AEROVENT

INDUSTRIAL VENTILATION SYSTEMS

TURBO PRESSURE BLOWERS

Models HPBA / HPBS

CATALOG 914
FEBRUARY 2015

Turbo Pressure Blowers

Models

HPBA | HPBS

Arrangement 8 with Punched Outlet Flange

The HPB series of fans are low volume, high-pressure blowers designed for stable operation throughout their operating range. Multiple outlet sizes and wheel diameters allow the most efficient selections across a wide range of operating points. These units incorporate a high efficiency wheel design at an economical price.

Typical Applications

- Pneumatic conveying
- Exhausting
- Combustion air
- Air knives
- Chemical processes
- Thermal oxidation
- Aeration
- Seal air

Capabilities

- Static pressures to 128" w.g.
- Airflow capabilities to 20,000 CFM
- High temperature applications to 600°F
- For higher performance requirements, see below.

Housing Construction

All HPB fans come standard with heavy gauge, continuously welded steel housings for rugged, heavy duty, long term service. Size 14 to 26 housings are reversible and rotatable. Size 14 to 26 HPB fans come standard with an inlet venturi with screen. All HPB fans come standard with a round punched flanged outlet connection.

Wheel Types

HPBA Aluminum Wheel

HPBS Steel Wheel

HPBA Aluminum Wheel - The HPBA offers a radial air handling wheel of riveted aluminum construction. This wheel is available in both narrow “N” and wide “W” widths for sizes up to 26" diameter for optimum performance and high efficiency. The HPBA is designed to handle clean air applications with temperatures up to 200°F. The HPBA wheel is a non-reversible design.

HPBS Steel Wheel - The HPBS is an all welded radial design steel wheel that is available in a variety of special materials. This wheel is available in both narrow “N” and wide “W” widths for sizes up to 26" diameter to meet specific performance requirements. The HPBS is designed to handle fumes, light particulates, and temperatures up to 600°F. The HPBS design is less efficient than the HPBA and requires a BHP correction. See the table in the Engineering Data section for correction factors. The HPBS wheel is a reversible design.

Arrangements

Arrangement 1 (Belt Driven)
The fan wheel on an Arrangement 1 is overhung on the shaft, i.e., mounted at the end of the shaft. The motor can be mounted in any of the four AMCA standard motor positions, W, X, Y or Z. The two fan bearings are mounted on the bearing pedestal, out of the airstream.

Arrangement 4 (Direct Drive)
The fan wheel on an Arrangement 4 is mounted directly on the motor shaft with the motor mounted on a pedestal. An Arrangement 4 offers a compact, low maintenance design, as there are no fan bearings, fan shaft or drive parts to maintain. Variations of Arrangement 4 include 4 Standard (Pedestal Mount), 4HI (Horizontal Inlet Mount) and 4VI (Vertical Inlet Mount).

Arrangement 8 (Direct Drive)
An Arrangement 8 is a modified version of an Arrangement 1 used for direct drive. The bearing pedestal is extended to accommodate the motor. A flexible coupling connects the fan and motor shaft.

Arrangement 1

ARRANGEMENT	MAXIMUM TEMP (°F)		
	HPBA	HPBS	
		STD	HIGH TEMP CONSTRUCTION
ARR. 1	200	300	600
ARR. 4	180	180	N/A
ARR. 8	200	300	600

Arrangement 4

Arrangement 8

Optional Construction

Spark Resistant Construction
Available for Model HPBA only. Fan applications may involve the handling of fumes or vapors. Such applications require careful consideration by the system designer to insure the safe handling of such gases. Aerovent offers the following classifications of spark resistant construction per AMCA Standard 99-0401-86. It is the specifier's or the user's responsibility to specify the type of spark resistant construction with full recognition of the potential hazards and the degree of protection required.

Construction
Type A - All parts of the fan in contact with the airstream must be made of nonferrous material — usually aluminum and limited to 200°F.

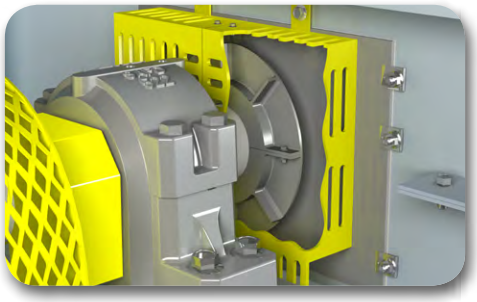
Type B - The fan shall have a nonferrous wheel and nonferrous rub ring about the opening through which the shaft passes — usually aluminum wheel and rub ring and limited to 200°F.

Type C - Not available.

High Temperature Construction (HPBS Only)
301 to 500°F - Package includes shaft seal, shaft cooler with guard, high temperature grease, and standard enamel paint.

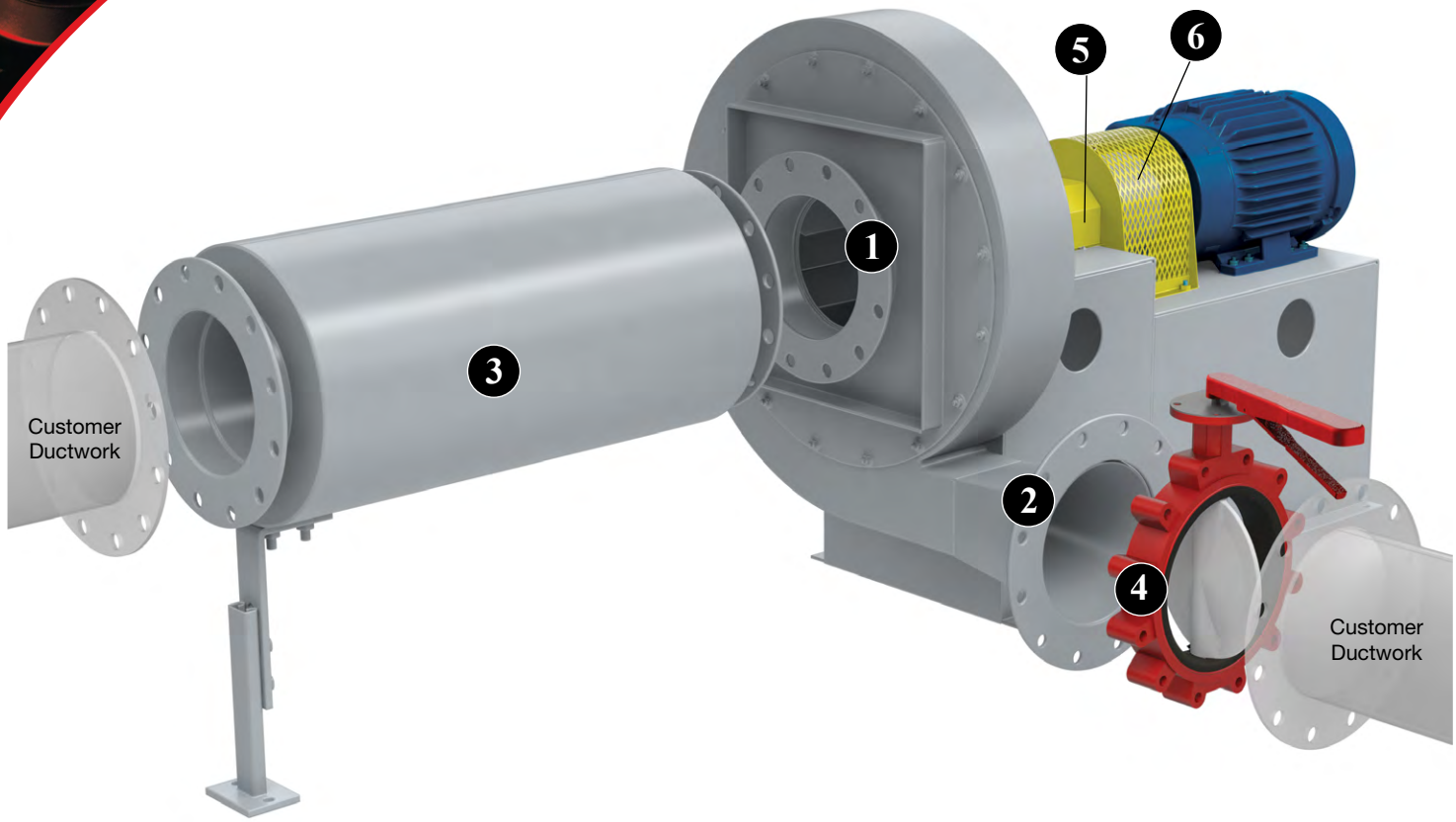
501 to 600°F - Package includes shaft seal, shaft cooler with guard, high temperature grease, and high temperature aluminum paint.

Special Materials - Stainless steel and other special alloys are available in the type HPBS radial design.



Shaft Cooler & Safety Guard

Accessories



1 **Flanged Inlet** For bolted pipe or duct connections. Flanged inlet is punched to ANSI 125/150 hole pattern.

2 **Flanged Outlet** punched to ANSI 125/150 hole pattern for bolted connection is standard.

3 **Inlet Silencer with Support Leg** Welded steel construction with acoustical absorption material to reduce noise emanating from fan inlet. Flanged connection is suggested for mounting to the inlet of the fan. The opposite end of the silencer can be furnished with an inlet venturi, inlet flange, or inlet pipe assembly. Unless otherwise specified, the silencer will be furnished with flanges (punched) at both ends.

4 **Blast Gate with Handle** A wafer-type butterfly valve for mounting to outlet flange allows controlling flow to full shutoff. Available for automatic control. Maximum temperature 250°F.

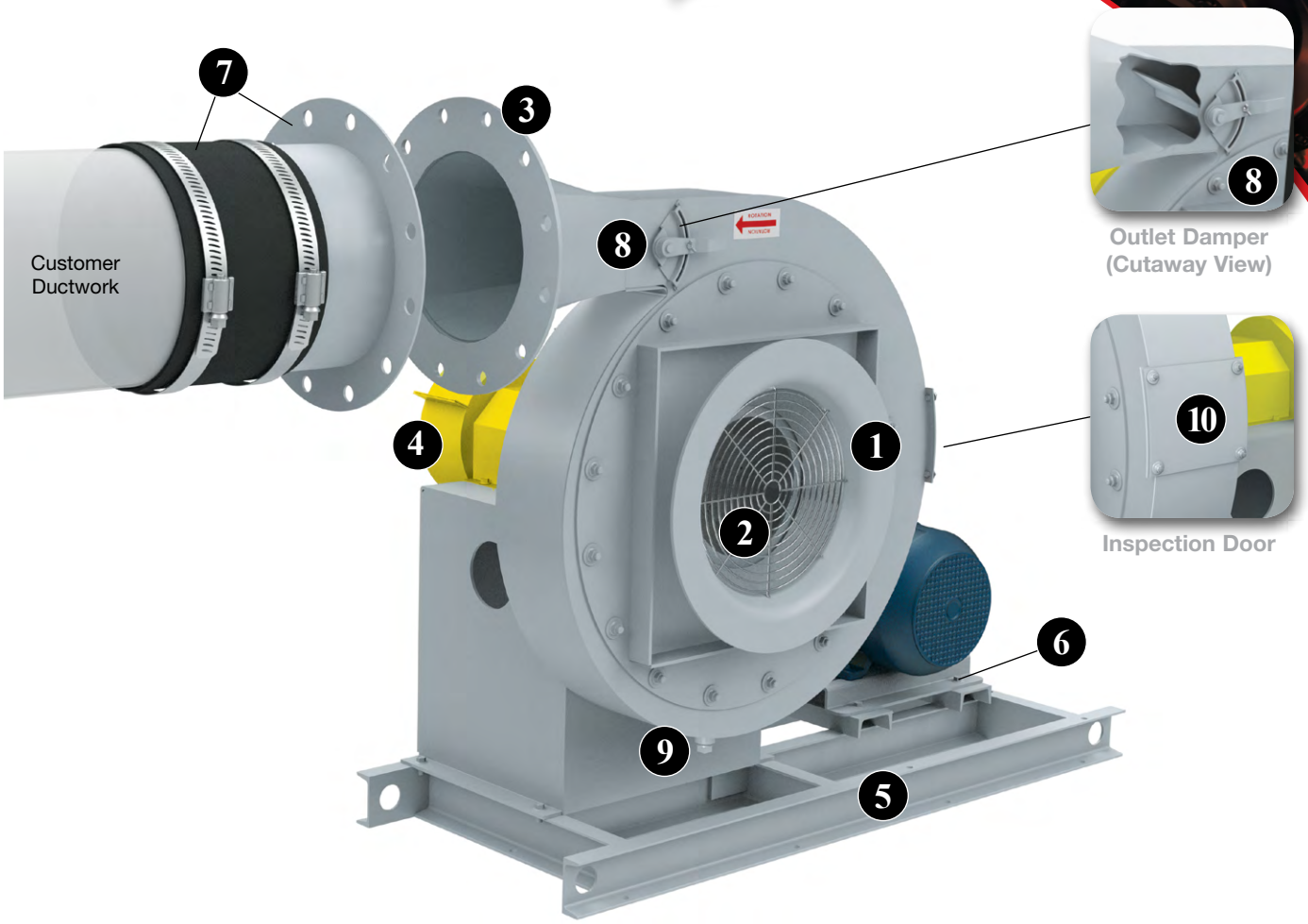
5 **Shaft & Bearing Guard** OSHA style to enclose the shaft and bearings. Painted safety yellow.

6 **Coupling Guard** OSHA style to enclose the coupling. Painted safety yellow.

Other Accessories Include:

- Inlet Pipe Assembly (for slip-on pipe or duct connections)
- Plain Pipe Outlet (for slip type connections)
- Inlet Filter (non-ducted inlet installations)
- Inlet Filter w/ Hood (non-ducted inlet installations)
- Flanged Outlet Flex Connector
- Plain Pipe Outlet Flex Connector
- Outlet Silencer
- Shaft Closure Plate
- Isolation Base (Arrangements 1 & 4)
- Inertia Base
- Vibration Rails (Arrangements 4)
- Cast Motors
- Extended Lube Lines
- Insulated Housings (Steel Wall or Aluminum Clad)
- Insulation Pins

Accessories



1. **Inlet Venturi** allows for smooth air entry on non-ducted fans.

2. **Inlet Screen** Recommended for all non-ducted inlet installations to obtain catalog performance.

3. **Flanged Outlet** punched to ANSI 125/150 hole pattern for bolted connection is standard.

4. **Belt Guard** OSHA style to enclose the V-belt drive. Painted safety yellow.

5. **Unitary Base** Steel structural base for mounting fan and motor on common structure. Allows for complete assembly of fan, motor, and v-belt drive (Arrangement 1). Must be bolted to a rigid support structure. (See page 6 for additional fan mounting.)

6. **Motor Slide Base** for positioning motors and adjusting belt tension during installation and maintenance.

7. **Companion Flange with Rubber Sleeve & Clamps** offers flexible connection between the fan and outlet ductwork. Flexible rubber sleeve is good to 200°F operation.

8. **Built-In Outlet Damper** offers a low cost single blade damper installed near the discharge of the fan housing for volume control where moderate leakage can be allowed. Available for manual control only.

9. **Drain** Standard ¾" NPT half coupling located at the lowest point of the housing. Available with or without plug.

10. **Inspection Door** Heavy duty bolted panel provides access for wheel inspection.

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INDUSTRIAL VENTILATION SYSTEMS

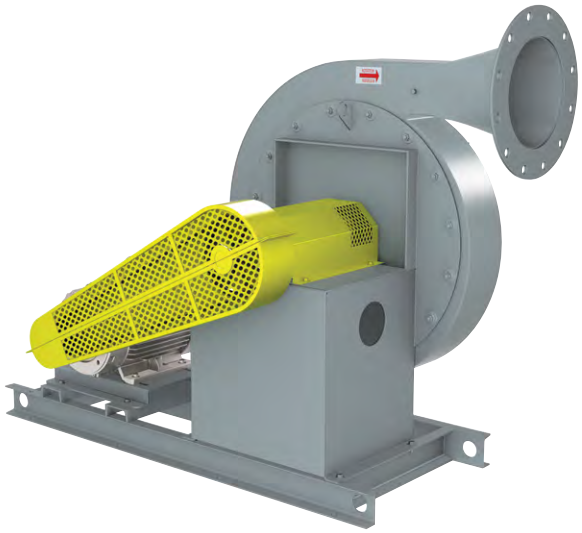
Vibration Isolation

Inertia Bases

Intertia Bases provide a common support to fan, motor and drive including guards and utilize heavy duty structural channel with spring isolators. Inertia bases incorporate reinforcing rods and require customer supplied concrete. Inertia bases are typically used on longer, direct drive fans to mitigate assembly deflection, maintaining proper alignment between the motor, coupling, shaft and bearings. Flexible connectors at inlet and outlet are required.

Vibration Rails with RIS Isolators (Sizes 14 to 26, Arr. 4 only)

Vibration Rails with RIS Isolators are designed to limit forces transmitted to the support structure of an operating fan. Constructed of structural angle, the rails extend the distance between mounting points distributing a more even load to the isolators. Rubber-in-shear type isolators and flexible connectors at inlet and outlet are required.



Vibration Isolation Bases provide a common support to fan, motor and drive including guards and utilize heavy duty structural channel. Vibration isloation bases require spring or rubber-in-shear type isolators that are designed to limit forces transmitted to the support structure of an operating fan.

Shaft & Bearings

SIZE	SHAFT DIA. (IN.)				BEARING TYPE		
	HPBA		HPBS		HPBA/S	HPBA	HPBS
	ARR. 1	ARR. 8	ARR. 1	ARR. 8	ARR. 1	ARR. 8	ARR. 8
14 to 18	1-3/16	1-3/16	1-3/16	1-3/16	HSHDB	SDB-C	SDB-C
19 to 22	1-7/16	1-7/16	1-7/16	1-7/16	RB	SDB-C	SDB-C
23 to 26	1-7/16	1-7/16	1-7/16	1-7/16	RB	SDB-C	SDB-C
27006	1-11/16	1	1-11/16	1-3/16	RB-C	SDB-C	HDB-C
27008	1-15/16	1-3/16	1-15/16	1-7/16	RB-C	HDB-C	RB-C
27010	2-3/16	1-11/16	2-3/16	1-7/16	RB-C	SDB-C	RB-C
27012	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
27506	1-11/16	1-3/16	1-15/16	1-3/16	RB-C	SDB-C	HDB-C
27508	1-15/16	1-3/16	1-15/16	1-7/16	RB-C	HDB-C	RB-C
27510	2-3/16	1-11/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
27512	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
28006	1-15/16	1-3/16	1-15/16	1-3/16	RB-C	SDB-C	HDB-C
28008	1-15/16	1-3/16	1-15/16	1-7/16	RB-C	HDB-C	RB-C
28010	2-3/16	1-11/16	2-7/16	1-7/16	RB-C	HDB-C	RB-C
28012	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
28506	1-15/16	1-3/16	1-15/16	1-7/16	RB-C	SDB-C	HDB-C
28508	1-15/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
28510	2-7/16	1-15/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
28512	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	SDB-C	RB-C
29006	1-15/16	1-3/16	1-15/16	1-7/16	RB-C	SDB-C	HDB-C
29008	2-3/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
29010	2-7/16	1-15/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
29012	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	SDB-C	RB-C
30008	2-3/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
30010	2-7/16	2-3/16	2-7/16	1-7/16	RB-C	HDB-C	RB-C
30012	2-7/16	1-11/16	2-7/16	1-11/16	RB-C	SDB-C	RB-C
30014	2-11/16	1-15/16	2-11/16	2-7/16	RB-C	HDB-C	RB-C
30508	2-3/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
30510	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
30512	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	SDB-C	RB-C
30514	2-11/16	2-3/16	2-11/16	2-7/16	RB-C	HDB-C	RB-C
31008	2-3/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
31010	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
31012	2-7/16	1-11/16	2-11/16	1-15/16	RB-C	HDB-C	RB-C
31014	2-11/16	1-15/16	2-11/16	2-7/16	RB-C	RB-C	RB-C
31508	2-3/16	1-7/16	2-3/16	1-7/16	RB-C	HDB-C	RB-C
31510	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
31512	2-7/16	1-11/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
31514	2-11/16	1-15/16	2-11/16	2-11/16	RB-C	RB-C	HSHDB

SDB: Standard Duty Ball Bearing
HDB: Heavy Duty Ball Bearing
RB: Roller Bearing
SRB: Roller Bearing with Split Pillow Block Housing

