We Care for Your Needs

UTILITY FAN

UF Series





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TABLE OF CONTENTS

GENERAL INFORMATION	
CONSTRUCTION FEATURES	05
ROTATION & DISCHARGES	06
OPTIONS & ACCEESSORIES	07
DIRECT DRIVE DATA	08-10
BELT DRIVEN DATA	11-38
TYPICAL SPECIFICATION	39



UTILITY FAN

UF Series

OVERVIEW

Twin City line of utility ventilating setsis one of the most comprehensive in theindustry. Utility sets are an excellent choicefor general exhaust and supply requirementsofcommercialandlightindustrialapplicationsThey are suitable forindoor usage and outdoorusage, with the addition of a weather cover toenclose the motor and drives. The fanhousings arelock seam steel construction.

TYPICAL APPLICATIONS INCLUDE

Data Center Exhaust, General HVAC, Elevator Shaft Exhaust/Pressurization, Restroom Exhaust, Stairwell Pressurization, Industrial Ovens, Vehicle Exhaust generator Room Ventilation, Swimming Pool Exhaust, Kitchen Exhaust, Dishwasher Exhaust, Elevator Shaft Exhaust/Pressurization, Emergency Smoke Exhaust, Stairwell Pressurization.

CONFIGURATIONS

The fan housings are rotatable to the seven standard discharge positions. Both clockwise and counter-clockwise rotations are available, Direct Drive and Belt Driven Configurations

> UFxxD (Direct Drive)

Available in 8 sizes, 12.0" to 24.0" wheel diameters

> UFxxB (Belt Driven)

Available in 10 sizes, 12.0" to 36.0" wheel diameters

OPTIONAL CONSTRUCTION

High Temperature, Special Materials, Special Coatings, IEC-ex Spark Resistant

WHEEL TYPES

Backward Inclined/Curved Centrifugal, Spark resistant aluminum wheels, Steel wheel (Heat & Smoke removal)

Aluminum Wheel

Steel Wheel





EASY MAINTENANCE ACCESS

By removing the fasteners, the weather cover lifts off for complete access to all the drive components.

KITCHEN EXHAUST

UF packages include V-belt drives, motor, weather cover, bolted access door, drain connection, back plate fins,

CERTIFICATIONS

AMCA Sound and Air Performance, IEC, CE for Electrical and RoHS $% \mathcal{A}_{\mathrm{S}}$



Twin City Fan & Blower certifies that theModels UF12B, UF16B, UF18B, UF2OB, UF24B,UF3OB & UF36B shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. CE Conformity with Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits



CE Conformity with Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits



Restriction of Hazardous Substances in Electrical and Electronic Equipment

SPARK-RESISTANT CONSTRUCTION

AMCA "C", AMCA "B" and AMCA "A" are available as an option

Туре	Construction
Α	All parts in contact with the airstream are constructed of non-ferrous material
В	The fan wheel is constructed of a non-ferrous material. A non-ferrous rub ring surrounds the fan shaft where it passes through the fan housing.
с	The Wheel or the inlet cone is constructed of non- ferrous material. A non-ferrous rub ring surrounds the fan shaft where it passes through the fan housing.

Notes:

A) Bearings shall be placed outside the airstream.

B) The user shall electrically ground all fan parts.

C) The use of the above standard in no way implies a guarantee of safety for any level of spark resistance. "Spark resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in the system."

HIGH TEMPERATURE CONSTRUCTION

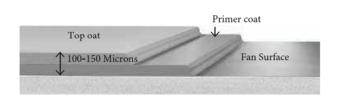
Temp. Range	Construction
20°F – 200°F	Standard construction
200°F – 300°F	RPM limited to 95% of maximum
300°F – 500°F	Steel wheel construction with fins RPM limited to 90% of maximum.
500°F – 750°F (Two Hours)	Steel wheel construction with fins RPM limited to 90% of maximum. Shaft Cooler High Temp Grease Bearings Shaft Seal

PROTECTIVE COATINGS

Twin City offers a wide variety of protective coatings suitable for corrosive applications. All coatings are electro statically applied baked powders that offer a durable long lasting fnish.

STD RALL - 9035, 9016, 9010

Two-Coat system is available as an option



MOTOR SELECTION

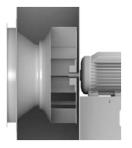
Both direct drive and belt drive models are available with a wide range of voltages and enclosures. Standard belt drive TEFC selected using a conservative portion of the IEC/NEMA service factor. Standard direct drive TEFC motors have Class B/F insulation and internal thermal overload protection. Each size is carefully engineered to match the motor to the wheel capacity.

ARRANGEMENT 4 OR 10

Fans are constructed with the motor and bearings (if apply) out of the mainstream. For arrangement 10, motors are mounted inside of the pedestal on an adjustable motor plate. For arrangement 4, motors are mounted on top of a pedestal. Both arrangements allow for the use of a weather cover and can be used in ducted or non-ducted applications.

Arrangement 4

Arrangement 10





HOUSINGS

Utility blowers are manufactured to insure a long, corrosion resistant life. The Finishing resists rust and will help maintain the unit's integrity even in environments such as coastal regions.

The housings use a mechanically fastened seam. This airtight and watertight housing construction uses the same structural support as all welded housings.



Optional on larger fan sizes, centrifugal fans are manufactured with heavy gauge, welded housing construction.

THE HEAVY DUTY SUPPORT FRAME

The heavy duty support frame provides a strong structural foundation for the motor and drive assembly, as well as rigid reinforcement for housing members.

INLET CONE

Deep spun cone, aerodynamically designed for smooth air entry into the wheel.

MOTOR/BEARING PEDESTAL

Large open motor compartment allows complete access to motor and motor base for quick and easy servicing and belt tension adjustment.

DRIVE

Adjustable or fixed pitch, 1.5 service factor V-belt drives with cast iron sheaves, and V-belts designed to be oil and heat resistant, and to dissipate static electricity.

BEARINGS

Heavy duty grease lubricated pillow block bearings selected for minimum average life (AFBMA L-50) of at least 200,000 hours at maximum class speed.

SHAFT

AISI 1045, turned ground and polished for accuracy. Designed to provide first critical speed of at least 1.25 times the maximum class speed

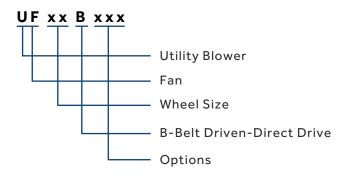
OUTLET FLANGE

Standard on all sizes

VIBRATION ISOLATION

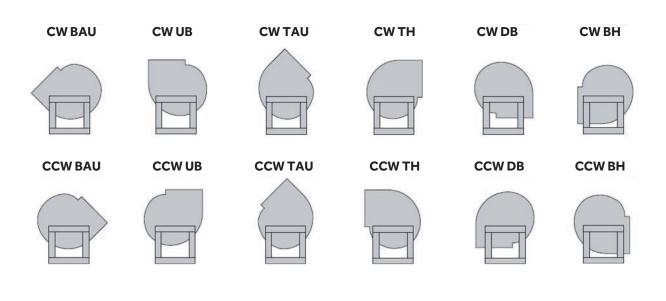
Twin City offers a complete package ofvibration isolators, isolation bases and inertiabases to simplify feld assembly and reducetransmitted vibrations..

ORDER CODE



> DISCHARGE POSITIONS AND ROTATABLE HOUSINGS

Rotation and discharge is always determined from the drive side of the fan.





CWTH Clockwise Top Horizontal Discharge



CWUB Clockwise Top Up-Blast Discharge

07

OPTIONS & ACCEESSORIES UF-UTILITY FAN SERIES

Inlet & Outlet Screen

Screens are available for mounting in the fan inlet or outlet.

Drain

Drains are made of 1-2" pipe which is mechanically fastened and sealed to prevent leakage at the lowest point of the scroll

Vibration Isolation Spring

Spring type vibration isolation mounts are available to reduce the transmission of fan vibration in 1" or 2" deflection



Inlet Flange Inlet and outlet flanges with prepunched mounting holes are available on all sizes to provide a bolted connection to ductwork.

Shaft Seal

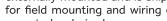
A felt, ceramic fabric shaft seal with a rub rings available for operation at high temperatures or for exhausting contaminated air.

NEMA 3R Disconnect Switch

NEMA 3R rain-tight disconnect switch, externally mounted and is shipped loose for field mounting and wiring or factory mounted and wired

NEMA 7/9 Disconnect Switch

NEMA 7/9 disconnect switches are provided on fan with explosion proof motors. NEMA 7/9 disconnects will be shipped loose for field mounting and wirina





NEMA 4 Disconnect Switch

NEMA 4 disconnect switch (optional) is mounted externally and is water- and dusttight. Switch is available shipped loose for field mounting and wiring or factory mounted and wired.

The heat slinger is an aluminum cooling

disc mounted on the fan shaft between

the inboard bearing and the blower

housing to dissipate heat conducted

00 Stainless steel hardware is available for 0000 selection.

0° 0°



Stainless Steel Hardware

Heat Slinger

along the fan shaft

Extended Lube Line

without disassembly

Access doors are specified where examination and cleaning of the fan interior is required.

















Gravity Damper

Bolted access door allows for inspection and maintenance of internal fan components

Extended Lube Lines Allow for easy

lubrication of bearings on belt driven units

Flange mounted damper is available for

exhaust or supply applications.

> DIRECT DRIVE

UF10	D											
			0	0.000" Pst	0.250"Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst	1.250" Pst	
Hz	ĸw	RPM	Ø	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones	
50	0.25	1450	4.6	46	971	849	780	709	637	559	-	-
50	0.25	1450	40	11.40	11.10	10.80	10.60	10.80	11.00	-	-	
	0.77	4750	10	1171	1075	1020	963	904	845	724	646	
60	0.37	1750	1750 48	48	14.90	14.80	1020	14.20	13.90	13.90	14.20	14.50

UF12	2D																						
			0	0.000" Pst	0.250"Pst	0.500" Pst	0.750" Pst	1.000" Pst	1.250" Pst	1.500" Pst	2.000" Pst												
Hz	ĸw	RPM	ø	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM												
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones												
50	0.37	1450 53	57	1779	1666	1523	1373	1240	1077	862	-												
50	0.57		1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450) 53	13.56	13.18	12.83	12.52	12.27	12.03	12.19
	0.55	1750	1750	1750		2147	2053	1959	1827	1698	1589	1473	1181										
60	0.55		55	18.18	17.85	17.56	17.26	16.96	16.76	16.60	16.50												

UF15	D																				
			•	0.000" Pst	0.500" Pst	0.750"Pst	1.000" Pst	1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst										
Hz	KW	RPM	Ô	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM										
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones										
50	1 1	1450	C 0	3362	3037	2847	2639	2210	1665	-	-										
50	1.1	1450	68	68	19.90	19.00	19.70	19.50	18.30	18.00	-	-									
60	4.5	1.5 1750	1750	70		70	70	70	70	70	70	70		4058	3803	3652	3500	3155	2803	2423	1909
60	1.5			1750	70	24.00	24.00	24.00	24.00	24.00	23.00	22.00	22.00								

UF16	D												
			0	0.000" Pst	0.500" Pst	0.750"Pst	1.000" Pst	1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst		
Hz	ĸw	RPM	ø	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM		
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones		
50	1 5	1450	70	3997	3704	3534	3347	2926	2267	-	-		
50	1.5	1450	76	76	19.18	17.77	17.53	17.43	17.40	17.44	-	-	
			0.4	0.4	0.4	4825	4581	4460	4322	4012	3667	3259	2489
60	2.2	1750 81	1750 81	25.38	23.92	23.22	22.90	22.84	23.16	23.58	23.96		

