

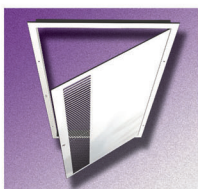
Miscellaneous

متفرقه



Fan coil Access Door

دریچه بازدید فن کوئل



مشخصات دریچه دسترسی به فن کوئل های سقفی
(شرکت ساراوول)

CFM فن کوئل	طول	عرض	سایز فیلتر
200	85	60	53 x 15
300	105	60	73 x 15
400	115	60	83 x 15
600	130	60	97 x 15
800	155	60	125 x 15
1000	185	60	155 x 15
1200	220	60	190 x 15

Dimensions in centimeters

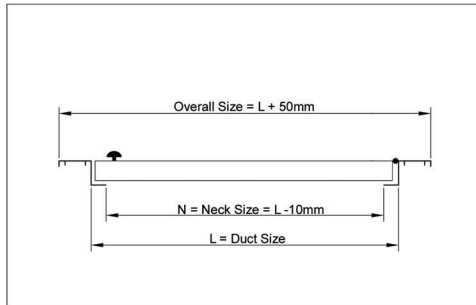
ابعاد به سانتیمتر است

مشخصات دریچه دسترسی به فن کوئل های سقفی
(شرکت تهویه)

CFM فن کوئل	طول	عرض	سایز فیلتر
200	90	70	47 x 16.5
300	110	70	67 x 16.5
400	130	70	87 x 16.5
600	160	70	117 x 16.5
800	200	70	157 x 16.5

Dimensions in centimeters

ابعاد به سانتیمتر است



Tech. Spec.

- The frame is constructed from galvanized steel sheet , Door Panel is constructed from aluminium sheet protected by electrostatic coating with lock .
- Door panel equipped with lock.
- Sizes are available from 150 x 150 mm to 600 x 600 mm.

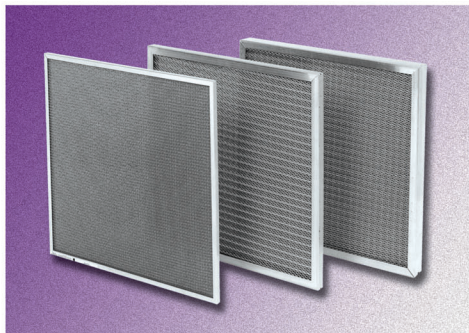
مشخصات فنی

- قاب از پروفیل و صفحه داخلی از جنس ورق آلومینیوم با رنگ الکترواستاتیک .
- دارای انواع قفل غلطکی، زمینسی یا تابلویی .
- اندازه‌ها بین ۱۵۰ × ۱۵۰ و ۶۰۰ × ۶۰۰ میلیمتر .

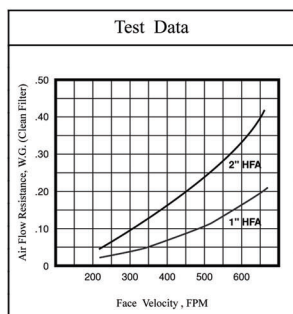
TYPE HFA

Two-Stage Foam & Aluminium Air Filter

فیلتر دو مرحله ای



Part #	Nominal H x W x D	Actual H x W x D
HFA101224	12" x 24" x 1"	11-1/2" x 23-1/2" x 7/8"
HFA101620	16" x 20" x 1"	15-1/2" x 19-1/2" x 7/8"
HFA101625	16" x 25" x 1"	15-1/2" x 24-1/2" x 7/8"
HFA102020	20" x 20" x 1"	19-1/2" x 19-1/2" x 7/8"
HFA102025	20" x 25" x 1"	19-1/2" x 24-1/2" x 7/8"
HFA102424	24" x 24" x 1"	23-1/2" x 23-1/2" x 7/8"
HFA201224	12" x 24" x 2"	11-1/2" x 23-1/2" x 1-3/4"
HFA201620	16" x 20" x 2"	15-1/2" x 19-1/2" x 1-3/4"
HFA201625	16" x 25" x 2"	15-1/2" x 24-1/2" x 1-3/4"
HFA202020	20" x 20" x 2"	19-1/2" x 19-1/2" x 1-3/4"
HFA202025	20" x 25" x 2"	19-1/2" x 24-1/2" x 1-3/4"
HFA202424	24" x 24" x 2"	23-1/2" x 23-1/2" x 1-3/4"



Notes : Recommended final resistance is 0.5" W.G.

Tech. Spec.

- Progressive density two-stage design.
- Uses 25 ppi filter foam for greater arrestance and efficiency.
- Washable with warm water and reusable.
- Standard and special sizes available.
- Efficiency 40%-60% .
- Lightweight.

مشخصات فنی

- مرحله اول فیلتر با فویل آلومینیوم .
- مرحله دوم ۲۵ درجه فوم .
- قابل شستشو با آب گرم و استفاده مجدد .
- مدل استاندارد و قابل سفارش به هر اندازه .
- راندمان ۴۰٪-۶۰٪ .
- وزن سبک .

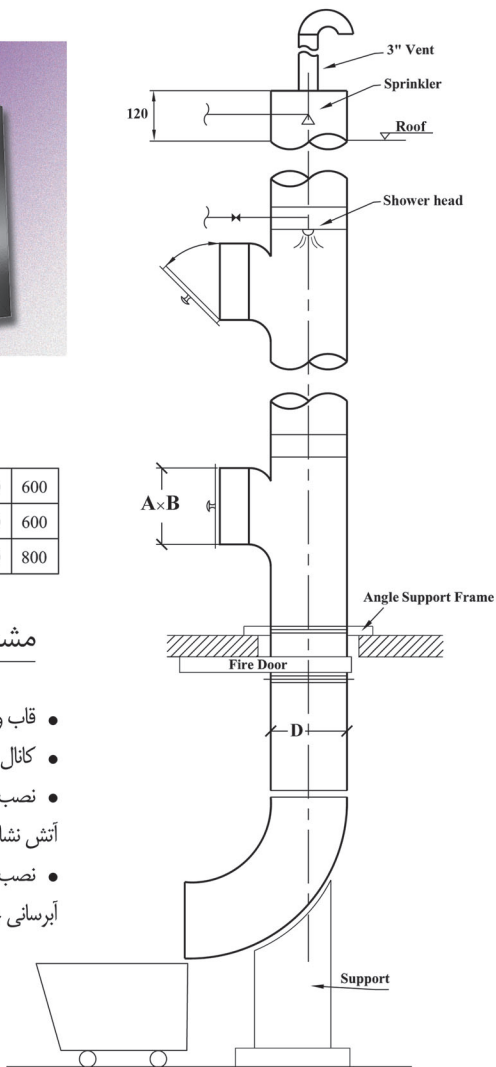


ابعاد دریچه شوت زباله

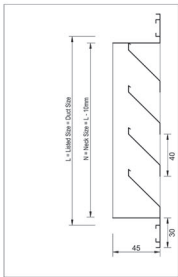
Intake Door	A	450	500	550	600	600
	B	450	500	550	600	600
Chute Ø	D	450	500	550	600	800

مشخصات فنی

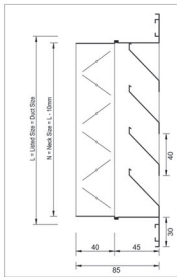
- قاب و در از جنس گالوانیزه یا استیل .
- کانال از جنس گالوانیزه یا استیل .
- نصب یکعدد اسپرینکلر با اتصال به مدار بوستر پمپ آتش نشانی یا آبرسانی جهت اطفاء حریق .
- نصب یکعدد افشانک با اتصال به مدار بوستر پمپ آبرسانی جهت شستشو .



