s]						1,5	1,7	2,1	2,5	2,9	3,3	3,7	4,2	5,2				
	(0,067)	Δp_t [Pa]						2	2	3	5	6	8	10	13	20				
		$L_{0,2}$ [m]						5,7	6,5	8	9,5	11	12,5	14	15,5	19,1				
		L_{WA} [dB(A)]								<20	21	26	30	33	36	43	48			
	800x150	V_k [m/s]								1,5	1,8	2,1	2,5	2,8	3,1	3,8	4,6			
	(0,09)	Δp_t [Pa]								2	3	3	5	6	7	11	16			
		$L_{0,2}$ [m]								6,8	8,1	9,4	10,6	11,9	13,2	16,3	19,4			
H=200		L_{WA} [dB(A)]					<20	<20	<20	26	31	35	39	43	46					
	400x200	V_k [m/s]					1,3	1,6	1,8	2,3	2,7	3,2	3,6	4,1	4,5					
	(0,0615)	Δp_t [Pa]					1	2	2	4	6	7	10	12	15					
		$L_{0,2}$ [m]					5,1	6	6,8	8,4	10	11,5	13,1	14,6	16,2					
		L_{WA} [dB(A)]							<20	<20	25	29	33	37	40	46				
	500x200	V_k [m/s]							1,4	1,8	2,1	2,5	2,8	3,2	3,6	4,4				
	(0,078)	Δp_t [Pa]							2	2	3	5	6	8	9	15				
		$L_{0,2}$ [m]							6	7,4	8,8	10,1	11,5	12,9	14,2	17,6				
		L_{WA} [dB(A)]								<20	20	24	28	32	35	42	47			
	600x200	V_k [m/s]								1,5	1,8	2	2,3	2,6	2,9	3,7	4,4			
	(0,095)	Δp_t [Pa]								2	2	3	4	5	6	10	15			
		$L_{0,2}$ [m]								6,6	7,9	9,1	10,4	11,6	12,8	15,8	18,9			
		L_{WA} [dB(A)]									<20	<20	21	24	27	34	39	48		
	800x200	V_k [m/s]									1,3	1,5	1,7	2	2,2	2,7	3,3	4,3		
	(0,128)	Δp_t [Pa]									1	2	2	3	4	6	8	14		
		$L_{0,2}$ [m]									6,7	7,8	8,8	9,9	10,9	13,5	16	21,1		
H=300		L_{WA} [dB(A)]									<20	<20	22	25	28	35	40	49		
	500x300	V_k [m/s]									1,3	1,6	1,8	2	2,2	2,8	3,4	4,5		
	(0,124)	Δp_t [Pa]									1	2	2	3	4	6	8	15		
		$L_{0,2}$ [m]									6,8	7,9	9	10	11,1	13,7	16,3	21,4		
		L_{WA} [dB(A)]										<20	<20	20	23	30	35	44	50	
	600x300	V_k [m/s]										1,3	1,5	1,7	1,8	2,3	2,8	3,7	4,6	
	(0,151)	Δp_t [Pa]										1	2	2	3	4	6	10	16	
		$L_{0,2}$ [m]										7,1	8,1	9	10	12,3	14,7	19,3	23,8	
		L_{WA} [dB(A)]												<20	<20	22	28	36	43	48
	800x300	V_k [m/s]												1,2	1,4	1,7	2,1	2,7	3,4	4,1
	(0,203)	Δp_t [Pa]												1	1	2	3	6	9	13
		$L_{0,2}$ [m]												7,7	8,5	10,5	12,5	16,4	20,3	24,1

$10 \le L_{WA} < 30$

$30 \le L_{WA} < 40$

$40 \le L_{WA} < 50$

Data valid for:

- Supply air
- Blade setting 0°
- Isotherm conditions
- Throw without ceiling effect
(distance > 800 mm to ceiling)

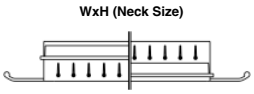
Terminology:

- A_k = effective free area
- V_k = effective face velocity
- Δp_t = total pressure loss
- L_{WA} = sound power level
- $l_{0,2}$ = throw to terminal velocity at 0,2 m/s

Extended Size Chart

RHO S-TYPE

WxH (in mm)	WxH (in mm)	WxH (in mm)	WxH (in mm)
100 x 100	500 x 500	750 x 150	900 x 400
100 x 125	550 x 100	750 x 200	900 x 450
150 x 100	550 x 125	750 x 250	900 x 500
150 x 125	550 x 150	750 x 300	900 x 550
150 x 150	550 x 200	750 x 350	900 x 600
200 x 100	550 x 250	750 x 400	900 x 650
200 x 125	550 x 300	750 x 450	900 x 700
200 x 150	550 x 350	750 x 500	900 x 750
200 x 200	550 x 400	750 x 550	900 x 800
250 x 100	550 x 450	750 x 600	900 x 850
250 x 125	550 x 500	750 x 650	900 x 900
250 x 150	550 x 550	750 x 700	950 x 100
250 x 200	600 x 100	750 x 750	950 x 125
250 x 250	600 x 125	800 x 100	950 x 150
300 x 100	600 x 150	800 x 125	950 x 200
300 x 125	600 x 200	800 x 150	950 x 250
300 x 150	600 x 250	800 x 200	950 x 300
300 x 200	600 x 300	800 x 250	950 x 350
300 x 250	600 x 350	800 x 300	950 x 400
300 x 300	600 x 400	800 x 350	950 x 450
350 x 100	600 x 450	800 x 400	950 x 500
350 x 125	600 x 500	800 x 450	950 x 550
350 x 150	600 x 550	800 x 500	950 x 600
350 x 200	600 x 600	800 x 550	950 x 650
350 x 250	650 x 100	800 x 600	950 x 700
350 x 300	650 x 125	800 x 650	950 x 750
350 x 350	650 x 150	800 x 700	950 x 800
400 x 100	650 x 200	800 x 750	950 x 850
400 x 125	650 x 250	800 x 800	950 x 900
400 x 150	650 x 300	850 x 100	950 x 950
400 x 200	650 x 350	850 x 125	1000 x 100
400 x 250	650 x 400	850 x 150	1000 x 125
400 x 300	650 x 450	850 x 200	1000 x 150
400 x 350	650 x 500	850 x 250	1000 x 200
400 x 400	650 x 550	850 x 300	1000 x 250
450 x 100	650 x 600	850 x 350	1000 x 300
450 x 125	650 x 650	850 x 400	1000 x 350
450 x 150	700 x 100	850 x 450	1000 x 400
450 x 200	700 x 125	850 x 500	1000 x 450
450 x 250	700 x 150	850 x 550	1000 x 500
450 x 300	700 x 200	850 x 600	1000 x 550
450 x 350	700 x 250	850 x 650	1000 x 600
450 x 400	700 x 300	850 x 700	1000 x 650
450 x 450	700 x 350	850 x 750	1000 x 700
500 x 100	700 x 400	850 x 800	1000 x 750
500 x 125	700 x 450	850 x 850	1000 x 800
500 x 150	700 x 500	900 x 100	1000 x 850
500 x 200	700 x 550	900 x 125	1000 x 900
500 x 250	700 x 600	900 x 150	1000 x 950
500 x 300	700 x 650	900 x 200	1000 x 1000
500 x 350	700 x 700	900 x 250	
500 x 400	750 x 100	900 x 300	
500 x 450	750 x 125	900 x 350	



Note: Grilles are available in various size combinations.

For special size requirements, please contact our sales team.

Exhaust Grilles

RHO EGG

Description

Exhaust grilles with aluminium frame and egg crate grille 12x12 mm pitch.