> DIRECT DRIVE

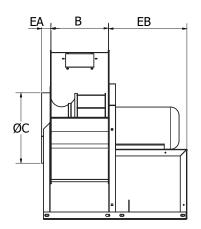
UF18	D												
			0	0.000" Pst	0.500" Pst	1.000" Pst	1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst	4.000" Pst		
Hz	KW	Α	Ö	CFM									
				Sones									
50	2.2	1450	102	102	5526	5157	4755	4346	3948	3507	2816	-	
50	2.2	1450	102	27.75	26.04	24.42	22.91	21.35	19.97	20.25	-		
60	4.0	1750	115	115	115	6670	6363	6254	5709	5368	5038	4707	3966
60	4.0 1750	115	36.39	34.75	33.23	31.79	30.41	29.07	27.81	25.82			

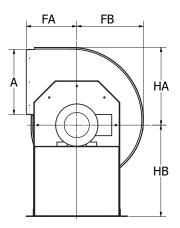
UF20	D																				
			0	0.000" Pst	0.500" Pst	1.000" Pst	1.500" Pst	2.000" Pst	3.000" Pst	4.000" Pst	4.500" Pst										
Hz	ĸw	Α	ø	CFM																	
				Sones																	
50	3.0	1450	112	7315	6900	6472	6031	5400	3775	-	-										
50	5.0	1450	112	27.75	26.04	24.42	22.91	21.35	20.25	-	-										
60		1750	1750	1750	1750	1750	1750	1750	1750	1750	4.95	125	50 125	8629	8485	8141	7780	7416	6426	5338	4067
60	5.5		125	36.39	34.75	33.23	31.79	30.41	27.81	25.82	27.73										

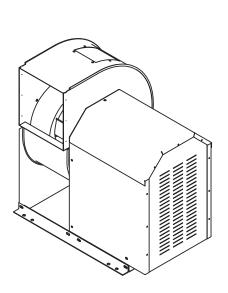
UF22	D																							
			•	0.000" Pst	1.000" Pst	1.500" Pst	2.000" Pst	3.000" Pst	4.000" Pst	5.000" Pst	5.500" Pst													
Hz	KW	Α	Ô	CFM																				
			Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones														
50		1450	130	130	10831	9664	9355	8808	7662	-	-	-												
50	5.5	1450	150	34.00	34.00	33.00	33.00	32.00	-	-	-													
		1750 150	1750	1750	1750	1750	4750	4750	4750	1750	4750	4750	4.50	450			13072	12272	11870	11491	10552	9623	8531	7490
60	11 1750						150	43.00	43.00	43.00	42.00	42.00	42.00	42.00	42.00									

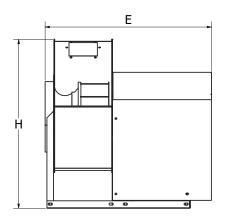
UF24	UF24D																					
			0	0.000" Pst	0.250"Pst	0.500" Pst	1.000" Pst	1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst											
Hz	HP	Α	Ö	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM											
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones											
50	7.0	950 1	180	9136	8795	8455	7671	5639	4899	-	-											
50	3.0	950		180	180	180	180	180	180	180	180	21.57	20.42	19.68	18.13	16.95	18.48	-	-			
		1150 18	1150	1150	0 1150	1150	1150	1150	1150	1150	185				11059	10778	10497	9895	9241	8389	7304	5557
60	4.0											28.85	27.90	26.96	25.17	23.77	22.68	21.69	25.45			

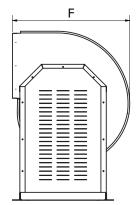
> DIMENSIONAL DATA











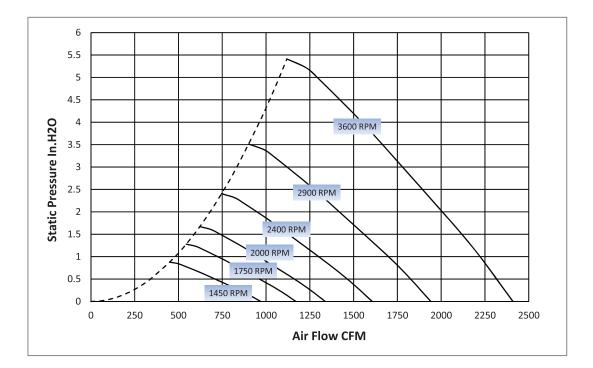
MODEL	A	В	с	E	EA	ЕВ	EC	F	FA	FB	FC	н	НА	НВ
UF10D	286	210	286	711	32	368	610	508	221	287	356	727	335	392
UF12D	305	264	330	765	32	368	664	552	238	314	406	800	368	432
UF15D	400	295	400	848	32	406	772	678	287	391	489	962	454	508
UF16D	445	324	438	876	32	406	768	740	313	427	527	1057	498	559
UF18D	502	359	483	994	38	454	851	822	352	470	572	1159	549	610
UF20D	552	375	521	1137	38	508	921	868	376	492	616	1240	592	648
UF22D	595	432	610	1194	38	508	978	963	408	555	711	1380	649	730
UF24D	660	483	635	1245	38	508	1029	1046	438	608	737	1513	713	800

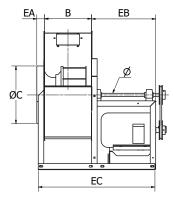
Notes:

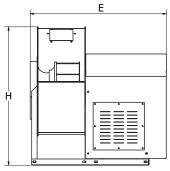
1. All dimensions are in mm unless otherwise noted.

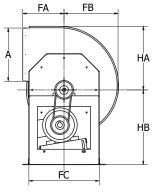
2. Dimensions are not to be used for construction

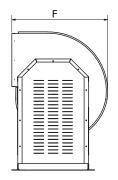
> UF10B











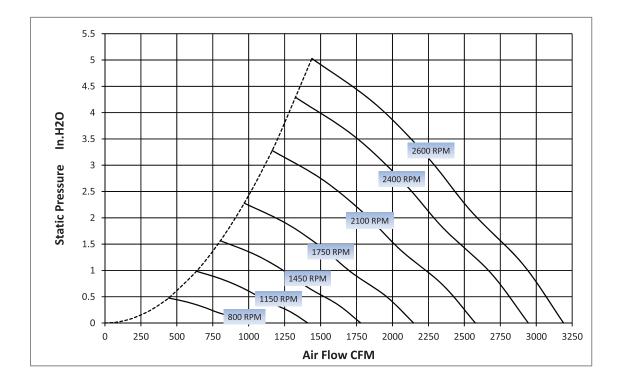
В	210
с	286
E	711
EA	32
EB	368
EC	610
F	508
FA	221
FB	287
FC	356
н	727
НА	335
НВ	392
Ø	19
KG	55

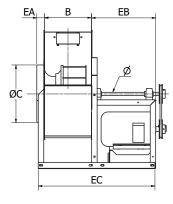
		0.000" Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst	1.250" Pst
HP	RPM	CFM							
		BHP Sones							
	800	536 0.03 2.80	283 0.03 3.50						
	900	602	387						
	900	0.04 4.20	0.04 4.50 433	299					
	950	636 0.05 5.00	433 0.05 5.10	0.04 5.00					
	1000	669	479	369					
		0.06 5.80 736	0.06 5.70 566	0.05 5.90 472	352				
	1100	0.07 6.90	0.07 6.70	0.07 6.80	0.06 6.80				
	1150	770 0.08 7.50	608 0.08 7.30	518 0.08 7.30	421 0.07 7.50				
	1000	803	650	564	473				
	1200	0.09 8.10	0.09 7.90	0.09 7.80	0.09 8.10				
	1300	870 0.11 9.60	731 0.11 9.20	653 0.12 9.00	573 0.11 9.10	486 0.11 9.40			
1/2	1400	937	810	738	664	589	507		
1/2	1400	0.14 10.80	0.14 10.40	0.14 10.10	0.15 10.10	0.14 10.30	0.13 10.50		
	1450	971 0.16 11.40	849 0.15 11.10	780 0.16 10.80	709 0.16 10.60	637 0.16 10.80	559 0.15 11.00		
	1500	1004	888	821	753	684	611		
		0.17 12.20 1071	0.17 11.80 963	0.17 11.50 902	0.18 11.30 838	0.18 11.30 774	0.17 11.50 709	566	
	1600	0.21 14.10	0.20 13.60	0.21 13.20	0.21 12.70	0.22 12.60	0.21 12.70	0.19 13.10	
	1700	1138 0.25 14.80	1038	981	922	861	800	672	
	1990	0.25 14.80	0.24 14.70 1075	0.25 14.30 1020	0.25 13.90 963	0.26 13.60 904	0.26 13.70 845	0.24 14.00 724	577
	1750	0.27 14.90	0.27 14.80	0.27 14.50	0.27 14.20	0.28 13.90	0.28 13.90	0.27 14.20	0.24 14.50
	1800	1205 0.30 15.10	1111 0.29 15.10	1059 0.29 14.80	1003 0.30 14.50	946 0.30 14.20	890 0.31 14.20	773 0.29 14.40	646 0.27 14.70
	1900	1272	1183	1135	1083	1030	976	867	751
	1900	0.35 15.70	0.34 15.30	0.34 15.40	0.34 15.20	0.35 15.00	0.36 14.80	0.35 14.90	0.33 15.10
	2000	1339 0.41 16.40	1255 0.40 16.50	1210 0.39 16.40	1162 0.40 16.20	1112 0.40 16.10	1060 0.41 15.80	957 0.41 15.60	852 0.40 15.80
	2100	1406	1326	1284	1239	1192	1144	1046	947
		0.47 17.10 1473	0.46 17.40 1396	0.46 17.40 1358	0.45 17.30 1315	0.46 17.20 1271	0.47 17.00 1225	0.48 16.70 1132	0.47 16.70 1038
3/4	2200	0.54 17.70	0.53 18.10	0.52 18.30	0.52 18.20	0.53 18.20	0.54 18.10	0.55 17.80	0.55 17.70
	2300	1540 0.61 18.40	1466 0.60 18.70	1430 0.60 19.00	1390 0.60 19.00	1349 0.60 19.00	1305 0.61 18.90	1217 0.62 18.80	1127 0.63 18.60
	0.400	1607	1536	1501	1464	1425	1384	1300	1215
1	2400	0.70 19.20	0.68 19.30	0.68 19.60	0.68 19.70	0.68 19.70	0.68 19.70	0.70 19.60	0.72 19.50
	2500	1674 0.79 20.00	1606 0.77 19.90	1572 0.77 20.00	1538 0.77 20.00	1501 0.76 20.00	1462 0.76 20.00	1382 0.79 21.00	1300 0.80 20.00
	2600	1740	1676	1643	1611	1575	1539	1463	1384
	2000	0.88 21.00 1807	0.87 20.00 1745	0.87 21.00 1714	0.86 21.00 1683	0.86 21.00 1650	0.86 21.00 1615	0.88 21.00 1542	0.89 21.00 1467
1.4/2	2700	0.99 22.00	0.97 22.00	0.97 22.00	0.97 22.00	0.96 22.00	0.96 23.00	0.97 23.00	0.99 23.00
1 1/2	2800	1874	1814	1784	1754	1723	1690	1621	1549
		1.10 23.00 1941	1.09 23.00 1883	1.08 23.00 1854	1.08 24.00 1825	1.08 24.00 1796	1.07 24.00 1764	1.08 24.00 1699	1.10 24.00 1630
	2900	1.23 24.00	1.21 24.00	1.20 24.00	1.20 24.00	1.20 25.00	1.19 25.00	1.19 25.00	1.21 25.00
	3000	2008 1.36 25.00	1952 1.34 25.00	1924 1.33 25.00	1896 1.33 25.00	1868 1.32 26.00	1838 1.32 26.00	1776 1.31 26.00	1709 1.33 26.00
2	2400	2075	2021	1994	1966	1939	1912	1851	1788
2	3100	1.50 27.00	1.48 26.00	1.47 26.00	1.46 26.00	1.46 27.00	1.46 27.00	1.45 27.00	1.46 27.00
	3200	2142 1.64 28.00	2089 1.62 27.00	2063 1.61 27.00	2037 1.61 28.00	2010 1.61 28.00	1984 1.61 28.00	1926 1.60 28.00	1867 1.60 28.00
	3300	2209	2158	2132	2107	2081	2056	2001	1944
	0000	1.80 29.00	1.78 29.00	1.77 29.00 2202	1.77 29.00	1.76 29.00	1.76 29.00	1.75 29.00 2075	1.75 29.00
	3400	2276 1.97 30.00	2226 1.95 30.00	2202 1.94 30.00	2177 1.93 30.00	2152 1.93 30.00	2127 1.93 30.00	2075 1.92 30.00	2020 1.91 30.00
3	3500	2343	2295	2271	2247	2223	2199	2149	2095
		2.15 32.00 2410	2.13 32.00 2363	2.12 32.00 2340	2.11 32.00 2316	2.10 32.00 2293	2.10 32.00 2269	2.10 32.00 2223	2.09 32.00 2170
	3600	2.34 33.00	2.32 33.00	2.30 33.00	2.29 33.00	2.29 33.00	2.29 33.00	2.28 33.00	2.27 33.00

