

Round Diffusers

Type: Round Supply / Return Ceiling Diffuser

Model: AERO SRD ; AERO RRD

Construction: Aluminum

DESCRIPTION

AEROSYS Round ceiling diffusers are designed for both supply and return applications. The diffuser frame and inner cones are constructed from high quality aluminum sheet.

The expanded diffuser cones construction provides a wider and draft-free diffusion of air that results in excellent air distribution and efficient cooling. Diffuser core is fixed to the frame with aluminum pins loaded with spiral spring, easily removable to provide access for damper adjustment

STANDARD CONSTRUCTION DETAILS

Frame

Extruded aluminum profile.

Core

Die punched single piece sheet.

Damper

Butterfly type opposed blade damper made of galvanized steel operated with screw.

Finish

Available with RAL powder coating, please specify color.

OPTIONAL FITTINGS

Plenum chamber

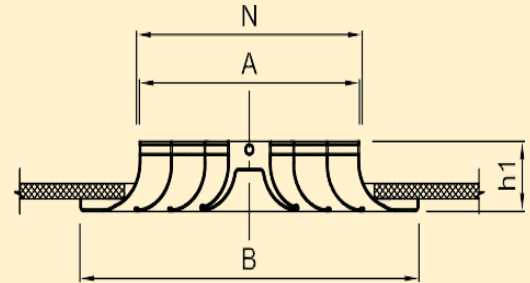
Plenum is available with circular, square or rectangular spigots in either top or side entry applications.

Foam Gasket

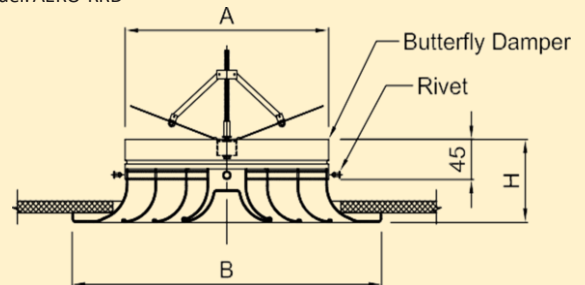
Provided all around the frame, to prevent leakage of air.

Finish

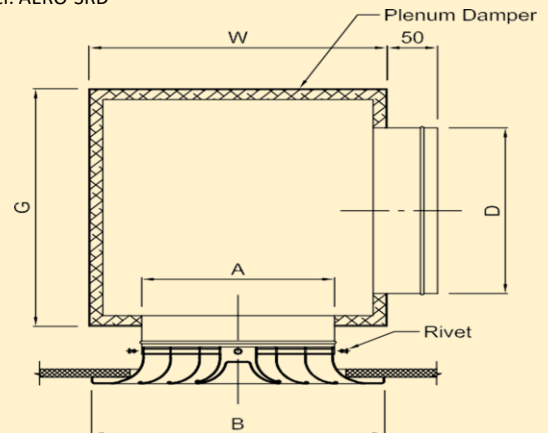
Mill finish or Chrome plating



Model: AERO-RRD



Model: AERO-SRD



Model: AERO-SRD+PLENUM

N = Nominal Duct Dia; A = Neck Dia; B = Outer/Face Dia;
h1 = Diffuser Height; H = Diffuser with Damper Height
W = Plenum Width; G = Plenum Height; D = Plenum inlet

PLENUM CONTRUCTION

Casing

0.7 mm thick galvanized steel.

Insulation

Acoustic liner of 13 mm thickness, 32 kg/m³ density.

Standard Sizes of Round Diffuser Models									
N = Nominal Duct		A Dia (mm)	B Dia (mm)	FlangeWidth(mm)	h 1 (mm)	W Width(mm)	D Dia (mm)	G (mm)	H (mm)
Dia in Inches	Dia in mm								
6	150	138	250	33	50	250	125	225	95
8	200	188	300	33	50	300	150	250	95
10	250	238	350	33	50	350	150	250	95
12	300	288	400	33	50	400	200	300	95
14	350	338	450	33	50	450	250	350	95
16	400	387	500	33	50	500	300	400	95
18	450	438	550	33	50	550	300	450	95
20.5	521	521	653	35	50	653	300	450	95
22.6	573	573	704	35	50	704	300	450	95
24.6	625	625	756	35	50	756	350	500	95