HSHDB: High Speed Heavy Duty Ball Bearing
SDB-C: Concentric Standard Duty Ball Bearing
HDB-C: Concentric Heavy Duty Ball Bearing
RB-C: Concentric Roller Bearing

SIZE	SHAFT DIA. (IN.)				BEARING TYPE		
	HPBA		HPBS		HPBA/S	HPBA	HPBS
	ARR. 1	ARR. 8	ARR. 1	ARR. 8	ARR. 1	ARR. 8	ARR. 8
32008	2-3/16	1-11/16	2-3/16	1-7/16	RB-C	SDB-C	RB-C
32010	2-7/16	2-3/16	2-7/16	1-11/16	RB-C	HDB-C	RB-C
32012	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	HDB-C	RB-C
32014	2-11/16	1-15/16	2-11/16	2-11/16	RB-C	RB-C	HSHDB
33008	2-3/16	1-11/16	2-3/16	1-11/16	RB-C	HDB-C	RB-C
33010	2-7/16	1-11/16	2-11/16	1-15/16	RB-C	RB-C	RB-C
33012	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	HDB-C	RB-C
33014	2-15/16	2-3/16	3-7/16	2-15/16	RB-C	HSHDB	HSHDB
33508	2-3/16	1-11/16	2-7/16	1-15/16	RB-C	HDB-C	RB-C
33510	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
33512	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
33514	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
34008	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	HDB-C	RB-C
34010	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
34012	2-11/16	1-15/16	2-11/16	2-7/16	RB-C	RB-C	RB-C
34014	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
34508	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	RB-C	RB-C
34510	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
34512	2-11/16	2-3/16	2-15/16	2-11/16	RB-C	RB-C	HSHDB
34514	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
35008	2-7/16	1-11/16	2-7/16	1-15/16	RB-C	RB-C	RB-C
35010	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
35012	2-15/16	2-3/16	2-15/16	2-15/16	RB-C	HDB-C	HSHDB
35014	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
36010	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
36012	2-15/16	2-3/16	2-15/16	2-15/16	RB-C	HDB-C	HSHDB
36014	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
36016	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	RB-C	HSHDB
36510	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
36512	2-15/16	2-3/16	2-15/16	2-7/16	RB-C	RB-C	RB-C
36514	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
36516	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	RB-C	HSHDB
37010	2-11/16	1-15/16	2-11/16	2-3/16	RB-C	RB-C	RB-C
37012	2-15/16	2-3/16	3-7/16	2-7/16	RB-C	RB-C	RB-C
37014	3-7/16	2-3/16	3-7/16	2-15/16	RB-C	RB-C	HSHDB
37016	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	HSHDB	HSHDB
37510	2-11/16	1-15/16	2-11/16	2-11/16	RB-C	RB-C	HSHDB
37512	2-15/16	2-3/16	3-7/16	2-7/16	RB-C	RB-C	RB-C
37514	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	RB-C	HSHDB
37516	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	HSHDB	HSHDB
38010	2-15/16	1-15/16	2-15/16	2-3/16	RB-C	SRB	RB-C
38012	3-7/16	2-3/16	3-7/16	2-7/16	RB-C	RB-C	RB-C
38014	3-7/16	2-3/16	3-7/16	3-7/16	RB-C	RB-C	HSHDB
38016	3-7/16	2-7/16	3-7/16	3-7/16	RB-C	RB-C	HSHDB

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Engineering Data

Bare Fan Weights (Lbs.)

SIZE	ARRANGEMENT 1		ARRANGEMENT 4		ARRANGEMENT 8	
	HPBA	HPBS	HPBA	HPBS	HPBA	HPBS
14N to 18N	202	212	185	195	282	292
14W to 18W	218	230	201	213	298	310
19N to 22N	278	292	252	266	395	409
19W to 22W	335	351	309	325	452	468
23N to 26N	392	432	366	406	524	564
23W to 26W	445	473	419	447	577	605
270xx	743	780	724	761	1073	1111
275xx	744	783	724	763	1074	1113
280xx	744	796	725	777	1075	1127
285xx	738	792	726	780	1069	1123
290xx	739	795	727	783	1070	1126
300xx	897	958	835	895	1258	1318
305xx	906	965	839	899	1266	1326
310xx	904	965	841	903	1264	1326
315xx	902	981	839	918	1262	1341
320xx	911	985	848	922	1271	1345
330xx	1031	1112	903	984	1384	1465
335xx	1042	1143	910	1011	1412	1513
340xx	1044	1148	912	1016	1413	1518
345xx	1050	1153	919	1022	1420	1523
350xx	1052	1159	921	1027	1422	1528
360xx	1200	1304	1020	1125	1579	1684
365xx	1202	1310	1022	1130	1581	1689
370xx	1204	1315	1024	1136	1584	1695
375xx	1206	1321	1026	1141	1586	1700
380xx	1208	1327	1029	1147	1588	1706

Note: Weights provided above are for the largest inlet/outlet size available on the housing.

Housing Thickness

SIZE	HOUSING THICKNESS	
	SIDES	SCROLL
14 to 26	10 GA.	10 GA.
27 to 38	0.25 IN	0.25 IN

Inlet Suction Pressure Correction

If the inlet pressure is suction or negative, the static pressure required must be corrected by the inlet density ratio.

Example: Operating conditions: 70°F at sea level. System resistance at the inlet of the fan is 40".

The correction factor from the table at right is 0.902, or it can be calculated as follows:

$$(407.5 - 40") \div 407.5 = 0.902$$

Equivalent static pressure to be used for selection from the standard performance curves:

$$40" \div 0.902 = 44.36"$$

Actual air density at the inlet of the fan:

$$0.075 \text{ lb/ft}^3 \times 0.902 = 0.0676 \text{ lb/ft}^3$$

Inlet Suction Pressure Correction Factors

INLET SUCTION PRESSURE (IN. W.G.)	CORRECTION FACTOR	INLET SUCTION PRESSURE (IN. W.G.)	CORRECTION FACTOR
5	0.988	70	0.828
10	0.975	75	0.816
15	0.963	80	0.804
20	0.951	85	0.791
25	0.939	90	0.779
30	0.926	95	0.767
35	0.914	100	0.755
40	0.902	105	0.742
45	0.89	110	0.73
50	0.877	115	0.718
55	0.865	120	0.706
60	0.853	125	0.693
65	0.84	130	0.681

Correction Factor = (407.5 – Inlet Suction Pressure) ÷ 407.5

Temperature Derate

AIRSTREAM TEMP (°F)	HPBA	HPBS							
		Sizes 14-26		Sizes 27-32		Sizes 33-35		Sizes 36-38	
		Steel	Stainless	Steel	2205	Steel	2205	Steel	2205
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
200	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	0.90
300	N/A	1.00	1.00	1.00	1.00	1.00	0.93	1.00	0.87
400	N/A	1.00	1.00	1.00	1.00	1.00	0.92	1.00	0.85
500	N/A	1.00	1.00	1.00	0.97	1.00	0.89	1.00	0.83
600	N/A	1.00	1.00	1.00	0.94	1.00	0.86	0.96	0.80

Maximum RPM, Wheel Weights and WR² (moment of inertia in lb-ft²)

SIZE	WHEEL					
	HPBA (ALUMINUM)			HPBS (STEEL)		
	MAX. RPM	WT. (LB)	WR² (LB-FT²)	MAX. RPM	WT. (LB)	WR² (LB-FT²)
14N	4000	10.5	3.3	4000	13.1	1.9
14W	4000	10.5	4.0	4000	12.8	2.0
15N	4000	10.6	3.4	4000	14.6	2.5
15W	4000	10.6	4.1	4000	14.6	2.7
16N	4000	10.7	3.5	4000	16.2	3.2
16W	4000	10.7	4.2	4000	16.5	3.4
17N	4000	10.8	3.7	4000	18.0	4.0
17W	4000	10.9	4.5	4000	18.5	4.3
18N	4000	11.0	3.9	4000	19.8	5.0
18W	4000	11.1	4.7	4000	20.5	5.4
19N	3900	14.7	8.1	3900	21.7	6.1
19W	3900	14.9	9.7	3900	22.0	6.4
20N	3900	14.8	8.4	3900	23.7	7.4
20W	3900	15.2	10.1	3900	24.1	7.8
21N	3900	15.0	8.8	3900	25.8	8.9
21W	3900	15.5	10.6	3900	26.4	9.5
22N	3900	15.2	9.3	3900	28.0	10.7
22W	3900	15.8	11.2	3900	28.8	11.3
23N	3800	19.8	16.8	3600	43.2	19.3
23W	3800	21.1	21.6	3600	43.9	20.3
24N	3800	20.1	17.5	3600	46.8	22.7
24W	3800	21.5	22.5	3600	47.8	24.1
25N	3800	20.3	18.2	3600	50.6	26.6
25W	3800	21.9	23.4	3600	51.9	28.2
26N	3800	20.5	19.0	3600	54.5	31.0
26W	3800	22.3	24.4	3600	56.1	32.9
27006	3600	39.1	17.1	3600	76.2	50.7
27008	3600	35.8	17.7	3600	73.9	52.1
27010	3600	42.0	19.1	3600	81.3	54.3
27012	3600	46.7	21.3	3600	86.9	57.8
27506	3600	39.8	18.3	3600	78.5	54.3
27508	3600	36.6	18.9	3600	76.2	55.8
27510	3600	42.8	20.3	3600	83.7	58.0
27512	3600	47.6	22.5	3600	88.3	61.5
28006	3600	40.6	19.5	3600	93.6	68.7
28008	3600	37.4	20.2	3600	90.8	70.2
28010	3600	43.7	21.6	3600	97.7	72.4
28012	3600	48.9	23.9	3600	104.2	76.5
28506	3600	41.4	20.8	3600	96.3	73.5
28508	3600	38.3	21.5	3600	93.6	75.0
28510	3600	44.5	23.0	3600	100.6	77.3
28512	3600	49.4	25.3	3600	104.7	81.0
29006	3600	42.2	22.1	3600	99.2	78.5
29008	3600	39.2	22.9	3600	96.5	80.2
29010	3600	45.4	24.4	3600	103.5	82.6
29012	3600	50.2	26.7	3600	107.8	86.4
30008	3600	43.9	28.6	3600	111.8	101.5
30010	3600	50.2	30.3	3600	119.0	104.4
30012	3600*	55.4	32.7	3600*	123.2	108.6
30014	3600*	68.9	38.7	3600*	136.4	116.5
30508	3600	46.0	30.5	3600	116.5	108.3
30510	3600	57.1	32.7	3600	128.8	111.7
30512	3600*	64.6	35.6	3600*	135.4	116.9
30514	3600*	69.9	40.7	3600*	139.1	121.0
31008	3600	47.1	32.4	3600	119.8	115.1
31010	3600	58.1	34.6	3600	132.2	118.7
31012	3600*	65.6	37.6	3600*	138.9	124.0
31014	3600*	71.0	42.7	3600*	143.6	131.0

SIZE	WHEEL					
	HPBA (ALUMINUM)			HPBS (STEEL)		
	MAX. RPM	WT. (LB)	WR² (LB-FT²)	MAX. RPM	WT. (LB)	WR² (LB-FT²)
31508	3600	52.5	38.3	3600	136.8	136.6
31510	3600	63.3	40.7	3600	148.8	140.3
31512	3600*	70.9	44.0	3600*	154.9	145.7
31514	3600*	76.3	49.5	3600*	159.0	152.8
32008	3600	53.7	40.5	3600	141.8	145.0
32010	3600	64.5	43.0	3600	152.7	148.8
32012	3600*	72.1	46.4	3600*	158.9	154.4
32014	3600*	77.6	52.0	3600*	163.2	161.8
33008	3600*	57.8	46.7	3600*	153.0	166.2
33010	3600*	68.4	49.4	3600*	164.2	170.6
33012	3600*	74.5	51.5	3600*	167.2	173.2
33014	3600*	80.2	57.4	3600*	171.8	181.2
33508	3600*	64.7	55.6	3600*	179.5	204.9
33510	3600*	74.7	58.2	3600*	191.1	210.4
33512	3600*	80.6	60.3	3600*	193.7	213.4
33514	3600*	86.0	66.2	3600*	199.1	223.6
34008	3600*	70.0	58.9	3600*	184.2	216.6
34010	3600*	76.1	61.3	3600*	195.9	222.4
34012	3600*	82.0	63.5	3600*	198.5	225.4
34014	3600*	87.5	69.5	3600*	204.2	236.1
34508	3600*	71.3	62.1	3600*	189.0	228.8
34510	3600*	77.6	64.6	3600*	200.8	234.8
34512	3600*	83.4	66.8	3600*	202.9	237.8
34514	3600*	89.0	73.0	3600*	209.3	249.1
35008	3600*	72.7	65.4	3600*	194.1	241.9
35010	3600*	79.0	68.0	3600*	206.0	248.1
35012	3600*	84.9	73.8	3600*	208.7	251.4
35014	3600*	90.5	76.6	3600*	214.7	262.9
36010	3600*	82.7	76.0	3600*	211.9	270.8
36012	3600*	89.7	79.6	3600*	217.5	277.6
36014	3600*	94.4	86.3	3600*	223.1	288.9
36016	3600*	99.3	91.9	3600*	223.0	294.1
36510	3600*	84.3	79.8	3600*	216.9	285.2
36512	3600*	91.2	83.5	3600*	222.7	292.3
36514	3600*	96.9	90.4	3600*	228.5	304.0
36516	3600*	100.9	95.8	3600*	228.4	309.3
37010	3600*	85.9	83.9	3600*	222.3	300.6
37012	3600*	92.8	87.7	3600*	228.1	308.0
37014	3600*	98.5	94.7	3600*	234.1	320.1
37016	3600*	102.6	100.1	3600*	234.0	325.6
37510	3600*	87.5	88.0	3600*	227.4	316.2
37512	3600*	94.4	91.9	3600*	233.4	323.8
37514	3600*	100.2	99.1	3600*	239.5	336.4
37516	3600*	104.2	104.6	3600*	239.5	342.1
38010	3600*	89.1	92.4	3600*	232.7	332.4
38012	3600*	96.0	96.3	3600*	238.7	340.3
38014	3600*	101.8	103.7	3600*	244.3	353.1
38016	3600*	105.9	109.3	3600*	245.1	359.2

* Arrangement 1, sizes 300xx - 320xx with 12 and 14 outlet and 330 - 380 with all outlet sizes are limited to 3200 RPM and 300 BHP maximum.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Selection

The performance curves shown are for Model HPBA and are based on standard air density: 70°F at sea level (0.075 lb/ft^3). **For Model HPBS performance, see Fan Selector (FS10).**

Selection Steps

1. Locate the CFM required on the horizontal axis.
2. Follow a vertical line up to the fan curve closest to the required SP. This will determine the fan size. The dotted lines represent system characteristic curves.
3. Interpolate BHP.

Selection Example:

Size = 22N4
Density = 0.075 lb/ft^3
CFM = 500
SP = 33.8"
RPM = 3500
Outlet Velocity = 5727 FPM
BHP (HPBA) = 4.85

Model Nomenclature (Size 14 — Size 26)

HPBA 20 N 4

MODEL
HPBA – Aluminum wheel
HPBS – Steel wheel

NOMINAL WHEEL SIZE

WHEEL WIDTH
N – Narrow
W – Wide

OUTLET SIZE (IN.)
4 6 8 10 12

Model Nomenclature (Size 27 — Size 38)

HPBS 320 12

MODEL
HPBA – Aluminum wheel
HPBS – Steel wheel

NOMINAL WHEEL SIZE
xx0
xx = Wheel Size

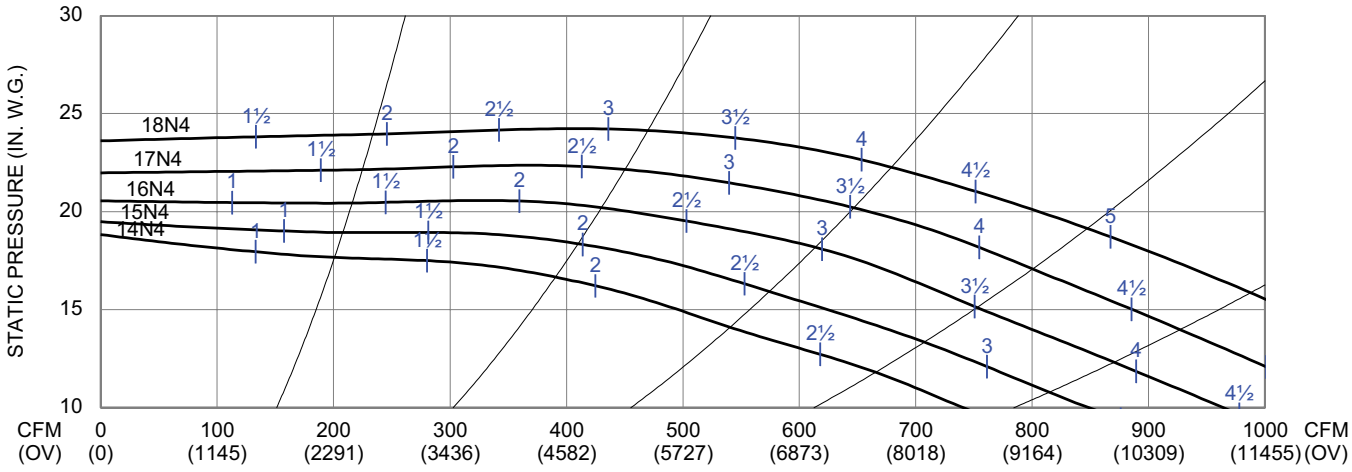
OUTLET SIZE (IN.)
06 08 10 12 14 16

HPBA 4 In. Outlet

Outlet Area: 0.09 ft^2

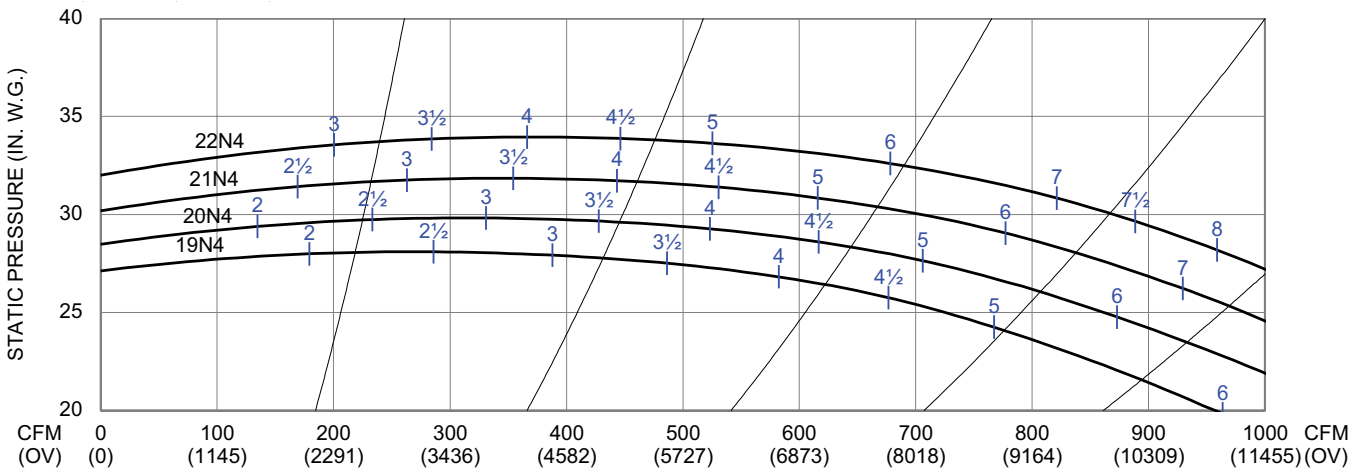
14N4, 15N4, 16N4, 17N4, 18N4

3500 RPM



19N4, 20N4, 21N4, 22N4

3500 RPM



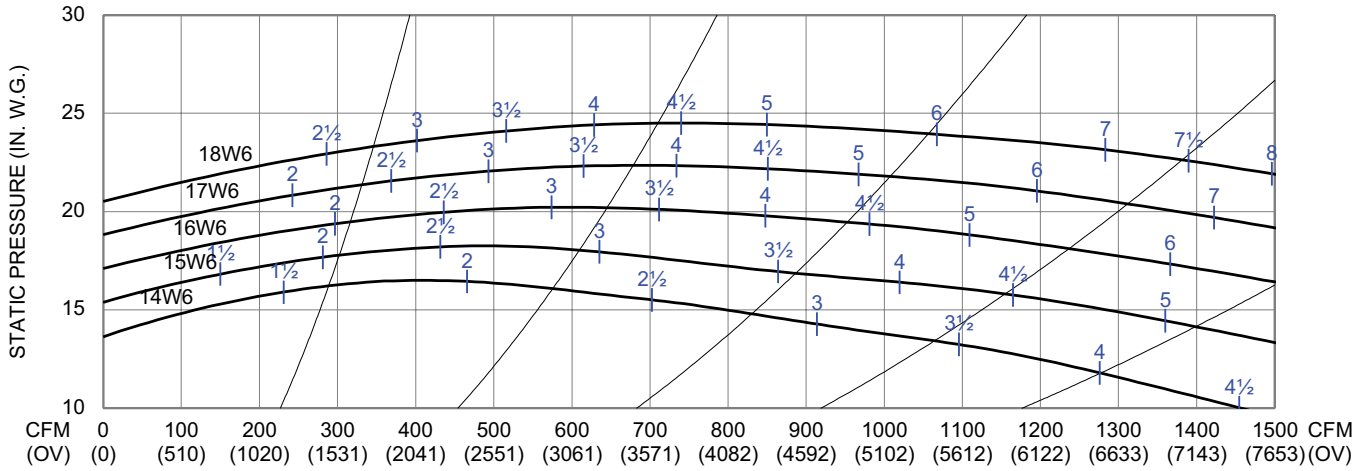
Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

