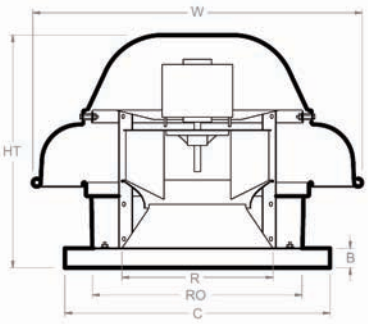
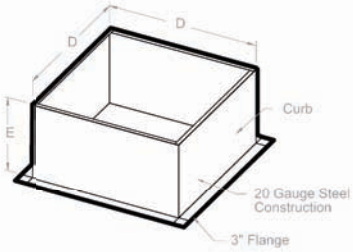
DR-H Direct Drive

Centrifugal Downblast Exhaust Fans





Centrifugal Direct Drive Fans are designed to pull more air under higher static pressures. The efficient wheel and air inlet design contribute to maintaining low noise levels and extended motor life. These fans are specially suited for installation in hospitals, schools, motels and hotels, auditoriums, office buildings and light industrial areas.

Features & Benefits

- **Spun aluminum housing** for dust-free, weather resistant durability
- **Standard bird screen**
- **Non-overloading backward inclined wheels, blades and inlets** fabricated from 3003-H14 aluminum
- **All sizes can be wall mounted**
- **Wire conduit** to provide a clear channel for electrical connections
- **Disconnect switch**
- **Variable speed control**

Options

- Gravity Damper
- Motorized Damper
- Wall Mount Sleeve
- Roof Curbs

Certifications

FloAire certifies that Models DR10H thru DR85H shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests & procedures performed in accordance with AMCA Publication 211 and Publication 311, and comply with the requirements of the AMCA Certified Ratings Program.

Models DR10H thru DR85H are ETL Listed and comply with UL 705 (electrical) Standards and CSA Std. C22.2, No. 113.

Measurements

MODEL	HT	W	B	C	D	E	R	RO	Weight Lbs	Damper Sq.
DR10H	14 1/2	20 3/4	2	19	17 1/2	12	8 1/8	13	30	12
DR12H	16 1/4	23 3/4	2	19	17 1/2	12	10 5/8	13	35	12
DR25H	19 1/8	26 1/4	2	21	19 1/2	12	12 1/8	16	45	15
DR30H	19 1/8	26 1/4	2	21	19 1/2	12	12 1/8	16	45	15
DR33H	19 1/8	26 1/4	2	21	19 1/2	12	12 1/8	16	45	15
DR50H	21 3/4	29 3/4	2	21	19 1/2	12	13 1/4	16	50	15
DR75H	23 3/8	33 1/4	2	24 3/4	23	12	14 7/8	20	60	19
DR85H	23 3/8	33 1/4	2	24 3/4	23	12	14 7/8	20	60	19

Motor Availability

	Single Phase Open – 115 Volts		Three Phase 280 – 230/460 Volts	
Model	**1 Speed**	**Speed Control**	**2 Speed**	**Speed Control**
DR10H	•	•	NA	NA
DR12H	•	•	NA	NA
DR25H	•	•	NA	NA
DR30H	•	•	NA	NA
DR33H	•	•	NA	NA
DR50H	•	•	NA	NA
DR75H	•	•	NA	NA
DR85H	•	•	•	•

BHP (*Brake Horsepower*): The actual power developed by a motor as measured by the force applied to a shaft or flywheel. *Performance shown is for installation Type A; Free Inlet, Free Outlet. Performance includes effect of bird screen in the air stream. Speed (RPM) shown is nominal and performance is based on actual speed of test.*