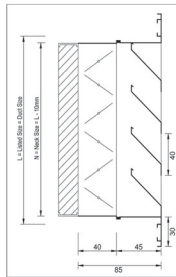
External Louvre (Fresh & Exhaust air)



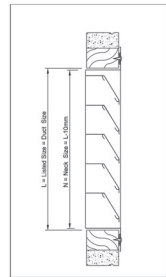
Model DL



Model DLD



Model DLDF



Model DHL

Tech. Spec.

- 45° degree angled blades provides maximum weather protection (ingress of rainwater).
- It provides a free area of approximately 45% .
- All louvres are manufactured from highly corrosion resistant and heavy gauge extruded aluminium.
- Standard air gap spacing is 40 mm.
- Designed for intake and exhaust ventilation application.
- Insect screen is available upon request.
- Opposed blade volume control damper and filter upon request.

مشخصات فنی

- ساخت لوور با تیغه های ۴۵ درجه به منظور جلوگیری از ورود آب باران.
- سطح مقطع مفید حداکثر ۴۵ درصد.
- قاب و تیغه ها از جنس آلومینیوم اکستروژن شده.
- فاصله استاندارد تیغه ها ۴۰ میلیمتر.
- مناسب برای ورود و تخلیه هوا.
- قابل سفارش با توری.
- قابل سفارش با دمپر و فیلتر.



External Louvre (Fresh & Exhaust air)

Face velocity Vs Total pressure drop across the Louver.

Table 1

Face velocity in m/sec	1.25	1.5	2.0	2.5	3.0	3.5	3.75	4.0	4.5
Exhaust in mm of water	0.248	0.331	0.564	0.814	1.151	1.595	1.825	2.143	3.290
Intake in mm of water	-0.35	-0.57	-0.83	-1.21	-1.69	-2.35	-2.69	-3.27	-3.85

Note: Intake pressure drop includes pressure drop across filters.
Readings are taken when the damper is in fully opened condition.

Effective pressure areas in m².

Model No: DL , DLD , DLDF, DHL.

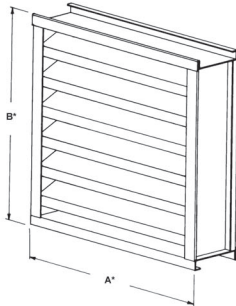
Table 2

Height In mm	Width in mm													
	300	350	400	450	500	550	600	650	700	750	800	850	900	1000
300	0.038	0.049	0.055	0.063	0.069	0.077	0.084	0.091	0.098	0.105	0.111	0.119	0.125	0.139
350	0.049	0.057	0.065	0.073	0.082	0.089	0.097	0.106	0.111	0.122	0.13	0.138	0.147	0.163
400	0.055	0.065	0.074	0.084	0.093	0.102	0.111	0.121	0.13	0.14	0.148	0.158	0.167	0.186
450	0.063	0.073	0.084	0.094	0.105	0.115	0.125	0.136	0.146	0.156	0.167	0.178	0.188	0.209
500	0.069	0.082	0.093	0.105	0.116	0.128	0.139	0.152	0.163	0.175	0.186	0.198	0.209	0.23
550	0.077	0.089	0.102	0.115	0.128	0.14	0.153	0.166	0.179	0.191	0.204	0.218	0.23	0.256
600	0.084	0.097	0.111	0.125	0.139	0.153	0.167	0.181	0.195	0.209	0.223	0.237	0.251	0.279
650	0.091	0.106	0.121	0.136	0.152	0.166	0.181	0.196	0.212	0.227	0.242	0.257	0.272	0.302
700	0.098	0.114	0.13	0.146	0.163	0.179	0.195	0.212	0.228	0.244	0.26	0.277	0.293	0.325
750	0.105	0.122	0.14	0.156	0.175	0.191	0.209	0.227	0.244	0.261	0.279	0.296	0.314	0.349
800	0.11	0.13	0.148	0.167	0.186	0.204	0.223	0.242	0.26	0.279	0.297	0.316	0.335	0.372
850	0.119	0.138	0.158	0.178	0.197	0.217	0.237	0.257	0.277	0.296	0.316	0.335	0.356	0.395
900	0.125	0.147	0.167	0.188	0.209	0.23	0.251	0.272	0.293	0.314	0.335	0.356	0.376	0.418
1000	0.139	0.163	0.186	0.21	0.23	0.256	0.279	0.302	0.325	0.349	0.372	0.395	0.418	0.464

Effective pressure areas for non standard sizes can be interpolated from the above data.

Internal Louvre

Model : D330



Tech. Spec.

- Frame is from galvanized or Aluminum with 1.25 ~ 2 mm thickness and 4" width.
- The blades are galvanized or Aluminum with 1.25 ~ 2 mm thickness, positioned at 30° angle and spaced approximately 4" center to center.
- Standard construction: min size 12"×12" max 72"×72".

مشخصات فنی

- قاب از ورق گالوانیزه و یا آلومینیوم به ضخامت ۱/۲۵ تا ۲ میلیمتر و عرض ۴ اینچ .
- تیغه ها از ورق گالوانیزه و یا آلومینیوم به ضخامت ۱/۲۵ تا ۲ میلیمتر . قرارگیری تیغه ها به فواصل ۴ اینچ و زاویه ۳۰ درجه رو به پایین .
- قابل ساخت به صورت مربع یا مستطیل با حداقل ابعاد ۱۲"×۱۲" و حداکثر ۷۳"×۷۳" .

Internal Louvre

Model : D330

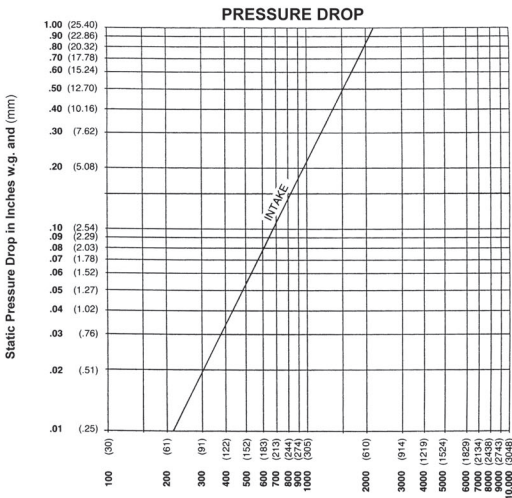
Dimension and technical Data

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of D330.

