

PERFORMANCE DATA | RM2, RM4, RA2, RA4 (4-CONES) | NO DAMPER

SIZE	IP DATA											METRIC DATA												
	NECK VEL	AIR FLOW	HZ		VT		HZ THROW	VT PROJECTION				HZ	VT	NECK VEL	AIR FLOW	HZ		VT		HZ THROW	VT PROJECTION			
			Ps	Pt	Ps	Pt		10°F	20°F	30°F	40°F					Pa	Pv	Pt	Pt		5°C	11°C	17°C	22°C
in	fpm	cfm	in wg	in wg	in wg	in wg	ft	ft	ft	ft	NC	NC	m/s	L/s	Pa	Pa	Pa	Pa	m	m	m	m	m	
6	200	39	0.00	0.01	0.00	0.01	1-1-2	1	1	1	0	-	-	1.0	19	1	1	1	2	0.2-0.3-0.7	0.2	0.2	0.2	0.1
	400	79	0.01	0.02	0.02	0.03	1-2-4	3	2	2	2	-	-	2.0	37	3	5	4	7	0.5-0.7-1.4	0.9	0.7	0.6	0.5
	600	118	0.02	0.05	0.04	0.06	2-3-7	6	5	5	3	20	21	3.0	56	6	12	10	15	0.7-1.0-2.0	1.9	1.6	1.4	1.1
	800	157	0.04	0.08	0.07	0.11	3-4-8	10	7	6	6	29	30	4.1	74	11	21	17	27	0.9-1.4-2.3	2.9	2.2	1.9	1.7
	900	177	0.06	0.11	0.09	0.14	3-5-8	11	8	7	6	32	33	4.6	83	14	26	22	34	1.0-1.5-2.5	3.3	2.4	2.2	2.0
	1000	196	0.07	0.13	0.11	0.17	4-6-9	12	9	8	7	35	36	5.1	93	17	33	27	42	1.1-1.7-2.6	3.6	2.7	2.4	2.2
	1100	216	0.08	0.16	0.13	0.21	4-6-9	13	10	9	8	38	39	5.6	102	21	39	32	51	1.2-1.9-2.7	4.0	3.0	2.7	2.4
	1200	236	0.10	0.19	0.16	0.25	4-7-9	14	11	10	9	41	42	6.1	111	25	47	39	61	1.4-2.0-2.8	4.2	3.2	2.9	2.6
	1300	255	0.12	0.22	0.18	0.29	5-7-10	14	11	10	9	43	44	6.6	120	29	55	45	72	1.5-2.1-3.0	4.3	3.4	3.1	2.8
8	200	70	0.00	0.01	0.00	0.01	1-1-3	1	1	1	0	-	-	1.0	33	1	1	1	2	0.3-0.5-0.9	0.2	0.2	0.2	0.1
	400	140	0.01	0.02	0.02	0.03	2-3-6	3	3	2	2	-	-	2.0	66	3	5	4	7	0.6-0.9-1.8	1.0	0.8	0.7	0.5
	600	209	0.02	0.05	0.04	0.06	3-4-9	7	6	5	4	21	22	3.0	99	6	12	10	15	0.9-1.4-2.7	2.2	1.7	1.5	1.2
	800	279	0.04	0.08	0.07	0.11	4-6-10	12	9	8	7	30	31	4.1	132	11	21	17	27	1.2-1.8-3.1	3.6	2.7	2.4	2.1
	900	314	0.06	0.11	0.09	0.14	4-7-11	13	10	9	8	33	34	4.6	148	14	26	22	34	1.4-2.0-3.3	4.1	3.1	2.7	2.5
	1000	349	0.07	0.13	0.11	0.17	5-7-11	15	11	10	9	36	37	5.1	165	17	33	27	42	1.5-2.3-3.5	4.5	3.4	3.1	2.7
	1100	384	0.08	0.16	0.13	0.21	5-8-12	16	12	11	10	39	40	5.6	181	21	39	32	51	1.7-2.5-3.6	5.0	3.7	3.4	3.0