HPBA 6 In. Outlet

Outlet Area: 0.20 ft²

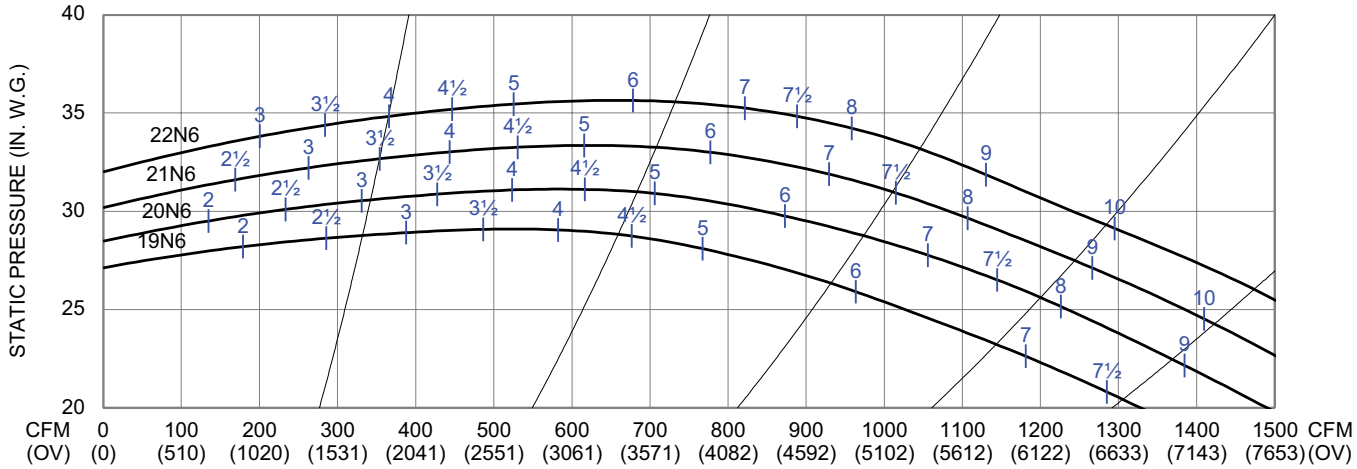
14W6, 15W6, 16W6, 17W6, 18W6

3500 RPM



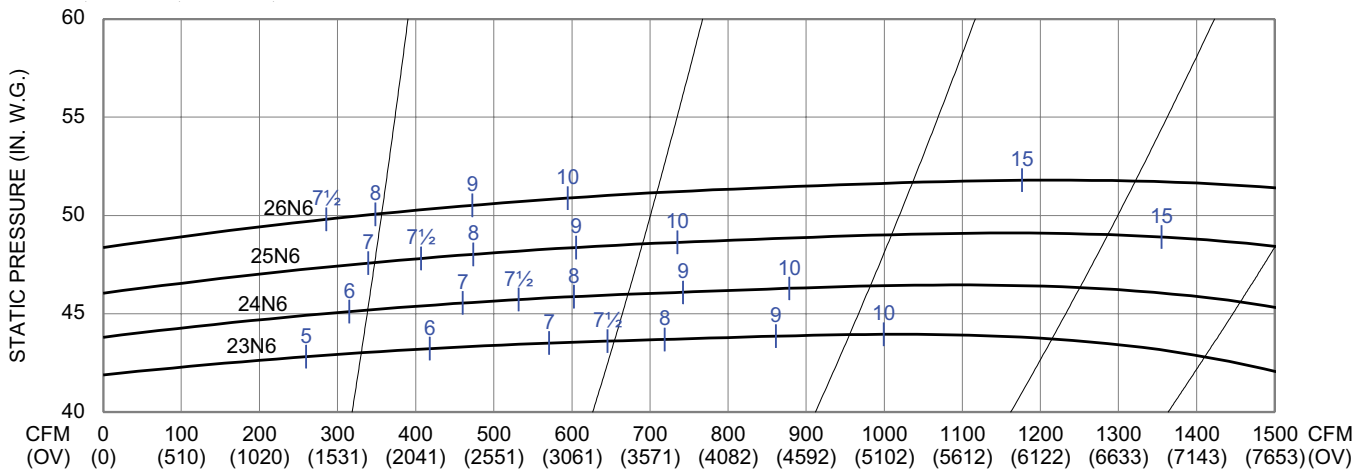
19N6, 20N6, 21N6, 22N6

3500 RPM



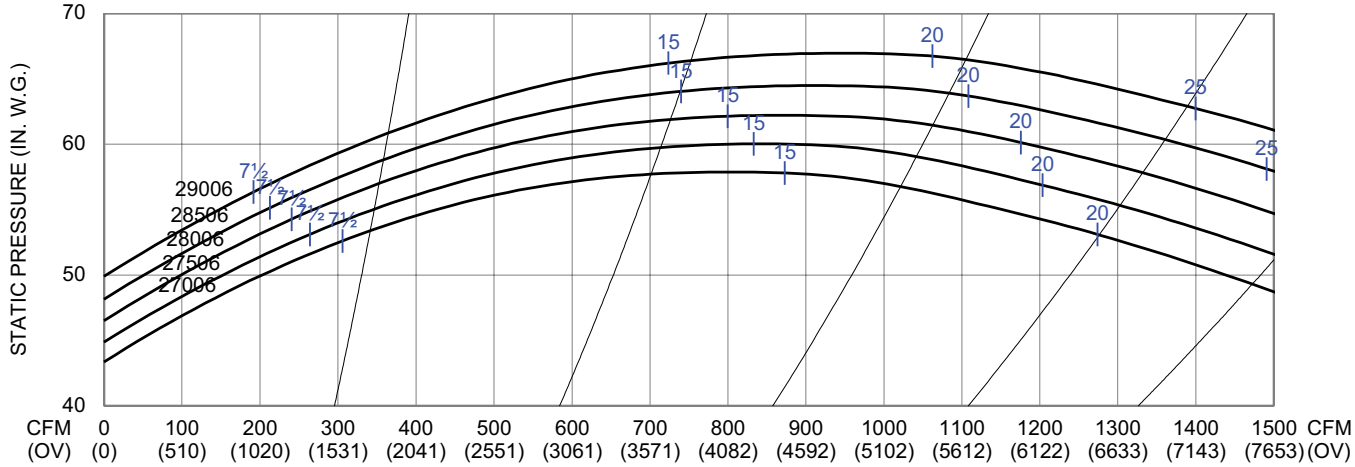
23N6, 24N6, 25N6, 26N6

3500 RPM



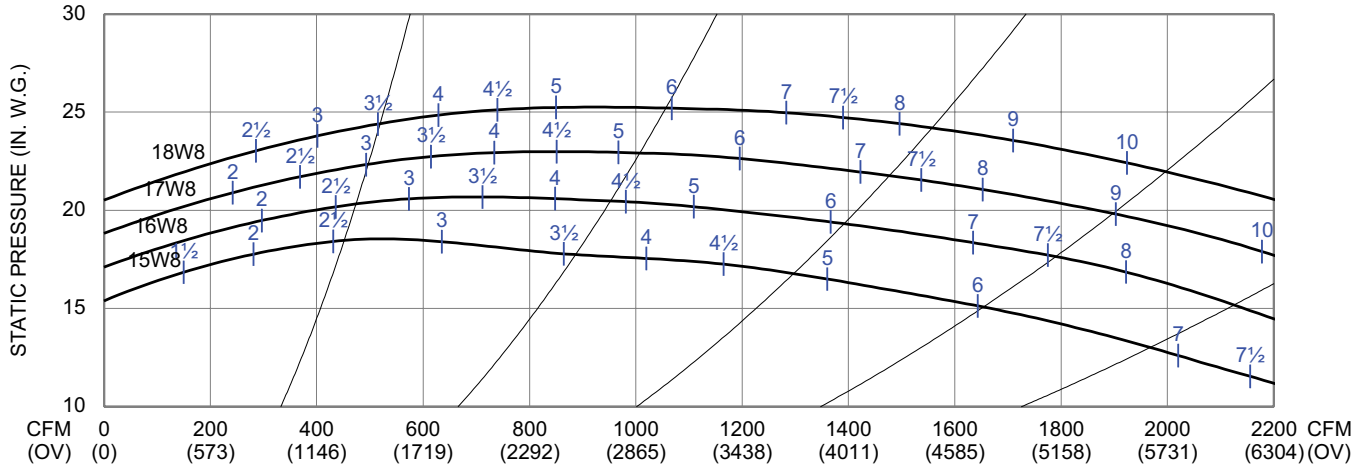
Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

27006, 27506, 28006, 28506, 29006 — 3550 RPM

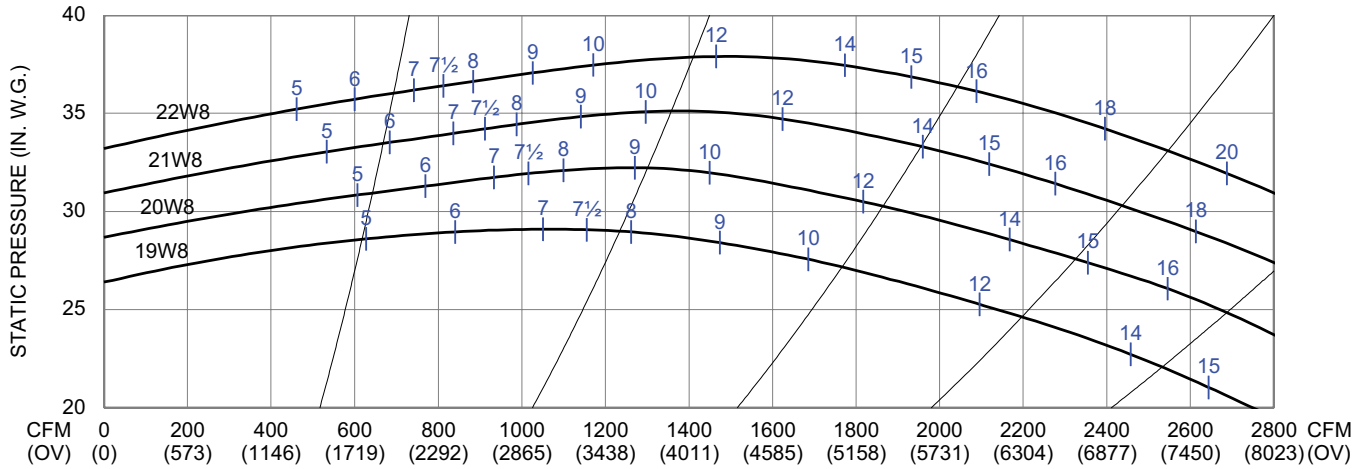


HPBA 8 In. Outlet — Outlet Area: 0.35 ft²

15W8, 16W8, 17W8, 18W8 — 3500 RPM

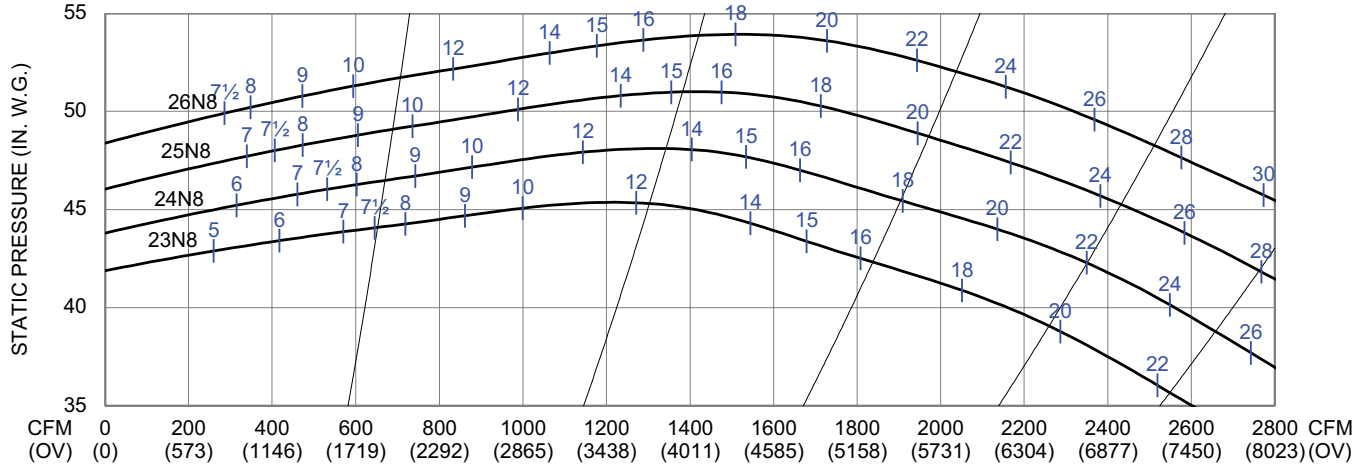


19W8, 20W8, 21W8, 22W8 — 3500 RPM

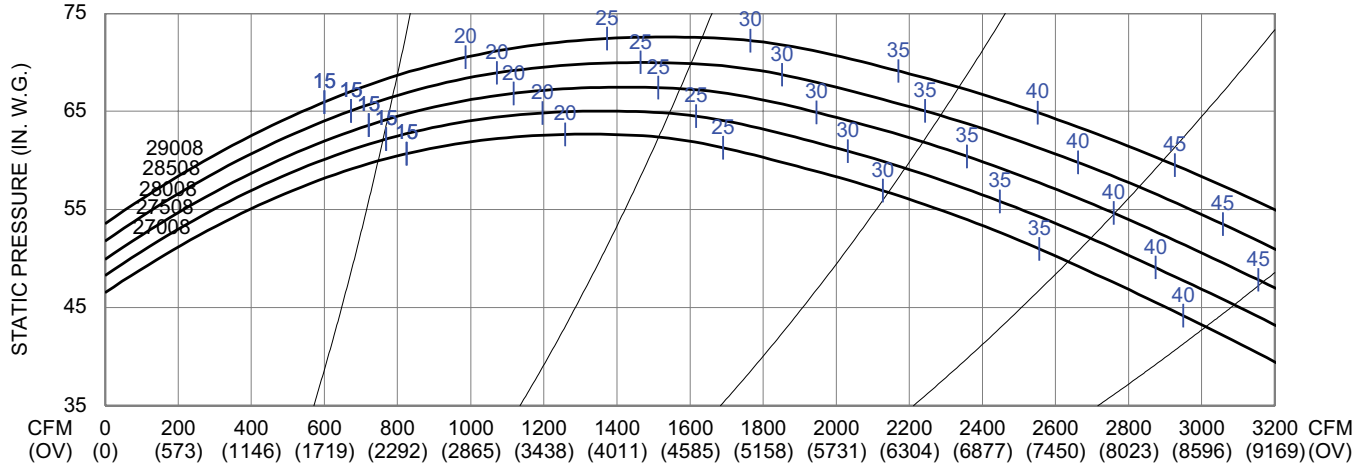


Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

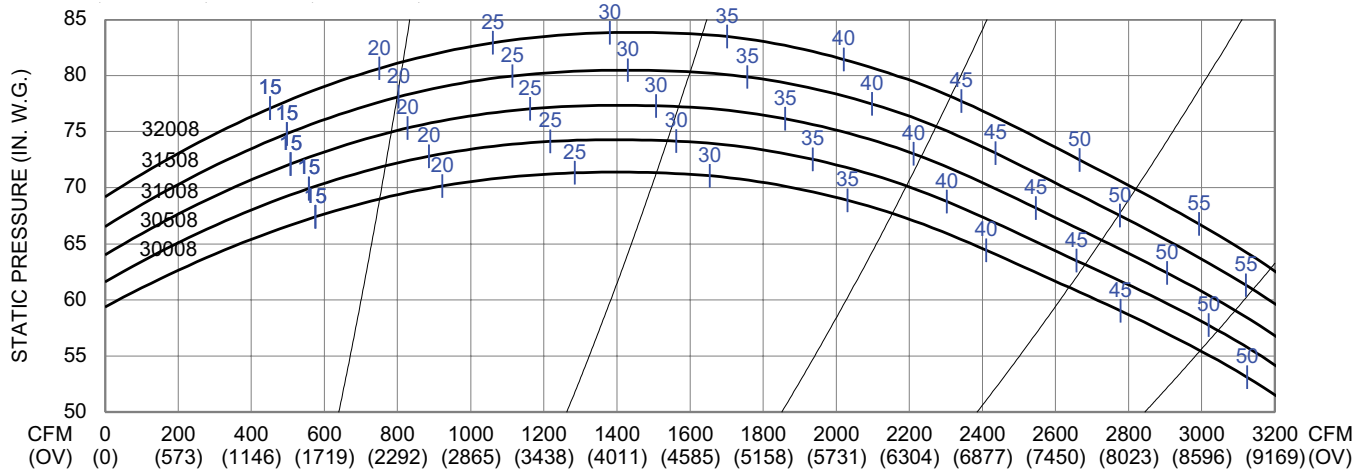
23N8, 24N8, 25N8, 26N8 — 3500 RPM



27008, 27508, 28008, 28508, 29008 — 3550 RPM

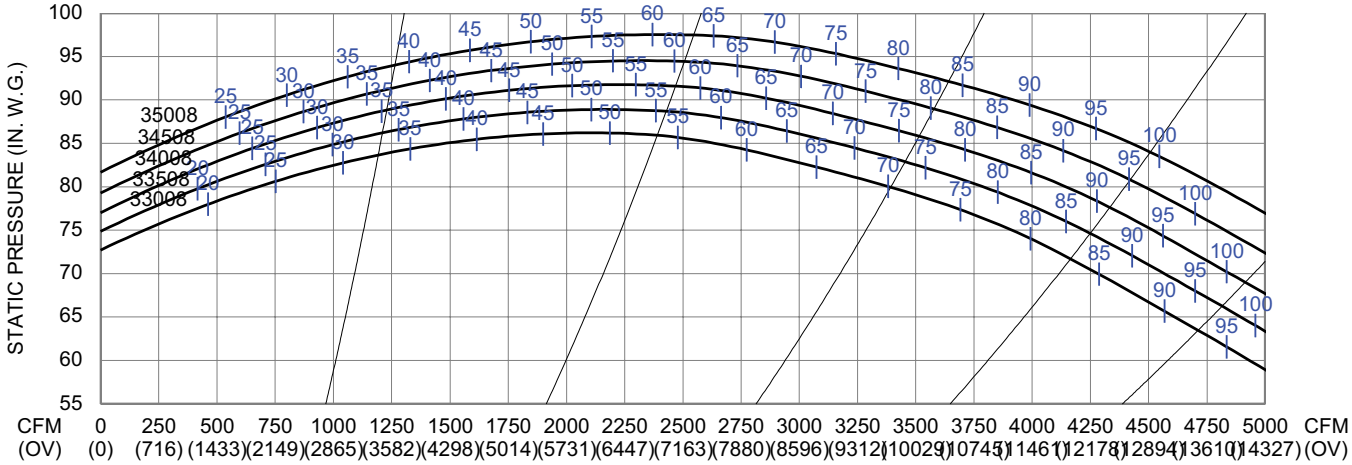


30008, 30508, 31008, 31508, 32008 — 3550 RPM



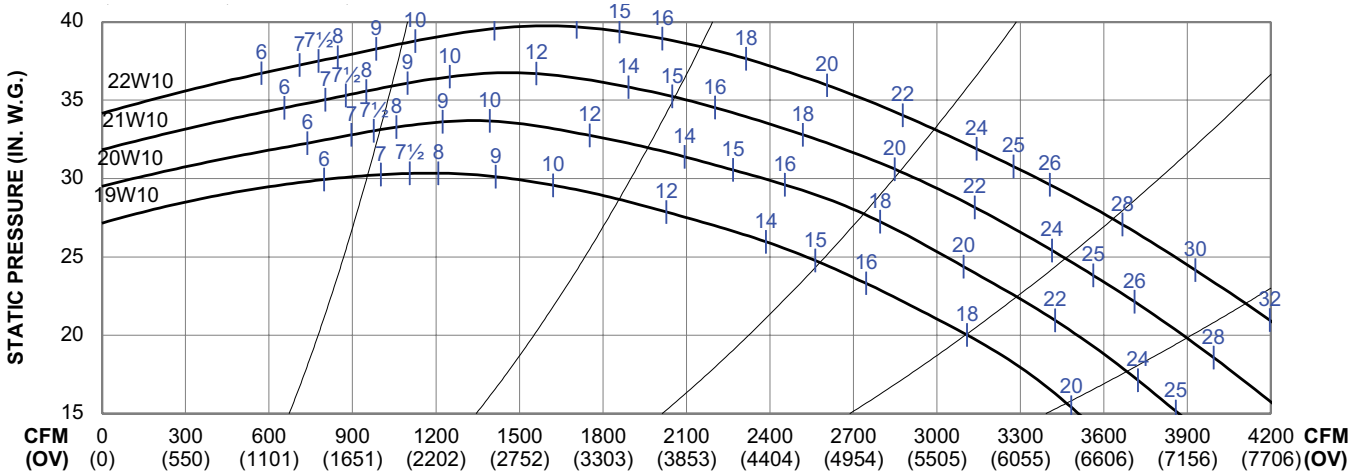
Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