Round Diffuser

Engineering and performance Data

Type: Round Supply / Return Ceiling Diffuser

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Construction: Aluminum

Neck Velocity	Size	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
100	CFM	50	78	106	151	236	326	370	444	562	606
	Ps in w.g	0.02	0.01	0	0	0	0	0	0	0	0
	Throw	0.6-1.6	0.7-1.8	0.8-2	1-2.2	1.2-2.4	1.5-2.7	3.4-5.4	4-6.2	5.2-7.7	5.7-8.5
	NC	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
150	CFM	79	118	160	228	352	444	488	562	682	724
	Ps in w.g	0.05	0.01	0.01	0	0	0	0	0	0	0
	Throw	1-2.0	1-2.3	1.31-2.6	1.6-3.0	1.8-3.2	2.0-3.35	3.9-6.0	4.8-7.3	6-9.0	6.5-9.5
	NC	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
200	CFM	108	160	212	305	470	562	606	680	802	842
	Ps in w.g	0.08	0.02	0.01	0.01	0	0	0	0	0	0
	Throw	1.2-2.5	1.44-2.7	1.7-3.14	2.16-3.7	2.4-4.0	2.6-4.6	4.4-6.9	5.7-8.4	7-10.1	7.2-10.4
	NC	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
250	CFM	137	199	265	390	588	680	724	798	922	960
	Ps in w.g	0.13	0.03	0.01	0.01	0.01	0	0	0	0	0
	Throw	1.57-3.0	1.8-3.2	2.16-3.7	2.6-4.4	2.8-4.6	3.13-4.8	5.5-8	6.5-9.5	7.8-11.2	8-11.4
	NC	18	18	<15	<15	<15	<15	<15	<15	<15	<15
300	CFM	166	238	316	456	706	798	843	916	1042	1078
	Ps in w.g	0.18	0.04	0.02	0.01	0.01	0	0	0	0	0
	Throw	1.8-3.3	2.16-3.7	2.6-4.3	3.2-5.15	3.4-5.4	3.72-5.8	6.89-9.23	7.3-10.6	8.6-12.4	8.8-12.6
	NC	21	24	<15	<15	<15	<15	<15	<15	<15	<15
350	CFM	195	277	356	533	822	916	961	1037	1162	1196
	Ps in w.g	0.25	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Throw	2.1-3.7	2.5-4.2	3-4.8	3.7-5.8	3.9-6.0	3.9-6.0	7.98-11	8.4-11.5	10-13.8	10.2-13.9
	NC	24	28	18	<15	<15	<15	<15	<15	<15	<15
400	CFM	224	316	397	610	940	1034	1080	1158	1282	1308
	Ps in w.g	0.32	0.06	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Throw	2.4-4.1	2.8-4.7	3.4-5.4	4.2-6.7	4.4-6.9	5-6.9	8.6-11.76	10-12.6	12-14.6	12.7-15
	NC	28	32	21	<15	<15	<15	<15	<15	<15	<15
450	CFM	253	355	224	687	1043	1152	1198	1279	1402	1426
	Ps in w.g	0.41	0.08	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01
	Throw	2.8-4.6	3.2-5.1	4.0-6.0	4.8-7.3	5.0-7.9	6.1-7.9	9.4-13	10.9-14.4	13.4-15.7	13.6-15.9
	NC	34	35	25	18	21	<15	<15	<15	<15	<15
500	CFM		394	555	761	1177	1270	1316	1400	1522	1544
	Ps in w.g		0.1	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.01
	Throw		3.6-5.6	4.3-6.6	5.3-8	5.7-8.6	7.3-8.9	10.4-14.65	11.8-15.8	14.7-17.1	14.9-17.6
	NC		38	28	22	26	<15	<15	<15	<15	<15
600	CFM		433	633	915	1411	1388	1435	1521	1642	1662
	Ps in w.g		0.14	0.06	0.03	0.02	0.01	0.01	0.01	0.01	0.01
	Throw		4.3-6.6	5.2-7.7	6.4-9.4	6.6-10.1	8.7-10.2	12-16.3	13-17	16.2-18.4	16.4-18.6
	NC		43	33	26	28	20	21	17	18	<15

Note :