Characteristics

Material: aluminium

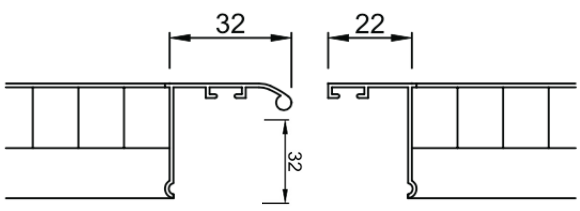
Finish: anodized, powdser coated

Installation: fixing on wall by clips (holes for screws for ceiling installation on demand)

Free area

H / L	$A_k(m^2)$														
	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1000
100	0,005	0,010	0,015	0,019	0,024	0,028	0,033	0,038	0,042	0,047	0,052	0,061	0,070	0,079	0,089
150	0,010	0,017	0,024	0,031	0,038	0,045	0,052	0,058	0,065	0,072	0,079	0,093	0,107	0,121	0,135
200	0,015	0,024	0,033	0,042	0,052	0,061	0,070	0,079	0,089	0,098	0,107	0,126	0,144	0,163	0,181
250	0,019	0,031	0,042	0,054	0,065	0,077	0,089	0,100	0,112	0,123	0,135	0,158	0,181	0,204	0,227
300	0,024	0,038	0,052	0,065	0,079	0,093	0,107	0,121	0,135	0,149	0,163	0,190	0,218	0,246	0,274
350	0,028	0,045	0,061	0,077	0,093	0,109	0,126	0,142	0,158	0,174	0,190	0,223	0,255	0,287	0,320
400	0,033	0,052	0,070	0,089	0,107	0,126	0,144	0,163	0,181	0,200	0,218	0,255	0,292	0,329	0,366
450	0,038	0,058	0,079	0,100	0,121	0,142	0,163	0,183	0,204	0,225	0,246	0,287	0,329	0,371	0,412
500	0,042	0,065	0,089	0,112	0,135	0,158	0,181	0,204	0,227	0,250	0,274	0,320	0,366	0,412	0,459
550	0,047	0,072	0,098	0,123	0,149	0,174	0,200	0,225	0,250	0,276	0,301	0,352	0,403	0,454	0,505
600	0,052	0,079	0,107	0,135	0,163	0,190	0,218	0,246	0,274	0,301	0,329	0,385	0,440	0,496	0,551
700	0,061	0,093	0,126	0,158	0,190	0,223	0,255	0,287	0,320	0,352	0,385	0,449	0,514	0,579	0,644
800	0,070	0,107	0,144	0,181	0,218	0,255	0,292	0,329	0,366	0,403	0,440	0,514	0,588	0,662	0,736
900	0,079	0,121	0,163	0,204	0,246	0,287	0,329	0,371	0,412	0,454	0,496	0,579	0,662	0,745	0,829
1000	0,089	0,135	0,181	0,227	0,274	0,320	0,366	0,412	0,459	0,505	0,551	0,644	0,736	0,829	0,921

Frame Options



Options

- plenum galvanized;
- plenum isolated.