33008, 33508, 34008, 34508, 35008 — 3550 RPM

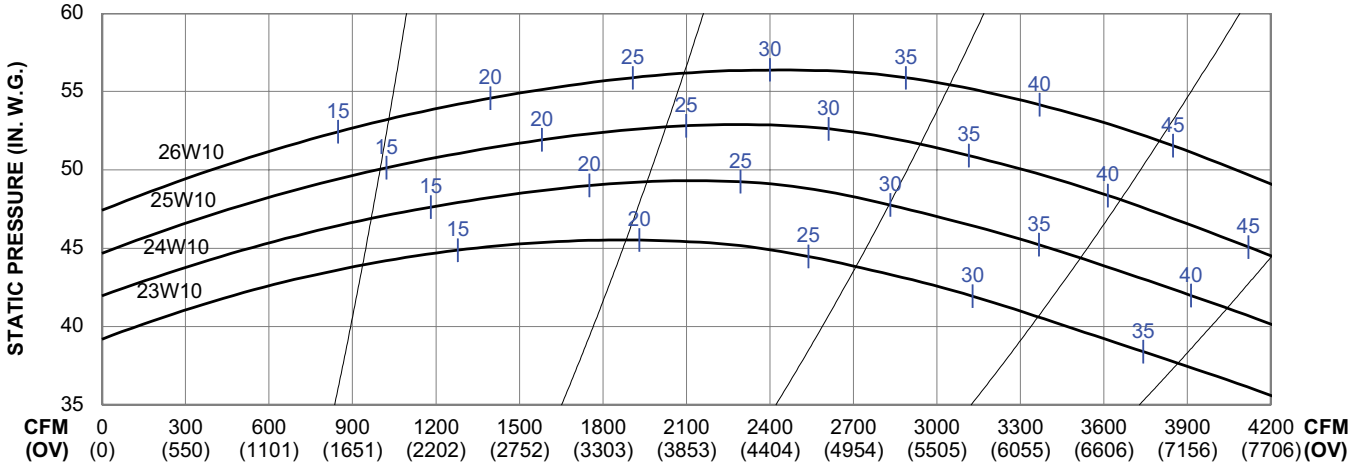


HPBA 10 In. Outlet — Outlet Area: 0.55 ft²

19W10, 20W10, 21W10, 22W10 — 3550 RPM

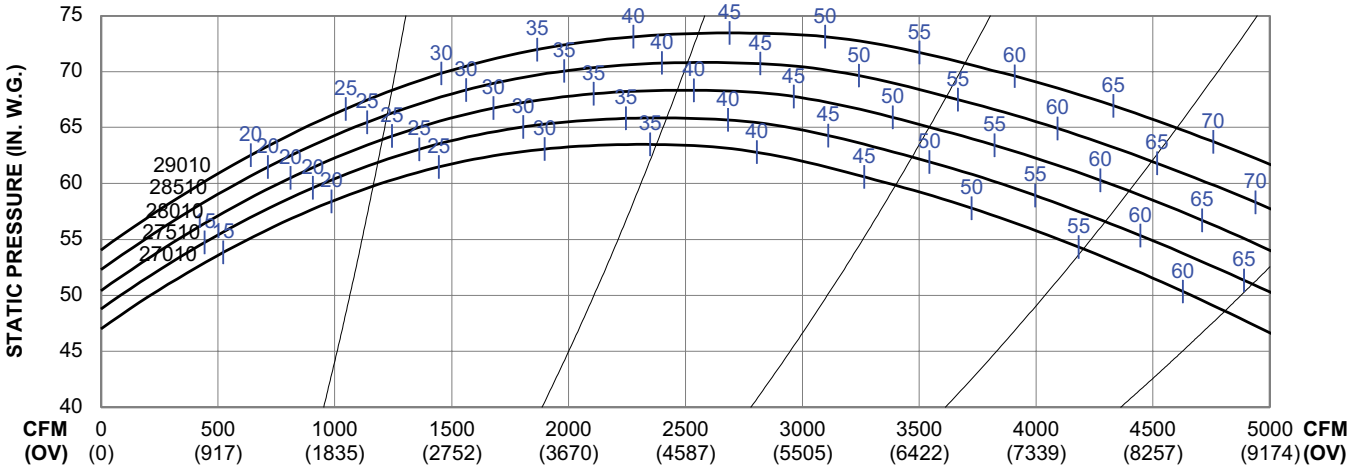


23W10, 24W10, 25W10, 26W10 — 3550 RPM

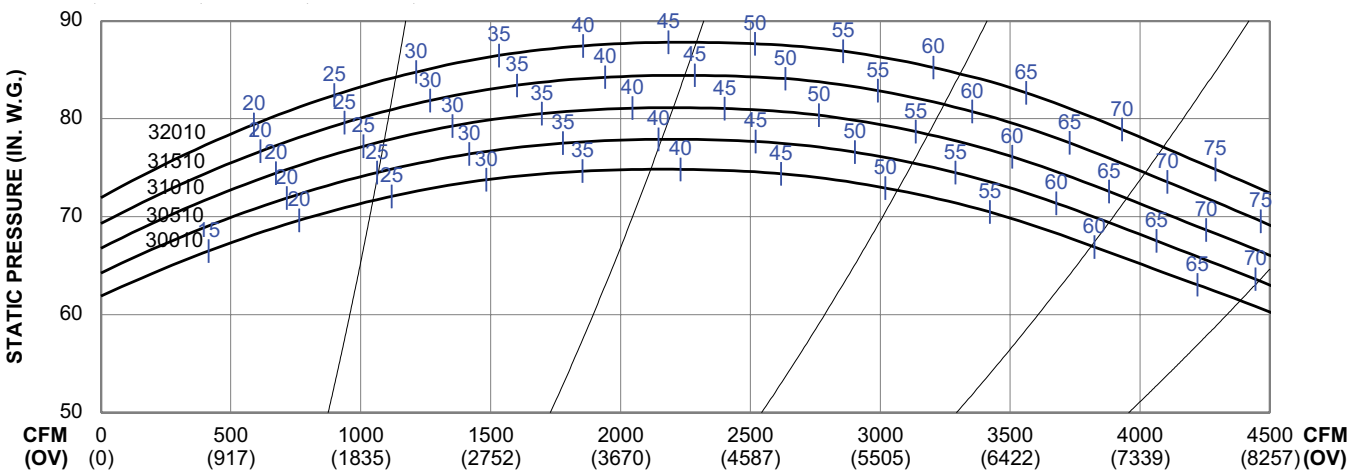


Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

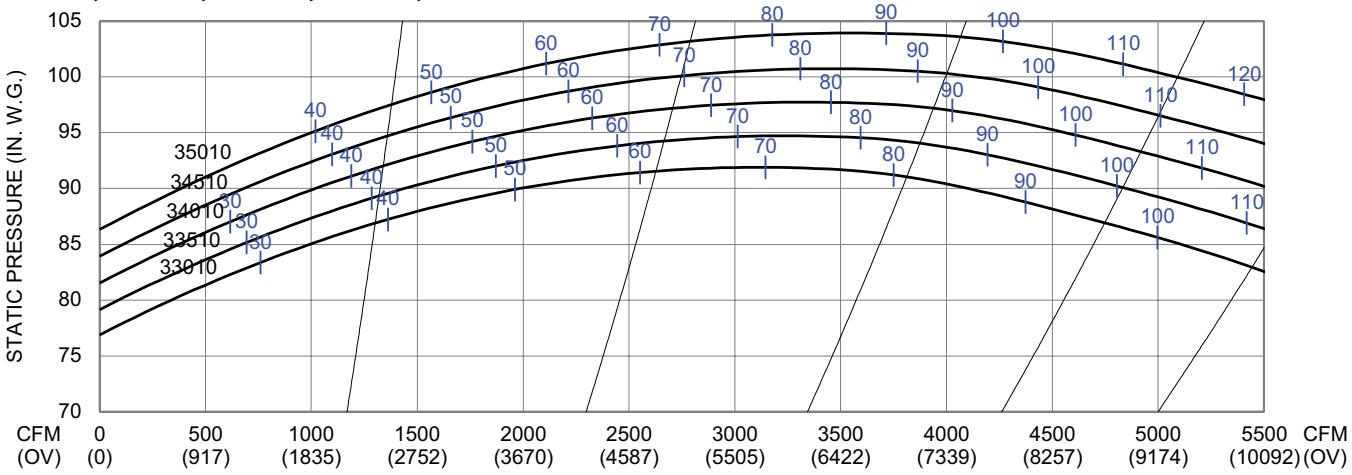
27010, 27510, 28010, 28510, 29010 — 3550 RPM



30010, 30510, 31010, 31510, 32010 — 3550 RPM



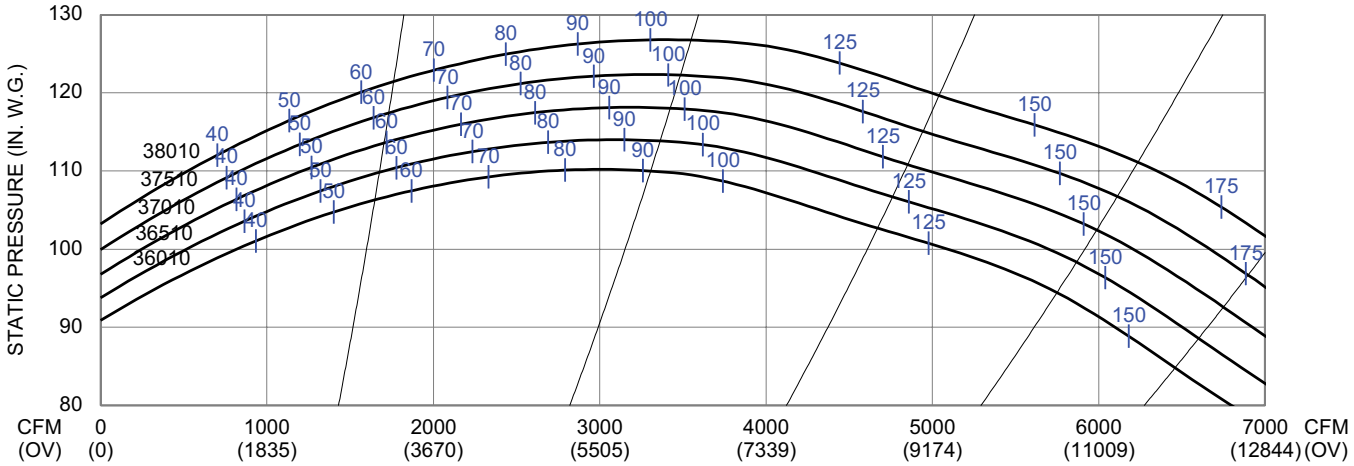
33010, 33510, 34010, 34510, 35010 — 3550 RPM



Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

36010, 36510, 37010, 37510, 38010

3550 RPM

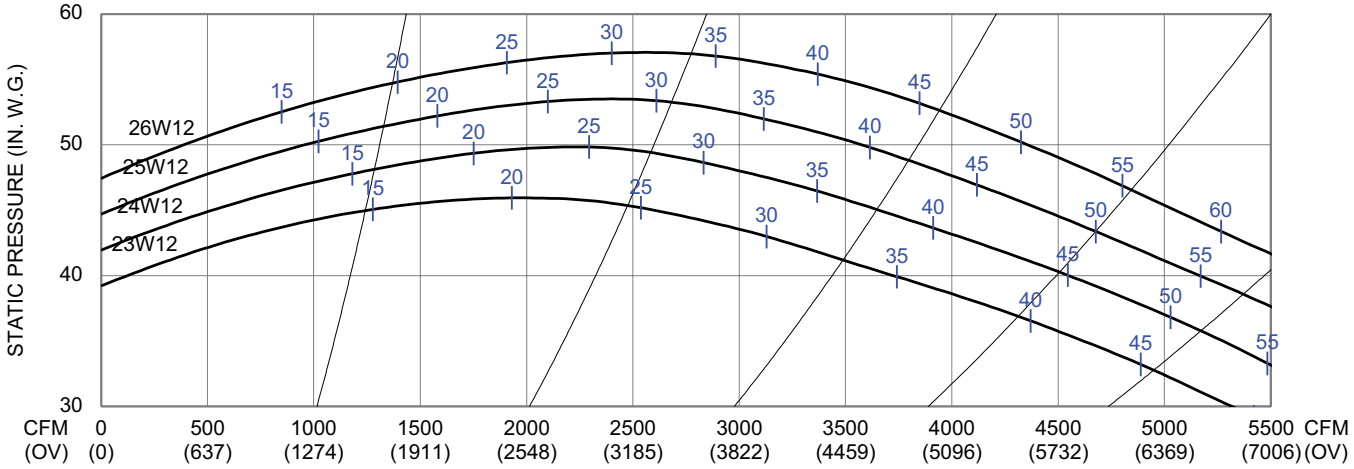


HPBA 12 In. Outlet

Outlet Area: 0.79 ft²

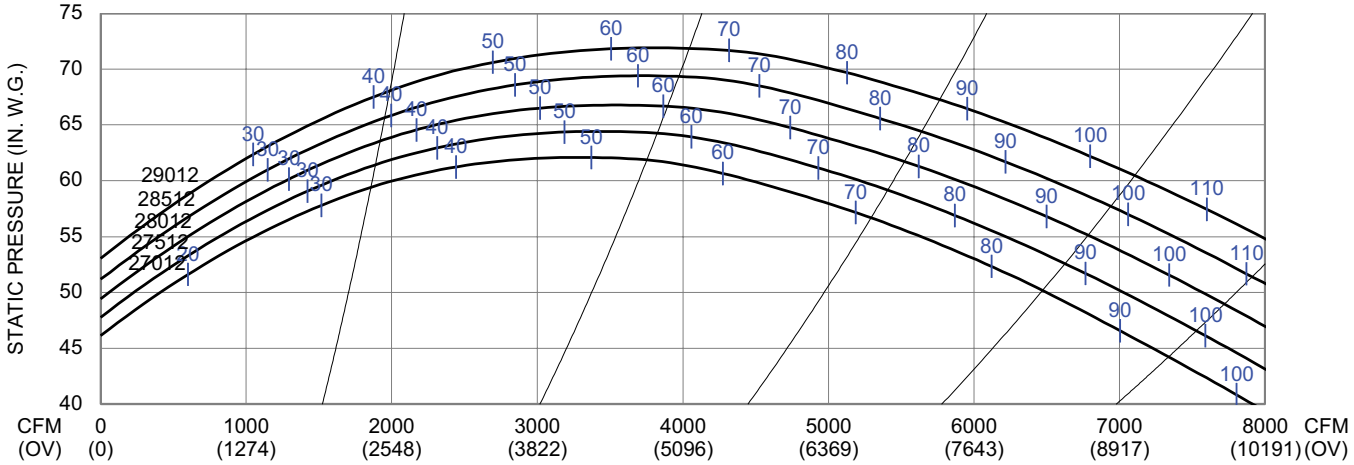
23W12, 24W12, 25W12, 26W12

3550 RPM



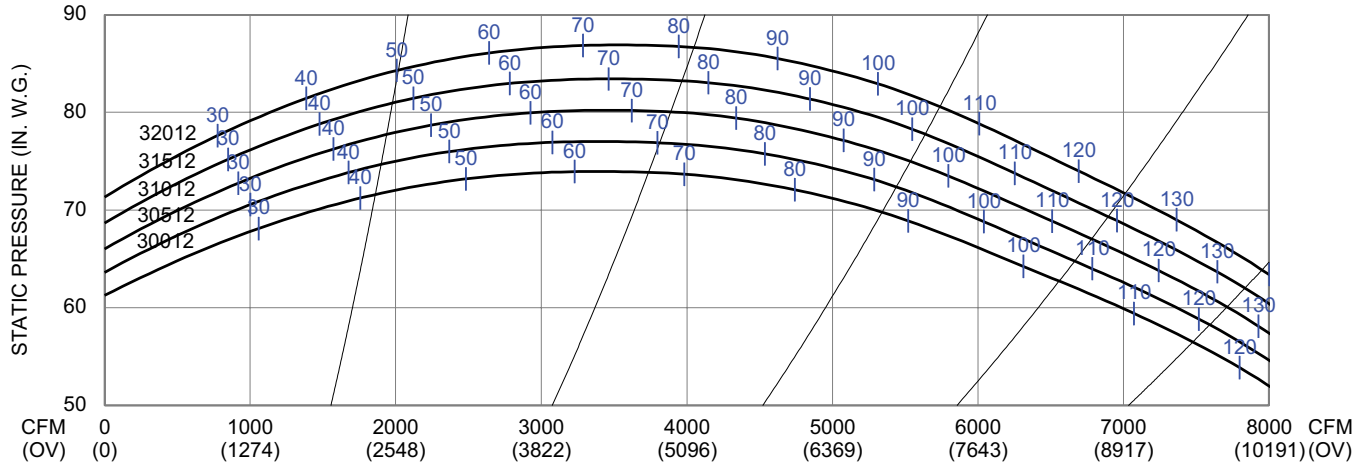
27012, 27512, 28012, 28512, 29012

3550 RPM

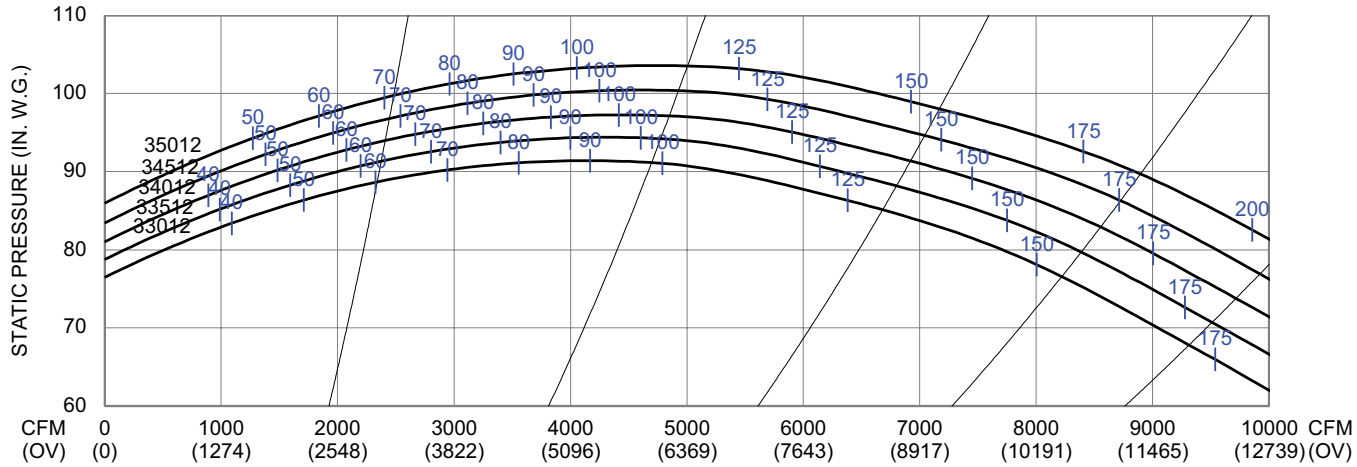


Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

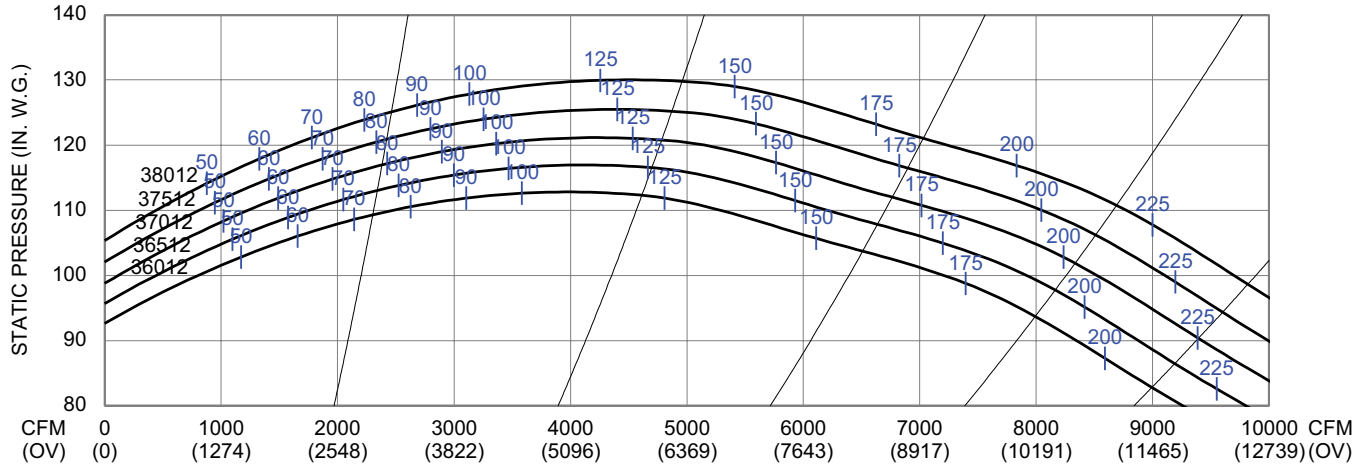
30012, 30512, 31012, 31512, 32012 — 3550 RPM