Width – Inches and Meters

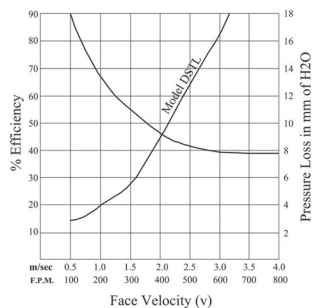
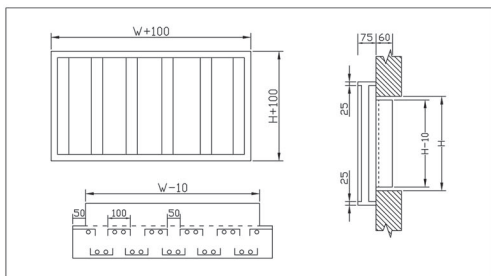
Height – Inches and Meters	12		18		24		30		36		42		48		54		60		66		72		78		84		90		96																			
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m																		
12	30	0.76	36	0.91	42	1.07	48	1.22	54	1.37	60	1.52	66	1.68	72	1.83	78	1.98	84	2.13	90	2.29	96	2.44	30	0.76	36	0.91	42	1.07	48	1.22	54	1.37	60	1.52	66	1.68	72	1.83	78	1.98	84	2.13	90	2.29	96	2.44
18	46	1.17	54	1.37	63	1.60	72	1.83	81	2.06	90	2.29	99	2.52	108	2.75	117	2.98	126	3.21	135	3.44	144	3.67	46	1.17	54	1.37	63	1.60	72	1.83	81	2.06	90	2.29	99	2.52	108	2.75	117	2.98	126	3.21	135	3.44	144	3.67
24	61	1.55	72	1.83	84	2.13	96	2.44	108	2.75	120	3.06	132	3.37	144	3.67	156	3.98	168	4.29	180	4.60	192	4.91	61	1.55	72	1.83	84	2.13	96	2.44	108	2.75	120	3.06	132	3.37	144	3.67	156	3.98	168	4.29	180	4.60	192	4.91
30	76	1.93	90	2.29	105	2.67	120	3.06	135	3.44	150	3.83	165	4.21	180	4.59	195	4.97	210	5.35	225	5.73	240	6.11	76	1.93	90	2.29	105	2.67	120	3.06	135	3.44	150	3.83	165	4.21	180	4.59	195	4.97	210	5.35	225	5.73	240	6.11
36	91	2.31	108	2.75	126	3.21	144	3.67	162	4.05	180	4.50	198	4.95	216	5.40	234	5.85	252	6.30	270	6.75	288	7.20	91	2.31	108	2.75	126	3.21	144	3.67	162	4.05	180	4.50	198	4.95	216	5.40	234	5.85	252	6.30	270	6.75	288	7.20
42	107	2.70	126	3.21	147	3.70	168	4.21	189	4.72	210	5.23	231	5.74	252	6.25	273	6.76	294	7.27	315	7.78	336	8.29	107	2.70	126	3.21	147	3.70	168	4.21	189	4.72	210	5.23	231	5.74	252	6.25	273	6.76	294	7.27	315	7.78	336	8.29
48	122	3.09	144	3.67	171	4.29	201	4.79	231	5.29	261	5.79	291	6.29	321	6.79	351	7.29	381	7.79	411	8.29	441	8.79	122	3.09	144	3.67	171	4.29	201	4.79	231	5.29	261	5.79	291	6.29	321	6.79	351	7.29	381	7.79	411	8.29	441	8.79
54	137	3.48	162	4.12	195	4.85	228	5.58	261	6.31	294	7.04	327	7.77	360	8.50	393	9.23	426	9.96	459	10.69	492	11.42	137	3.48	162	4.12	195	4.85	228	5.58	261	6.31	294	7.04	327	7.77	360	8.50	393	9.23	426	9.96	459	10.69	492	11.42
60	152	3.87	180	4.57	219	5.42	258	6.36	297	7.30	336	8.24	375	9.18	414	10.12	453	11.06	492	12.00	531	12.94	570	13.88	152	3.87	180	4.57	219	5.42	258	6.36	297	7.30	336	8.24	375	9.18	414	10.12	453	11.06	492	12.00	531	12.94	570	13.88
66	168	4.26	198	5.06	240	6.00	288	7.04	336	8.08	384	9.12	432	10.16	480	11.20	528	12.24	576	13.28	624	14.32	672	15.36	168	4.26	198	5.06	240	6.00	288	7.04	336	8.08	384	9.12	432	5.16	480	11.20	528	12.24	576	13.28	624	14.32	672	15.36
72	183	4.65	216	5.55	261	6.49	318	7.53	375	8.57	432	9.60	489	10.64	546	11.68	603	12.72	660	13.76	717	14.80	774	15.84	183	4.65	216	5.55	261	6.49	318	7.53	375	4.65	432	5.57	489	6.49	546	7.41	603	8.37	660	9.31	717	10.27	774	11.21
78	198	5.04	234	6.04	285	7.08	351	8.12	408	9.16	465	10.20	522	11.24	579	12.28	636	13.32	693	14.36	750	15.40	807	16.48	198	5.04	234	6.04	285	7.08	351	8.12	408	5.04	465	6.04	522	7.08	579	8.12	636	9.16	693	10.20	750	11.24	807	12.28
84	213	5.43	252	6.53	315	7.67	405	8.81	474	9.95	543	11.09	612	12.23	681	13.37	750	14.51	819	15.63	888	16.75	957	17.89	213	5.43	252	6.53	315	7.67	405	8.81	474	5.43	543	6.53	612	7.67	681	8.81	750	9.95	819	11.09	888	12.23	957	13.37
90	229	5.82	270	7.02	336	8.26	432	9.40	513	10.58	582	12.16	651	13.52	720	14.94	789	16.38	858	18.18	927	19.42	996	20.70	229	5.82	270	7.02	336	8.26	432	9.40	513	5.82	582	7.02	651	8.26	720	9.40	789	10.58	858	12.16	927	13.52		
96	244	6.21	288	7.52	357	8.91	459	10.00	540	11.17	609	13.03	678	14.97	747	16.85	816	18.72	885	20.46	954	22.14	1023	23.82	244	6.21	288	7.52	357	8.91	459	10.00	540	6.21	609	7.52	678	8.91	747	10.17	816	11.17	885	13.03	954	14.97		



Ratings do not include the effect of a bird screen.