Performance

MODEL	RPM	Tip Speed	Motor HP	0.00 sp CFM Sone/BHP	0.125 sp CFM Sone/BHP	0.25 sp CFM Sone/BHP	0.375 sp CFM Sone/BHP	0.50 sp CFM Sone/BHP	0.625 sp CFM Sone/BHP	0.75 sp CFM Sone/BHP	0.875 sp CFM Sone/BHP	1.05 sp CFM Sone/BHP
DR10H	1000	2356	0.07	338 3.1 / 0.02	259 3.1 / 0.02	166 3.1 / 0.02						
DR10H	1100	2592	0.07	371 3.7 / 0.02	300 3.7 / 0.02	226 3.7 / 0.02	111 3.7 / 0.02					
DR10H	1200	2827	0.07	405 4.4 / 0.03	339 4.4 / 0.03	275 4.4 / 0.03	188 4.4 / 0.03					
DR10H	1300	3063	0.07	439 5.2 / 0.04	378 5.2 / 0.04	319 5.2 / 0.04	250 5.2 / 0.04	155 5.2 / 0.04				
DR10H	1400	3299	0.07	473 6 / 0.05	416 6 / 0.05	361 6 / 0.05	303 6 / 0.05	227 6 / 0.05	122 6 / 0.05			
DR10H	1500	3534	0.07	507 7.2 / 0.06	453 7.2 / 0.06	402 7.2 / 0.06	351 7.2 / 0.06	288 7.2 / 0.06	211 7.2 / 0.06	89 7.2 / 0.06		
DR10H	1600	3770	0.07	541 8 / 0.07	490 8 / 0.07	442 8 / 0.07	394 8 / 0.07	342 8 / 0.07	275 8 / 0.07	197 8 / 0.07	64 8 / 0.03	
DR12H	900	2474	0.14	491 3.8 / 0.03	367 3.8 / 0.03	227 3.8 / 0.03	61 3.8 / 0.02					
DR12H	1000	2749	0.14	546 4.7 / 0.04	435 4.7 / 0.04	314 4.7 / 0.04	181 4.7 / 0.04					
DR12H	1100	3024	0.14	600 5.9 / 0.06	500 5.9 / 0.06	394 5.9 / 0.06	275 5.9 / 0.06	157 5.9 / 0.06				
DR12H	1200	3299	0.14	655 7 / 0.07	563 7 / 0.07	468 7 / 0.07	364 7 / 0.07	252 7 / 0.07	148 7 / 0.07			
DR12H	1300	3574	0.14	709 9.2 / 0.09	625 9.2 / 0.09	538 9.2 / 0.09	445 9.2 / 0.09	346 9.2 / 0.09	243 9.2 / 0.09	148 9.2 / 0.09		
DR12H	1400	3848	0.14	764 9.6 / 0.11	685 9.6 / 0.11	606 9.6 / 0.11	522 9.6 / 0.11	432 9.6 / 0.11	337 9.6 / 0.11	243 9.6 / 0.11	156 9.6 / 0.11	
DR25H	775	2384	0.25	620 2.8 / 0.07	522 2.8 / 0.07	375 2.8 / 0.07						
DR25H	875	2692	0.25	701 3.8 / 0.10	617 3.8 / 0.10	506 3.8 / 0.10						
DR25H	975	2999	0.25	781 4.9 / 0.14	706 4.9 / 0.14	618 4.9 / 0.14	495 4.9 / 0.14					
DR25H	1075	3307	0.25	861 5.8 / 0.19	793 5.8 / 0.19	719 5.8 / 0.19	624 5.8 / 0.19	491 5.8 / 0.19				
DR30H	1100	3384	0.25	911 6.3 / 0.07	838 6.3 / 0.07	756 6.3 / 0.07	656 6.3 / 0.07	532 6.3 / 0.07				