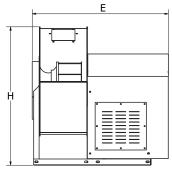
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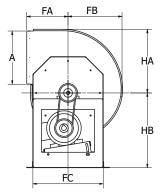
		1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst	3.500" Pst	4.000" Pst	4.500" Pst	5.000" Pst	
HP	RPM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	
		BHP Sones	BHP Sones	BHP Sones	BHP Sones	BHP Sones	BHP Sones	BHP Sones	BHP Sones	
	1900	599								
1/2	1900	0.30 15.20								
1/2	2000	738								
	2000	0.37 16.10								
	2100	842								
	2100	0.45 16.70								
3/4	2200	943	703							
0,1	2200	0.53 17.70	0.46 17.50							
	2300	1037	842							
	0.62 18.6		0.56 18.60							
	2400	1128	946							
1		0.71 19.40	0.66 19.40							
	2500	1218	1048	861						
		0.81 20.00	0.77 20.00	0.70 20.00						
	2600	1305	1145	971						
		0.91 21.00	0.88 21.00	0.82 21.00	070					
	2700	1391 1.01 23.00	1238	1075	872 0.85 22.00					
1 1/2		1476	1.00 22.00 1329	0.95 23.00	1013					
	2800	1.12 24.00	1.13 24.00	1.08 24.00	1.01 24.00					
		1559	1418	1274	1118	910				
	2900	1.23 25.00	1.26 24.00	1.22 24.00	1.15 24.00	1.04 24.00				
		1642	1505	1367	1221	1068				
	3000	1.36 26.00	1.40 25.00	1.37 25.00	1.31 25.00	1.23 25.00				
		1724	1591	1458	1322	1174	972			
2	3100	1.49 27.00	1.53 26.00	1.52 25.00	1.48 25.00	1.39 25.00	1.27 25.00			
		1804	1676	1548	1417	1278	1133			
	3200	1.63 28.00	1.67 26.00	1.69 26.00	1.65 26.00	1.57 26.00	1.48 26.00			
		1883	1760	1636	1510	1379	1241	1055		
	3300	1.77 29.00	1.82 28.00	1.86 27.00	1.82 27.00	1.76 26.00	1.67 26.00	1.55 26.00		
	2400	1962	1843	1723	1601	1478	1345	1209		
3	3400	1.93 30.00	1.98 29.00	2.02 28.00	2.01 28.00	1.96 27.00	1.88 27.00	1.78 27.00		
3	3500	2041	1925	1808	1691	1571	1447	1316	1155	
	3000	2.09 32.00	2.15 31.00	2.19 29.00	2.21 28.00	2.16 28.00	2.09 28.00	2.00 28.00	1.87 28.00	
	3600	2118	2007	1893	1779	1663	1547	1420	1292	
	0000	2.26 33.00	2.33 33.00	2.37 30.00	2.42 30.00	2.37 29.00	2.32 29.00	2.22 28.00	2.12 28.00	

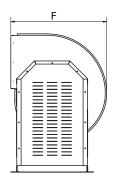
> UF12B











A	305
В	264
с	330
E	765
EA	32
ЕВ	368
EC	664
F	552
FA	238
FB	314
FC	406
н	800
НА	368
НВ	431
Ø	19
KG	58

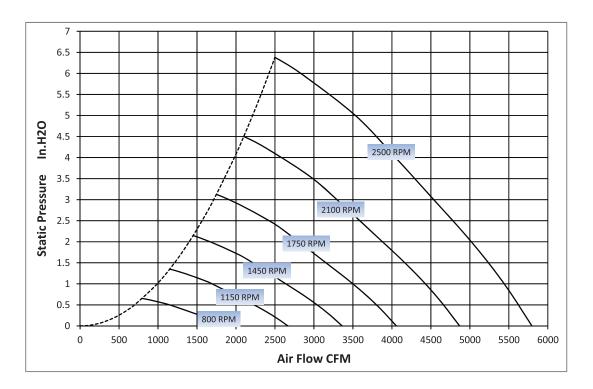
All dimensions are in mm.

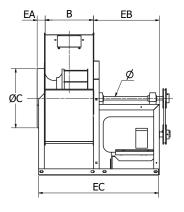
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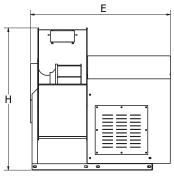
		0.000" Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst	1.250" Pst
HP	RPM	CFM							
		BHP Sones							
		982	737	601					
	800	0.05 5.30	0.06 4.73	0.06 4.54					
		1104	886	779	649				
	900	0.07 6.44	0.08 5.89	0.08 5.71	0.08 5.59				
		1166	963	857	742	591			
	950	0.09 7.04	0.09 6.51	0.10 6.29	0.10 6.12	0.09 6.17			
		1227	1039	933	832	712			
	1000	0.10 7.64	0.11 7.13	0.11 6.92	0.11 6.73	0.11 6.62			
		1350	1188	1082	994	898	791		
	1100	0.13 8.90	0.14 8.39	0.14 8.16	0.15 7.98	0.15 7.82	0.14 7.72		
		1411	1260	1159	1070	987	884		
1/2	1150	0.15 9.50	0.16 9.07	0.16 8.86	0.16 8.64	0.17 8.44	0.16 8.29		
	1000	1472	1332	1235	1145	1065	975	744	
	1200	0.17 10.12	0.18 9.69	0.18 9.48	0.19 9.30	0.19 9.16	0.19 8.98	0.18 8.92	
	1000	1595	1468	1385	1296	1218	1145	969	727
	1300	0.21 11.51	0.23 11.07	0.23 10.87	0.23 10.68	0.24 10.51	0.24 10.34	0.23 10.04	0.22 10.23
	1400	1718	1600	1531	1448	1367	1298	1152	973
	1400	0.26 12.86	0.28 12.48	0.28 12.30	0.29 12.11	0.29 11.93	0.29 11.81	0.29 11.53	0.29 11.41
	1450	1779	1666	1604	1523	1443	1373	1240	1077
	1450	0.29 13.56	0.31 13.18	0.32 13.00	0.32 12.83	0.32 12.66	0.32 12.52	0.33 12.27	0.32 12.03
	1500	1840	1731	1675	1598	1520	1448	1320	1169
	1500	0.32 14.29	0.34 13.91	0.35 13.72	0.35 13.54	0.36 13.37	0.36 13.22	0.36 12.99	0.36 12.78
	1600	1963	1860	1809	1744	1672	1599	1474	1349
	1000	0.39 15.80	0.41 15.46	0.42 15.30	0.42 15.13	0.43 14.96	0.43 14.80	0.44 14.53	0.44 14.30
	1700	2086	1989	1941	1889	1820	1752	1624	1511
3/4	1700	0.47 17.39	0.49 17.06	0.50 16.89	0.50 16.72	0.51 16.55	0.51 16.40	0.52 16.15	0.52 15.97
0,1	1750	2147	2053	2006	1959	1893	1827	1698	1589
	1100	0.51 18.18	0.53 17.85	0.54 17.70	0.55 17.56	0.55 17.42	0.56 17.26	0.57 16.98	0.57 16.78
	1800	2209	2117	2071	2026	1966	1902	1772	1665
		0.55 18.97	0.57 18.68	0.58 18.53	0.59 18.38	0.60 18.22	0.60 18.08	0.61 17.80	0.62 17.63
	1900	2331	2245	2201	2158	2111	2049	1927	1815
		0.65 20.61	0.67 20.33	0.68 20.18	0.69 20.03	0.70 19.90	0.71 19.76	0.72 19.49	0.72 19.29
	2000	2454	2372	2330	2289	2248	2195	2079	1962
		0.76 22.24	0.78 22.00	0.79 21.89	0.80 21.76	0.81 21.64	0.82 21.52	0.83 21.27	0.84 21.03
	2100	2577	2498	2459	2420	2381	2339	2228	2117
1 1/2		0.87 24.08 2699	0.90 23.81 2625	0.91 23.66 2587	0.92 23.50 2550	0.93 23.34 2512	0.95 23.21 2475	0.96 23.01 2375	0.97 22.80 2269
	2200	1.00 25.90	1.03 25.64	1.04 25.51	1.05 25.39	1.07 25.27		1.09 24.90	
		2822	2750	2715	2679	2643	1.08 25.14 2607	2521	1.11 24.61 2420
	2300	1.15 27.76	1.17 27.49	1.19 27.36	1.20 27.24	1.21 27.11	1.23 26.98	1.25 26.75	1.26 26.53
2		2945	2876	2842	2808	2773	2739	2665	2568
	2400	1.30 29.63	1.33 29.37	1.34 29.25	1.36 29.12	1.37 29.00	1.39 28.87	1.41 28.63	1.42 28.40
		3067	3002	2969	2936	2903	2870	2804	2714
	2500	1.47 31.56	1.50 31.31	1.51 31.18	1.53 31.06	1.54 30.94	1.56 30.81	1.59 30.57	1.60 30.33
3		3190	3127	3095	3063	3032	3000	2937	2860
	2600	1.65 33.65	1.68 33.38	1.70 33.24	1.71 33.11	1.73 32.98	1.74 32.85	1.77 32.60	1.80 32.34
		1.00 00.00		1.10 00.24					1.50 02.04

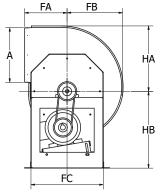
		1.500" Pst	2.000" Pst	2.500" Pst	3.000" Pst	3.500" Pst	4.000" Pst	4.500" Pst	5.000" Pst
HP	RPM	CFM							
		BHP Sones							
	1450	862							
1/2	1450	0.31 12.19							
1/2	1500	985							
	1500	0.35 12.82							
	1600	1201							
	1000	0.43 14.11							
	1700	1384	1059						
3/4	1700	0.52 15.77	0.50 15.78						
3/4	1750	1473	1181						
	1750	0.57 16.60	0.55 16.51						
	1800	1558	1298						
	1000	0.62 17.46	0.61 17.24						
	1900	1714	1484	1182					
1	1300	0.73 19.13	0.73 18.87	0.69 19.16					
	2000	1866	1664	1424					
	2000	0.85 20.88	0.85 20.60	0.84 20.86					
	2100	2016	1833	1615	1341				
1 1/2	2100	0.98 22.63	0.99 22.38	0.98 22.71	0.94 23.25				
1 1/2	2200	2164	1989	1796	1581	1279			
	2200	1.12 24.32	1.13 24.11	1.13 24.57	1.12 25.17	1.05 25.98			
	2300	2318	2141	1974	1768	1526			
2	2000	1.27 26.31	1.28 26.03	1.29 26.19	1.28 26.76	1.24 27.49			
-	2400	2471	2291	2131	1950	1753	1487		
	2100	1.43 28.18		1.47 27.83	1.46 28.41	1.45 29.07	1.39 29.78		
	2500	2621	2438	2285	2128	1939	1730	1464	
3	2000	1.61 30.08		1.65 29.59	1.66 30.13	1.65 30.72	1.62 31.39	1.54 32.12	
	2600	2770	2591	2437	2289	2120	1938	1711	1455
	LUUU	1.81 32.11	1.84 31.66	1.85 31.53	1.86 31.89	1.86 32.43	1.84 33.05	1.79 33.75	1.71 34.49