33012, 33512, 34012, 34512, 35012 — 3550 RPM



36012, 36512, 37012, 37512 — 3550 RPM



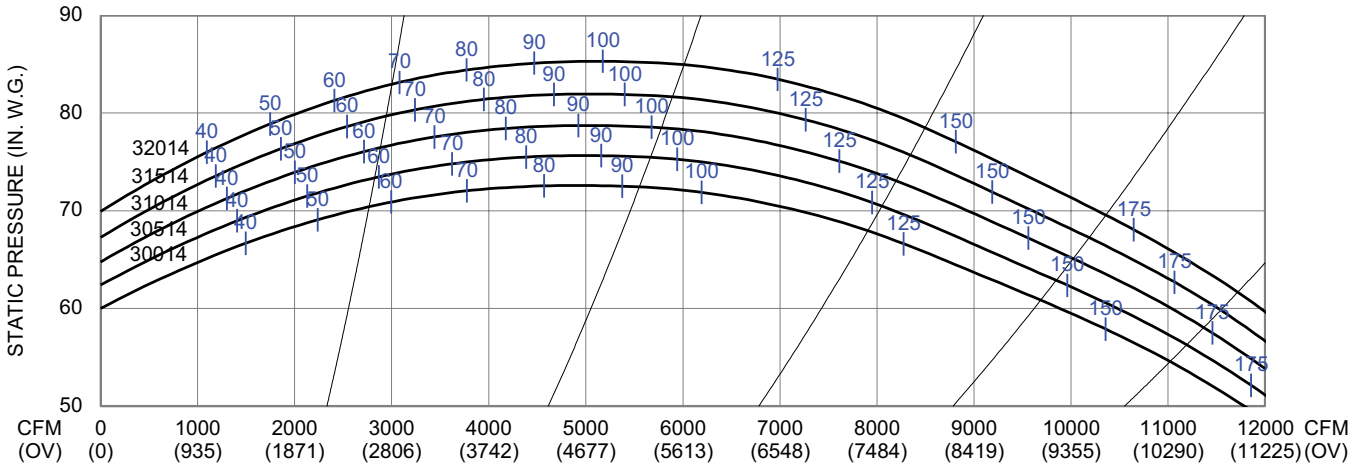
Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

HPBA 14 In. Outlet

Outlet Area: 1.07 ft^2

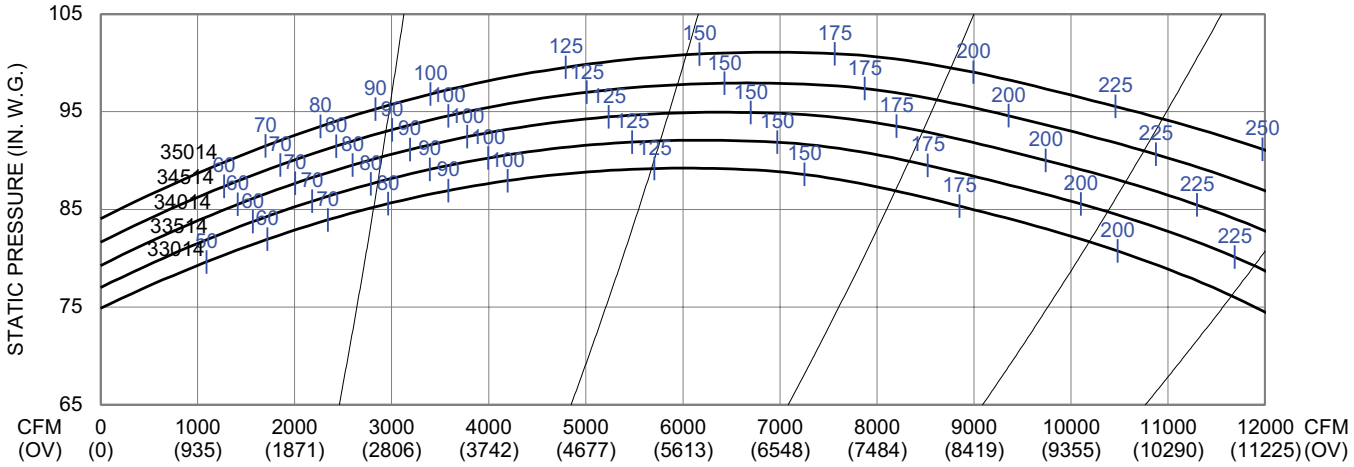
30014, 30514, 31014, 31514, 32014

3550 RPM



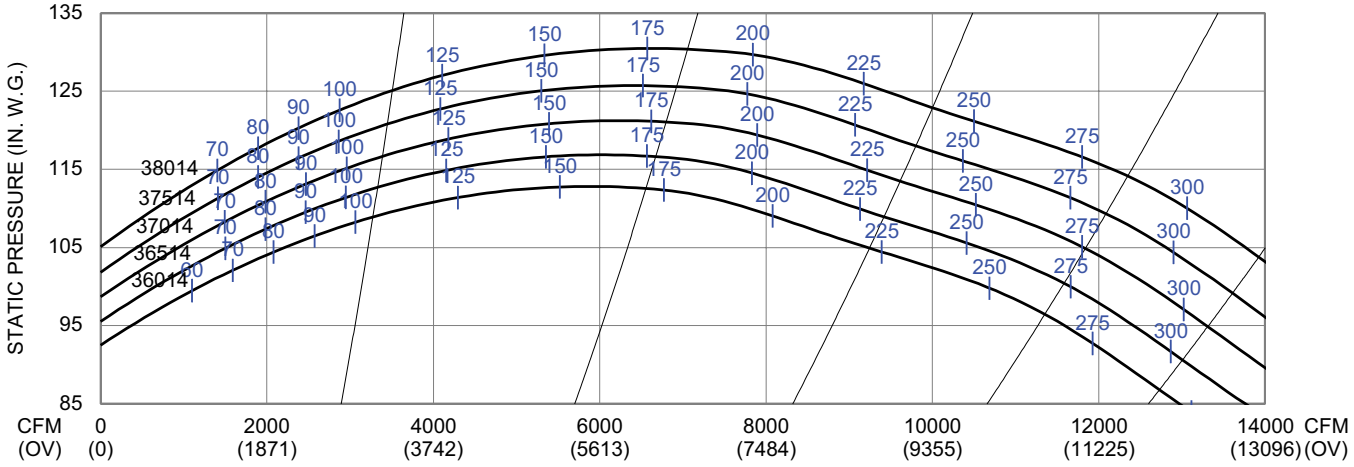
33014, 33514, 34014, 34514, 35014

3550 RPM



36014, 36514, 37014, 37514, 38014

3550 RPM

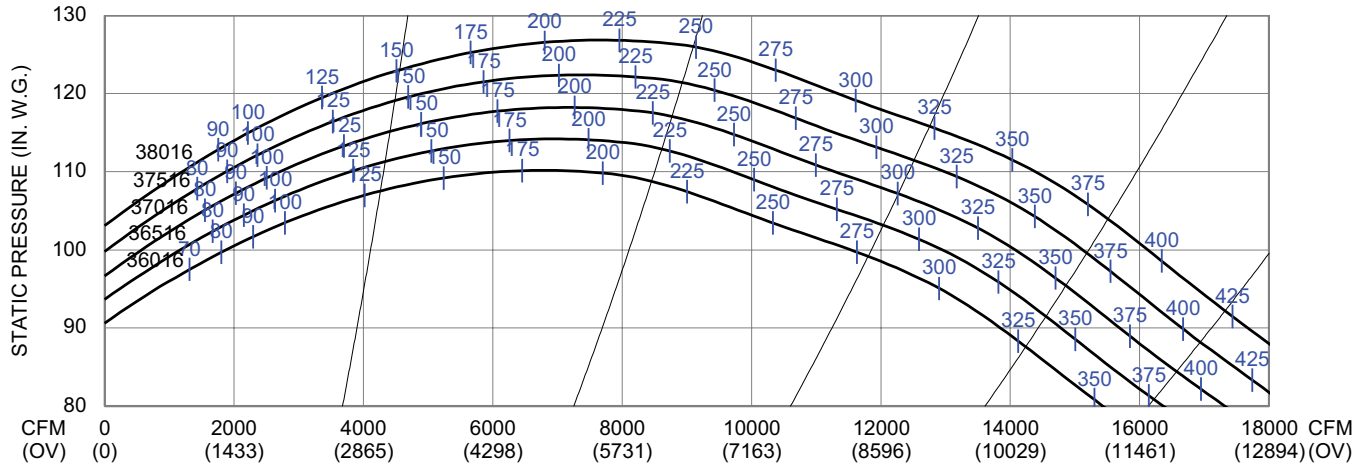


Performance shown is with a ducted outlet, and a ducted inlet or inlet with venturi.

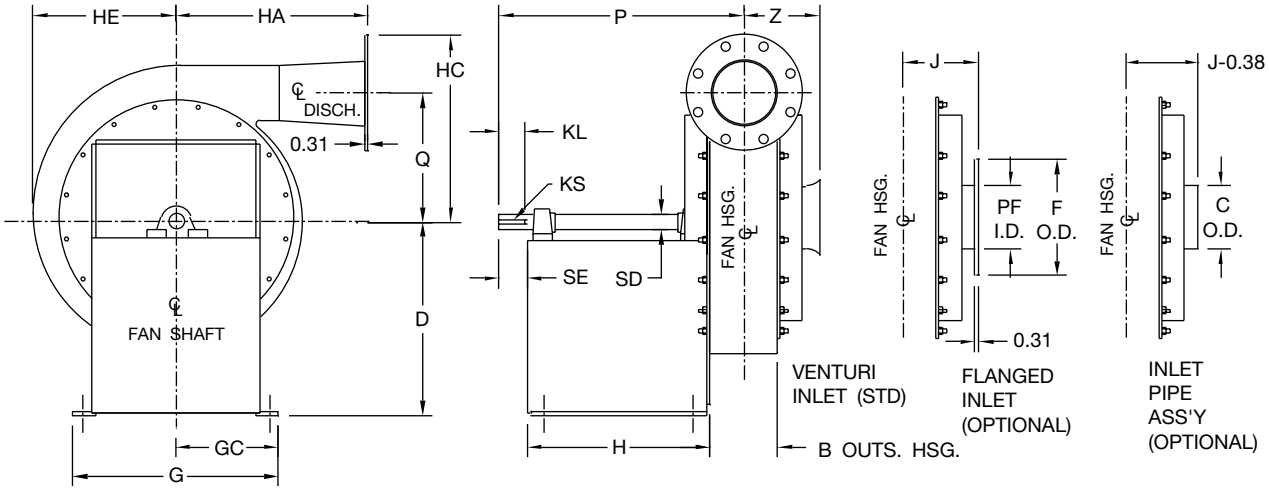
HPBA 16 In. Outlet

Outlet Area: 1.40 ft^2

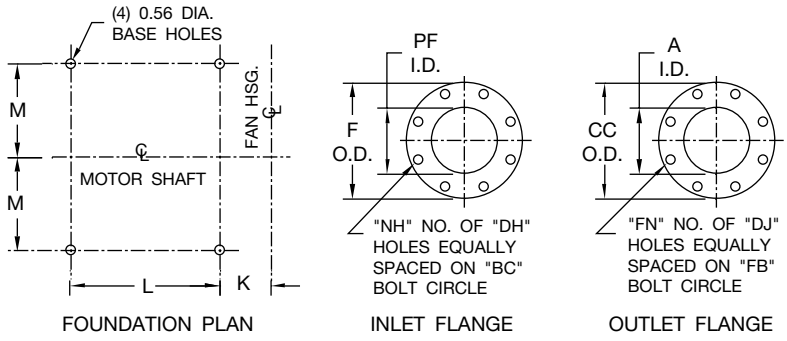
36016, 36516, 37016, 37516, 38016 **3550 RPM**

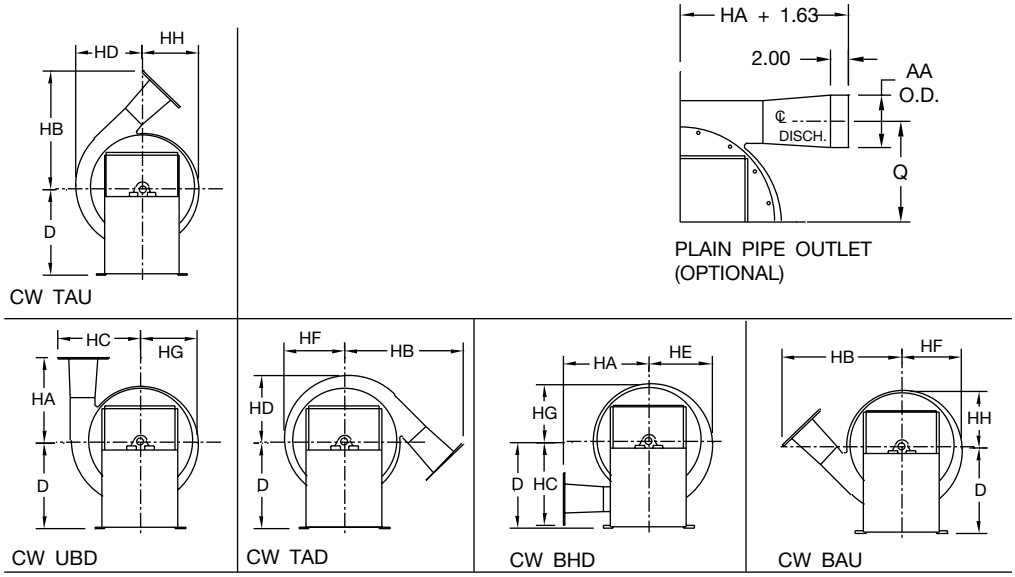


Arrangement 1 | Sizes 14 – 26



CLOCKWISE ROTATION
TOP HORIZONTAL DISCHARGE
'CW THD'
WITH STD. FLANGED OUTLET





Notes:
1. CW rotation shown, CCW rotation similar but opposite.
2. Bolt patterns on inlet and outlet flanges straddle centerline.
3. Inlet screen included with venturi inlet.

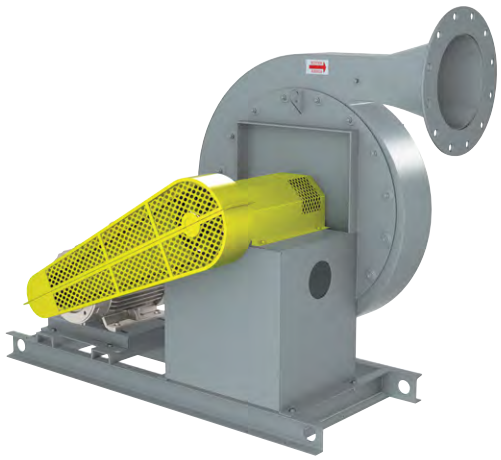
Arrangement 1 | Sizes 14 – 26

FAN SIZE	A	AA	B	BC	C	CC	D	DH	DJ	F	FB	FN	G	GC	H	HA	HB	HC
14N4, 15N4, 16N4, 17N4, 18N4	4.00	4.50	3.88	9.50	6.63	9.00	17.75	0.88	0.75	11.00	7.50	8	19.50	9.75	11.63	18.25	24.44	16.31
14W6, 15W6, 16W6, 17W6, 18W6	6.00	6.63	6.25	11.75	8.63	11.00	17.75	0.88	0.88	13.50	9.50	8	19.50	9.75	11.63	18.25	25.13	17.31
15W8, 16W8, 17W8, 18W8	8.00	8.63	6.25	11.75	8.63	13.50	17.75	0.88	0.88	13.50	11.75	8	19.50	9.75	11.63	18.25	26.00	18.56
19N4, 20N4, 21N4, 22N4	4.00	4.50	3.88	9.50	6.63	9.00	23.00	0.88	0.75	11.00	7.50	8	23.50	11.75	17.13	17.75	26.25	19.38
19N6, 20N6, 21N6, 22N6	6.00	6.63	3.88	9.50	6.63	11.00	23.00	0.88	0.88	11.00	9.50	8	23.50	11.75	17.13	17.75	26.94	20.38
19W8, 20W8, 21W8, 22W8	8.00	8.63	6.25	11.75	8.63	13.50	23.00	0.88	0.88	13.50	11.75	8	23.50	11.75	17.13	17.75	27.88	21.63
19W10, 20W10, 21W10, 22W10	10.00	10.75	6.25	14.25	8.63	16.00	23.00	1.00	1.00	16.00	14.25	12	23.50	11.75	17.13	21.75	31.56	22.88
23N6, 24N6, 25N6, 26N6	6.00	6.63	5.00	11.75	8.63	11.00	24.00	0.88	0.88	13.50	9.50	8	23.50	11.75	17.13	19.00	29.81	23.13
23N8, 24N8, 25N8, 26N8	8.00	8.63	5.00	11.75	8.63	13.50	24.00	0.88	0.88	13.50	11.75	8	23.50	11.75	17.13	19.00	30.69	24.38
23W10, 24W10, 25W10, 26W10	10.00	10.75	7.25	14.25	10.75	16.00	24.00	1.00	1.00	16.00	14.25	12	23.50	11.75	17.13	23.00	34.38	25.63
23W12, 24W12, 25W12, 26W12	12.00	12.75	7.25	17.00	10.75	19.00	24.00	1.00	1.00	19.00	17.00	12	23.50	11.75	17.13	23.00	35.44	27.13