Model : DSTL



W	150	300	450	600	750	900	1050	1200	1350	1500
H	150	300	450	600	750	900	1050	1200	1350	1500

Tech. Spec.

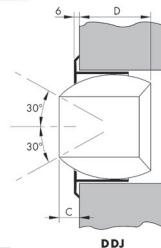
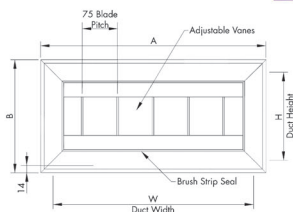
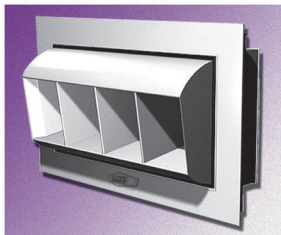
- قاب و تیغه ها از جنس گالوانیزه بارنگ کوره ای. • تعبیه سوراخ بقطر ۲۰ میلیمتر در طرفین پایین
- Drain holes of diameter 20mm are provided in two rows at the bottom of the louvre for emptying filtered sand and dust. • درجه بمنظور تخلیه شن و گرد و خاک.
- Available in square and rectangular sizes. • قابل سفارش در ابعاد مربع یا مستطیل.

مشخصات فنی



Drum Jet Diffusers

Model : DDJ



No	A	B	W	H	C	D
906	300	217	261	170	36	87
1206	376	217	337	170	36	87
1806	529	217	490	170	36	87
2406	681	217	642	170	36	87
2010	579	319	540	271	63	138
2510	706	319	667	271	63	138
3010	833	319	794	271	63	138
3510	960	319	921	271	63	138

Tech. Spec.

- DDj Drum Jet diffuser is a high capacity unit specifically designed for warehouses, sports halls or factory units etc, where a long throw is required.
- The DDJ is fully adjustable to provide a full jet spread and directional control.
- The unit is constructed from aluminium extrusions.
- It comes complete with brush strips to provide a low friction , airtight seal.

مشخصات فنی

- کاربرد درام جت دیفیوزر با پرتاب هوا با حجم زیاد برای فضاهای ورزشی ، انبارها ، کارخانجات.
- تغییر جهت با پره های راهنما .
- قاب و دریچه از جنس آلومینیوم اکستروژنه شده.
- کاربرد دوگانه واشر بین قاب و دریچه (تغییر جهت دریچه و هواپندی).

Drum Jet Diffusers

Model : DDJ

Selection Example DDJ

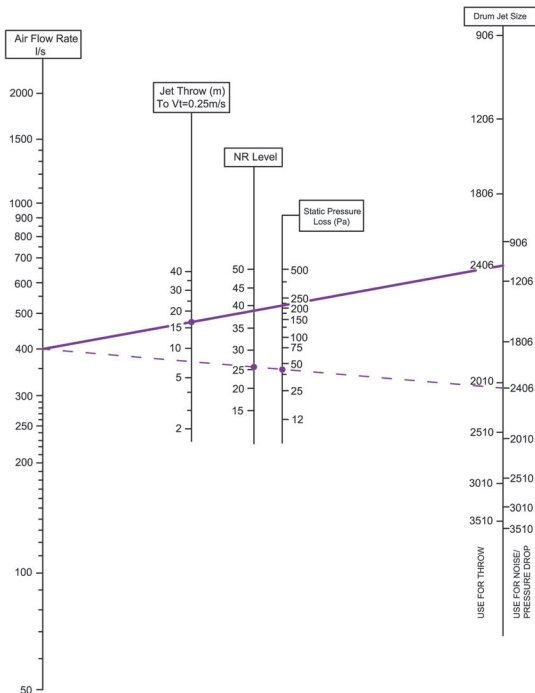
Air flow rate 400 l/s

Throw 17.0 m (Solid line)

Pressure drop 45Pa (Dotted line)

Noise level NR 26 (Dotted line)

Selection Nomegram



Throw Correction Factor							
Vane Angle	0°	5°	10°	20°	30°	40°	60°
Factor	1.0	0.9	0.82	0.68	0.6	0.52	0.4

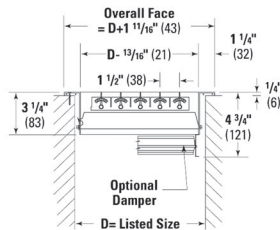


Jet diffuser

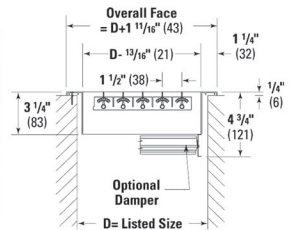
جت دیفیوزر

Louvered Face Supply

Model : D150



Model 150
Double Deflection



Model 150
Single Deflection

Tech. Spec.

- D150 Series industrial grille is designed to be Rugged and reliable. Streamlined heavy duty Blades and mullions are extruded from high Strength aluminum alloy.
- Single or double deflection supply grille designed To handle larger air volumes common to industrial Applications (up to 1800fpm).
- Rugged construction for commercial, factory warehouse or textile mill applications.
- Maximum free area to reduce pressure drop and sound levels.
- Model 150G gang operated blades are adjustable with pole operator. Front or rear blades can be gang operated.

مشخصات فنی

- مدل D150 از سری دریچه های صنعتی با تیغه های بسیار محکم از جنس آلومینیوم اکستروژده شده.
- طراحی تیغه های تکی و دوپل برای پرتاب هوا با حجم زیاد در فضاهای صنعتی (سرعت تا 1800 F.P.M).
- کاربرد این دریچه ها در فضاهای تجاری ، کارخانجات ، انبارها ، نساجی و ...
- کاهش افت فشار و صدای کم به لحاظ حداکثر سطح مفید دریچه.
- مدل 150G با دسته تنظیم کننده تیغه های عقب و جلو.

Jet diffuser

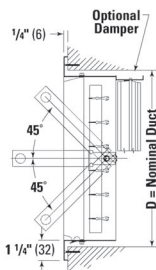
جت دیفیوزر

Louvered Face Supply

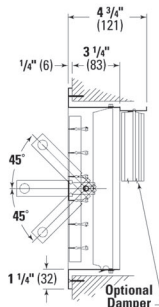
Model : D150

Product Details

جزئیات ساخت



150G Rear Blades Ganged



150G Front Blades Ganged

Tech. Spec.

- Streamlined 1/4" (32) blades positioned on 1/2" (38) centers. Maximum blade length is 20" (508).
- Individually adjustable blades lock into position At 0,15,30 and 45° deflection in both directions.
- Blades, frame , mullions and the gang operator Mechanism are extruded aluminum to resist corrosion.
- Optional opposed blade damper.
- Gang operated front or rear blades adjust up to 45° in Either direction with operator lever (model 150G).