	1200	419	0.10	0.19	0.16	0.25	6-9-12	18	13	12	11	42	43	6.1	198	25	47	39	61	1.8-2.7-3.8	5.4	4.1	3.7	3.3
	1300	454	0.12	0.22	0.18	0.29	6-9-13	19	14	13	12	44	45	6.6	214	29	55	45	72	2.0-2.8-3.9	5.8	4.4	4.0	3.5
10	200	109	0.00	0.01	0.00	0.01	1-2-4	1	1	1	0	-	-	1.0	51	1	1	1	2	0.4-0.6-1.1	0.3	0.2	0.2	0.2
	400	218	0.01	0.02	0.02	0.03	2-4-7	4	3	3	2	-	11	2.0	103	3	5	4	7	0.8-1.1-2.3	1.1	0.9	0.8	0.6
	600	327	0.02	0.05	0.04	0.06	4-6-11	8	7	6	4	22	23	3.0	154	6	12	10	15	1.1-1.7-3.3	2.5	2.0	1.8	1.4
	800	436	0.04	0.08	0.07	0.11	5-7-13	14	11	10	8	31	32	4.1	206	11	21	17	27	1.5-2.3-3.9	4.4	3.3	3.0	2.4
	900	491	0.06	0.11	0.09	0.14	6-8-13	16	12	11	10	34	35	4.6	232	14	26	22	34	1.7-2.5-4.1	5.0	3.7	3.3	3.0
	1000	545	0.07	0.13	0.11	0.17	6-9-14	18	14	12	11	37	38	5.1	257	17	33	27	42	1.9-2.8-4.3	5.5	4.1	3.7	3.3
	1100	600	0.08	0.16	0.13	0.21	7-10-15	20	15	13	12	40	41	5.6	283	21	39	32	51	2.1-3.1-4.5	6.1	4.5	4.1	3.7
	1200	654	0.10	0.19	0.16	0.25	7-11-16	22	16	15	13	43	44	6.1	309	25	47	39	61	2.3-3.3-4.7	6.6	5.0	4.5	4.0
	1300	709	0.12	0.22	0.18	0.29	8-11-16	24	18	16	14	45	46	6.6	335	29	55	45	72	2.5-3.5-4.9	7.2	5.4	4.8	4.3
12	200	157	0.00	0.01	0.00	0.01	1-2-4	1	1	1	1	-	-	1.0	74	1	1	1	2	0.5-0.7-1.4	0.3	0.3	0.2	0.2
	400	314	0.01	0.02	0.02	0.03	3-4-9	4	3	3	2	11	12	2.0	148	3	5	4	7	0.9-1.4-2.7	1.3	1.0	0.9	0.7
	600	471	0.02	0.05	0.04	0.06	4-7-13	9	8	7	5	23	24	3.0	222	6	12	10	15	1.4-2.0-4.0	2.9	2.3	2.0	1.6
	800	628	0.04	0.08	0.07	0.11	6-9-15	17	13	12	9	31	32	4.1	297	11	21	17	27	1.8-2.7-4.6	5.1	3.9	3.5	2.8
	900	707	0.06	0.11	0.09	0.14	7-10-16	19	14	13	12	35	36	4.6	334	14	26	22	34	2.0-3.1-4.9	5.9	4.4	4.0	3.5
	1000	785	0.07	0.13	0.11	0.17	7-11-17	21	16	14	13	38	39	5.1	371	17	33	27	42	2.3-3.4-5.2	6.5	4.9	4.4	3.9
	1100	864	0.08	0.16	0.13	0.21	8-12-18	24	18	16	14	41	42	5.6	408	21	39	32	51	2.5-3.7-5.4	7.2	5.4	4.8	4.3
	1200	942	0.10	0.19	0.16	0.25	9-13-19	26	19	17	16	43	44	6.1	445	25	47	39	61	2.7-4.0-5.7	7.8	5.9	5.3	4.7