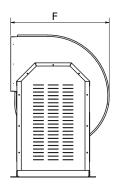












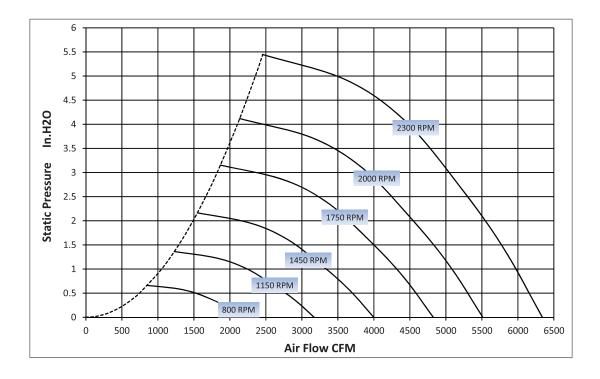
А	400
В	295
с	400
E	848
EA	32
ЕВ	406
EC	772
F	678
FA	287
FB	391
FC	489
н	962
НА	454
НВ	508
Ø	25
KG	75

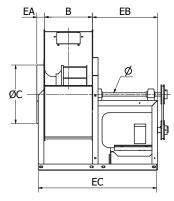
		0.000" Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.750" Pst	1.000" Pst	1.250" Pst	1.500" Pst
HP	RPM	CFM							
		BHP Sones							
	800	1855	1538	1348	1149				
	800	0.13 7.70	0.15 8.20	0.16 8.60	0.16 8.80				
	900	2087	1818	1652	1482	1073			
	000	0.19 9.20	0.21 9.20	0.22 10.30	0.22 10.50	0.22 10.70			
1/2	950	2203	1950	1798	1638	1291			
		0.22 10.50	0.24 10.40	0.26 11.70	0.26 12.10	0.26 12.20	1010		
	1000	2319 0.26 12.20	2082 0.28 12.20	1941 0.29 12.30	1790 0.31 12.20	1477 0.30 12.00	1046 0.29 12.20		
		2551	2340	2220	2085	1808	1504		
	1100	0.34 13.20	0.37 13.20	0.38 13.20	0.39 13.50	0.40 12.90	0.40 12.80		
		2666	2468	2353	2228	1964	1689	1332	
	1150	0.39 14.30	0.42 14.40	0.43 14.30	0.44 14.70	0.46 14.20	0.45 13.80	0.45 14.10	
3/4	1200	2782	2595	2485	2370	2118	1858	1553	
	1200	0.44 15.80	0.47 15.90	0.48 15.80	0.50 16.10	0.52 16.10	0.52 15.50	0.51 15.20	
	1300	3014	2844	2745	2643	2416	2181	1937	1638
1	1000	0.56 19.10	0.59 19.10	0.61 19.10	0.62 19.10	0.66 17.70	0.66 16.80	0.65 16.20	0.65 16.20
	1400	3246	3088	3001	2907	2705	2489	2270	2040
		0.69 19.50	0.73 19.50	0.75 19.50	0.76 19.50	0.80 19.00	0.83 18.40	0.82 17.80	0.81 17.30
	1450	3362 0.77 19.90	3209 0.81 20.00	3128 0.83 20.00	3037 0.84 19.90	2847 0.88 19.70	2639 0.92 19.50	2428 0.92 18.90	2210 0.91 18.30
		3478	3330	3254	3166	2987	2787	2583	2377
1 1/2	1500	0.85 21.00	0.89 21.00	0.91 21.00	0.93 21.00	0.96 21.00	1.00 20.00	1.02 19.90	1.01 19.30
		3710	3571	3502	3423	3258	3076	2888	2696
	1600	1.03 22.00	1.08 22.00	1.10 22.00	1.12 22.00	1.15 22.00	1.19 22.00	1.24 21.00	1.23 21.00
	1700	3942	3811	3746	3677	3522	3360	3183	3004
	1700	1.24 23.00	1.28 23.00	1.31 23.00	1.33 23.00	1.36 23.00	1.40 23.00	1.45 23.00	1.48 23.00
2	1750	4058	3931	3867	3803	3652	3500	3328	3155
2	1100	1.35 24.00	1.40 24.00	1.42 24.00	1.44 24.00	1.48 24.00	1.52 24.00	1.57 24.00	1.62 24.00
	1800	4174	4050	3989	3927	3782	3635	3471	3304
		1.47 24.00	1.52 24.00	1.54 24.00	1.56 25.00	1.60 24.00	1.64 24.00	1.69 25.00	1.75 25.00
	1900	4405 1.72 26.00	4289 1.78 26.00	4230 1.80 26.00	4172 1.83 26.00	4040 1.87 26.00	3901 1.91 26.00	3754 1.96 26.00	3596 2.01 26.00
3		4637	4526	4471	4415	4295	4163	4031	3883
	2000	2.01 27.00	2.06 28.00	2.09 28.00	2.12 28.00	2.17 28.00	2.21 27.00	2.25 27.00	2.31 27.00
		4869	4763	4711	4658	4549	4423	4297	4165
	2100	2.33 28.00	2.38 28.00	2.41 28.00	2.44 28.00	2.50 28.00	2.54 28.00	2.58 28.00	2.63 28.00
4	0000	5101	5000	4950	4899	4798	4680	4560	4440
	2200	2.67 30.00	2.73 30.00	2.76 30.00	2.79 30.00	2.85 30.00	2.90 30.00	2.95 30.00	2.99 30.00
	2300	5333	5236	5188	5140	5043	4936	4821	4706
5	2000	3.05 32.00	3.12 32.00	3.15 32.00	3.18 32.00	3.24 32.00	3.30 32.00	3.34 32.00	3.39 32.00
	2400	5565	5472	5426	5380	5287	5189	5079	4969
		3.47 34.00	3.53 34.00	3.57 34.00	3.60 34.00	3.67 35.00	3.73 34.00	3.78 35.00	3.83 34.00
7 1/2	2500	5797	5708	5663	5619	5530	5441	5336	5230
		3.92 36.00	3.99 36.00	4.02 37.00	4.06 37.00	4.13 37.00	4.19 37.00	4.25 37.00	4.30 36.00

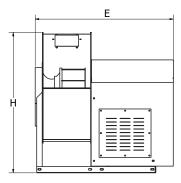
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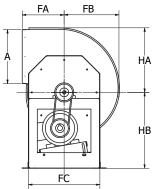
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HP	RPM	С	FM	C	FM	С	FM	C	FM	С	FM	C	FM	С	FM	С	FM						
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones						
1	1400	14	402																				
,	1400	0.76	17.80																				
	1450	1665																					
	1450	0.90	18.00																				
4.4/0	4500	18	386																				
1 1/2	1500	0.99	18.30																				
	1000	2299		1	756																		
	1600	1.21	20.00	1.19	19.70																		
	1200	2638				2638		2638		2	209												
	1700	1.46	22.00	1.45	21.00																		
		2803		24	423	19	909																
2	1750	1.60	23.00	1.58	22.00	1.55	22.00																
		29	964	20	608	2	146																
	1800	1.75	24.00	1.72	23.00	1.72	22.00																
		3276		2	947	2	582	21	14														
	1900	2.06	26.00	2.04	25.00	2.02	24.00	2.00	23.00														
3		35	581		274		954	25	564	2	092												
	2000	2.41	27.00	2.39	26.00	2.36	25.00	2.35	24.00	2.25	25.00												
		38	378	3	588	32	290	2983		2	574	2	103										
	2100	2.76	29.00	2.78	28.00	2.76	27.00	2.72	26.00	2.72	26.00	2.55	27.00										
4		41	170	3	894	30	516	33	326	3	007	2	609										
	2200	3.12	31.00	3.20	30.00	3.19	29.00	3.16	28.00	3.13	28.00	3.13	28.00										
		44	157		195		929		659		379	3	046	2	665								
	2300	3.51	33.00	3.65	33.00	3.65	32.00	3.63	31.00	3.59	30.00	3.57	29.00	3.57	29.00								
5			740		489		236		980		717		448		105	2	740						
	2400		35.00		36.00		35.00		33.00		32.00		31.00		31.00		31.00						
			019		778		537		292		047		789		531		182						
7 1/2	2500		37.00	4.55	38.00		37.00		36.00	4.67	34.00	4.63			32.00		32.00						

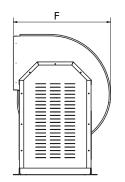
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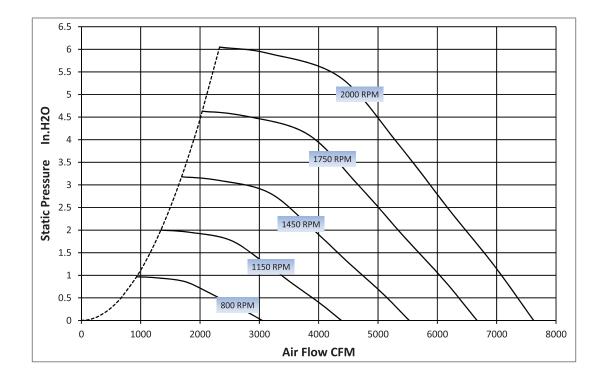
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В	324
с	438
E	876
EA	32
ЕВ	406
EC	768
F	740
FA	313
FB	427
FC	527
н	1057
НА	499
НВ	559
Ø	30
KG	86

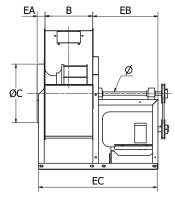
UF16B (Belt Drive)

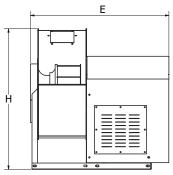
		0.000" Ps	. (.250" Pst	0.37	5" Pst	0.50	0" Pst	0.75	0" Pst	1.000)" Pst	1.250" Pst		1.500" Pst	
HP	RPM	CFM		CFM	C	=M	С	FM	С	FM	C	FM	CF	-M	CI	FM
		BHP So	nes BH	IP Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	000	2205		1920	17	45	1:	545								
	800	0.17 7.	78 0.1	9 7.28	0.19	7.16	0.20	7.02								
	000	2481		2240	20	90	19	927	1-	460						
1/2	900	0.23 9.	31 0.2	.6 8.77	0.27 8.67		0.28 8.57		0.27	8.17						
1/2	950	2619		2395	2255		2	111	1	739						
	950	0.27 10	05 0.3	0.31 9.48		9.37	0.32	9.29	0.32	9.02						
	1000	2757		2544		17	2	282	1	971	13	321				
	1000	0.32 10	86 0.3	6 10.29	0.37	10.16	0.37	10.07	0.38	9.94	0.33	9.37				
	1100	3033		2839	27	'36	20	513	2	352	20)24	12	73		
3/4	1100	0.42 12	49 0.4	6 11.93	0.48	11.71	0.49	11.63	0.50	11.48	0.50	11.22	0.41	10.76		
0/4	1150	3170		2985	28	93	2	776	2	536		258	18	17		
	1100	0.48 13.38		2 12.80	0.54	12.55	0.55	12.45	0.57	12.30	0.57	12.20	0.55	11.72		
	1200	3308		3131	30)42	29	937	2	711	24	151	20	99	13	337
1	1200	0.55 14	28 0.5			13.41		13.30		13.16		13.01	0.64			12.41
· ·	1300	3584		3420	3339		3: 0.79	254		045		326		80	2218	
	1000	0.70 16	13 0.7					14.95	0.80 14.83		0.82 14.71		0.82 14.59			14.53
	1400	3860		3708		532		556		372		79		61		'33
1 1/2		0.87 18	15 0.9			17.07		16.82		16.65		16.49		16.38		16.54
	1450	3997		3851		77		704		534		347		47		926
		0.96 19	18 1.0			18.02		17.77		17.53		17.43		17.33		17.40
	1500	4135		3994		23		352		693		513		31		17
2		1.07 20	20 1.1	1.12 19.40		1.15 19.01		18.75	1.21 18.43		1.23 18.30		1.25 18.2			18.33
	1600	4411		4278		212		145		010		340				90
		1.29 22	25 1.3		1.38	21.08	1.41	20.73	1.46	20.30	1.48 20.15		1.51 20.01 4003		1.52	20.06
	1700	4687		4562	4499			436	4311			63				344
		1.55 24	29 1.6	1 23.56	1.64	23.19	1.67 22.82 4581		1.73	22.14		21.97	1.79	21.87		21.93
	1750	4825	00 4 -	4703		642				460		322		67		012
3		1.69 25 4962	38 1.7		1.78	24.28	1.82	23.92 726	1.88	23.22 608	1.92	22.90 80	1.94	22.81 30		22.84 79
	1800	1.84 26	43 1.9	4844 0 25.65	1.94	'85 25.29	1.97	24.95	2.03	24.26	2.08	23.86	2.11	23.78		23.69
		5238	45 1.8	5126		25.29		24.95		24.20 902		23.00 '90		23.76 i52		23.69
	1900	2.16 28	48 2.2		2.26	27.42	2.30	27.07	2.37	26.38	2.43	25.78	2.46	25.70	2.49	25.64
		5514	40 2.2	5407		27.42		301		195		25.78		70		334
	2000	2.52 30	62 2.5		2.63	29.59	2.66	29.26	2.73	28.60	2.81	27.96	2.86	27.74	2.89	27.69
4		5789	02 2.0	5688		37		587		486		384		83		55
	2100	2.92 32	84 2.9		3.03	31.79	3.07	31.47	3.14	30.83	3.22	30.22	3.29	29.78	3.32	29.74
		6065	2.8	5968		20		31.47		775		50.22		29.70		29.74
	2200	3.36 35	38 3.4		3.47	34.19	3.51	33.81	3.59	33.10		32.51	3.74	31.99		31.82
5		6341	00 0.4	6248		202		156		063		971		78		86
	2300	3.83 38	09 3.9		3.96	36.93	4.00	36.55	4.08	35.78	4.16	35.04	4.24	34.48		34.09
		0.00 00	00 0.8	51.51	0.00	00.00	4.00	00.00	4.00	00.70	4.10	00.04	4.24	04.40	4.02	04.00