مشخصات فنی

- ساخت تیغه‌ها با عرض ۳۲ میلی‌متر به فاصله ۳۸ میلی‌متر از یکدیگر، حداکثر طول تیغه ۵۰۸ میلی‌متر.
- تیغه‌ها را می‌توان بطور تکی در زوایای ۰ ، ۱۵ ، ۳۰ و ۴۵ درجه در دو جهت روی قاب قفل نمود.
- تیغه‌ها ، قاب ، تکیه‌گاهها و دسته تنظیم کننده از آلومینیوم اکستروژنه شده ، مقاوم در مقابل خوردگی.
- نصب دمپر با پره های ضربدری در صورت نیاز.
- تنظیم تیغه‌های جلو و عقب در دو جهت حداکثر تا ۴۵ درجه.

Jet diffuser

جت دیفیوزر

Louvered Face Supply

Model : D150

Performance Data

		Core Velocity FPM		300	400	500	600	700	800	1000	1200	1400	1600	1800	
		Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	0.160	0.202	
Ac = 0.15 ft ² 7 x 4 6 x 5	Total	0°	0.012	0.020	0.032	0.044	0.061	0.079	0.123	0.178	0.242	0.317	0.400		
		15°	0.013	0.021	0.034	0.046	0.065	0.084	0.130	0.189	0.256	0.336	0.424		
		45°	0.025	0.041	0.066	0.090	0.127	0.164	0.254	0.369	0.500	0.656	0.828		
	CFM	0°	45	60	75	90	105	120	150	180	210	240	270		
		15°	-	-	-	-	-	-	16	24	31	37	42	46	
		45°	-	-	-	-	-	-	-	-	-	-	-	-	
	Throw	0°	4-6-11	5-8-13	7-10-15	8-11-16	9-12-18	10-13-19	12-15-21	13-16-23	14-18-25	15-19-25	16-21-29		
		15°	3-5-10	4-6-10	6-8-12	6-10-13	7-10-14	9-10-15	10-12-17	10-13-18	11-14-20	12-15-21	13-17-23		
		45°	5-8-13	3-4-7	3-5-8	4-6-9	5-7-9	5-7-10	6-8-10	7-9-11	8-9-12	8-10-13	9-10-14		
	Ac = 0.18 ft ² 8 x 4 7 x 5 6 x 6	CFM	0°	54	72	90	108	126	144	180	216	252	288	324	
			15°	-	-	-	-	-	-	16	25	31	37	42	46
			45°	-	-	-	-	-	-	-	-	-	-	-	-
Throw		0°	4-7-12	6-8-14	7-10-16	9-12-18	10-14-19	10-15-21	13-16-23	14-16-25	16-20-28	17-21-28	18-23-32		
		15°	3-6-10	5-6-11	6-9-13	7-10-14	8-11-15	9-12-17	10-13-18	11-14-20	13-16-22	13-17-24	14-18-25		
		45°	2-3-7	3-4-8	4-5-9	4-7-10	5-7-10	6-8-11	7-9-12	8-10-13	8-10-14	9-11-15	10-12-16		
Ac = 0.22 ft ² 10 x 4 8 x 5 7 x 6		CFM	0°	66	88	110	132	154	176	220	264	308	352	396	
			15°	-	-	-	-	-	-	17	25	32	38	43	47
			45°	-	-	-	-	-	-	-	-	-	-	-	-
		Throw	0°	4-7-13	7-10-16	8-11-18	8-14-20	10-16-22	12-16-23	15-18-26	16-20-28	18-20-30	19-24-32	20-25-34	
			15°	3-6-10	6-8-13	6-10-14	7-11-16	8-12-17	10-13-18	12-14-21	13-16-22	14-17-25	15-19-26	16-20-28	
			45°	2-4-7	3-5-9	4-6-10	5-7-10	6-8-10	6-9-11	8-10-12	9-10-14	9-11-15	10-11-16	10-12-17	
	Ac = 0.26 ft ² 12 x 4 10 x 5 8 x 6	CFM	0°	78	104	130	156	182	208	260	312	364	416	468	
			15°	-	-	-	-	-	-	17	25	32	38	43	47
			45°	-	-	-	-	-	-	-	-	-	-	-	-
		Throw	0°	5-8-15	7-10-18	8-12-20	9-15-22	11-16-23	13-18-25	16-20-28	18-20-30	19-24-33	21-25-35	22-26-38	
			15°	4-6-12	6-9-14	7-10-16	8-12-17	10-13-18	10-14-20	13-16-22	14-16-22	15-19-27	17-20-29	17-21-30	
			45°	3-4-8	4-5-9	4-7-10	5-8-10	6-9-11	7-9-12	8-10-14	9-11-15	10-12-16	10-12-17	11-13-19	
Ac = 0.30 ft ² 14 x 4		CFM	0°	90	120	150	180	210	240	300	360	420	480	540	
			15°	-	-	-	-	-	-	18	26	33	38	43	48
			45°	-	-	-	-	-	-	-	-	-	-	-	-
		Throw	0°	5-9-16	8-10-19	9-13-21	10-16-23	12-18-25	14-19-25	17-22-29	19-24-32	21-26-35	23-28-38	24-29-40	
			15°	4-7-13	6-9-15	7-10-17	9-13-18	9-14-20	10-14-21	13-17-24	15-19-26	17-21-29	18-22-30	19-23-32	
			45°	3-4-8	4-6-10	5-7-10	6-8-11	7-9-12	8-10-13	9-10-15	10-11-16	10-12-18	11-13-19	11-14-20	
	Ac = 0.34 ft ² 16 x 4 12 x 5 10 x 6	CFM	0°	102	136	170	204	238	272	340	408	476	544	612	
			15°	-	-	-	-	-	-	18	26	33	39	44	48
			45°	-	-	-	-	-	-	-	-	-	-	-	-
		Throw	0°	5-9-17	8-11-20	10-14-23	11-18-25	13-19-27	15-21-29	19-23-31	21-25-35	22-27-38	24-29-40	25-30-43	
			15°	4-7-13	6-10-16	8-11-18	10-14-20	10-15-21	12-17-23	15-18-25	17-20-29	17-21-30	19-23-32	20-25-34	
			45°	3-4-9	4-6-10	5-8-11	6-9-12	7-10-13	8-10-14	10-11-16	10-12-17	11-13-19	11-14-20	12-15-21	