DR30H	1200	3691	0.25	994 7.4 / 0.09	927 7.4 / 0.09	854 7.4 / 0.09	771 7.4 / 0.09	672 7.4 / 0.09	543 7.4 / 0.09			
DR30H	1300	3999	0.25	1077 8.6 / 0.11	1015 8.6 / 0.11	950 8.6 / 0.11	880 8.6 / 0.11	793 8.6 / 0.11	698 8.6 / 0.11	568 8.6 / 0.11		
DR30H	1400	4307	0.25	1160 10 / 0.14	1103 10 / 0.14	1044 10 / 0.14	979 10 / 0.14	907 10 / 0.14	824 10 / 0.14	733 10 / 0.14	606 10 / 0.14	
DR30H	1500	4614	0.25	1243 11.5 / 0.17	1190 11.5 / 0.17	1135 11.5 / 0.17	1076 11.5 / 0.17	1015 11.5 / 0.17	940 11.5 / 0.17	863 11.5 / 0.17	775 11.5 / 0.17	654 11.5 / 0.17
DR30H	1600	4922	0.25	1326 13.1 / 0.21	1276 13.1 / 0.21	1225 13.1 / 0.21	1171 13.1 / 0.21	1114 13.1 / 0.21	1053 13.1 / 0.21	980 13.1 / 0.21	906 13.1 / 0.21	824 13.1 / 0.21
DR30H	1700	5229	0.25	1409 14.8 / 0.25	1362 14.8 / 0.25	1314 14.8 / 0.25	1265 14.8 / 0.25	1211 14.8 / 0.25	1157 14.8 / 0.25	1094 14.8 / 0.25	1026 14.8 / 0.25	955 14.8 / 0.25
DR33H	1100	3384	0.33	859 6.3 / 0.09	783 6.3 / 0.09	715 6.3 / 0.09	635 6.3 / 0.09	535 6.3 / 0.09				
DR33H	1200	3691	0.33	938 7.5 / 0.12	868 7.5 / 0.12	803 7.5 / 0.12	739 7.5 / 0.12	657 7.5 / 0.12	555 7.5 / 0.12			
DR33H	1300	3999	0.33	1016 8.7 / 0.15	951 8.7 / 0.15	890 8.7 / 0.15	833 8.7 / 0.15	765 8.7 / 0.15	685 8.7 / 0.15	579 8.7 / 0.15		
DR33H	1400	4307	0.33	1094 10.1 / 0.19	1034 10.1 / 0.19	975 10.1 / 0.19	923 10.1 / 0.19	868 10.1 / 0.19	799 10.1 / 0.19	721 10.1 / 0.19	617 10.1 / 0.19	
DR33H	1500	4614	0.33	1172 11.6 / 0.23	1116 11.6 / 0.23	1060 11.6 / 0.23	1010 11.6 / 0.23	961 11.6 / 0.23	904 11.6 / 0.23	839 11.6 / 0.23	763 11.6 / 0.23	667 11.6 / 0.23
DR33H	1600	4922	0.33	1250 13.1 / 0.28	1198 13.1 / 0.28	1145 13.1 / 0.28	1097 13.1 / 0.28	1051 13.1 / 0.28	1004 13.1 / 0.28	945 13.1 / 0.28	884 13.1 / 0.28	812 13.1 / 0.28
DR33H	1700	5229	0.33	1329 14.8 / 0.33	1279 14.8 / 0.33	1230 14.8 / 0.33	1182 14.8 / 0.33	1139 14.8 / 0.33	1095 14.8 / 0.33	1049 14.8 / 0.33	991 14.8 / 0.33	933 14.8 / 0.33