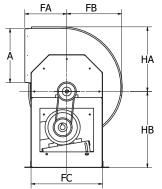
		2.000)" Pst	2.50)" Pst	3.000)" Pst	3.50	0" Pst	4.00	0" Pst	4.50	0" Pst	5.00	0" Pst	5.50	0" Pst
HP	RPM	С	FM	С	FM	CI	-M	С	FM	С	FM	С	FM	C	FM	C	FM
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	1400	17	708														
1 1/2	1400	0.85	16.45														
1 1/2	1450	22	267														
	1430	1.09	17.44														
	1500	25	555														
2	1000		18.38														
-	1600	3090			300												
	1000		20.34		20.59												
	1700	34			984	19	25										
			22.24		22.54		22.93										
	1750		67		259		89										
3			23.16		23.58		23.96										
	1800	3854			199		20										
			23.88		24.32		24.69										
	1900		223		386		77										
			25.54		25.74		26.12		26.50								
	2000	45			263		943		467		643						
4			27.62		27.62		27.62		27.94		28.37						
	2100		397		632		327		015		193		562				
			29.70		29.67		29.73		29.72		29.86		30.32				
	2200		227	49		47		44)48		550		546		
5			31.82		31.88		31.96		32.06		32.02		31.96		32.35		
	2300		552		316		073	47		4516		4110		3634		2586	
		4.39	34.03	4.45	34.12	4.51	34.27	4.52	34.42	4.53	34.60	4.46	34.56	4.35	34.53	3.61	34.53

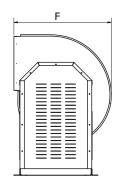
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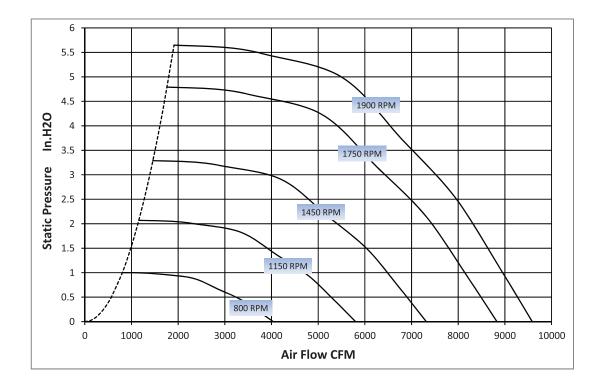


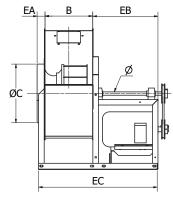
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E	994
EA	38
EB	454
EC	851
F	822
FA	352
FB	470
FC	572
н	1159
НА	549
НВ	610
Ø	30
KG	118

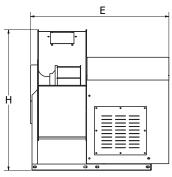
		0.000" Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.750" Pst	1.000" Pst	1.250" Pst	1.500" Pst
HP	RPM	CFM							
		BHP Sones							
	800	3049	2706	2517	2335	1953	451		
3/4	800	0.34 11.92	0.35 10.58	0.36 9.98	0.37 9.36	0.38 8.17	0.21 8.49		
5/4	900	3430	3132	2965	2798	2477	2124	1052	
	900	0.48 14.06	0.49 12.90	0.50 12.36	0.51 11.81	0.53 10.56	0.54 9.52	0.40 10.11	
	950	3621	3339	3184	3026	2719	2398	2025	
1	550	0.56 15.31	0.58 14.08	0.59 13.54	0.60 13.00	0.61 11.87	0.63 10.78	0.63 10.32	
	1000	3811	3543	3401	3250	2955	2665	2339	1610
	1000	0.65 16.52	0.67 15.25	0.68 14.75	0.69 14.24	0.71 13.14	0.73 12.10	0.74 11.12	0.65 11.65
	1100	4192	3949	3827	3690	3416	3154	2884	2588
1 1/2	1100	0.86 18.89	0.89 17.85	0.90 17.36	0.91 16.86	0.93 15.79	0.95 14.73	0.97 13.83	0.98 12.91
1.02	1150	4383	4150	4033	3907	3644	3390	3139	2864
	1100	0.99 20.09	1.01 19.05	1.02 18.57	1.03 18.12	1.05 17.22	1.08 16.13	1.10 15.12	1.11 14.33
	1200	4574	4350	4239	4121	3870	3623	3383	3133
2	1200	1.12 21.35	1.14 20.31	1.16 19.81	1.17 19.34	1.19 18.49	1.21 17.59	1.24 16.63	1.26 15.62
-	1300	4955	4749	4645	4542	4313	4081	3857	3635
	1000	1.42 23.85	1.45 22.95	1.46 22.50	1.48 22.05	1.50 21.15	1.52 20.27	1.55 19.39	1.58 18.58
	1400	5336	5144	5049	4953	4748	4533	4319	4113
	1400	1.77 26.43	1.80 25.52	1.82 25.08	1.83 24.63	1.86 23.85	1.89 23.09	1.91 22.30	1.94 21.46
3	1450	5526	5342	5249	5157	4963	4755	4547	4346
Ŭ	1400	1.97 27.75	2.00 26.89	2.02 26.46	2.03 26.04	2.06 25.21	2.09 24.42	2.11 23.69	2.14 22.91
	1500	5717	5538	5449	5360	5176	4975	4774	4577
	1000	2.18 29.09	2.21 28.23	2.23 27.83	2.24 27.42	2.27 26.63	2.30 25.86	2.33 25.11	2.36 24.31
	1600	6098	5931	5847	5763	5595	5411	5223	5034
4	1000	2.65 31.83	2.68 31.01	2.70 30.61	2.71 30.22	2.74 29.43	2.78 28.69	2.81 27.98	2.84 27.28
	1700	6479	6322	6243	6164	6006	5841	5663	5486
		3.17 34.81	3.21 33.98	3.23 33.57	3.24 33.18	3.28 32.41	3.31 31.66	3.34 30.94	3.37 30.24
	1750	6670	6517	6440	6363	6210	6054	5881	5709
5		3.46 36.39	3.50 35.55	3.52 35.15	3.53 34.75	3.57 33.96	3.60 33.23	3.64 32.51	3.67 31.79
Ŭ	1800	6860	6711	6637	6563	6414	6265	6098	5930
-		3.77 37.99	3.80 37.15	3.82 36.75	3.84 36.35	3.88 35.59	3.91 34.83	3.95 34.11	3.98 33.40
	1900	7242	7100	7030	6959	6818	6677	6527	6369
7 1/2		4.43 41.24	4.47 40.45	4.49 40.05	4.51 39.66	4.55 38.89	4.58 38.14	4.62 37.41	4.66 36.71
	2000	7623	7489	7422	7355	7221	7087	6952	6801
	2000	5.17 44.68	5.21 43.87	5.23 43.48	5.25 43.08	5.29 42.31	5.33 41.56	5.37 40.84	5.41 40.13

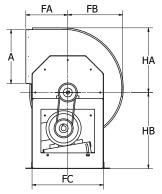
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HP	RPM	C	FM	С	FM	С	FM	С	FM	CI	-M	С	FM	С	FM	С	FM
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1 1/2	1150	17	758														
1 1/2	1150	0.96	14.55														
	1200	25	537														
2	1200	1.26	14.78														
2	1300	31	154	2	215												
	1300	1.61	17.00	1.45	17.46												
	1400	36	694	33	229	1842											
	1400	1.99	19.90	2.02	18.48	1.59	20.06										
3	1450	39	948	3	507	28	316										
5	1450	2.20	21.35	2.23	19.97	2.13	20.25										
	1500	1500 419	192	3	781	33	346										
	1500	2.42	22.85	2.46	21.44	2.49	20.50										
	1600	46	671	4310		39	906	34	199								
4	1000	2.90	25.79	2.96	24.42	2.99	23.14	3.02	23.01								
4	1700	51	138	4	798	44	147	40)63	36	31						
	1700	3.44	28.83	3.51	27.48	3.57	26.17	3.60	25.18	3.59	25.47						
	1750	53	368	50	038	47	707	43	338	39	66	3	061				
5	1750	3.74	30.41	3.81	29.07	3.88	27.81	3.91	26.60	3.94	25.82	3.58	27.73				
5	1800	55	595	52	274	49	954	46	609	42	47	3	806	2	104		
	1000	4.05	32.03	4.12	30.66	4.19	29.43	4.24	28.24	4.27	27.28	4.24	27.80	3.18	29.97		
	1900	60)51	5	741	54	137	51	33	47	97	44	453	4	050	26	656
7 1/2	1300	4.73	35.37	4.80	34.00	4.88	32.70	4.96	31.51	5.00	30.44	5.03	29.52	5.01	30.05	4.10	32.13
- 1/2	2000	65	500	6	199	59	910	56	622	53	31	5	005	4	679	43	353
	2000	5.48	38.78	5.56	37.48	5.64	36.19	5.72	34.94	5.80	33.81	5.83	32.74	5.86	31.82	5.90	32.28

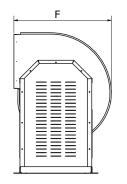
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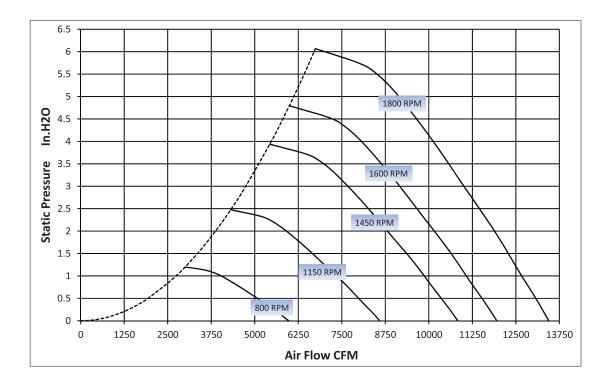