Selection table

RHO EGG

Grille size [mm]			Air flow rate																	
		m³/h	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2500	3200
	A_k [m²]	l/s	(28)	(56)	(83)	(111)	(139)	(167)	(194)	(222)	(250)	(278)	(306)	(333)	(389)	(444)	(500)	(556)	(694)	(889)
H=100		L_{WA} [dB(A)]	<20	34	47															
	200x100	V_k [m/s]	1,9	3,9	5,7															
	(0,015)	Δp_t [Pa]	3	13	29															
		L_{WA} [dB(A)]		20	33	42	50													
	300x100	V_k [m/s]		2,4	3,5	4,7	5,9													
	(0,024)	Δp_t [Pa]		5	11	20	31													
		L_{WA} [dB(A)]		<20	23	33	40	47												
	400x100	V_k [m/s]		1,7	2,5	3,4	4,2	5,1												
	(0,033)	Δp_t [Pa]		3	6	10	16	23												
		L_{WA} [dB(A)]			<20	26	33	40	44	49										
	500x100	V_k [m/s]			2	2,6	3,3	4	4,6	5,3										
	(0,042)	Δp_t [Pa]			3	6	10	14	19	25										
		L_{WA} [dB(A)]			<20	20	28	34	39	43	47									
	600x100	V_k [m/s]			1,6	2,2	2,7	3,2	3,8	4,3	4,9									
	(0,052)	Δp_t [Pa]			2	4	7	9	13	17	21									
		L_{WA} [dB(A)]				<20	<20	25	30	35	38	42	45	48						
	800x100	V_k [m/s]				1,6	2	2,4	2,8	3,2	3,6	4	4,4	4,8						
	(0,07)	Δp_t [Pa]				2	4	5	7	9	11	14	17	20						
H=150		L_{WA} [dB(A)]			20	29	37	43	48											
	300x150	V_k [m/s]			2,2	3	3,7	4,4	5,2											
	(0,038)	Δp_t [Pa]			4	8	12	18	24											
		L_{WA} [dB(A)]			<20	20	28	34	39	43	47									
	400x150	V_k [m/s]			1,6	2,2	2,7	3,2	3,8	4,3	4,9									
	(0,052)	Δp_t [Pa]			2	4	7	9	13	17	21									
		L_{WA} [dB(A)]				<20	21	27	32	37	40	44	47	50						
	500x150	V_k [m/s]				1,7	2,1	2,6	3	3,4	3,8	4,3	4,7	5,1						
	(0,065)	Δp_t [Pa]				3	4	6	8	10	13	16	20	23						
		L_{WA} [dB(A)]					<20	22	27	31	35	38	42	44	50					
	600x150	V_k [m/s]					1,8	2,1	2,4	2,8	3,2	3,5	3,9	4,2	4,9					
	(0,079)	Δp_t [Pa]					3	4	5	7	9	11	13	16	22					
		L_{WA} [dB(A)]						<20	<20	22	26	30	33	36	41	45	49			
	800x150	V_k [m/s]						1,6	1,8	2,1	2,3	2,6	2,9	3,1	3,6	4,1	4,7			
	(0,107)	Δp_t [Pa]						2	3	4	5	6	7	9	12	15	20			
H=200		L_{WA} [dB(A)]				<20	<20	25	30	35	38	42	45	48						
	400x200	V_k [m/s]				1,6	2	2,4	2,8	3,2	3,6	4	4,4	4,8						
	(0,07)	Δp_t [Pa]				2	4	5	7	9	11	14	17	20						
		L_{WA} [dB(A)]					<20	<20	23	28	32	35	38	41	46					
	500x200	V_k [m/s]					1,6	1,9	2,2	2,5	2,8	3,1	3,5	3,8	4,4					
	(0,089)	Δp_t [Pa]					2	3	4	6	7	9	11	13	17					
		L_{WA} [dB(A)]						<20	<20	22	26	30	33	36	41	45	49			
	600x200	V_k [m/s]						1,6	1,8	2,1	2,3	2,6	2,9	3,1	3,6	4,1	4,7			
	(0,107)	Δp_t [Pa]						2	3	4	5	6	7	9	12	15	20			
		L_{WA} [dB(A)]							<20	<20	<20	21	25	27	33	37	41	44		
	800x200	V_k [m/s]							1,3	1,5	1,7	1,9	2,1	2,3	2,7	3,1	3,5	3,9		
	(0,144)	Δp_t [Pa]							2	2	3	3	4	5	7	9	11	13		
H=300		L_{WA} [dB(A)]							<20	<20	20	23	27	29	34	39	43	46		
	500x300	V_k [m/s]							1,4	1,6	1,9	2,1	2,3	2,5	2,9	3,3	3,7	4,1		
	(0,135)	Δp_t [Pa]							2	2	3	4	5	5	8	10	12	15		
		L_{WA} [dB(A)]								<20	<20	<20	21	24	29	33	37	41	48	
	600x300	V_k [m/s]								1,4	1,5	1,7	1,9	2	2,4	2,7	3,1	3,4	4,3	
	(0,163)	Δp_t [Pa]								2	2	3	3	4	5	7	9	11	16	
		L_{WA} [dB(A)]										<20	<20	<20	21	25	29	33	40	48
	800x300	V_k [m/s]										1,3	1,4	1,5	1,8	2	2,3	2,6	3,2	4,1
	(0,218)	Δp_t [Pa]										1	2	2	3	4	5	6	9	15