FAN SIZE	HD	HE	HF	HG	HH	J	K	KL	KS	L	M	NH	P	PF	Q	SD	SE	Z
14N4, 15N4, 16N4, 17N4, 18N4	14.00	13.63	13.19	12.75	12.31	5.56	3.38	2.38	.25x.138	.63	8.88	8	16.19	6.00	11.75	1.19	2.63	4.56
14W6, 15W6, 16W6, 17W6, 18W6	14.00	13.63	13.19	12.75	12.31	6.69	4.50	2.38	.25x.138	.63	8.88	8	17.38	8.00	11.75	1.19	2.63	6.38
15W8, 16W8, 17W8, 18W8	14.00	13.63	13.19	12.75	12.31	6.69	4.50	2.38	.25x.138	.63	8.88	8	17.38	8.00	11.75	1.19	2.63	6.38
19N4, 20N4, 21N4, 22N4	17.00	16.50	16.00	15.50	15.00	6.06	3.38	3.25	.38x.19	14.13	10.88	8	23.06	6.00	14.88	1.44	4.00	4.56
19N6, 20N6, 21N6, 22N6	17.00	16.50	16.00	15.50	15.00	6.06	3.38	3.25	.38x.19	14.13	10.88	8	23.06	6.00	14.88	1.44	4.00	4.56
19W8, 20W8, 21W8, 22W8	17.00	16.50	16.00	15.50	15.00	6.69	4.50	3.25	.38x.19	14.13	10.88	8	24.13	8.00	14.88	1.44	3.88	6.38
19W10, 20W10, 21W10, 22W10	17.00	16.50	16.00	15.50	15.00	6.69	4.50	3.25	.38x.19	14.13	10.88	12	24.13	10.00	14.88	1.44	3.88	6.38
23N6, 24N6, 25N6, 26N6	20.00	19.50	18.88	18.25	17.69	6.94	3.88	3.88	.38x.19	14.13	10.88	8	24.13	8.00	17.63	1.44	4.50	5.25
23N8, 24N8, 25N8, 26N8	20.00	19.50	18.88	18.25	17.69	6.94	3.88	3.88	.38x.19	14.13	10.88	8	24.13	8.00	17.63	1.44	4.50	5.25
23W10, 24W10, 25W10, 26W10	20.00	19.50	18.88	18.25	17.69	7.19	5.00	3.88	.38x.19	14.13	10.88	12	25.25	10.00	17.63	1.44	4.50	6.88
23W12, 24W12, 25W12, 26W12	20.00	19.50	18.88	18.25	17.69	7.19	5.00	3.88	.38x.19	14.13	10.88	12	25.25	12.00	17.63	1.44	4.50	6.88

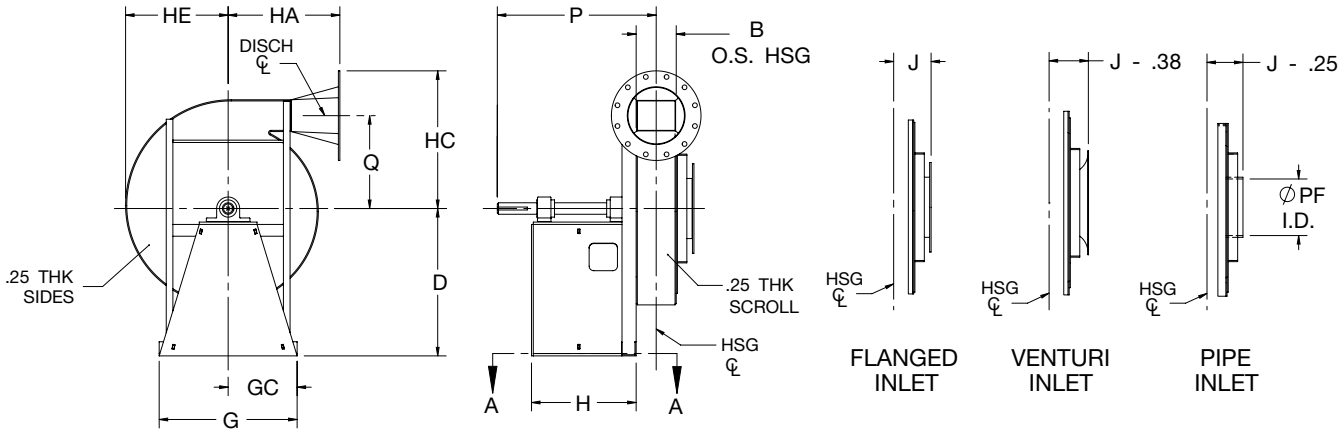
R-1004958-A

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

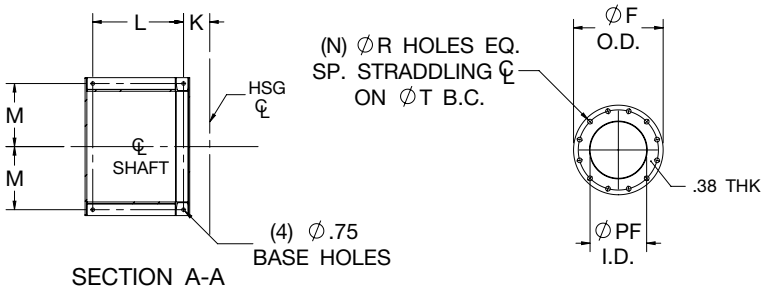


AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 1 | Sizes 27 – 38

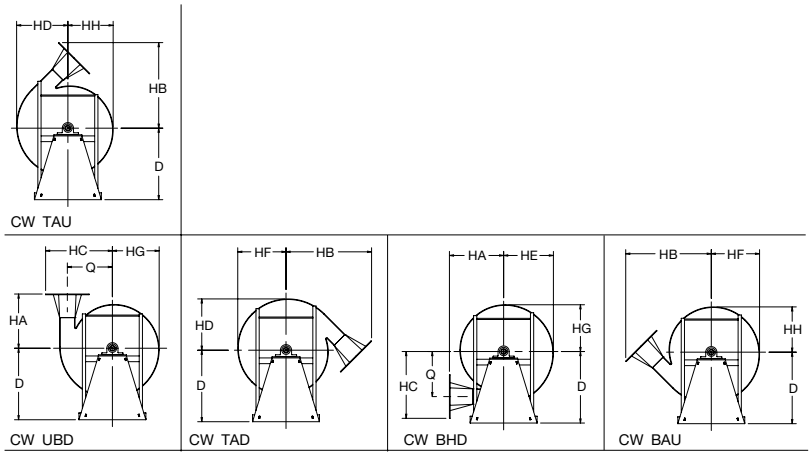


DRIVE SIDE VIEW
CW THD



SECTION A-A

INLET/OUTLET
FLANGED DETAIL



Notes:
1. CW rotation shown, CCW rotation similar but opposite.

Arrangement 1 | Sizes 27 – 38

FAN SIZE	D	HD	HE	HF	HG	HH	G	GC	L	M	Q
270xx – 290xx	31.25	22.44	21.75	21.13	20.44	19.81	29.25	14.63	19.25	13.38	19.75
300xx – 320xx	34.50	24.75	24.00	23.25	22.56	21.81	29.25	14.63	21.25	13.38	21.75
330xx – 350xx	36.75	27.44	26.63	25.81	25.00	24.19	29.25	14.63	23.25	14.38	24.13
360xx – 380xx	40.00	29.75	28.88	28.00	27.19	26.25	31.25	15.63	25.25	14.38	26.00

FAN SIZE	OUTLET SIZE	B	F	H	HA	HB	HC	J	K	N	P	PF	R	T
270xx – 290xx	xxx06	4.88	11.00	21.94	19.75	31.56	24.88	6.00	3.50	8	31.63	6.00	0.88	9.50
	xxx08	5.88	13.50	21.94	19.75	32.50	26.13	6.50	4.00	8	32.13	8.00	0.88	11.75
	xxx10	6.50	16.00	22.13	23.75	36.19	27.38	7.00	4.50	12	32.63	10.00	1.00	14.25
	xxx12	8.50	19.00	22.13	23.75	37.25	28.88	8.00	5.50	12	33.63	12.00	1.00	17.00
300xx – 320xx	xxx08	5.00	13.50	23.88	20.25	34.50	28.50	6.00	3.50	8	34.63	8.00	0.88	11.75
	xxx10	6.00	16.00	23.88	24.25	38.19	29.75	7.00	4.00	12	35.13	10.00	1.00	14.25
	xxx12	7.13	19.00	24.19	24.25	39.25	31.25	7.38	4.88	12	36.00	12.00	1.00	17.00
	xxx14	9.38	21.00	24.19	28.25	42.81	32.25	8.50	6.00	12	37.13	14.00	1.13	18.75
330xx – 350xx	xxx08	6.00	13.50	25.88	28.75	42.19	30.88	6.50	4.00	8	36.88	8.00	0.88	11.75
	xxx10	6.63	16.00	26.06	28.75	43.06	32.13	7.00	4.50	12	37.44	10.00	1.00	14.25
	xxx12	7.13	19.00	26.19	28.75	44.13	33.63	7.38	4.88	12	37.75	12.00	1.00	17.00
	xxx14	9.38	21.00	26.19	28.75	44.88	34.63	8.50	6.00	12	38.88	14.00	1.13	18.75
360xx – 380xx	xxx10	6.13	16.00	27.81	29.25	44.75	34.00	6.50	4.00	12	38.88	10.00	1.00	14.25
	xxx12	6.75	19.00	28.19	29.25	45.81	35.50	7.13	4.63	12	39.56	12.00	1.00	17.00
	xxx14	8.75	21.00	28.19	29.25	46.50	36.50	8.13	5.63	12	40.56	14.00	1.13	18.75
	xxx16	9.50	23.50	28.13	29.25	47.44	37.75	8.50	6.00	16	40.88	16.00	1.13	21.25

R-1005812-A

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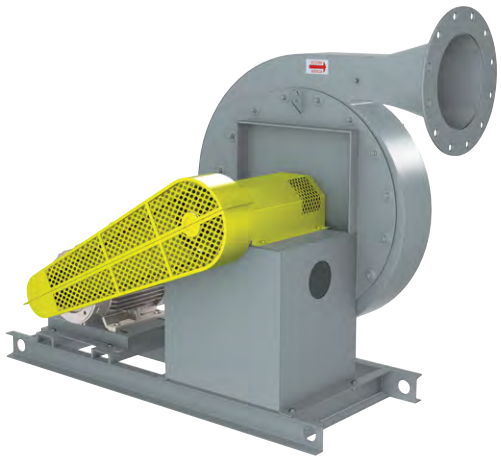
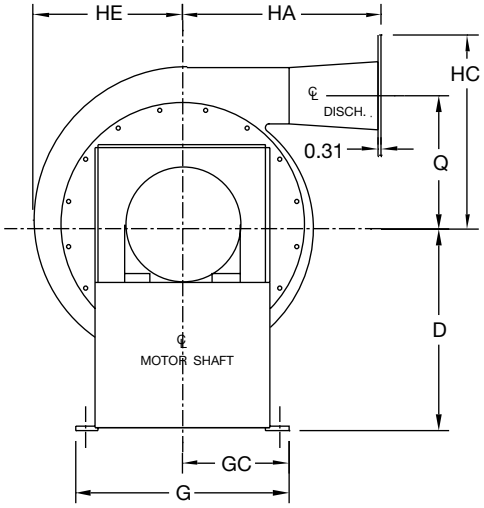
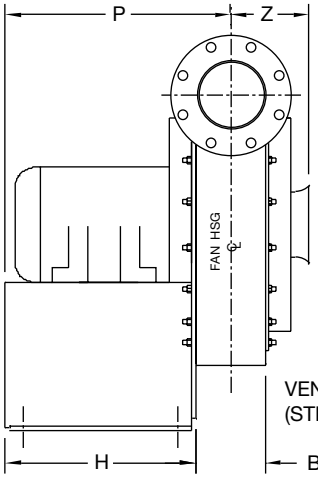


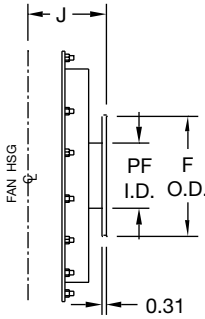
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 4 | Sizes 14 – 26

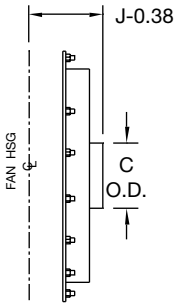




VENTURI INLET (STD)

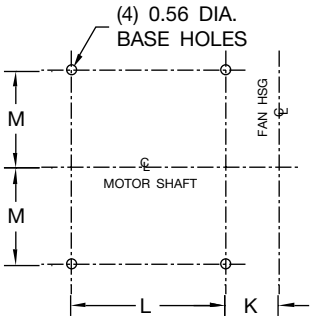


FLANGED INLET (OPTIONAL)

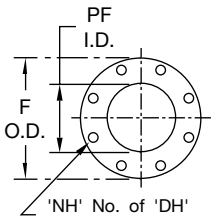


INLET PIPE ASSEMBLY (OPTIONAL)

CLOCKWISE ROTATION
TOP HORIZONTAL DISCHARGE
'CW THD'
WITH STD. FLANGED OUTLET

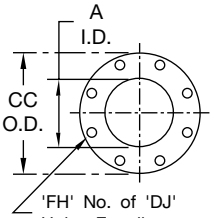


FOUNDATION PLAN



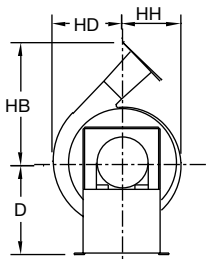
'NH' No. of 'DH' Holes Equally Spaced on 'BC' Bolt Circle

INLET FLANGE

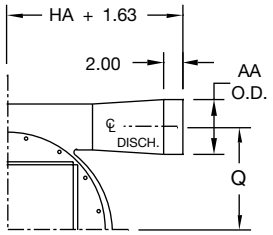


'FH' No. of 'DJ' Holes Equally Spaced on 'FB' Bolt Circle

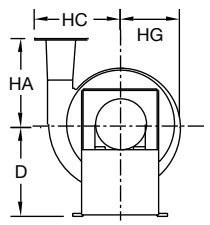
OUTLET FLANGE



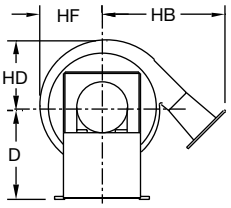
CW TAU



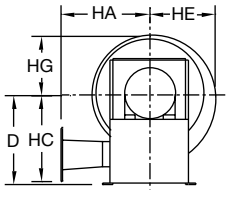
PLAIN PIPE OUTLET (OPTIONAL)



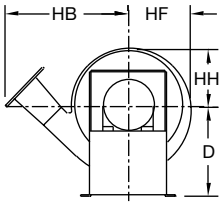
CW UBD



CW TAD



CW BHD



CW BAU

Notes:
1. CW rotation shown, CCW rotation similar but opposite.
2. Bolt patterns on inlet and outlet flanges straddle centerline.
3. Inlet screen included with venturi inlet.

Arrangement 4 | Sizes 14 – 26

FAN SIZE	MOTOR FRAME	A	AA	B	BC	C	CC	D	DH	DJ	F	FB	FN	G	GC	H	HA
14N4, 15N4 16N4, 17N4, 18N4	143T & 145T	4.00	4.50	3.88	9.50	6.63	9.00	17.75	0.88	0.75	11.00	7.50	8	19.50	9.75	11.63	18.25
	182T & 184T							19.00								17.13	
14W6, 15W6 16W6, 17W6, 18W6	143T & 145T	6.00	6.63	6.25	11.75	8.63	11.00	17.75	0.88	0.88	13.50	9.50	8	19.50	9.75	11.63	18.25
	182T & 184T							19.00								17.13	
15W8, 16W8 17W8, 18W8	182T & 184T	8.00	8.63	6.25	11.75	8.63	13.50	19.00	0.88	0.88	13.50	11.75	8	19.50	9.75	17.13	18.25
	213T & 215T							19.75								17.13	
19N4, 20N4 21N4, 22N4	145T	4.00	4.50	3.88	9.50	6.63	9.00	23.00	0.88	0.75	11.00	7.50	8	23.50	11.75	17.13	17.75
	182T & 184T							24.00								17.13	
19N6, 20N6 21N6, 22N6	182T & 184T	6.00	6.63	3.88	9.50	6.63	11.00	24.00	0.88	0.88	11.00	9.50	8	23.50	11.75	17.13	17.75
	213T & 215T							24.75								17.13	
19W8, 20W8 21W8, 22W8	182T & 184T	8.00	8.63	6.25	11.75	8.63	13.50	24.00	0.88	0.88	13.50	11.75	8	23.50	11.75	17.13	17.75
	213T & 215T							24.75								17.13	
	254T & 256T							26.00								22.50	
19W10, 20W10 21W10, 22W10	213T & 215T	10.00	10.75	6.25	14.25	8.63	16.00	24.75	1.00	1.00	16.00	14.25	12	23.50	11.75	17.13	21.75
	254T & 256T							26.00								22.50	
	284TS							26.75								22.50	
23N6, 24N6 25N6, 26N6	184T	6.00	6.63	5.00	11.75	8.63	11.00	24.00	0.88	0.88	13.50	9.50	8	23.50	11.75	17.13	19.00
	213T & 215T							24.75								17.13	
	254T & 256T							26.00								22.50	
23N8, 24N8 25N8, 26N8	213T & 215T	8.00	8.63	5.00	11.75	8.63	13.50	24.75	0.88	0.88	13.50	11.75	8	23.50	11.75	17.13	19.00
	254T & 256T							26.00								22.50	
23W10, 24W10 25W10, 26W10	254T & 256T	10.00	10.75	7.25	14.25	10.75	16.00	26.00	1.00	1.00	16.00	14.25	12	23.50	11.75	22.50	23.00
	284TS							26.75								22.50	
	286TS							28.25								26.50	
	324TS & 326TS							29.25								26.50	
23W12, 24W12 25W12, 26W12	286TS	12.00	12.75	7.25	17.00	10.75	19.00	28.25	1.00	1.00	19.00	17.00	12	23.50	11.75	26.50	23.00
	324TS & 326TS							29.25								26.50	

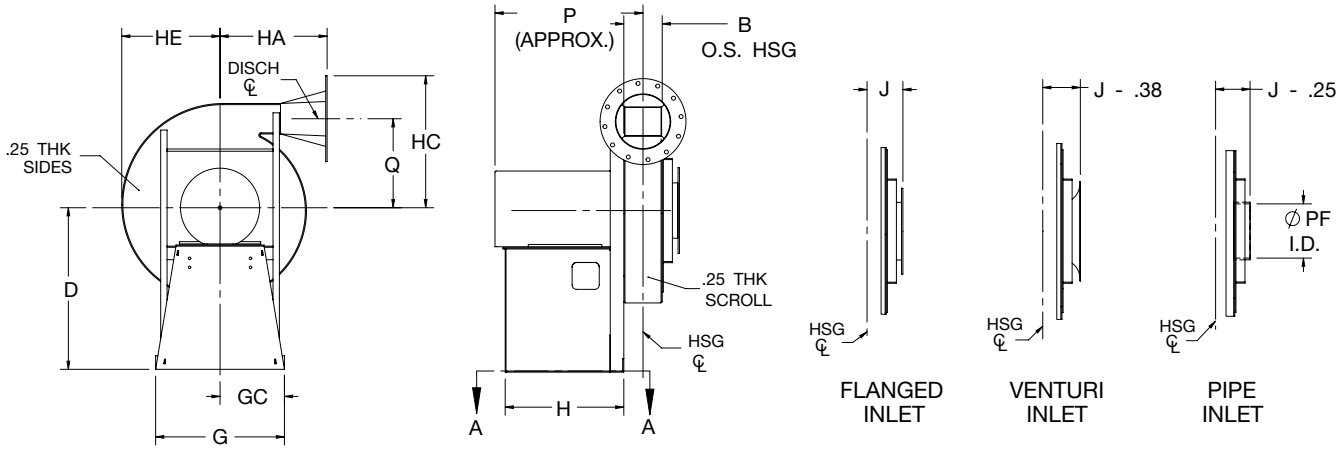
FAN SIZE	MOTOR FRAME	HB	HC	HD	HE	HF	HG	HH	J	K	L	M	NH	P	PF	Q	Z
14N4, 15N4 16N4, 17N4, 18N4	143T & 145T	24.44	16.31	14.00	13.63	13.19	12.75	12.31	5.56	3.38	8.63	8.88	8	13.56	6.00	11.75	4.56
	182T & 184T										14.13			19.06			
14W6, 15W6 16W6, 17W6, 18W6	143T & 145T	25.13	17.31	14.00	13.63	13.19	12.75	12.31	6.69	4.50	8.63	8.88	8	14.75	8.00	11.75	6.38
	182T & 184T										14.13			20.25			
15W8, 16W8 17W8, 18W8	182T & 184T	26.00	18.56	14.00	13.63	13.19	12.75	12.31	6.69	4.50	14.13	8.88	8	20.25	8.00	11.75	6.38
	213T & 215T										14.13			20.25			
19N4, 20N4 21N4, 22N4	145T	26.25	19.38	17.00	16.50	16.00	15.50	15.00	6.06	3.38	14.13	10.88	8	19.06	6.00	14.88	4.56
	182T & 184T										14.13			19.06			
19N6, 20N6 21N6, 22N6	182T & 184T	26.94	20.38	17.00	16.50	16.00	15.50	15.00	6.06	3.38	14.13	10.88	8	19.06	6.00	14.88	4.56
	213T & 215T										14.13			19.06			
19W8, 20W8 21W8, 22W8	182T & 184T	27.88	21.63	17.00	16.50	16.00	15.50	15.00	6.69	4.50	14.13	10.88	8	20.25	8.00	14.88	6.38
	213T & 215T										14.13			20.25			
	254T & 256T										19.50			25.63			
19W10, 20W10 21W10, 22W10	213T & 215T	31.56	22.88	17.00	16.50	16.00	15.50	15.00	6.69	4.50	14.13	10.88	12	20.25	10.00	14.88	6.38
	254T & 256T										19.50			25.63			
	284TS										19.50			25.63			
23N6, 24N6 25N6, 26N6	184T	29.81	23.13	20.00	19.50	18.88	18.25	17.69	6.94	3.88	14.13	10.88	8	19.63	8.00	17.63	5.25
	213T & 215T										14.13			19.63			
	254T & 256T										19.50			25.00			
23N8, 24N8 25N8, 26N8	213T & 215T	30.69	24.38	20.00	19.50	18.88	18.25	17.69	6.94	3.88	14.13	10.88	8	19.63	8.00	17.63	5.25
	254T & 256T										19.50			25.00			
23W10, 24W10 25W10, 26W10	254T & 256T	34.38	25.63	20.00	19.50	18.88	18.25	17.69	7.19	5.00	19.50	10.88	12	26.13	10.00	17.63	6.88
	284TS										19.50			26.13			
	286TS										23.50			30.13			
	324TS & 326TS										23.50			30.13			
23W12, 24W12 25W12, 26W12	286TS	35.44	27.13	20.00	19.50	18.88	18.25	17.69	7.19	5.00	23.50	10.88	12	30.13	12.00	17.63	6.88
	324TS & 326TS										23.50			30.13			