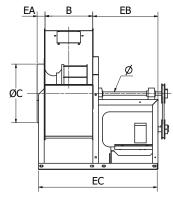
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В	375
с	521
E	1137
EA	38
EB	508
EC	921
F	868
FA	376
FB	492
FC	616
н	1239
НА	592
НВ	648
Ø	30
KG	135

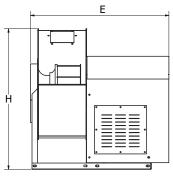
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HP	RPM	CFM		C	FM	C	FM	С	FM	С	FM	C	-M	CF	M	С	FM
		BHP S	ones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	000	4036		36	658	34	158	32	228	29	942	26	646	80)2		
	800	0.42 1	1.92	0.46	10.58	0.47	9.98	0.48	9.36	0.49	8.73	0.49	8.17	0.31	8.49		
1	900	4541		42	206	40)32	38	355	36	647	33	93	28	69	8	75
	900	0.59 1	4.06	0.64	12.90	0.66	12.36	0.67	11.81	0.69	11.19	0.69	10.56	0.69	9.52	0.43	10.11
	950	4793		44	76	43	313	41	146	39	978	37	47	32	58	27	734
	950	0.69 1	5.31	0.74	14.08	0.76	13.54	0.78	13.00	0.80	12.45	0.81	11.87	0.82	10.78	0.80	10.32
	1000	5045		47	44	45	592	44	433	42	273	40	92	36	35	31	158
1 1/2	1000	0.81 1	6.52	0.86	15.25	0.88	14.75	0.90	14.24	0.92	13.70	0.94	13.14	0.95	12.10	0.95	11.12
1 1/2	1100	5550		52	276	51	139	49	998	48	353	47	'08	43	47	39	931
	1100	1.07 1	8.89	1.13	17.85	1.16	17.36	1.18	16.86	1.20	16.30	1.23	15.79	1.26	14.73	1.27	13.83
	1150	5802		55	540	5409		52	276	51	138	49	99	46	93	42	295
2	1150	1.22 2	0.09	1.28	19.05	1.31	18.57	1.34	18.12	1.36	17.67	1.39	17.22	1.43	16.13	1.44	15.12
2	1200	6054		58	303	56	678	55	552	54	120	52	87	50	22	46	651
	1200	1.39 2	1.35	1.45	20.31	1.48	19.81	1.51	19.34	1.54	18.90	1.56	18.49	1.61	17.59	1.63	16.63
	1300	6559		63	327	62	211	60	095	59	978	58	56	56	10		344
3	1000	1.77 2	3.85	1.83	22.95	1.86	22.50	1.90	22.05	1.93	21.60	1.96	21.15	2.01	20.27		19.39
Ŭ	1400	7063		68	348	67	741		533	65	525	64	15	61			960
	1100		6.43	2.27 25.52		2.31	25.08	2.35	24.63	2.38	24.23	2.42	23.85	2.47	23.09	2.53	22.30
	1450	7315			08	7004		69	900	6796		66	92	64			253
4			7.75	2.52	26.89	2.56	26.46	2.60	26.04	2.63	25.63	2.67	25.21	2.73	24.42	2.79	23.69
	1500	7568			867		267		166		066		65	67			543
			9.09	2.79	28.23	2.82	27.83	2.86	27.42	2.90	27.02	2.94	26.63	3.01	25.86	3.07	25.11
	1600	8072			384		790		696		602		608	73			116
5			1.83	3.37	31.01	3.41	30.61	3.45	30.22	3.49	29.82	3.53	29.43	3.61	28.69	3.68	27.98
	1700	8577			00		311		222		134		945	78			682
			4.81	4.03	33.98	4.07	33.57	4.11	33.18	4.16	32.79	4.20	32.41	4.29	31.66	4.36	30.94
	1750	8829			57		571		185		399		313	81			962
7 1/2			6.39	4.39	35.55	4.43	35.15	4.48	34.75	4.52	34.35	4.57	33.96	4.66	33.23	4.74	32.51
	1800	9081			914		330		747		63		579	84			241
			7.99	4.77	37.15	4.82	36.75	4.86	36.35	4.91	35.96	4.95	35.59	5.05	34.83		34.11
10	1900	9586			27		348		269		190		10		52		793
		5.50 4	1.24	5.60	40.45	5.65	40.05	5.69	39.66	5.74	39.27	5.79	38.89	5.89	38.14	5.99	37.41

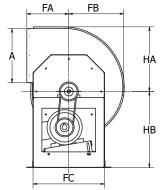
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HP	RPM	С	FM	С	FM	C	-M	С	FM	С	FM	С	FM	С	FM	CI	-M
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	1000		123 11.65														
1 1/2			495														
	1100	-	12.91														
		38	387	23	333												
	1150	1.44	14.33	1.23	14.55												
2		42	269	34	124												
	1200	1.64	15.62	1.61	14.78												
	4000	49	992	42	271	2936											
2	1300	2.08	18.58	2.08	17.00	1.86	17.46										
3	1400	56	690	50	036	43	52	10	011								
	1400	2.58	21.46	2.61	19.90	2.59	18.48	1.44	20.06								
	1450	6031		54	400	47	'48	37	775								
4	1450	2.85	22.91	2.89	21.35	2.88	19.97	2.73	20.25								
4	1500	63	330	57	757	51	36	44	197	13	353						
	1500	3.13	24.31	3.19	22.85	3.20	21.44	3.17	20.50	1.95	22.72						
	1600	69	917	64	456	58	884	52	292	46	693	1	603				
5	1000	3.74	27.28	3.84	25.79	3.88	24.42	3.87	23.14	3.84	23.01	2.46	25.34				
5	1700	74	494	71	119	65	699	60)59	54	195	4	904	15	571		
	1700	4.43	30.24	4.58	28.83	4.63	27.48	4.66	26.17	4.64	25.18	4.59	25.47	2.86	27.79		
	1750	77	780	74	416	69	49	64	126	58	386	5	338	4(067		
7 1/2	1750	4.81	31.79	4.96	30.41	5.04	29.07	5.08	27.81	5.07	26.60	5.04	25.82	4.57	27.73		
	1800	80	064	77	710	72	95	67	786	62	270	5	737	5	136	17	'50
	1000	5.21	33.40	5.36	32.03	5.47	30.66	5.51	29.43	5.53	28.24	5.50	27.28	5.42	27.80	3.39	29.97
10	1900	86	627	82	291	79	56	74	193	70	012	6	517	60	012	54	69
10	1300	6.07	36.71	6.23	35.37	6.39	34.00	6.45	32.70	6.49	31.51	6.49	30.44	6.46	29.52	6.40	30.05

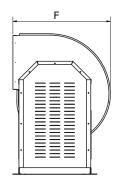
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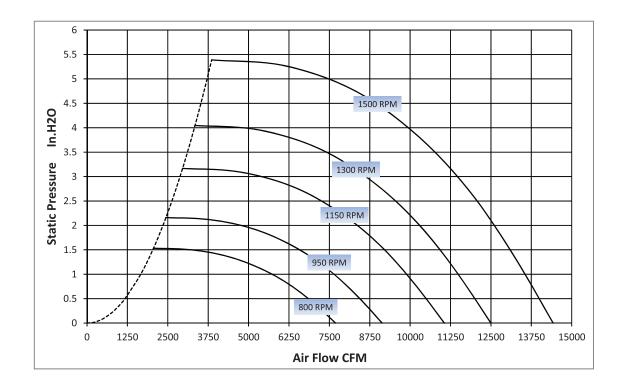


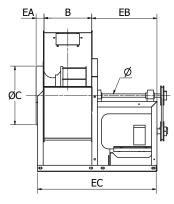
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НА	649
НВ	730
Ø	30
KG	151

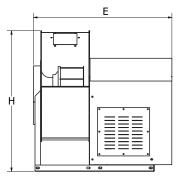
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HP	RPM	CF	=M	С	FM	С	FM	C	FM	CF	-M	CF	-M	CI	-M	CI	-M
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1 1/2	000	59	76	55	538	53	318	50	076	45	80	40	30				
1 1/2	800	0.83	13.70	0.91	13.70	0.94	13.70	0.97	13.60	1.01	13.20	1.02	12.50				
	900	67	23	63	334	61	139	59	943	55	03	50	63	45	69	35	603
2	900	1.19	17.10	1.27	17.00	1.31	17.10	1.35	17.00	1.39	16.70	1.44	16.00	1.45	15.50	1.36	14.20
2	950	70	96	67	730	65	543	63	358	59	52	55	35	50	90	45	67
	950	1.39	18.90	1.48	18.90	1.52	18.90	1.56	18.90	1.62	18.60	1.67	18.10	1.70	17.40	1.70	16.80
	1000	74	69	71	124	69	945	67	69	63	94	59	97	55	98	51	54
3	1000	1.63	21.00	1.72	20.00	1.76	20.00	1.80	20.00	1.87	20.00	1.93	19.70	1.98	19.10	1.99	18.50
3	1100	82	16	79	906	77	740	75	580	72	60	69	00	65	39	61	78
	1100	2.16	24.00	2.27	24.00	2.31	24.00	2.36	24.00	2.46	23.00	2.51	23.00	2.57	22.00	2.63	21.00
	1150	85	90	8295		8136		79	981	7675		73	42	69	97	66	52
4	1150	2.47	26.00	2.59	26.00	2.63	25.00	2.67	25.00	2.78	25.00	2.85	25.00	2.91	24.00	2.97	23.00
4	4 1200	89	63	86	683	85	530	83	380	80	87	77	79	74	48	71	17
	1200	2.81	27.00	2.93	27.00	2.97	27.00	3.02	27.00	3.13	27.00	3.22	27.00	3.28	26.00	3.34	26.00
5	1300	97	10	94	154	93	315	91	74	89	02	86	32	83	34	80	28
5	1300	3.57	30.00	3.71	30.00	3.75	30.00	3.80	30.00	3.91	30.00	4.03	29.00	4.11	29.00	4.17	28.00
	1400	104	457	10	219	10	094	99	963	97	07	94	56	92	:01	89	18
7 1/2	1400	4.45	33.00	4.60	33.00	4.67	32.00	4.71	32.00	4.82	32.00	4.95	32.00	5.07	32.00	5.14	32.00
1 1/2	1450	108	831	10	601	10	482	10	356	10	107	98	64	96	22	93	55
	1450	4.95	34.00	5.10	34.00	5.17	34.00	5.22	34.00	5.33	34.00	5.46	34.00	5.59	34.00	5.68	33.00
	1500	11:	204	10	982	10	869	10	747	10	505	102	270	10	036	97	'89
10	1300	5.47	35.00	5.64	35.00	5.71	35.00	5.76	35.00	5.87	35.00	6.01	35.00	6.14	35.00	6.26	44.00
10	1600	119	951	11	743	11	639	11	527	11:	298	11(076	10	856	10	637
	1000	6.64	38.00	6.82	38.00	6.90	38.00	6.97	38.00	7.07	38.00	7.21	38.00	7.36	38.00	7.50	38.00
	1700	126	698	12	502	12	404	12	302	120	087	118	375	110	668	11-	461
	1100	7.97	41.00		41.00	8.24	41.00	8.32	41.00	8.44	41.00	8.57	41.00	8.72	41.00	8.88	41.00
15	1750	130	072	12	881	12	786	12	689	124	480	122	272	120	071	11	870
15	11.50	8.69	43.00	8.88	43.00	8.98	43.00	9.07	43.00	9.18	43.00	9.31	43.00	9.47	43.00	9.63	43.00
	1800	134	445	13	260	13	167	13	075	128	372	126	668	12	473	12	278
	1000	9.46	45.00	9.65	45.00	9.75	45.00	9.85	45.00	9.97	45.00	10.09	45.00	10.26	45.00	10.42	45.00