	1300	1021	0.12	0.22	0.18	0.29	10-14-19	28	21	19	17	46	47	6.6	482	29	55	45	72	2.9-4.2-5.9	8.5	6.4	5.7	5.1
14	200	214	0.00	0.01	0.00	0.01	2-3-5	1	1	1	1	-	-	1.0	101	1	1	1	2	0.5-0.8-1.6	0.4	0.3	0.3	0.2
	400	428	0.01	0.02	0.02	0.03	3-5-10	5	4	3	3	11	12	2.0	202	3	5	4	7	1.1-1.6-3.2	1.4	1.2	1.0	0.8
	600	641	0.02	0.05	0.04	0.06	5-8-15	11	9	8	6	23	24	3.0	303	6	12	10	15	1.6-2.4-4.7	3.3	2.6	2.3	1.8
	800	855	0.04	0.08	0.07	0.11	7-10-18	19	15	13	10	32	33	4.1	404	11	21	17	27	2.1-3.2-5.4	5.8	4.5	4.1	3.2
	900	962	0.06	0.11	0.09	0.14	8-12-19	22	17	15	13	35	36	4.6	454	14	26	22	34	2.4-3.6-5.7	6.8	5.1	4.6	4.0
	1000	1069	0.07	0.13	0.11	0.17	9-13-20	25	19	17	15	39	40	5.1	505	17	33	27	42	2.6-4.0-6.0	7.5	5.7	5.1	4.6
	1100	1176	0.08	0.16	0.13	0.21	10-14-21	27	20	18	16	41	42	5.6	555	21	39	32	51	2.9-4.4-6.3	8.3	6.2	5.6	5.0
	1200	1283	0.10	0.19	0.16	0.25	10-15-22	30	22	20	18	44	45	6.1	605	25	47	39	61	3.2-4.7-6.6	9.1	6.8	6.1	5.5
	1300	1390	0.12	0.22	0.18	0.29	11-16-23	32	24	22	19	46	47	6.6	656	29	55	45	72	3.4-4.9-6.9	9.8	7.3	6.6	5.9
16	200	279	0.00	0.01	0.00	0.01	2-3-6	1	1	1	1	-	-	1.0	132	1	1	1	2	0.6-0.9-1.8	0.4	0.3	0.3	0.2
	400	559	0.01	0.02	0.02	0.03	4-6-12	5	4	4	3	12	13	2.0	264	3	5	4	7	1.2-1.8-3.6	1.6	1.3	1.2	0.9
	600	838	0.02	0.05	0.04	0.06	6-9-18	12	10	9	7	24	25	3.0	395	6	12	10	15	1.8-2.7-5.4	3.7	3.0	2.6	2.0
	800	1117	0.04	0.08	0.07	0.11	8-12-20	21	17	15	12	32	33	4.1	527	11	21	17	27	2.4-3.6-6.2	6.5	5.1	4.6	3.6
	900	1257	0.06	0.11	0.09	0.14	9-13-22	25	19	17	15	36	37	4.6	593	14	26	22	34	2.7-4.1-6.6	7.7	5.8	5.2	4.5
	1000	1396	0.07	0.13	0.11	0.17	10-15-23	28	21	19	17	39	40	5.1	659	17	33	27	42	3.0-4.5-6.9	8.6	6.4	5.8	5.2
	1100	1536	0.08	0.16	0.13	0.21	11-16-24	31	23	21	19	42	43	5.6	725	21	39	32	51	3.3-5.0-7.2	9.4	7.1	6.4	5.7
	1200	1676	0.10	0.19	0.16	0.25	12-18-25	34	25	23	20	45	46	6.1	791	25	47	39	61	3.6-5.4-7.6	10.3	7.7	6.9	6.2
	1300	1815	0.12	0.22	0.18	0.29	13-18-26	37	27	25	22	47	48	6.6	857	29	55	45	72	3.9-5.6-7.9	11.2	8.4	7.5	6.7