1. Neck velocity is measured in feet/minute (fpm).
2. Static Pressure (Ps) is measured in inch water gauge (in. w.g).

3. Throw is measured in feet (ft).
4. Noise criteria (NC) is measured in decibals (dB).
5. Airflow is measured in cubic feet / minute

Round Diffuser

Engineering and performance Data

Type: Round Supply / Return Ceiling Diffuser

Model: AERO-SRD/ AERO-RRD

Construction: Aluminium

Neck Velocity	Size	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
700	CFM		472	722	1066	1647	1506	1554	1642	1762	1780
	Ps in w.g		0.19	0.08	0.04	0.02	0.01	0.01	0.01	0.01	0.01
	Throw		5.0-7.5	6-9.0	7.5-10.8	7.9-11.2	9-12.2	13.67-17.2	14.7-19	17.8-20.1	18-20.7
	NC		47	37	31	33	24	23	21	22	22
800	CFM			811	1220	1883	1624	1673	1763	1882	1898
	Ps in w.g			0.1	0.05	0.03	0.02	0.02	0.02	0.02	0.02
	Throw			7-10.1	8.6-12.4	8.8-12.6	10.2-13.6	14.5-18.6	15.65-19.3	18.7-21.2	19.1-22.3
	NC			41	36	36	26	25	25	24	26
900	CFM			900	1372	2119	1742	1792	1884	2002	2016
	Ps in w.g			0.13	0.06	0.04	0.02	0.02	0.02	0.02	0.02
	Throw			7.8-11.2	9.3-13.3	9.6-13.7	10.9-14.9	15.1-19	16.9-21	19.6-23.4	19.8-23.6
	NC			44	39	41	28	26	29	28	30
1000	CFM			989	1525	2155	1860	1910	2005	2122	2134
	Ps in w.g			0.16	0.08	0.05	0.02	0.02	0.02	0.02	0.02
	Throw			8.6-12.4	10.1-13.7	10.4-14.1	13-16.7	17-22	17.8-23	21-25.2	21.2-25.4
	NC			47	43	43	32	28	32	31	33
1100	CFM			1078	1678	2191	1978	2028	2126	2242	2252
	Ps in w.g			0.11	0.1	0.05	0.03	0.03	0.03	0.03	0.03
	Throw			13.5-16.8	11.1-14.1	11.3-14.6	13.8-18.2	18.4-23.4	19.1-24.1	22-26.16	22.3-26.4
	NC			50	47	47	36	30	34	35	35
1200	CFM				1833	2227	2096	2146	2247	2362	2370
	Ps in w.g				0.11	0.06	0.03	0.03	0.03	0.03	0.03
	Throw				11.7-14.5	12.3-14.9	14.6-19.4	19.6-24.5	21-25.2	23.42-27.6	23.8-27.8
	NC				51	48	38	32	37	38	38
1300	CFM				1988	2263	2214	2265	2368	2482	2488
	Ps in w.g				0.13	0.08	0.04	0.04	0.04	0.04	0.04
	Throw				12.3-15	12.7-15.6	15.1-22.4	20.2-25.3	22.6-26.8	24.8-29	30-29.2
	NC				54	50	43	36	39	40	40
1500	CFM						2332	2383	2489	2602	2608
	Ps in w.g						0.04	0.04	0.04	0.04	0.04
	Throw						17.1-23	22-26.16	24.1-27.6	25.7-31	26.1-31.2
	NC						45	40	43	45	44
1700	CFM						2450	2502	2610	2722	2762
	Ps in w.g						0.05	0.05	0.05	0.05	0.05
	Throw						18-24.32	23.35-28.1	25.2-28.8	26.4-32.4	26.8-32.6
	NC						46	44	46	47	47
2000	CFM						2568	2621	2731	2842	2844
	Ps in w.g						0.05	0.05	0.05	0.05	0.05
	Throw						19.6-25.7	25-30	26.7-31.2	27.6-34.59	27.8-35.2
	NC						49	47	50	51	51

Note:

1. Neck velocity is measured in feet/minute (fpm).
2. Static Pressure (Ps) is measured in inch water gauge (in. w.g).
3. Throw is measured in feet (ft.).
4. Noise criteria (NC) is measured in decibels (dB).
5. Airflow is measured in cubic feet / minute (CFM).