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Performance

MODEL	RPM	Tip Speed	Motor HP	0.00 sp CFM Sone/BHP	0.125 sp CFM Sone/BHP	0.25 sp CFM Sone/BHP	0.375 sp CFM Sone/BHP	0.50 sp CFM Sone/BHP	0.625 sp CFM Sone/BHP	0.75 sp CFM Sone/BHP	0.875 sp CFM Sone/BHP	1.05 sp CFM Sone/BHP
DR50H	1050	3780	0.50	1631 8.4 / 0.13	1510 8.4 / 0.13	1375 8.4 / 0.13	1210 8.4 / 0.13	1015 8.4 / 0.13	791 8.4 / 0.13			
DR50H	1150	4140	0.50	1787 9.7 / 0.17	1677 9.7 / 0.17	1557 9.7 / 0.17	1426 9.7 / 0.17	1258 9.7 / 0.17	1074 9.7 / 0.17	866 9.7 / 0.17		
DR50H	1250	4500	0.50	1942 11.3 / 0.22	1841 11.3 / 0.22	1735 11.3 / 0.22	1618 11.3 / 0.22	1480 11.3 / 0.22	1323 11.3 / 0.22	1151 11.3 / 0.22	964 11.3 / 0.22	
DR50H	1350	4860	0.50	2097 13 / 0.27	2004 13 / 0.27	1909 13 / 0.27	1801 13 / 0.27	1693 13 / 0.27	1550 13 / 0.27	1402 13 / 0.27	1243 13 / 0.27	1079 13 / 0.27
DR50H	1450	5220	0.50	2253 14.8 / 0.34	2166 14.8 / 0.34	2078 14.8 / 0.34	1981 14.8 / 0.34	1880 14.8 / 0.34	1767 14.8 / 0.34	1635 14.8 / 0.34	1494 14.8 / 0.34	1346 14.8 / 0.34
DR50H	1550	5580	0.50	2408 16.7 / 0.41	2328 16.7 / 0.41	2245 16.7 / 0.41	2159 16.7 / 0.41	2064 16.7 / 0.41	1969 16.7 / 0.41	1854 16.7 / 0.41	1729 16.7 / 0.41	1597 16.7 / 0.41
DR50H	1650	5940	0.50	2564 18.7 / 0.50	2488 18.7 / 0.50	2410 18.7 / 0.50	2333 18.7 / 0.50	2244 18.7 / 0.50	2156 18.7 / 0.50	2066 18.7 / 0.50	1950 18.7 / 0.50	1833 18.7 / 0.50
DR75H	775	3196	0.75	1686 7.1 / 0.22	1532 7.1 / 0.22	1356 7.1 / 0.22	1141 7.1 / 0.22					
DR75H	875	3608	0.75	1904 8.8 / 0.31	1768 8.8 / 0.31	1617 8.8 / 0.31	1449 8.8 / 0.31	1248 8.8 / 0.31				
DR75H	975	4020	0.75	2121 10.6 / 0.43	2000 10.6 / 0.43	1870 10.6 / 0.43	1729 10.6 / 0.43	1569 10.6 / 0.43	1384 10.6 / 0.43	1086 10.6 / 0.43		
DR75H	1075	4433	0.75	2339 12.7 / 0.57	2230 12.7 / 0.57	2116 12.7 / 0.57	1989 12.7 / 0.57	1859 12.7 / 0.57	1709 12.7 / 0.57	1540 12.7 / 0.57	1294 12.7 / 0.57	
DR75H	1175	4845	0.75	2557 14.9 / 0.75	2457 14.9 / 0.75	2354 14.9 / 0.75	2243 14.9 / 0.75	2126 14.9 / 0.75	2001 14.9 / 0.75	1865 14.9 / 0.75	1712 14.9 / 0.75	1523 14.9 / 0.75
DR85H	1050	4330	0.75	2161 9.5 / 0.19	2034 9.5 / 0.19	1902 9.5 / 0.19	1756 9.5 / 0.19	1585 9.5 / 0.19	1394 9.5 / 0.19	1178 9.5 / 0.19		
DR85H	1150	4742	0.75	2366 11.1 / 0.25	2251 11.1 / 0.25	2134 11.1 / 0.25	2003 11.1 / 0.25	1866 11.1 / 0.25	1703 11.1 / 0.25	1526 11.1 / 0.25	1331 11.1 / 0.25	1102 11.1 / 0.21
DR85H	1250	5154	0.75	2572 12.8 / 0.33	2467 12.8 / 0.33	2359 12.8 / 0.33	2244 12.8 / 0.33	2122 12.8 / 0.33	1987 12.8 / 0.33	1837 12.8 / 0.33	1674 12.8 / 0.33	1499 12.8 / 0.33
DR85H	1350	5567	0.75	2778 14.7 / 0.41	2681 14.7 / 0.41	2581 14.7 / 0.41	2480 14.7 / 0.41	2367 14.7 / 0.41	2254 14.7 / 0.41	2122 14.7 / 0.41	1984 14.7 / 0.41	1834 14.7 / 0.41
DR85H	1450	5979	0.75	2984 16.8 / 0.51	2894 16.8 / 0.51	2801 16.8 / 0.51	2708 16.8 / 0.51	2607 16.8 / 0.51	2501 16.8 / 0.51	2396 16.8 / 0.51	2270 16.8 / 0.51	2141 16.8 / 0.51
DR85H	1550	6391	0.75	3190 18.8 / 0.62	3106 18.8 / 0.62	3019 18.8 / 0.62	2932 18.8 / 0.62	2843 18.8 / 0.62	2744 18.8 / 0.62	2646 18.8 / 0.62	2547 18.8 / 0.62	2426 18.8 / 0.62
DR85H	1650	6804	0.75	3396 21 / 0.75	3317 21 / 0.75	3235 21 / 0.75	3154 21 / 0.75	3072 21 / 0.75	2983 21 / 0.75	2890 21 / 0.75	2798 21 / 0.75	2703 21 / 0.75