NOTE: See notes on next page.

RM & RA SERIES

Round Diffusers, 3 and 4 Cones



PERFORMANCE DATA | RM2, RM4, RA2, RA4 (4-CONES) | NO DAMPER

DIFFUSERS | ROUND

SIZE	IP DATA											METRIC DATA												
	NECK VEL	AIR FLOW	HZ		VT		HZ THROW	VT PROJECTION				HZ	VT	NECK VEL	AIR FLOW	HZ		VT		HZ THROW	VT PROJECTION			
			Ps	Pt	Ps	Pt		10°F	20°F	30°F	40°F					Pa	Pv	Pt	Pt		5°C	11°C	17°C	22°C
in	fpm	cfm	in wg	in wg	in wg	in wg	ft	ft	ft	ft	ft	NC	NC	m/s	L/s	Pa	Pa	Pa	Pa	m	m	m	m	
18	200	353	0.00	0.01	0.00	0.01	2-3-7	1	1	1	1	-	-	1.0	167	1	1	1	2	0.7-1.0-2.0	0.5	0.4	0.3	0.2
	400	707	0.01	0.02	0.02	0.03	4-7-13	6	5	4	3	12	13	2.0	334	3	5	4	7	1.4-2.0-4.1	1.8	1.5	1.3	1.0
	600	1060	0.02	0.05	0.04	0.06	7-10-20	13	11	9	7	24	25	3.0	500	6	12	10	15	2.0-3.1-6.0	4.1	3.3	2.9	2.2
	800	1414	0.04	0.08	0.07	0.11	9-13-23	24	19	17	13	33	34	4.1	667	11	21	17	27	2.7-4.1-7.0	7.3	5.8	5.1	4.0
	900	1590	0.06	0.11	0.09	0.14	10-15-24	28	21	19	16	36	37	4.6	751	14	26	22	34	3.1-4.6-7.4	8.7	6.5	5.8	5.0
	1000	1767	0.07	0.13	0.11	0.17	11-17-26	32	24	21	19	40	41	5.1	834	17	33	27	42	3.4-5.1-7.8	9.6	7.2	6.5	5.8
	1100	1944	0.08	0.16	0.13	0.21	12-18-27	35	26	23	21	42	43	5.6	917	21	39	32	51	3.7-5.6-8.2	10.6	7.9	7.1	6.4
	1200	2121	0.10	0.19	0.16	0.25	13-20-28	38	28	26	23	45	46	6.1	1001	25	47	39	61	4.1-6.0-8.5	11.5	8.6	7.8	7.0
20	200	436	0.00	0.01	0.00	0.01	2-4-7	2	1	1	1	-	-	1.0	206	1	1	1	2	0.8-1.1-2.3	0.5	0.4	0.4	0.3
	400	873	0.01	0.02	0.02	0.03	5-7-15	7	5	5	4	13	14	2.0	412	3	5	4	7	1.5-2.3-4.5	2.0	1.6	1.4	1.1
	600	1309	0.02	0.05	0.04	0.06	7-11-22	15	12	10	8	25	26	3.0	618	6	12	10	15	2.3-3.4-6.7	4.5	3.6	3.2	2.5
	800	1745	0.04	0.08	0.07	0.11	10-15-25	26	21	19	14	33	34	4.1	824	11	21	17	27	3.0-4.5-7.7	8.0	6.4	5.7	4.4
	900	1963	0.06	0.11	0.09	0.14	11-17-27	32	24	21	18	37	38	4.6	927	14	26	22	34	3.4-5.1-8.2	9.6	7.2	6.5	5.5
	1000	2182	0.07	0.13	0.11	0.17	12-19-28	35	26	24	21	40	41	5.1	1030	17	33	27	42	3.8-5.7-8.6	10.7	8.0	7.2	6.4
	1100	2400	0.08	0.16	0.13	0.21	14-20-30	39	29	26	23	43	44	5.6	1133	21	39	32	51	4.1-6.2-9.1	11.7	8.8	7.9	7.1
	1200	2618	0.10	0.19	0.16	0.25	15-22-31	42	32	28	25	45	46	6.1	1236	25	47	39	61	4.5-6.7-9.5	12.8	9.6	8.6	7.7
24	200	628	0.00	0.01	0.00	0.01	3-4-9	2	2	1	1	-	-	1.0	297	1	1	1	2	0.9-1.4-2.7	0.6	0.5	0.4	0.3
	400	1257	0.01	0.02	0.02	0.03	6-9-18	8	6	6	4	13	14	2.0	593	3	5	4	7	1.8-2.7-5.4	2.4	1.9	1.7	1.3
	600	1885	0.02	0.05	0.04	0.06	9-13-26	18	14	12	10	25	26	3.0	890	6	12	10	15	2.7-4.1-8.0	5.4	4.3	3.8	2.9
	800	2513	0.04	0.08	0.07	0.11	12-18-30	31	25	22	17	34	35	4.1	1186	11	21	17	27	3.6-5.4-9.3	9.5	7.6	6.7	5.2