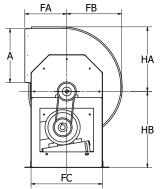
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HP	RPM	C	FM	С	FM	C	FM	С	FM	С	FM	CI	-M	CI	-м	C	FM
		Sones	BHP	BHP	Sones												
3	1100	53	311														
	1100	2.63	20.00														
	1150	59	902														
4	1150	3.03	22.00														
4	1200	64	22	55	501												
	1200	3.43	25.00	3.38	24.00												
5	1300	74	18	67	48	57	/52										
¥	1300	4.32	27.00	4.37	27.00	4.27	26.00										
	1400	8351		77	74	71	39	60	091								
7 1/2	1400	5.29	31.00	5.43	30.00	5.46	29.00	5.30	29.00								
1 1/2	1450	8808		82	261	76	62	69	961								
	1400	5.83	33.00	5.99	32.00	6.05	32.00	6.02	31.00								
	1500	92	260	87	732	81	75	75	580	66	609						
10	1000	6.41	34.00	6.57	34.00	6.69	34.00	6.72	33.00	6.54	33.00						
10	1600	10	151	96	655	91	59	86	524	80	060	72	201				
	1000	7.69	37.00	7.86	37.00	8.03	36.00	8.12	36.00	8.15	36.00	7.98	35.00				
	1700	11	026	10	559	10	093	96	526	9.	112	85	85	78	333		
	1700	9.13	41.00	9.30	40.00	9.49	40.00	9.68	40.00	9.74	40.00	9.77	40.00	9.62	39.00		
15	1750	11	459	11	005	10	552	10	099	96	523	91	15	85	531		90
10	1100	9.92	43.00	10.10	43.00	10.28	42.00	10.48	42.00	10.61	42.00	10.65	42.00	10.60	42.00	10.28	42.00
	1800	11	887	11	448	11	007	10	566	10	125	96	33	91	39		505
	1300	10.74	45.00	10.93	45.00	11.12	45.00	11.32	45.00	11.52	45.00	11.56	45.00	11.60	45.00	11.47	45.00

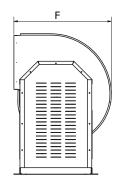
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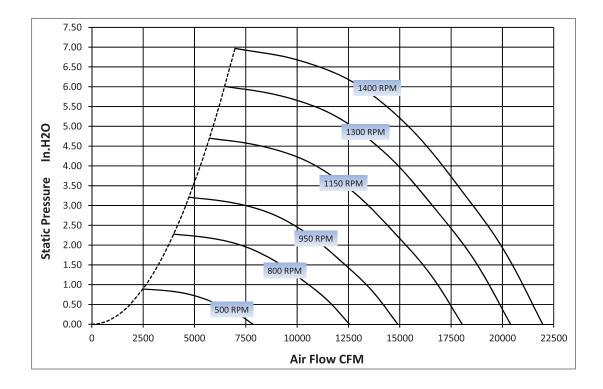


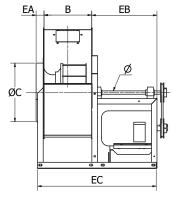
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E	1244
EA	35
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EC	1028
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FA	438
FB	608
FC	737
н	1513
НА	713
НВ	800
Ø	36.5
KG	205

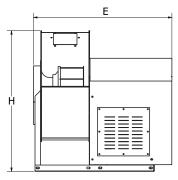
		0.000'	" Pst	0.250)"Pst	0.37	5" Pst	0.500)"Pst	0.750)"Pst	1.00	0"Pst	1.250)" Pst	1.500	" Pst
НР	RPM	CF	M	С	FM	С	FM	С	FM	С	FM	C	FM	C	FM	C	FM
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	000	769	93	72	289	70	087	68	353	63	383	5	754	49	928	34	93
2	800	1.16	16.71	1.25	15.70	1.30	15.26	1.33	14.81	1.40	13.95	1.43	13.35	1.38	12.78	1.21	16.08
2	850	817	74	77	794	76	604	73	396	69	953	6	424	58	315	49	917
	650	1.39	18.25	1.49	17.32	1.54	16.87	1.58	16.42	1.65	15.58	1.70	14.90	1.72	14.28	1.62	14.07
	900	865	55	82	296	8	116	79	932	75	514	7	077	65	508	58	322
3	900	1.65	19.87	1.75	18.92	1.81	18.48	1.86	18.06	1.93	17.24	2.00	16.49	2.03	15.91	2.00	15.35
5	950	913	36	87	795	86	625	84	455	80	067	7	671	71	78	66	639
	930	1.94	21.57	2.05	20.42	2.11	20.05	2.16	19.68	2.24	18.90	2.32	18.13	2.37	17.54	2.40	16.95
	1000	961	16	92	293	9	132	89	970	86	614	8	238	78	332	73	320
4	1000	2.26	23.33	2.38	22.29	2.44 21.81		2.49	21.39	2.59 20.51		2.67	19.77		19.13		18.53
	1050) 2 61 25 10		97	789	9635		94	482	9155		8796			138		986
	1000	2.61			24.08	2.80 23.61		2.86	23.13			3.06	21.58	3.14	20.82		20.28
	1100	10578 3.00 26.98			284		137		990		691		349		007		639
5	1100				25.96		25.46	3.26	24.98	3.39	24.10	3.48	23.37	3.57	22.66		22.02
	1150	110			778		637		497		216		895		568		241
		3.43		3.57			27.43	3.70	26.96	3.84	26.03	3.94	25.17	4.03	24.44	4.12	
	1200	115			270		136		001		732		437		123		310
		3.90		4.04	29.83	4.11	29.36	4.18	28.92	4.32	28.04	4.44	27.18	4.54	26.35	4.63	25.64
7 1/2	1250	120			762		633		503		245		974		673		372
		4.40			31.87	4.63	31.38	4.70	30.92	4.85	30.04	4.98	29.19	5.09	28.39		27.59
	1300	125			253		128		004		755		507		218		929
		4.95 129	35.12	5.11	34.10 743	5.18	33.61 623	5.26	33.11 503	5.42	32.18 264	5.57	31.28 024	5.68	30.45 759	5.78	29.65 480
	1350	5.54		5.70	36.41	5.79	35.93	5.87		6.03	204 34.50	6.19	33.57	6.31	32.68	6.42	
10		134			232		117		35.45 001		770		539		296		027
	1400	6.18			38.73	6.43	38.27	6.52	37.80	6.68	36.89	6.85	35.98	7.00	35.09	7.11	34.22
-		139			721		609		498		275		052		829		570
	1450	6.87	42.10		41.12	7.13	40.63	7.21	40.15	7.39	39.26	7.56	38.40	7.73	37.55	7.85	36.70
15		144			209		101		994		778		563		347		109
	1500	7.60			43.50	7.87	43.03	7.96	42.56	8.14	41.64	8.32	40.73	8.50	39.86	8.64	39.06
		1.00	11.02	1.10	10.00	1.07	10.00	1.00	12.00	0.14	11.04	0.02	10.70	0.00	00.00	0.04	00.00

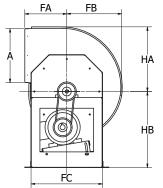
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HP	RPM	С	FM	С	FM	С	FM	CI	FM	C	FM	С	FM	C	=M	С	FM
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
3	950		899														
	000	2.16	18.48														
	1000	60	017														
4	1000	2.67	17.56														
-	1050	69	914	50	080												
	1050	3.20	19.24	2.84	22.33												
	1100	77	707	63	397												
5	1100	3.72	20.94	3.51	20.19												
5	1150	83	389	73	304	55	557										
	1150		22.68	4.14	21.69	3.73	25.45										
	1200	90	057	81	187	69	915	25	571								
	1200	4.77	24.48	4.83	23.47	4.55	23.20	2.94	31.21								
7 1/2	1250	9713		8894		78	327	62	261								
11/2	1250	5.36	26.34	5.44	25.29	5.29	24.30	4.86	27.93								
	1300	10	350	95	571	87	714	75	541	54	190						
	1300	5.99	28.24	6.09	27.17	6.10	26.16	5.79	25.68	5.11	33.16						
	1350	10	923	10	237	94	178	84	151	71	40						
10	1350	6.64	30.27	6.78	29.07	6.87	28.06	6.66	27.09	6.26	30.00						
10	1400	11	490	10	892	10	160	93	339	82	250	65	527				
	1400	7.34	32.56	7.52	31.14	7.62	29.98	7.61	29.01	7.27	28.07	6.63	34.72				
	1450	12	051	11	532	10	831	10	125	91	56	8	104	60)22		
45	1450	8.08	35.03	8.32	33.46	8.42	32.13	8.52	30.98	8.28	29.99	7.93	31.75	7.04	39.51		
15	1500	12	607	12	106	11	492	10	809	10	043	90	026	76	578	34	160
	1500	8.88	37.47	9.12	35.90	9.28	34.50	9.38	33.19	9.37	32.08	9.01	31.12	8.46	36.00	5.94	44.60

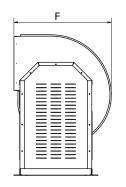
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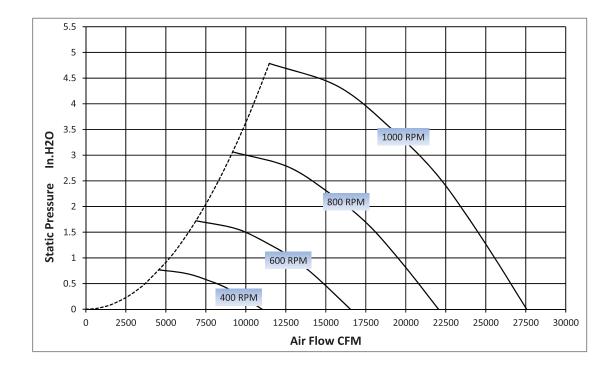