Jet diffuser

جت دیفیوزر

Louvered Face Supply

Model : D150

Performance Data

		Core Velocity FPM												
		300	400	500	600	700	800	1000	1200	1400	1600	1800		
		Velocity Pressure												
Size	Total	0°	0.012	0.020	0.032	0.044	0.061	0.079	0.123	0.178	0.242	0.317	0.400	
	Pressure	15°	0.013	0.021	0.034	0.046	0.065	0.084	0.130	0.189	0.256	0.336	0.424	
		45°	0.025	0.041	0.066	0.090	0.127	0.164	0.254	0.369	0.500	0.656	0.828	
Ac = 0.39 ft²		CFM	117	156	195	234	273	312	390	468	546	624	702	
18 x 4	14 x 5	NC	-	-	-	-	-	18	27	33	39	44	48	
12 x 6	8 x 8	Throw	0°	6-9-18	9-12-22	10-15-24	12-18-27	14-21-29	16-22-30	20-25-34	22-26-38	24-29-40	26-31-43	27-33-46
		15°	5-7-14	7-10-17	9-12-19	10-14-21	11-17-23	13-17-25	16-20-28	17-21-30	19-23-32	21-25-34	21-27-36	
		Fl.	45°	3-5-10	4-6-10	5-8-12	7-10-13	8-10-14	9-11-15	10-12-17	11-13-19	11-14-20	12-15-22	13-16-23
Ac = 0.46 ft²		CFM	138	184	230	276	322	368	460	552	644	736	828	
20 x 4	16 x 5	NC	-	-	-	-	-	19	27	34	40	45	49	
14 x 6	10 x 8	Throw	0°	7-10-21	9-13-24	11-16-26	13-21-29	15-22-30	18-24-33	22-26-37	24-29-41	26-31-44	28-33-47	29-36-49
		15°	6-8-17	7-10-19	10-13-21	10-17-23	12-17-25	14-19-27	17-22-29	19-24-32	21-25-35	22-27-37	24-29-40	
		Fl.	45°	3-5-10	5-7-11	6-9-13	7-10-14	8-10-15	10-12-16	10-13-19	11-14-20	13-16-22	13-17-23	14-18-25
Ac = 0.52 ft²		CFM	156	208	260	312	364	416	520	624	728	832	936	
24 x 4	18 x 5	NC	-	-	-	-	-	19	27	34	40	45	49	
16 x 6		Throw	0°	7-10-22	10-14-25	12-18-28	14-21-30	17-24-33	19-25-35	23-29-39	26-31-43	28-33-47	29-36-49	30-38-52
		15°	6-9-17	8-11-20	10-14-22	11-17-25	13-19-27	15-20-29	18-23-31	21-25-34	22-27-37	24-29-40	25-30-42	
		Fl.	45°	3-5-10	5-7-12	6-9-14	8-10-15	9-11-16	10-12-17	11-14-20	12-15-22	13-17-23	14-18-25	15-19-27
Ac = 0.60 ft²		CFM	180	240	300	360	420	480	600	720	840	960	1080	
28 x 4	20 x 5	NC	-	-	-	-	-	19	28	34	40	45	50	
18 x 6	12 x 8	Throw	0°	7-11-23	10-15-27	13-19-29	15-23-32	18-26-35	21-28-38	25-30-43	28-33-46	29-36-49	31-38-53	33-41-56
		15°	6-10-18	9-12-21	10-15-24	12-18-26	14-21-29	17-22-30	20-25-34	22-27-36	24-29-40	25-30-43	27-32-45	
		Fl.	45°	4-6-11	5-8-13	7-10-15	8-11-16	10-12-18	10-13-19	12-15-21	13-16-23	14-18-25	15-19-27	16-20-28
Ac = 0.69 ft²		CFM	207	276	345	414	483	552	690	828	966	1104	1242	
30 x 4	24 x 5	NC	-	-	-	-	-	20	28	35	41	46	50	
20 x 6	14 x 8	Throw	0°	8-12-25	11-16-29	14-21-32	17-25-35	20-28-48	23-29-41	27-32-45	29-36-49	31-38-53	33-41-57	35-43-60
		15°	6-10-20	10-13-23	11-17-26	13-20-29	16-22-30	18-24-32	21-26-36	23-29-40	25-30-43	27-32-46	29-34-48	
		Fl.	45°	4-6-12	6-9-14	7-10-16	9-12-17	10-13-19	11-14-20	13-16-23	14-18-25	15-19-27	17-21-29	18-22-29
Ac = 0.81 ft²		CFM	243	324	405	486	567	648	810	972	1134	1296	1458	
36 x 4	28 x 5	NC	-	-	-	-	15	20	28	35	41	46	50	
22 x 6	16 x 8	Throw	0°	8-13-27	12-18-31	15-22-35	18-27-38	22-29-41	25-31-44	29-35-48	31-39-53	34-42-57	36-44-61	38-47-65
		15°	6-10-21	10-14-25	12-17-29	14-21-30	17-24-32	20-25-35	23-29-39	25-31-43	28-33-46	29-35-48	30-37-51	
		Fl.	45°	4-7-13	6-9-15	8-11-17	10-13-19	10-14-21	12-16-22	14-18-25	16-19-27	17-21-29	18-22-30	19-24-32