R-1004957-A

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 4 | Sizes 27 – 38

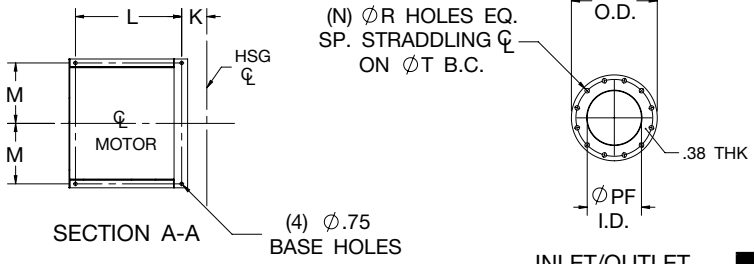


DRIVE SIDE VIEW CW THD

FLANGED INLET

VENTURI INLET

PIPE INLET

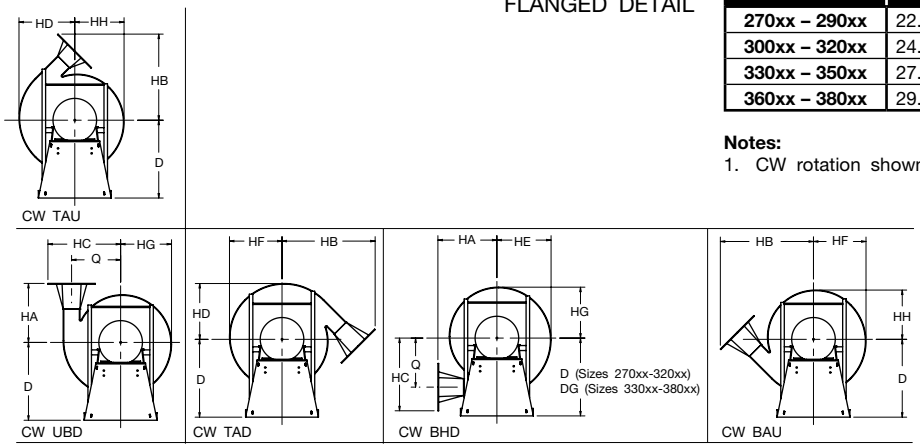


SECTION A-A

INLET/OUTLET FLANGED DETAIL

FAN SIZE	HD	HE	HF	HG	HH	Q
270xx – 290xx	22.44	21.75	21.13	20.44	19.81	19.75
300xx – 320xx	24.75	24.00	23.25	22.56	21.81	21.75
330xx – 350xx	27.44	26.63	25.81	25.00	24.19	24.13
360xx – 380xx	29.75	28.88	28.00	27.19	26.25	26.00

Notes:
1. CW rotation shown, CCW rotation similar but opposite.



FAN SIZE	OUTLET SIZE	B	F	HA	HB	HC	J	N	PF	R	T
270xx – 290xx	xxx06	4.88	11.00	19.75	31.56	24.88	6.00	8	6.00	0.88	9.50
	xxx08	5.88	13.50	19.75	32.50	26.13	6.50	8	8.00	0.88	11.75
	xxx10	6.50	16.00	23.75	36.19	27.38	7.00	12	10.00	1.00	14.25
	xxx12	8.50	19.00	23.75	37.25	28.88	8.00	12	12.00	1.00	17.00
300xx – 320xx	xxx08	5.00	13.50	20.25	34.50	28.50	6.00	8	8.00	0.88	11.75
	xxx10	6.00	16.00	24.25	38.19	29.75	7.00	12	10.00	1.00	14.25
	xxx12	7.13	19.00	24.25	39.25	31.25	7.38	12	12.00	1.00	17.00
	xxx14	8.50	21.00	28.25	42.81	32.25	8.50	12	14.00	1.13	18.75
330xx – 350xx	xxx08	6.00	13.50	28.75	42.19	30.88	6.50	8	8.00	0.88	11.75
	xxx10	6.63	16.00	28.75	43.06	32.13	7.00	12	10.00	1.00	14.25
	xxx12	7.13	19.00	28.75	44.13	33.63	7.38	12	12.00	1.00	17.00
	xxx14	9.38	21.00	28.75	44.88	34.63	8.50	12	14.00	1.13	18.75
360xx – 380xx	xxx10	6.13	16.00	29.25	44.75	34.00	6.50	12	10.00	1.00	14.25
	xxx12	6.75	19.00	29.25	45.81	35.50	7.13	12	12.00	1.00	17.00
	xxx14	8.75	21.00	29.25	46.50	36.50	8.13	12	14.00	1.13	18.75
	xxx16	9.50	23.50	29.25	47.44	37.75	8.50	16	16.00	1.13	21.25

Arrangement 4 | Sizes 27 – 38

FAN SIZE	MOTOR FRAME	D	DG	G	GC	L	M
270xx – 290xx	254T – 256T	34.00	–	28.50	14.25	23.50	13.38
	284TS – 286TS	34.75	–	28.50	14.25	23.50	13.38
	324TS – 326TS	35.75	–	28.50	14.25	23.50	13.38
	364TS – 365TS	34.50	–	29.25	14.63	31.50	13.38
	404TS – 405TS	35.50	–	29.25	14.63	31.50	13.38
300xx – 320xx	254T – 256T	34.00	–	28.50	14.25	23.50	13.38
	284TS – 286TS	34.75	–	28.50	14.25	23.50	13.38
	324TS – 326TS	35.75	–	28.50	14.25	23.50	13.38
	364TS – 365TS	34.50	–	29.25	14.63	31.50	13.38
	404TS – 405TS	35.50	–	29.25	14.63	31.50	13.38
	444TS – 445TS	34.50	–	31.25	15.63	43.50	14.38
	447TS – 449TS	34.50	–	31.25	15.63	43.50	14.38
330xx – 350xx	254T – 256T	35.50	35.50	31.25	15.63	20.50	14.38
	284TS – 286TS	36.25	36.25	31.25	15.63	23.00	14.38
	324TS – 326TS	37.25	37.25	31.25	15.63	25.75	14.38
	364TS – 365TS	32.63	39.25	31.25	15.63	31.50	14.38
	404TS – 405TS	33.63	40.25	31.25	15.63	31.50	14.38
	444TS – 445TS	37.75	39.13	31.25	15.63	43.50	14.38
	447TS – 449TS	37.75	39.13	31.25	15.63	43.50	14.38
360xx – 380xx	254T – 256T	35.50	35.50	31.25	15.63	20.50	14.38
	284TS – 286TS	36.25	36.25	31.25	15.63	23.00	14.38
	324TS – 326TS	37.25	37.25	31.25	15.63	25.75	14.38
	364TS – 365TS	32.63	39.25	31.25	15.63	31.50	14.38
	404TS – 405TS	33.63	40.25	31.25	15.63	31.50	14.38
	444TS – 445TS	37.75	39.13	31.25	15.63	43.50	14.38
	447TS – 449TS	37.75	39.13	31.25	15.63	43.50	14.38

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

FAN SIZE	MOTOR FRAME	H						K						P					
		xxx06	xxx08	xxx10	xxx12	xxx14	xxx16	xxx06	xxx08	xxx10	xxx12	xxx14	xxx16	xxx06	xxx08	xxx10	xxx12	xxx14	xxx16
270xx – 290xx	254T – 256T	26.06	26.06	26.31	26.25	–		3.50	4.00	4.50	5.50	–	–	24.00	26.50	26.88	27.56	–	–
	284TS – 286TS	26.06	26.06	26.31	26.25	–		3.50	4.00	4.50	5.50	–	–	26.50	29.06	29.38	30.06	–	–
	324TS – 326TS	26.13	26.13	26.38	26.31	–		3.50	4.00	4.50	5.50	–	–	28.50	31.06	31.44	32.06	–	–
	364TS – 365TS	–	34.19	34.44	34.38	–		3.50	4.00	4.50	5.50	–	–	–	33.19	33.50	34.19	–	–
	404TS – 405TS	–	34.19	34.44	34.38	–		3.50	4.00	4.50	5.50	–	–	–	37.00	37.44	38.06	–	–
300xx – 320xx	254T – 256T	–	26.00	26.00	26.31		–	3.50	4.00	4.88	6.00	–	–	–	26.25	26.63	27.13	27.88	–
	284TS – 286TS	–	26.00	26.00	26.31		–	3.50	4.00	4.88	6.00	–	–	–	28.75	29.13	29.63	30.38	–
	324TS – 326TS	–	26.06	26.06	26.38		–	3.50	4.00	4.88	6.00	–	–	–	30.75	31.13	31.63	32.38	–
	364TS – 365TS	–	34.13	34.13	34.44		–	3.50	4.00	4.88	6.00	–	–	–	32.91	33.25	33.75	34.50	–
	404TS – 405TS	–	34.13	34.13	34.44		–	3.50	4.00	4.88	6.00	–	–	–	36.75	37.13	37.63	38.38	–
	444TS – 445TS	–	–	46.13	46.44		–	3.50	4.00	4.88	6.00	–	–	–	–	41.91	42.44	43.19	–
	447TS – 449TS	–	–	–	46.44		–	3.50	4.00	4.88	6.00	–	–	–	–	–	52.06	52.75	–
330xx – 350xx	254T – 256T	–	23.38	23.56	23.69		–	–	4.38	4.88	5.25	6.38	–	–	26.50	26.88	27.06	27.81	–
	284TS – 286TS	–	25.88	26.06	26.19		–	–	4.38	4.88	5.25	6.38	–	–	29.06	29.38	29.56	30.31	–
	324TS – 326TS	–	28.69	28.88	29.00		–	–	4.38	4.88	5.25	6.38	–	–	31.00	31.38	31.56	32.31	–
	364TS – 365TS	–	34.13	34.31	34.44		–	–	4.00	4.50	4.88	6.00	–	–	33.13	33.50	33.69	34.44	–
	404TS – 405TS	–	34.13	34.31	34.44		–	–	4.00	4.50	4.88	6.00	–	–	37.00	37.38	37.56	38.31	–
	444TS – 445TS	–	46.13	46.31	46.44		–	–	4.00	4.50	4.88	6.00	–	–	41.81	42.19	42.38	43.13	–
	447TS – 449TS	–	46.13	46.31	46.44		–	–	4.00	4.50	4.88	6.00	–	–	51.38	51.75	51.94	52.69	–
360xx – 380xx	254T – 256T	–	–	23.31	23.63			–	–	4.38	5.00	6.00	6.38	–	–	26.56	26.94	27.56	27.81
	284TS – 286TS	–	–	25.81	26.13			–	–	4.38	5.00	6.00	6.38	–	–	29.06	29.44	30.06	30.31
	324TS – 326TS	–	–	28.63	28.94			–	–	4.38	5.00	6.00	6.38	–	–	31.06	31.44	32.06	32.31
	364TS – 365TS	–	–	34.06	34.38			–	–	4.00	4.63	5.63	6.00	–	–	33.19	33.56	34.25	34.44
	404TS – 405TS	–	–	34.06	34.38			–	–	4.00	4.63	5.63	6.00	–	–	37.06	37.44	38.06	38.31
	444TS – 445TS	–	–	46.06	46.38			–	–	4.00	4.63	5.63	6.00	–	–	41.88	42.25	42.88	43.13
	447TS – 449TS	–	–	46.06	46.38			–	–	4.00	4.63	5.63	6.00	–	–	51.44	51.81	52.44	52.75

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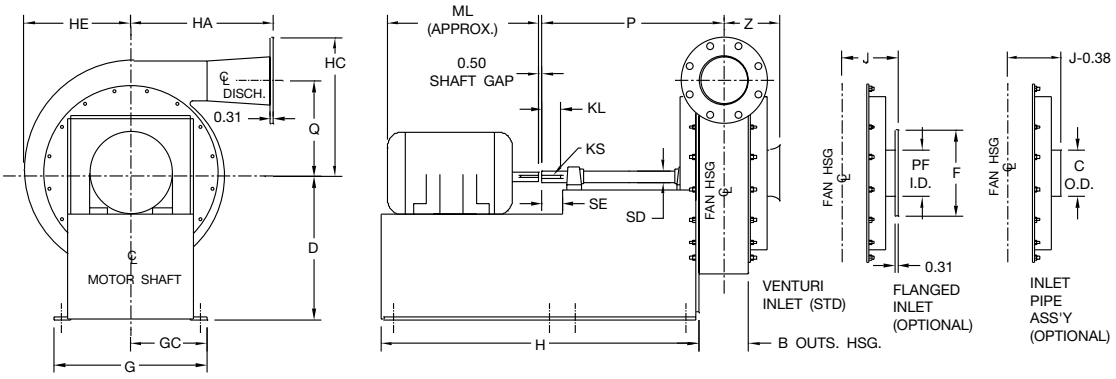
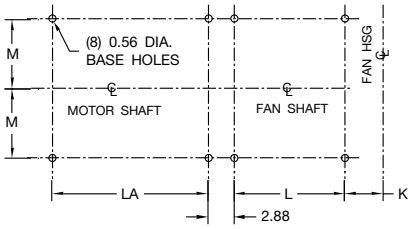
DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

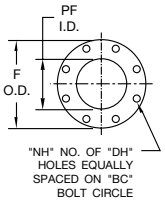
Arrangement 8 | Sizes 14 – 26



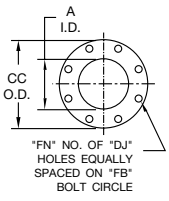
CLOCKWISE ROTATION
TOP HORIZONTAL DISCHARGE
'CW THD'
WITH STD FLANGED OUTLET



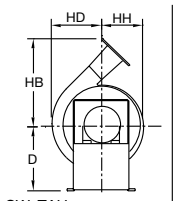
FOUNDATION PLAN



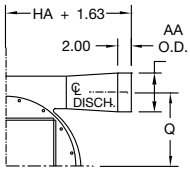
INLET FLANGE



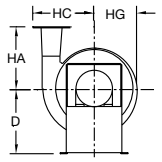
OUTLET FLANGE



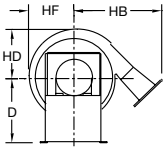
CW TAU



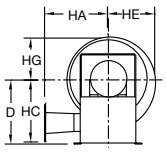
PLAIN PIPE OUTLET (OPTIONAL)



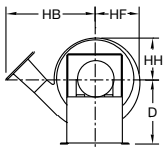
CW UBD



CW TAD



CW BHD



CW BAU

Notes:
1. CW rotation shown, CCW rotation similar but opposite.
2. Bolt patterns on inlet and outlet flanges straddle centerline.
3. Inlet screen included with venturi inlet.

FAN SIZE	MOTOR FRAME	A	AA	B	BC	C	CC	D	DH	DJ	F	FB	FN	G	GC	H	HA
14N4, 15N4 16N4, 17N4, 18N4	143T & 145T	4.00	4.50	3.88	9.50	6.63	9.00	17.75	0.88	0.75	11.00	7.50	8	19.50	9.75	28.63	18.25
	182T & 184T															32.50	
14W6, 15W6 16W6, 17W6, 18W6	143T & 145T	6.00	6.63	6.25	11.75	8.63	11.00	17.75	0.88	0.88	13.50	9.50	8	19.50	9.75	28.63	18.25
	182T & 184T															32.50	
15W8, 16W8 17W8, 18W8	182T & 184T	8.00	8.63	6.25	11.75	8.63	13.50	17.75	0.88	0.88	13.50	11.75	8	19.50	9.75	32.50	18.25
	213T & 215T															32.50	
19N4, 20N4 21N4, 22N4	143T & 145T	4.00	4.50	3.88	9.50	6.63	9.00	23.00	0.88	0.75	11.00	7.50	8	23.50	11.75	35.50	17.75
	182T & 184T															39.38	
19N6, 20N6 21N6, 22N6	182T & 184T	6.00	6.63	3.88	9.50	6.63	11.00	23.00	0.88	0.88	11.00	9.50	8	23.50	11.75	39.38	17.75
	213T & 215T															40.38	
19W8, 20W8 21W8, 22W8	182T & 184T	8.00	8.63	6.25	11.75	8.63	13.50	23.00	0.88	0.88	13.50	11.75	8	23.50	11.75	39.38	17.75
	213T & 215T															40.38	
	254T & 256T															45.38	
19W10, 20W10 21W10, 22W10	213T & 215T	10.00	10.75	6.25	14.25	8.63	16.00	23.00	1.00	1.00	16.00	14.25	12	23.50	11.75	40.38	21.75
	254T & 256T															45.38	
	284TS & 286TS															46.50	
23N6, 24N6 25N6, 26N6	182T & 184T	6.00	6.63	5.00	11.75	8.63	11.00	24.00	0.88	0.88	13.50	9.50	8	23.50	11.75	40.00	19.00
	213T & 215T															41.00	
	254T & 256T															46.00	
23N8, 24N8 25N8, 26N8	213T & 215T	8.00	8.63	5.00	11.75	8.63	13.50	24.00	0.88	0.88	13.50	11.75	8	23.50	11.75	41.00	19.00
	254T & 256T															46.00	
23W10, 24W10 25W10, 26W10	254T & 256T	10.00	10.75	7.25	14.25	10.75	16.00	24.00	1.00	1.00	16.00	14.25	12	23.50	11.75	46.00	23.00
	284TS & 286TS															47.13	
	324TS & 326TS															50.38	
23W12, 24W12 25W12, 26W12	284TS & 286TS	12.00	12.75	7.25	17.00	10.75	19.00	24.00	1.00	1.00	19.00	17.00	12	23.50	11.75	47.13	23.00
	324TS & 326TS															50.38	