$10 \le L_{WA} < 30$ $30 \le L_{WA} < 40$ $40 \le L_{WA} < 50$

Data valid for:

- Extract air

Terminology:

- A_k = effective free area
- V_k = effective face velocity
- Δp_t = total pressure loss
- L_{WA} = sound power level

Exhaust Grilles

RHO EGG PUSH

Description

Exhaust egg crate grille 12x12 mm pitch for false ceiling installation, with double frame (internal 15 mm) with hinged opening and push-pull system for easy storage and replacement of the filter.

Characteristics

Material: aluminium.

Finish: anodized aluminium, powder coated

Filter: COARSE class (G2) thickness 12 mm.

Opening / closing: push-pull system.

Installation

Installation is carried out by fixing the outer frame of the grille to the wall using screws or in support on structure for paneled ceilings 600x600 mm.

Selection table

model	external frame size	effective filter section	Front speed on the filter	air flow rate
	mm	m^2	m/s	m^3/h
RHO EGG PUSH	595x595	0,238	1,5	1285
			2	1713

V m/s	dB(A)
1,5	<20
2	20/25

V m/s	Pa
1,5	25/30
2	45/50

Transfer Grilles

RHO TG

Description

Aluminum Transfer Door Grille with Frame

Characteristics

Extruded aluminum construction
Vision proof
Inverted V type grille bar for best vision proof quality and airflow
Excellent for installation in doors or partitions
Bright White or Satin Anodized finish

Use the engineering data files to determine the proper size to use for maximum performance. Refer to the submittal drawing for key product dimensions.

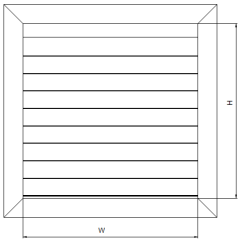
Selection table

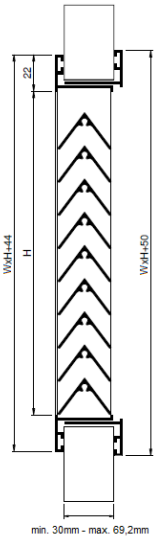
Standard Size W*H (mm)	Effective Area (m^2)	Air Volume (m^3/h)
300*150	0,029	260
500*150	0,050	450
500*250	0,088	788
750*250	0,131	1180
750*350	0,183	1650
900*300	0,203	1830
900*500	0,338	3040
1000*250	0,188	1690
1000*350	0,263	2360
1000*500	0,400	3600