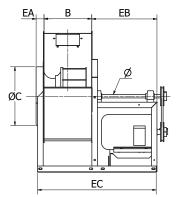
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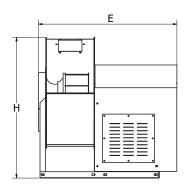
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НР	RPM	CFM								
		BHP Sones								
	500	7845	7146	6174	4856					
	500	0.65 9.86	0.75 8.49	0.82 7.64	0.83 7.73					
2	550	8629	8000	7183	6216	4545				
2	550	0.86 11.50	0.98 10.10	1.06 9.21	1.11 8.48	1.04 9.48				
	c00	9414	8837	8135	7299	6258	4309			
	600	1.11 13.27	1.24 11.86	1.35 10.93	1.41 10.12	1.43 10.15	1.28 11.26			
	650	10198	9666	9065	8339	7506	6400	3974		
3	650	1.41 15.13	1.55 13.78	1.68 12.77	1.77 11.94	1.81 11.24	1.81 11.92	1.49 13.11		
3	700	10983	10488	9977	9304	8581	7802	6660		
	700	1.76 16.96	1.92 15.64	2.06 14.70	2.16 13.93	2.23 13.16	2.28 12.75	2.25 13.77		
	750	11767	11306	10844	10247	9619	8897	8092	4529	
4	750	2.17 18.78	2.33 17.68	2.50 16.69	2.61 15.86	2.71 15.13	2.77 14.48	2.80 14.56	2.28 16.81	
4	800	12552	12119	11686	11174	10585	9960	9278	7446	
	800	2.63 20.88	2.80 19.81	2.98 18.82	3.12 17.94	3.23 17.23	3.32 16.52	3.37 15.83	3.35 17.46	
5	850	13336	12929	12521	12087	11532	10978	10354	8892	
	850	3.15 22.92	3.34 21.76	3.52 20.84	3.70 20.03	3.81 19.35	3.93 18.62	4.00 17.87	4.06 18.04	
	900	14121	13736	13351	12966	12464	11940	11403	10191	
7 1/2	300	3.74 25.00	3.94 23.88	4.14 22.92	4.33 22.02	4.47 21.32	4.59 20.68	4.70 20.05	4.83 18.92	
1 1/2	950	14905	14541	14176	13812	13383	12887	12391	11282	
	900	4.40 27.15	4.61 26.04	4.81 25.11	5.02 24.21	5.19 23.45	5.32 22.77	5.45 22.11	5.62 20.91	
	1000	15690	15343	14997	14651	14291	13820	13349	12347	
10	1000	5.13 29.37	5.35 28.31	5.57 27.34	5.79 26.42	6.00 25.60	6.14 24.97	6.27 24.33	6.49 23.09	
	1050	16474	16144	15815	15485	15155	14741	14292	13391	
	1030	5.93 31.63	6.16 30.59	6.40 29.64	6.63 28.75	6.86 27.88	7.03 27.20	7.17 26.54	7.45 25.33	
	1100	17259	16944	16629	16314	15999	15652	15223	14366	
	1100	6.82 34.03	7.06 32.99	7.31 32.01	7.55 31.08	7.79 30.22	8.01 29.48	8.16 28.87	8.46 27.65	
15	1150	18043	17742	17441	17140	16839	16538	16144	15324	
	1100	7.79 36.66	8.05 35.59	8.30 34.55	8.55 33.61	8.81 32.69	9.06 31.83	9.23 31.19	9.54 30.01	
	1200	18828	18539	18251	17962	17673	17385	17055	16270	
	1200	8.85 39.41	9.12 38.38	9.38 37.36	9.65 36.37	9.91 35.40	10.18 34.49	10.40 33.75	10.73 32.50	
	1250	19612	19335	19058	18781	18504	18227	17950	17204	
		10.01 42.15	10.28 41.17	10.56 40.22	10.83 39.27	11.11 38.34	11.39 37.42	11.66 36.56	12.01 35.21	
20	1300	20397	20130	19864	19598	19331	19065	18798	18129	
		11.26 45.07	11.54 44.03	11.83 43.04	12.12 42.11	12.40 41.23	12.69 40.37	12.98 39.50	13.39 38.15	
	1350	21181	20925	20668	20412	20155	19899	19642	19045	
		12.60 48.10	12.90 47.05	13.20 46.10	13.50 45.16	13.80 44.24	14.09 43.33	14.39 42.45	14.88 41.05	
25	1400	21966	21718	21471	21224	20976	20729	20482	19954	
		14.06 51.25	14.37 50.17	14.67 49.21	14.98 48.29	15.29 47.40	15.60 46.50	15.91 45.64	16.48 44.11	

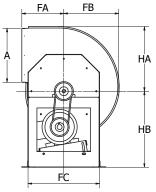
		2.500" Pst CFM		3.000" Pst		3.500" Pst		4.000" Pst		4.500" Pst		5.00	0" Pst	5.50	0" Pst	6.000)" Pst
HP	RPM			CI	-M	CI	-M	C	FM	С	FM	С	FM	CFM		CI	-M
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
5	850		71														
			20.26														
	900		189														
7 1/2			20.84														
	950	9932		77	37												
		5.67	21.47	5.33	23.62												
	1000	11:	257	97	12	68	34										
10	1000	6.63	22.19	6.57	24.14	5.76	26.44										
10	1050	12	352	11	144	95	71	52	249								
		7.60	24.18	7.66	24.82	7.55	26.87	5.68	29.46								
	1100	13-	13423 1.		2432		11065		9089								
		8.66	26.44	8.81	25.55	8.77	27.44	8.32	29.59								
15	1150	14	474	74 13526		12483		11077		8779							
15		9.82	28.87	9.98	27.75	10.08	28.15	9.98	30.11	9.20	32.44						
	1200	15484		14599		13690		12516		11170		8618					
	1200	11.05	31.32	11.25	30.23	11.41	29.17	11.41	30.73	11.31	32.74	10.21	35.62				
	1250	16	450	15652		14780		13907		12625		11188		81	185		
	1250	12.35	33.96	12.63	32.79	12.80	31.70	12.97	31.55	12.87	33.33	12.63	35.53	10.98	38.80		
	1300	17-	404	16	679	15	350	15	011	14	043	12800		11176		79	48
20	1300	13.75	36.87	14.10	35.63	14.29	34.44	14.47	33.32	14.56	34.26	14.44	36.20	13.96	38.61	11.91	41.94
	1050	18	347	17	649	16	903	16	095	15	287	14	231	13	033	11:	275
	1350	15.25	39.83	15.62	38.62	15.91	37.43	16.09	36.27	16.27	35.31	16.27	37.13	16.15	39.16	15.44	41.64
0.5	1400	19:	281	18	607	17	934	17	162	16382		15603		14474		13320	
25	1400	16.86	42.81	17.24	41.58	17.62	40.44	17.83	39.31	18.02	38.20	18.21	38.20	18.11	40.06	17.99	42.08

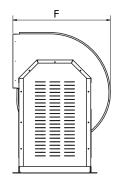
> UF36B











А	976
В	718
с	1045
E	1654
EA	45
EB	635
EC	1410
F	1510
FA	657
FB	853
FC	1137
н	2097
НА	980
НВ	1118
Ø	50.8
KG	550

		0.000	0" Pst	0.125	ö" Pst	0.250	"Pst	0.375	5" Pst	0.500	" Pst	0.625	"Pst	0.750	"Pst	1.000)"Pst
НР	RPM	CFM		CFM		CF	-M	CI	-M	CI	=M	CFM		CFM		CFM	
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	400	11	024	10406		9768		9077		82	8213		32	53	32		
_	400	0.81	14.76	0.88	13.32	0.95	12.10	1.00	11.22	1.04	10.41	1.05	10.06	0.96	9.97		
3	450	12	402	11853		11304		10	701	10	087	92	94	8385		1240	
	450	1.15	17.66	1.23	16.30	1.31	15.09	1.37	14.19	1.44	13.32	1.48	12.50	1.50	12.06	0.70	11.99
	500	13	780	13	286	12792		12	279	11	11726		173	104	160	87	729
4	500	1.57	20.43	1.66	19.23	1.75	18.09	1.83	17.07	1.90	16.26	1.97	15.50	2.02	14.77	2.04	14.16
4	550	15	158	14709		142	259	13810		13	321	128	318	123	316	10984	
	550	2.09	23.24	2.19	22.05	2.28	20.97	2.38	19.92	2.47	19.16	2.54	18.40	2.62	17.69	2.71	16.31
5	600	16536		16124		15712		15	15300 14882		882	14422		13961		12966	
3	000	2.71	26.17	2.82	25.06	2.92	24.02	3.03	23.04	3.14	22.11	3.22	21.31	3.31	20.60	3.46	19.35
	650	17	914	17534		17154		16773		16393		15993		15567		14716	
7 1/2		3.44	29.37	3.56	28.23	3.68	27.14	3.79	26.10	3.91	25.17	4.01	24.43	4.11	23.78	4.29	22.50
1 112	700	19	19292		18939		18586		18233		17880		527	17143		16353	
		4.30	32.59	4.42	31.57	4.55	30.56	4.68	29.56	4.80	28.56	4.93	27.62	5.03	26.92	5.23	25.61
	750	20670		20341		20011		19	19682 19352		19023		18693		17958		
10	700	5.28	36.01	5.42	34.96	5.55	33.92	5.69	32.99	5.82	32.08	5.96	31.19	6.09	30.37	6.31	29.05
	800	22	048	21739		21430		21121		20812		20503		201	195	19	536
	000	6.41	39.51	6.56	38.50	6.70	37.55	6.84	36.60	6.99	35.68	7.13	34.77	7.28	33.89	7.53	32.54
	850	23	426	23	135	228	345	22	554	22	263	219	972	21682		21	092
15	000		43.35	7.84		8.00	41.31	8.15		8.30	39.43	8.45	38.52	8.61	37.67	8.91	
	900		804		529	242			980		706	234		237			607
			47.34		46.36	9.45	45.38		44.42	9.78	43.49	9.94	42.58	10.10	41.67	10.42	39.95
	950		182		922	256			402		141	24881		24621			101
20			51.57	10.91		11.08	49.57	11.25	48.59		47.66	11.59	46.78	11.76			44.19
	1000		560		313	270			819		572	26324		26077			583
		12.52	56.19	12.70	55.20	12.88	54.23	13.06	53.27	13.24	52.32	13.42	51.37	13.60	50.47	13.96	48.69

HP		1.250" Pst CFM		1.500	1.500" Pst CFM		"Pst	2.500)"Pst	3.000)"Pst	3.50)" Pst	4.00)" Pst	4.500)" Pst
	RPM			CI			-M	С	FM	CFM		CFM		CFM		CFM	
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
	500	2161															
4	500	1.09	14.17														
4	550	93	14	18	01												
	550	2.70	16.27	1.33	16.47												
5	600	11673		10	078												
5	600	3.54	18.25	3.50	18.41												
	650	13682		12489		83	81										
7 1/2		4.42	21.18	4.51	20.35	4.05	21.00										
/ 1/2	700	15563		14511		11994		9									
		5.43	24.44	5.54	23.32	5.57	22.97	1.97	23.79								
	750	17221		16466		14398		11	715								
10		6.52	27.78	6.72	26.57	6.93	24.93	6.76	25.67								
10	800	18845		18154		16426		14264		10663							
	000	7.75	31.33	7.98	30.16	8.29	27.92	8.35	27.59	7.65	28.52						
	850	204	442	19791		18394		16569		14326		10074					
15	000	9.15	34.91	9.39	33.75	9.82	31.58	10.06	29.78	9.95	30.49	8.75	31.56				
13	900	220	016	21	402	20	173	18	587	16	771	14	567				
	500	10.70	38.66	10.96	37.50	11.46	35.29	11.79	33.25	11.95	32.64	11.76	33.52				
	950	23	572	22	990	218	326	20	552	18	919	17	045	14949			
20	330	12.43	42.69	12.70	41.48	13.24	39.17	13.71	37.10	13.98	35.13	13.99	35.52	13.78	36.55		
20	1000	250	089	24	558	234	452	22	346	20	920	19369		17459		15096	
	1000	14.32	47.07	14.63	45.84	15.19	43.53	15.76	41.33	16.12	39.28	16.40	37.94	16.26	38.73	15.77	39.94

TYPICAL SPECIFICATION

Model UF Backward Inclined, as manufactured by Twin City.

PERFORMANCE

Fans shall be tested in accordance with AMCA 211 and AMCA 311 test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels. UF fans shall be licensed to bear the AMCA certified ratings seal for both sound and air.

HOUSING

Fan housings shall be heavy gauge with fastened seam and partially welded construction. Housings shall be suitably braced to prevent vibration or pulsation. Housings shall have tapered spun, aerodynamically designed inlet cones or shrouds providing stable flow and high rigidity. Housings shall be of the rotatable design, convertible to seven standard discharge configurations.

WHEELS

UF backward inclined wheels shall be single thickness plate type designed for maximum efficiency and quiet operation and shall be of the nonoverloading type. Sizes 10 through 36 shall be constructed of aluminum, with blades welded to the spun wheel cone and back plate.

SHAFT

Shafts shall be AISI 1045 hot rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.25 times the maximum speed.

BEARINGS

Bearings shall be heavy duty, grease lubricated, anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.

DRIVE

Motor sheaves shall be cast iron, and supplied as either variable pitch or fixed pitch. Drives and belts shall be rated for a minimum of 150% of the required motor HP.

ACCESSORIES

when specified, accessories such as access doors, variable inlet vanes, outlet shutters, inlet screens, etc., shall be provided by Twin City maintain one source responsibility.

FACTORY RUN TEST

All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each wheel shall be and dynamically balanced statically in accordance with ISO1940 "Balance Quality and Vibration Levels for Fans" to Fan Application, Balance Quality Grade G2.5. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

WARANTEE

The manufacturer shall guarantee the workmanship and materials for its UF Utility Sets for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | PROPELLER WALL FANS | PROPELLER ROOF VENTILATORS CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCODLERS | FIBERGLASS FANS | CUSTOM FANS



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 Fan & Blower products at the time of publication and we reserve the right to make changes in design and construction at any time without notice.