Arrangement 8 | Sizes 14 – 26

FAN SIZE	MOTOR FRAME	HB	HC	HD	HE	HF	HG	HH	J	K	KL	KS	L	LA	M	ML	NH
14N4, 15N4 16N4, 17N4, 18N4	143T & 145T	24.44	16.31	14.00	13.63	13.19	12.75	12.31	5.56	3.38	2.38	.25x.13	8.63	14.13	8.88	14.38	8
	182T & 184T													18.00		18.13	
14W6, 15W6 16W6, 17W6, 18W6	143T & 145T	25.13	17.31	14.00	13.63	13.19	12.75	12.31	6.69	4.50	2.38	.25x.13	8.63	14.13	8.88	14.38	8
	182T & 184T													18.00		18.13	
15W8, 16W8 17W8, 18W8	182T & 184T	26.00	18.56	14.00	13.63	13.19	12.75	12.31	6.69	4.50	2.38	.25x.13	8.63	18.00	8.88	18.13	8
	213T & 215T													19.00		20.13	
19N4, 20N4 21N4, 22N4	143T & 145T	26.25	19.38	17.00	16.50	16.00	15.50	15.00	6.06	3.38	3.25	.38x.19	14.13	15.50	10.88	14.38	8
	182T & 184T													19.38		18.13	
19N6, 20N6 21N6, 22N6	182T & 184T	26.94	20.38	17.00	16.50	16.00	15.50	15.00	6.06	3.38	3.25	.38x.19	14.13	19.38	10.88	18.13	8
	213T & 215T													20.38		20.13	
19W8, 20W8 21W8, 22W8	182T & 184T	27.88	21.63	17.00	16.50	16.00	15.50	15.00	6.69	4.50	3.25	.38x.19	14.13	19.38	10.88	18.13	8
	213T & 215T													20.38		20.13	
	254T & 256T													25.38		25.75	
19W10, 20W10 21W10, 22W10	213T & 215T	31.56	22.88	17.00	16.50	16.00	15.50	15.00	6.69	4.50	3.25	.38x.19	14.13	20.38	10.88	20.13	12
	254T & 256T													25.38		25.75	
	284TS & 286TS													26.50		27.50	
23N6, 24N6 25N6, 26N6	182T & 184T	29.81	23.13	20.00	19.50	18.88	18.25	17.69	6.94	3.88	3.88	.38x.19	14.13	20.00	10.88	18.13	8
	213T & 215T													21.00		20.13	
	254T & 256T													26.00		25.75	
23N8, 24N8 25N8, 26N8	213T & 215T	30.69	24.38	20.00	19.50	18.88	18.25	17.69	6.94	3.88	3.88	.38x.19	14.13	21.00	10.88	20.13	8
	254T & 256T													26.00		25.75	
23W10, 24W10 25W10, 26W10	254T & 256T	34.38	25.63	20.00	19.50	18.88	18.25	17.69	7.19	5.00	3.88	.38x.19	14.13	26.00	10.88	25.75	12
	284TS & 286TS													27.13		27.50	
	324TS & 326TS													30.38		30.50	
23W12, 24W12 25W12, 26W12	284TS & 286TS	35.44	27.13	20.00	19.50	18.88	18.25	17.69	7.19	5.00	3.88	.38x.19	14.13	27.13	10.88	27.50	12
	324TS & 326TS													30.38		30.50	

FAN SIZE	MOTOR FRAME	P	PF	Q	SD	SE	Z
14N4, 15N4 16N4, 17N4, 18N4	143T & 145T	16.19	6.00	11.75	1.19	2.63	4.56
	182T & 184T						
14W6, 15W6 16W6, 17W6, 18W6	143T & 145T	17.38	8.00	11.75	1.19	2.63	6.38
	182T & 184T						
15W8, 16W8 17W8, 18W8	182T & 184T	17.38	8.00	11.75	1.19	2.63	6.38
	213T & 215T						
19N4, 20N4 21N4, 22N4	143T & 145T	23.06	6.00	14.88	1.44	4.00	4.56
	182T & 184T						
19N6, 20N6 21N6, 22N6	182T & 184T	23.06	6.00	14.88	1.44	4.00	4.56
	213T & 215T						
19W8, 20W8 21W8, 22W8	182T & 184T	24.13	8.00	14.88	1.44	3.88	6.38
	213T & 215T						
	254T & 256T						
19W10, 20W10 21W10, 22W10	213T & 215T	24.13	10.00	14.88	1.44	3.88	6.38
	254T & 256T						
	284TS & 286TS						
23N6, 24N6 25N6, 26N6	182T & 184T	24.13	8.00	17.63	1.44	4.50	5.25
	213T & 215T						
	254T & 256T						
23N8, 24N8 25N8, 26N8	213T & 215T	24.13	8.00	17.63	1.44	4.50	5.25
	254T & 256T						
23W10, 24W10 25W10, 26W10	254T & 256T	25.25	10.00	17.63	1.44	4.50	6.88
	284TS & 286TS						
	324TS & 326TS						
23W12, 24W12 25W12, 26W12	284TS & 286TS	25.25	12.00	17.63	1.44	4.50	6.88
	324TS & 326TS						

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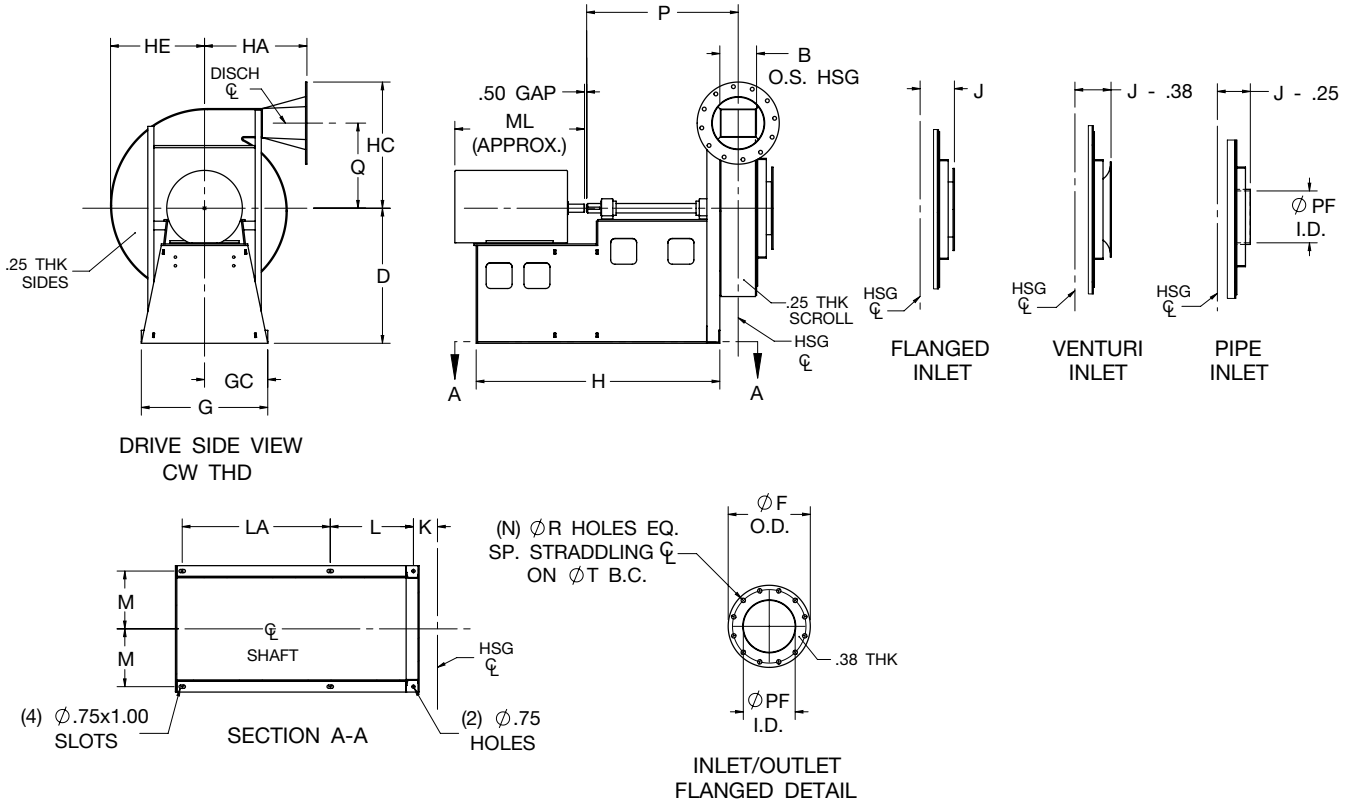
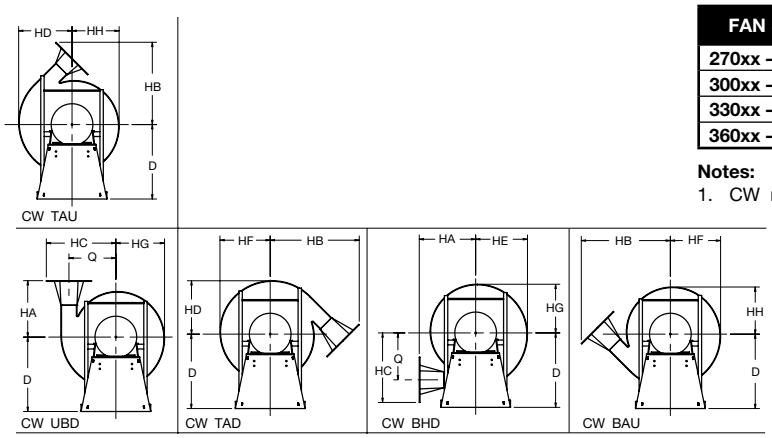
DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 8 | Sizes 27 – 38





FAN SIZE	D	HD	HE	HF	HG	HH	Q
270xx – 290xx	31.25	22.44	21.75	21.13	20.44	19.81	19.75
300xx – 320xx	34.50	24.75	24.00	23.25	22.56	21.81	21.75
330xx – 350xx	36.75	27.44	26.63	25.81	25.00	24.19	24.13
360xx – 380xx	40.00	29.75	28.88	28.00	27.19	26.25	26.00

Notes:

1. CW rotation shown, CCW rotation similar but opposite.

FAN SIZE	OUTLET SIZE	B	F	HA	HB	HC	J	K	N	PF	R	T
270xx – 290xx	xxx06	4.88	11.00	19.75	31.56	24.88	6.00	3.50	8	6.00	0.88	9.50
	xxx08	5.88	13.50	19.75	32.50	26.13	6.50	4.00	8	8.00	0.88	11.75
	xxx10	6.50	16.00	23.75	36.19	27.38	7.00	4.50	12	10.00	1.00	14.25
	xxx12	8.50	19.00	23.75	37.25	28.88	8.00	5.50	12	12.00	1.00	17.00
300xx – 320xx	xxx08	5.00	13.50	20.25	34.50	28.50	6.00	3.50	8	8.00	0.88	11.75
	xxx10	6.00	16.00	24.25	38.19	29.75	7.00	4.00	12	10.00	1.00	14.25
	xxx12	7.13	19.00	24.25	39.25	31.25	7.38	4.88	12	12.00	1.00	17.00
	xxx14	9.38	21.00	28.25	42.81	32.25	8.50	6.00	12	14.00	1.13	18.75
330xx – 350xx	xxx08	6.00	13.50	28.75	42.19	30.88	6.50	4.00	8	8.00	0.88	11.75
	xxx10	6.63	16.00	28.75	43.06	32.13	7.00	4.50	12	10.00	1.00	14.25
	xxx12	7.13	19.00	28.75	44.13	33.63	7.38	4.88	12	12.00	1.00	17.00
	xxx14	9.38	21.00	28.75	44.88	34.63	8.50	6.00	12	14.00	1.13	18.75
360xx – 380xx	xxx10	6.13	16.00	29.25	44.75	34.00	6.50	4.00	12	10.00	1.00	14.25
	xxx12	6.75	19.00	29.25	45.81	35.50	7.13	4.63	12	12.00	1.00	17.00
	xxx14	8.75	21.00	29.25	46.50	36.50	8.13	5.63	12	14.00	1.13	18.75
	xxx16	9.50	23.50	29.25	47.44	37.75	8.50	6.00	16	16.00	1.13	21.25

Arrangement 8 | Sizes 27 – 38

FAN SIZE	MOTOR FRAME	G	GC	L	LA	M	ML
270xx – 290xx	254T – 256T	29.25	14.63	19.25	28.75	13.38	25.75
	284TS – 286TS	29.25	14.63	19.25	30.75	13.38	28.88
	324TS – 326TS	29.25	14.63	19.25	34.25	13.38	30.00
	364TS – 365TS	29.25	14.63	27.75	27.75	13.38	32.13
	404TS – 405TS	29.25	14.63	30.25	30.25	13.38	36.50
300xx – 320xx	254T – 256T	29.25	14.63	21.25	28.75	13.38	25.75
	284TS – 286TS	29.25	14.63	21.25	30.75	13.38	28.88
	324TS – 326TS	29.25	14.63	21.25	34.25	13.38	30.00
	364TS – 365TS	29.25	14.63	28.75	28.75	13.38	32.13
	404TS – 405TS	29.25	14.63	31.25	31.25	13.38	36.50
	444TS – 445TS	31.25	15.63	33.75	33.75	14.38	41.81
	447TS – 449TS	31.25	15.63	37.75	37.75	14.38	51.38
330xx – 350xx	254T – 256T	31.25	15.63	23.25	27.13	14.38	25.75
	284TS – 286TS	31.25	15.63	23.25	29.13	14.38	28.88
	324TS – 326TS	31.25	15.63	23.25	35.13	14.38	30.00
	364TS – 365TS	31.25	15.63	30.25	30.25	14.38	32.13
	404TS – 405TS	31.25	15.63	32.50	32.50	14.38	36.50
	444TS – 445TS	31.25	15.63	35.38	35.38	14.38	41.81
	447TS – 449TS	31.25	15.63	39.63	39.63	14.38	51.38
360xx – 380xx	254T – 256T	31.25	15.63	25.25	27.13	14.38	25.75
	284TS – 286TS	31.25	15.63	25.25	29.13	14.38	28.88
	324TS – 326TS	31.25	15.63	25.25	35.13	14.38	30.00
	364TS – 365TS	31.25	15.63	31.25	31.25	14.38	32.13
	404TS – 405TS	31.25	15.63	33.50	33.50	14.38	36.50
	444TS – 445TS	31.25	15.63	36.38	36.38	14.38	41.81
	447TS – 449TS	31.25	15.63	40.63	40.63	14.38	51.38

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FAN SIZE	MOTOR FRAME	H						P					
		xxx06	xxx08	xxx10	xxx12	xxx14	xxx16	xxx06	xxx08	xxx10	xxx12	xxx14	xxx16
270xx – 290xx	254T – 256T	50.56	50.56	50.75		–	–	30.75	31.25	31.75	32.75	–	–
	284TS – 286TS	52.56	52.56	52.75		–	–	31.75	32.25	32.25	33.75	–	–
	324TS – 326TS	56.13	56.13	56.31		–	–	33.00	33.50	34.00	35.00	–	–
	364TS – 365TS	–	58.19	58.38		–	–	–	34.38	34.88	35.88	–	–
	404TS – 405TS	–	63.19	63.38		–	–	–	36.63	37.13	38.13	–	–
300xx – 320xx	254T – 256T	–	52.50		52.81		–	–	32.75	33.25	34.13	35.25	–
	284TS – 286TS	–	54.50		54.81		–	–	33.75	34.25	35.13	36.25	–
	324TS – 326TS	–	58.06		58.38		–	–	35.00	35.50	36.38	37.50	–
	364TS – 365TS	–	60.13		60.44		–	–	35.88	36.38	37.25	38.38	–
	404TS – 405TS	–	65.13		65.44		–	–	38.13	38.63	39.50	40.63	–
	444TS – 445TS	–	70.13		70.44		–	–	39.00	39.50	40.38	41.50	–
	447TS – 449TS	–	78.13		78.44		–	–	38.88	39.38	40.25	41.38	–
330xx – 350xx	254T – 256T	–	52.88	53.06	53.19		–	–	33.63	34.13	34.50	35.63	–
	284TS – 286TS	–	54.88	55.06	55.19		–	–	34.63	35.13	35.50	36.63	–
	324TS – 326TS	–	60.94	61.13	61.25		–	–	38.38	38.88	39.25	40.38	–
	364TS – 365TS	–	63.13	63.31	63.44		–	–	39.38	39.88	40.25	41.38	–
	404TS – 405TS	–	67.63	67.81	67.94		–	–	41.13	41.63	42.00	43.13	–
	444TS – 445TS	–	73.38	73.56	73.69		–	–	42.75	43.25	43.63	44.75	–
	447TS – 449TS	–	81.88	82.06	82.19		–	–	43.13	43.63	44.00	45.13	–
360xx – 380xx	254T – 256T	–	–	54.81	55.19	55.13		–	–	35.63	36.31	37.31	37.63
	284TS – 286TS	–	–	56.81	57.19	57.13		–	–	36.63	37.31	38.31	38.63
	324TS – 326TS	–	–	62.88	63.25	63.19		–	–	40.38	41.06	42.06	42.38
	364TS – 365TS	–	–	65.06	65.44	65.38		–	–	41.38	42.06	43.06	43.38
	404TS – 405TS	–	–	69.56	69.94	69.88		–	–	43.13	43.81	44.81	45.13
	444TS – 445TS	–	–	75.31	75.69	75.63		–	–	44.75	45.44	46.44	46.75
	447TS – 449TS	–	–	83.81	84.19	84.13		–	–	45.13	45.81	46.81	47.13

R-1005814-A

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Model HPBA

Fans shall be Model HPBA Turbo Pressure Blowers as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested and rated in accordance with industry accepted test codes and shall be guaranteed by the manufacturer to deliver rated published performance levels.

HOUSING — Fan housings shall be constructed of continuously welded heavy gauge steel. Sizes 14 through 26 shall be rotatable and reversible. A choice of inlet connections at no additional charge shall include an inlet venturi with screen, an inlet pipe assembly and a punched flange to ANSI 125/150. The outlet connection shall be flanged and punched to ANSI 125/150 with the option of a plain pipe assembly on Sizes 14 - 26.

WHEEL — Model HPBA wheels shall be constructed of aluminum alloy with riveted construction. Wheels shall be statically and dynamically balanced. The complete fan assembly shall be test balanced at the operating speed prior to shipment.

SHAFT (ARR. 1 & 8 ONLY) — 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 1.43 times the maximum speed.

BEARINGS (ARR 1, 8 ONLY) — Bearings shall be heavy duty, grease lubricated, anti-friction ball or roller, 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.

FINISH AND COATING — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant. Aluminum components shall be unpainted.

ACCESSORIES — When specified, accessories such as inlet filters, inlet filters with hoods, inlet and outlet silencers, flexible connectors for flanged outlet and plain pipe outlets, outlet blast gates, built-in outlet dampers, shaft closure plates, shaft seals, drains, inspection ports, shaft and bearing guards, belt guards, couplings, coupling guards, unitary bases, isolation bases, inertia bases, and vibration rails shall be provided by Aerovent to 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 statically and dynamically balanced to in accordance with ANSI/AMCA 204-96 “Balance Quality and Vibration Levels for Fans” to Fan Application Category BV-3, Balance Quality Grade G6.3. 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.

GUARANTEE — Manufacturer shall guarantee the workmanship and materials for its Turbo Pressure Blowers for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Model HPBS

Fans shall be Model HPBS Turbo Pressure Blowers as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested and rated in accordance with industry accepted test codes and shall be guaranteed by the manufacturer to deliver rated published performance levels.

HOUSING — Fan housings shall be constructed of continuously welded heavy gauge steel. Sizes 14 through 26 shall be rotatable and reversible. A choice of inlet connections at no additional charge shall include an inlet venturi with screen, an inlet pipe assembly and a punched flange to ANSI 125/150. The outlet connection shall be flanged and punched to ANSI 125/150 with the option of a plain pipe assembly on Sizes 14 - 26.

WHEEL — Model HPBS wheels shall be constructed of continuously welded heavy gauge steel or from a variety of special materials. Wheels shall be statically and dynamically balanced. The complete fan assembly shall be test balanced at the operating speed prior to shipment.

SHAFT (ARR. 1 & 8 ONLY) — 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 1.43 times the maximum speed.

BEARINGS (ARR 1, 8 ONLY) — Bearings shall be heavy duty, grease lubricated, anti-friction ball or roller, selfaligning, 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.

FINISH AND COATING — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant. Aluminum components shall be unpainted.

ACCESSORIES — When specified, accessories such as inlet filters, inlet filters with hoods, inlet and outlet silencers, flexible connectors for flanged outlet and plain pipe outlets, outlet blast gates, built-in outlet dampers, shaft closure plates, shaft seals, drains, inspection ports, shaft and bearing guards, belt guards, couplings, coupling guards, unitary bases, isolation bases, inertia bases, and vibration rails shall be provided by Aerovent to 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 statically and dynamically balanced to in accordance with ANSI/AMCA 204-96 “Balance Quality and Vibration Levels for Fans” to Fan Application Category BV-3, Balance Quality Grade G6.3. 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.

GUARANTEE — Manufacturer shall guarantee the workmanship and materials for its Turbo Pressure Blowers for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

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