Extended Size Chart

RHO TG

WxH (in mm)	WxH (in mm)	WxH (in mm)	WxH (in mm)
100 x 300	300 x 350	500 x 400	700 x 450
100 x 350	300 x 400	500 x 450	700 x 500
100 x 400	300 x 450	500 x 500	700 x 550
100 x 450	300 x 500	500 x 550	700 x 600
100 x 500	300 x 550	500 x 600	750 x 250
100 x 550	300 x 600	550 x 200	750 x 300
100 x 600	350 x 200	550 x 250	750 x 350
150 x 200	350 x 250	550 x 300	750 x 400
150 x 250	350 x 300	550 x 350	750 x 450
150 x 300	350 x 350	550 x 400	750 x 500
150 x 350	350 x 400	550 x 450	750 x 550
150 x 400	350 x 450	550 x 500	750 x 600
150 x 450	350 x 500	550 x 550	800 x 300
150 x 500	350 x 550	550 x 600	800 x 350
150 x 550	350 x 600	600 x 200	800 x 400
150 x 600	400 x 200	600 x 250	800 x 450
200 x 200	400 x 250	600 x 300	800 x 500
200 x 250	400 x 300	600 x 350	800 x 550
200 x 300	400 x 350	600 x 400	800 x 600
200 x 350	400 x 400	600 x 450	850 x 350
200 x 400	400 x 450	600 x 500	850 x 400
200 x 450	400 x 500	600 x 550	850 x 450
200 x 500	400 x 550	600 x 600	850 x 500
200 x 550	400 x 600	650 x 200	850 x 550
200 x 600	450 x 200	650 x 250	850 x 600
250 x 200	450 x 250	650 x 300	900 x 400
250 x 250	450 x 300	650 x 350	900 x 450
250 x 300	450 x 350	650 x 400	900 x 500
250 x 350	450 x 400	650 x 450	900 x 550
250 x 400	450 x 450	650 x 500	900 x 600
250 x 450	450 x 500	650 x 550	950 x 450
250 x 500	450 x 550	650 x 600	950 x 500
250 x 550	450 x 600	700 x 200	950 x 550
250 x 600	500 x 200	700 x 250	950 x 600
300 x 200	500 x 250	700 x 300	1000 x 500
300 x 250	500 x 300	700 x 350	1000 x 550
300 x 300	500 x 350	700 x 400	1000 x 600



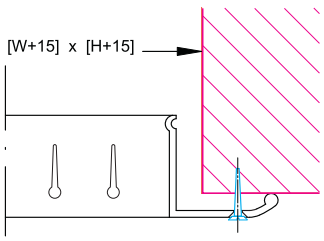


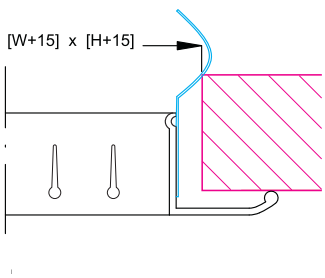
Installation Details

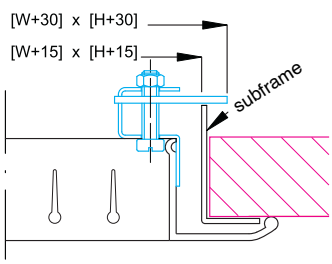
RHO

Mounting Types – Application Method

Depending on the installation type and the characteristics of the application area, three different mounting methods are available: screw-mounted, spring clip-mounted, and latch-mounted. The standard mounting method is with screws, and the preferred mounting type should be specified at the time of order.







Screw Mounted

As the standard installation method, the unit is mounted onto the grille frame using air-head screws through pre-drilled M4 metric mounting holes.

Spring Clip Mounting

Spring clip mounting provides effective results in applications with deep seating surfaces. The grille is secured by compressing specially designed steel spring clips on the side surfaces of the frame into the mounting opening. This method can be applied with or without a sub-frame.

Latch Mounting

Latch mounting is ideal for applications requiring easy removal and reinstallation of the grille. The unit is fixed in place using mechanical latches integrated into the side surfaces of the frame, allowing tool-free installation and removal. It can be used with or without a sub-frame depending on the project requirements.

Available Dimensions

RHO

RHO-R / RHO-S

W \ H (mm)	100	125	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
100	✓	✓																		
150	✓	✓	✓																	
200	✓	✓	✓	✓																
250	✓	✓	✓	✓	✓															
300	✓	✓	✓	✓	✓	✓														
350	✓	✓	✓	✓	✓	✓	✓													
400	✓	✓	✓	✓	✓	✓	✓	✓												
450	✓	✓	✓	✓	✓	✓	✓	✓	✓											
500	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										
550	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
650	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
700	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
800	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
850	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
950	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RHO-EGG