	900	2827	0.06	0.11	0.09	0.14	13-20-32	38	28	25	22	38	39	4.6	1334	14	26	22	34	4.1-6.1-9.8	11.5	8.6	7.7	6.6
	1000	3142	0.07	0.13	0.11	0.17	15-22-34	42	31	28	25	41	42	5.1	1483	17	33	27	42	4.5-6.8-10.4	12.8	9.6	8.6	7.7
	1100	3456	0.08	0.16	0.13	0.21	16-25-36	46	35	31	28	44	45	5.6	1631	21	39	32	51	5.0-7.5-10.9	14.0	10.5	9.5	8.5
	1200	3770	0.10	0.19	0.16	0.25	18-26-37	50	38	34	30	46	47	6.1	1779	25	47	39	61	5.4-8.0-11.4	15.3	11.5	10.3	9.2
30	200	982	0.00	0.01	0.00	0.01	4-6-11	2	2	2	1	-	-	1.0	463	1	1	1	2	1.1-1.7-3.4	0.7	0.6	0.5	0.4
	400	1963	0.01	0.02	0.02	0.03	7-11-22	10	8	7	5	14	15	2.0	927	3	5	4	7	2.3-3.4-6.8	2.9	2.4	2.1	1.6
	600	2945	0.02	0.05	0.04	0.06	11-17-33	22	18	15	12	26	27	3.0	1390	6	12	10	15	3.4-5.1-10.0	6.6	5.4	4.7	3.6
	800	3927	0.04	0.08	0.07	0.11	15-22-38	39	31	27	21	35	36	4.1	1853	11	21	17	27	4.5-6.8-11.6	11.8	9.5	8.3	6.4
	900	4418	0.06	0.11	0.09	0.14	17-25-40	47	35	32	27	38	39	4.6	2085	14	26	22	34	5.1-7.6-12.3	14.3	10.7	9.6	8.1
	1000	4909	0.07	0.13	0.11	0.17	19-28-43	52	39	35	32	42	43	5.1	2317	17	33	27	42	5.7-8.5-13.0	15.9	11.9	10.7	9.6
	1100	5400	0.08	0.16	0.13	0.21	20-31-45	58	43	39	35	44	45	5.6	2548	21	39	32	51	6.2-9.3-13.6	17.5	13.1	11.8	10.5
	1200	5890	0.10	0.19	0.16	0.25	22-33-47	63	47	42	38	47	48	6.1	2780	25	47	39	61	6.8-10.0-14.2	19.1	14.3	12.9	11.5
36	200	1414	0.00	0.01	0.00	0.01	4-7-13	3	2	2	2	-	-	1.0	667	1	1	1	2	1.4-2.0-4.1	0.9	0.7	0.6	0.5
	400	2827	0.01	0.02	0.02	0.03	9-13-27	12	9	8	6	15	16	2.0	1334	3	5	4	7	2.7-4.1-8.1	3.5	2.8	2.5	1.9
	600	4241	0.02	0.05	0.04	0.06	13-20-40	26	21	18	14	27	28	3.0	2002	6	12	10	15	4.1-6.1-12.0	7.9	6.4	5.6	4.3
	800	5655	0.04	0.08	0.07	0.11	18-27-46	46	37	33	25	36	37	4.1	2669	11	21	17	27	5.4-8.1-13.9	14.1	11.4	10.0	7.7
	900	6362	0.06	0.11	0.09	0.14	20-30-49	56	42	38	32	39	40	4.6	3002	14	26	22	34	6.1-9.2-14.7	17.1	12.8	11.6	9.7
	1000	7069	0.07	0.13	0.11	0.17	22-33-51	63	47	42	38	42	43	5.1	3336	17	33	27	42	6.8-10.2-15.5	19.1	14.3	12.8	11.5
	1100	7775	0.08	0.16	0.13	0.21	25-37-54	69	52	46	42	45	46	5.6	3670	21	39	32	51	7.5-11.2-16.3	21.0	15.7	14.1	12.6
	1200	8482	0.10	0.19	0.16	0.25	27-40-56	75	56	51	45	48	49	6.1	4003	25	47	39	61	8.1-12.0-17.0	22.9	17.1	15.4	13.8
1300	9189	0.12	0.22	0.18	0.29	29-41-58	81	61	55	49	50	51	6.6	4337	29	55	45	72	8.8-12.5-17.7	24.8	18.6	16.7	14.9	

NOTES: Throw values are given terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Horizontal throw values are given for isothermal conditions. Vertical throw values are for a terminal velocity of 50 FPM, free jet, at the temperature differences shown. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.