Jet diffuser

جت دیفیوزر

Louvered Face Supply

Model : D150

Performance Data

		Core Velocity FPM		300	400	500	600	700	800	1000	1200	1400	1600	1800
		Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	0.160	0.202
Size		Total	0°	0.012	0.020	0.032	0.044	0.061	0.079	0.123	0.178	0.242	0.317	0.400
		Pressure	15°	0.013	0.021	0.034	0.046	0.065	0.084	0.130	0.189	0.256	0.336	0.424
			45°	0.025	0.041	0.066	0.090	0.127	0.164	0.254	0.369	0.500	0.656	0.828
Ac = 0.90 ft²		CFM		270	360	450	540	630	720	900	1080	1260	1440	1620
40 x 4	30 x 5	NC		-	-	-	-	15	20	29	36	41	46	51
26 x 6	18 x 8		0°	9-14-29	13-19-32	16-24-37	20-29-40	23-31-43	26-33-46	30-37-52	33-41-57	35-44-60	38-47-60	40-50-68
16 x 10	12 x 12	Throw	15°	7-11-23	10-15-26	13-19-29	16-23-32	18-25-34	21-27-36	25-29-42	27-32-45	29-35-48	30-37-51	32-40-55
		Ft.	45°	5-8-14	7-10-16	9-12-18	10-14-20	11-15-22	13-16-23	15-19-26	16-20-28	18-22-30	19-23-32	20-25-34
Ac = 1.07 ft²		CFM		321	428	535	642	749	856	1070	1284	1498	1712	1926
48 x 4	36 x 5	NC		-	-	-	-	16	21	29	36	42	47	51
30 x 6	18 x 10		0°	10-15-32	14-21-36	17-27-40	21-31-44	25-34-47	28-37-50	33-41-56	36-44-61	39-48-66	41-50-70	44-54-75
14 x 12		Throw	15°	8-12-25	11-17-29	13-21-32	17-25-35	20-27-37	22-29-40	27-32-45	29-35-48	31-38-52	32-40-56	35-44-60
		Ft.	45°	5-8-15	7-10-18	9-13-20	10-16-22	12-17-24	13-18-25	16-20-28	18-22-30	19-24-33	21-26-35	22-27-38
Ac = 1.18 ft²		CFM		354	472	590	708	826	944	1180	1416	1652	1888	2124
34 x 6	24 x 8	NC		-	-	-	-	16	21	29	36	42	47	51
20 x 10	16 x 12		0°	10-16-32	14-22-38	18-27-42	22-33-46	26-36-50	29-38-53	34-43-59	38-46-64	41-49-69	43-53-74	46-56-79
14 x 14		Throw	15°	8-13-26	11-17-30	14-21-33	17-27-36	21-29-40	24-30-43	28-34-48	30-36-51	32-40-55	34-43-59	36-45-63
		Ft.	45°	5-8-16	8-10-19	10-13-21	11-16-23	12-18-25	14-19-27	17-21-29	19-23-32	20-25-35	22-27-37	23-29-39
Ac = 1.34 ft²		CFM		402	536	670	804	938	1072	1340	1608	1876	2144	2412
60 x 4	48 x 5	NC		-	-	-	-	16	21	30	37	42	47	52
36 x 6	18 x 12		0°	10-17-34	15-23-40	19-29-45	23-28-48	27-38-53	30-41-56	37-45-62	40-49-68	43-53-74	46-57-79	48-60-85
16 x 14		Throw	15°	9-13-28	12-18-32	15-23-36	18-29-39	21-30-43	25-32-45	29-36-49	32-40-55	34-43-59	36-46-63	39-48-67
		Ft.	45°	6-9-17	8-11-20	10-14-22	11-17-24	13-19-27	15-20-28	18-22-31	20-25-34	22-27-37	23-29-39	25-30-42
Ac = 1.60 ft²		CFM		480	640	800	960	1120	1280	1600	1920	2240	2560	2880
72 x 4	30 x 8	NC		-	-	-	-	17	22	30	37	43	48	52
24 x 10	22 x 12		0°	12-19-38	17-25-44	21-30-48	16-37-53	29-41-57	32-44-61	40-48-68	44-53-75	47-58-81	50-62-86	53-66-92
18 x 14	16 x 16	Throw	15°	10-15-30	13-20-35	17-25-39	21-29-43	24-32-46	27-35-48	32-39-55	35-43-60	37-47-65	40-49-69	43-52-74
		Ft.	45°	6-10-19	9-12-22	10-15-24	12-19-27	14-21-29	16-22-30	20-25-34	22-27-37	24-29-41	25-30-44	27-33-46
Ac = 1.80 ft²		CFM		540	720	900	1080	1260	1440	1800	2160	2520	2880	3240
60 x 5	48 x 6	NC		-	-	-	-	17	22	31	37	43	48	52
36 x 8	30 x 10		0°	12-20-40	18-27-46	23-33-52	28-41-60	29-44-60	35-47-65	43-52-72	46-57-80	49-62-86	53-66-92	57-69-98
24 x 12	20 x 14	Throw	15°	10-16-32	14-21-36	18-27-42	22-32-45	25-35-48	29-37-51	34-42-58	36-46-64	40-49-68	43-52-74	46-55-78
18 x 16		Ft.	45°	7-10-20	9-13-23	11-16-26	13-20-28	15-22-30	18-23-32	21-26-36	23-29-40	25-30-43	27-33-46	29-35-48



Jet diffuser

جت ديفيوزر

Louvered Face Supply

Model : D150

Performance Data

		Core Velocity FPM		300	400	500	600	700	800	1000	1200	1400	1600	1800
		Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	0.160	0.202
Size	Total	0°	0.012	0.020	0.032	0.044	0.061	0.079	0.123	0.178	0.242	0.317	0.400	
	Pressure	15°	0.013	0.021	0.034	0.046	0.065	0.084	0.130	0.189	0.256	0.336	0.424	
		45°	0.025	0.041	0.066	0.090	0.127	0.164	0.254	0.369	0.500	0.656	0.828	
Ac = 2.08 ft²		CFM	624	832	1040	1248	1456	1664	2080	2496	2912	3328	3744	
72 x 5	60 x 6	NC	-	-	-	-	18	23	31	38	43	48	53	
40 x 8	35 x 10	0°	13-22-43	19-29-49	25-36-55	29-42-60	33-47-65	38-50-69	46-56-78	49-61-86	53-66-92	57-71-99	61-75-105	
30 x 12	24 x 14	15°	10-17-34	15-23-40	20-29-44	23-33-48	27-37-51	30-40-55	36-45-63	40-46-68	43-52-74	46-57-79	48-60-84	
20 x 16	18 x 18	45°	7-10-22	10-14-25	12-18-28	14-21-30	16-24-32	19-25-35	23-28-39	25-30-43	27-33-46	29-35-49	29-38-52	
Ac = 2.45 ft²		CFM	735	980	1225	1470	1715	1960	2450	2940	3430	3920	4410	
72 x 6	48 x 8	NC	-	-	-	-	18	23	31	38	44	49	53	
32 x 12	26 x 14	0°	14-24-47	21-31-54	26-38-59	30-46-65	36-51-70	41-54-76	49-61-85	54-67-92	58-72-101	62-77-107	67-83-114	
24 x 16	20 x 18	15°	11-19-37	17-25-44	21-30-48	25-36-51	29-41-56	32-44-61	40-48-67	44-53-74	47-58-81	49-62-86	53-66-91	
20 x 20		45°	7-11-23	10-15-27	13-19-29	15-23-32	18-26-35	21-27-38	25-30-43	27-33-47	30-36-50	31-40-53	33-41-57	
Ac = 2.78 ft²		CFM	834	1112	1390	1668	1946	2224	2780	3336	3892	4448	5004	
36 x 12	30 x 14	NC	-	-	-	-	18	23	32	38	44	49	54	
26 x 16	24 x 18	0°	15-25-49	22-32-57	28-40-64	33-48-69	38-54-75	43-58-81	52-65-90	57-71-99	62-77-106	67-83-116	70-88-122	
22 x 20		15°	12-20-40	17-26-46	22-32-51	27-38-55	30-44-60	34-47-65	42-51-72	46-57-79	49-62-86	53-67-93	56-70-97	
		45°	8-12-25	11-16-29	13-20-31	16-24-35	19-27-38	22-29-40	27-32-45	29-35-49	31-38-53	33-41-58	35-44-61	
Ac = 3.11 ft²		CFM	933	1244	1555	1866	2177	2488	3110	3732	4354	4976	5598	
60 x 8	48 x 10	NC	-	-	-	-	19	24	32	39	45	50	54	
40 x 12	36 x 14	0°	16-26-52	23-34-60	32-43-67	39-50-74	45-57-80	46-61-86	55-68-95	61-75-105	66-82-112	70-87-122	75-92-128	
30 x 16	26 x 18	15°	13-21-42	19-28-48	26-34-54	31-40-59	36-46-64	36-48-68	45-55-76	48-60-84	52-66-89	56-70-97	60-74-103	
24 x 20		45°	8-13-27	11-17-29	16-21-33	19-25-37	22-29-40	23-30-43	28-34-48	30-38-52	33-41-56	35-44-61	38-47-64	
Ac = 3.61 ft²		CFM	1083	1444	1805	2166	2527	2888	3610	4332	5054	5776	6498	
72 x 8	60 x 10	NC	-	-	-	-	19	24	32	39	45	50	54	
48 x 12	36 x 16	0°	17-28-56	25-36-65	30-45-72	36-53-80	42-62-96	48-66-92	60-74-103	66-82-112	71-88-122	76-94-130	82-98-139	
30 x 18	28 x 20	15°	13-22-45	20-29-51	25-36-58	29-43-64	33-49-68	39-52-74	48-59-82	52-66-84	57-70-97	57-75-105	66-80-111	
24 x 24		45°	9-13-28	12-18-32	15-22-36	18-27-40	21-30-43	24-33-46	29-37-51	33-41-56	36-44-61	38-48-66	41-49-69	
Ac = 4.29 ft²		CFM	1287	1716	2145	2574	3003	3432	4290	5148	6006	6864	7722	
48 x 14	36 x 18	NC	-	-	-	-	19	24	33	40	45	50	55	
32 x 20	28 x 24	0°	18-29-61	27-39-70	33-48-79	40-57-96	47-67-93	53-72-101	66-81-112	72-88-124	78-97-133	84-103-142	87-109-150	
		15°	14-24-48	21-31-56	27-38-63	32-46-69	37-54-74	43-58-81	52-65-89	58-70-99	63-78-106	67-82-113	70-87-120	
		45°	10-14-30	13-19-35	16-24-40	20-29-44	23-33-47	27-36-50	32-41-56	36-45-62	39-48-67	42-51-71	44-54-75	