W \ H (mm)	100	125	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
100	✓	✓																		
150	✓	✓	✓																	
200	✓	✓	✓	✓																
250	✓	✓	✓	✓	✓															
300	✓	✓	✓	✓	✓	✓														
350	✓	✓	✓	✓	✓	✓	✓													
400	✓	✓	✓	✓	✓	✓	✓	✓												
450	✓	✓	✓	✓	✓	✓	✓	✓	✓											
500	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										
550	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
650	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
700	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
800	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
850	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
950	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RHO-EGG PUSH

W \ H (mm)	100	125	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
100																				
150																				
200																				
250																				
300						✓														
350					✓	✓	✓													
400				✓	✓	✓	✓	✓												
450				✓	✓	✓	✓	✓	✓											
500				✓	✓	✓	✓	✓	✓	✓										
550				✓	✓	✓	✓	✓	✓	✓	✓									
600				✓	✓	✓	✓	✓	✓	✓	✓	✓								
650				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
700				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
750				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
800				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
850				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
900				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
950				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1000				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RHO-TG

W \ H (mm)	100	125	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
200			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
250		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
350	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
450	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
500	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
550	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Note: The above dimensions represent available size combinations. Other sizes can be manufactured upon request.

Accessories

RHO

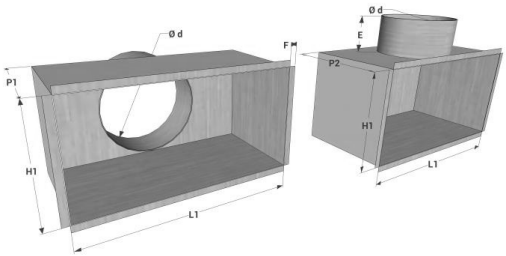
OD calibration damper

OD calibration damper with fins with opposing movement

Installation sub frame

Plenum box

•Can be used for both supply and extract air
•Easy-to-detach the grilles for access to the plenum
•Same box used for several type of grilles
•Special lip bend allow an easy clips mounting of all grilles model



All dimensions are espressed in mm.

model L1 x H1	upper air connection			side air connection			E	F	model L1 x H1	upper air connection			side air connection			E	F
	P1	n° connection	Ø d	P2	n° connection	Ø d				P1	n° connection	Ø d	P2	n° connection	Ø d		
200x100	200	1	98	200	1	98	80	12	1000x200	200	2	198	300	2	198	80	12
300x100	200	1	98	200	1	98	80	12	300x300	200	1	248	350	1	248	80	12
400x100	200	2	98	200	2	98	80	12	400x300	200	1	248	350	1	248	80	12
500x100	200	2	98	200	2	98	80	12	500x300	200	1	248	350	1	248	80	12
600x100	200	2	98	200	2	98	80	12	600x300	200	2	198	350	2	248	80	12
800x100	200	2	98	200	2	98	80	12	800x300	200	2	248	350	2	248	80	12
200x200	200	1	198	300	1	198	80	12	1000x300	200	2	248	350	2	248	80	12
300x200	200	1	198	300	1	198	80	12	400x400	200	1	298	350	1	298	80	12
400x200	200	1	198	300	1	198	80	12	500x400	200	1	298	350	1	298	80	12
500x200	200	1	198	300	1	198	80	12	600x400	200	2	198	350	2	248	80	12
600x200	200	2	198	300	2	198	80	12	800x400	200	2	298	350	2	298	80	12
800x200	200	2	198	300	2	198	80	12	1000x400	200	2	298	400	2	298	80	12
560x560	-	-	-	300	1	248	80	12									

SELECTION GUIDE									
Spigot Velocity (m/s)	1,5	2	2,5	3	3,5	4	4,5	5	6
Pressure Drop (Pa)	2	4	6	8	12	16	20	28	36

*The pressure drop given is for supply diffuser with damper fully open.
When the diffuser is installed with plenum box the pressure loss of the box has to be added to the diffuser.

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