1. Pressure

All pressures are in inches of water.

2. Throw

Maximum throws are to a terminal velocity of 50 FPM (Vt = 50).

Middle throws are to a terminal velocity of 100 FPM (Vt = 100).

Minimum throws are to a terminal velocity of 150 FPM (Vt = 150).

3. Throw data based on supply air and room air being at isothermal conditions.

4. Sound

The NC values are based on a room absorption of 10dB.

5. Blanks (—) indicate an NC level below 15.

6. Deflection

The listed deflection settings refer to horizontal deflection. For a 15° upward deflection, use the room throw rating for a 0° setting and the total pressure for a 15° horizontal setting.

The performance tables are based on units with an opposed blade damper.

Correction for grilles without dampers

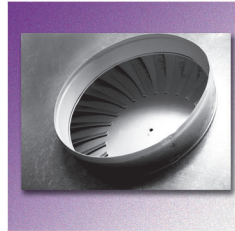
— Multiply total pressure by 0.79

— Subtract 12 from NC.

Swirl Diffuser

دریچه توزیع هوا (تایل خورشیدی)

Model : DSD



Tech. Spec.

- DSD serial Swirl diffuser consists of fixed radial aligned diversion blade.
- It is featured with large air volume and low noise.
- It blows by means of horizontal swirl , obtains a high inductivity ,Which enables the air blown to rapidly mixed with the air inside Of the room to reduce the temperature as well as the wind speed.
- Considerable degree of comfort inside of the room.
- Two modes for air intake of static pressure box : intake from top and intake horizontally.
- Easily can be mounted to any rectangular or round Ducts by flexible ducts.
- The diffuser adopts cold rolling galvanized or aluminum plate for its panels.
- The static pressure box adopts cold rolling galvanized steel plate.

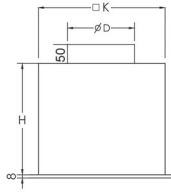
مشخصات فنی

- تایل خورشیدی شامل یک صفحه با پره های ثابت زاویه دار میباشد.
- پرتاب هوا به مقدار زیاد و صدای کم.
- مزیت این دریچه ها پرتاب هوا و سریع مخلوط شدن هوای مطبوع با هوای اتاق است.
- آسایش بیشتر برای ساکنان.
- ورود هوا به جعبه هوا از بالا و یا کنار جعبه.
- امکان اتصال آسان و سریع به انواع کانالهای چهارگوش یا گرد توسط لوله های خرطومی قابل انعطاف.
- جنس دریچه از گالوانیزه یا آلومینیوم.
- جنس جعبه هوا از گالوانیزه.

Swirl Diffuser

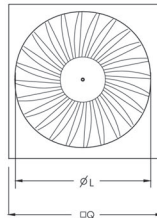
دریچه توزیع هوا (تایل خورشیدی)

Static Pressure Box

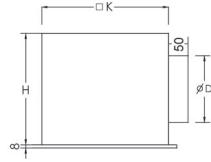


V

Swirl diffuser



Static Pressure Box



H

Dimension

Model	□Q	ΦL	□K	ΦD	H
300	300	254	290	160	250
400	400	336	362	200	300
500	500	440	476	200	300
600	600	530	567	250	350

Air Flow (Vertical Inlet)

Specs	Air Volume m ³ /h (CFM)	Pressure loss (Pa)	Noise (db)
300-V	120 (70)	9	22
	150 (90)	14	28
	200 (120)	25	35
	250 (150)	38	43
	400 (240)	120	60
400-V	200 (120)	8	<20
	250 (150)	13	25
	300 (180)	16	28
	400 (240)	30	37
	500 (300)	45	43
500-V	250 (150)	8	21
	300 (180)	12	24
	400 (240)	20	33
	500 (300)	30	38
	700 (415)	55	47
600-V	400 (240)	12	27
	500 (300)	18	33
	600 (360)	26	37
	800 (480)	45	47
	1000 (590)	65	55

Air Flow (Horizontal Inlet)

Specs	Air Volume m ³ /h (CFM)	Pressure loss (Pa)	Noise (db)
300-H	100 (60)	6.5	<20
	150 (90)	13	24
	250 (150)	35	37
	400 (240)	90	53
	500 (300)	140	65
400-H	150 (90)	4.5	<20
	200 (120)	9	<20
	300 (180)	18	28
	400 (240)	36	38
	500 (300)	50	44
500-H	180 (105)	4.5	<20
	250 (150)	8	<20
	350 (207)	15	27
	550 (325)	38	42
	700 (415)	60	47
600-H	300 (180)	6	<20
	400 (240)	10	22
	600 (360)	20	32
	800 (480)	38	42
	1200 (710)	85	55