cincinnati fan

OEM and Industrial Air Handling Specialist

# PB SERIES

# CAST ALUMINUM PRESSURE BLOWERS

7697 Snider Road, Mason, OH 45040-9135

Telephone: 513-573-0600

Visit us at www.cincinnatifan.com for more information.

Cat. No. PB1102

Supersedes A400

# cincinnati fan

## A Company That Stands Behind Its Product

Since the founding of **Cincinnati Fan** in 1956, the company's mission has been to provide quality products at competitive prices, backed by dependable service.

This mission is carried out by specializing in the market for industrial air handling products up to 125 HP. But specialization does not mean the product line is small. **Cincinnati Fan** offers a wide variety of standard and customized products, production flexibility, and customer responsiveness.

**Cincinnati Fan** has over 170 experienced sales engineers across the U.S. and Canada ready to serve your air handling needs.

**Cincinnati Fan** can provide:

- Technical evaluation for correct performance conditions.
- Review of air stream and ambient conditions that require special attention.
- Selection of proper components to meet required design specifications.
- Selection of proper accessories.
- System analysis for proper fan design.

**Cincinnati Fan** operates in a modern facility specifically designed for world class manufacturing enabling us to build standard products to order, including accessories, and ship within 5 to 10 working days.

With support like this, you can be sure your **Cincinnati Fan** product will be well-built and will provide maximum dependability and longevity.

Visit us at www.cincinnatifan.com for more information.

# FEATURES/BENEFITS OF CAST ALUMINUM

*Cincinnati Cast Aluminum Blowers are a smart buy now and for many years to come because aluminum is:*

**NON-SPARKING**
Cincinnati Cast Aluminum Blowers are AMCA Type B spark resistant. With the addition of a non-sparking shaft, they meet AMCA Type A requirements. See Page 5.

**CORROSION-FREE**
No painting required. Maintenance free in moist environments.

**LIGHTWEIGHT**
Aluminum is 1/3 the weight of steel and, therefore, less structural support is required.

**NON-TOXIC**
Aluminum is friendly to foods, beverages and medicines. Cast Aluminum Blowers are used in many food processing applications where cleanliness is important.

**STRONG**
Aluminum's strength is exhibited in products such as highway guard rails, truck trailers and baseball bats. In high speed blower wheels, aluminum is alloyed with magnesium and other metals for greater strength.

**ATTRACTIVE**
Aluminum's natural appearance is desirable. No other metal accepts a greater variety of finishes. It can be brushed, buffed, colored by anodizing and has excellent paint adhesion.

**NON-MAGNETIC**
Resists magnetism even in magnetic fields making it ideal in electronic applications where prevention of interference is very important.

**WORKABLE**
Aluminum can be machined by every known metal working process. This makes future modifications easier.

**NOT AFFECTED BY COLD**
Unlike many materials that become brittle when super cold, aluminum alloys can actually become stronger. Cast aluminum blowers are used in many sub-zero applications.

**AVAILABLE**
Approximately eight percent of the earth's crust contains aluminum, making it the most common metal on earth.

# SUGGESTED SPECIFICATIONS FOR CAST ALUMINUM BLOWERS

Blowers shall be cast with commercial grade 319 cast aluminum, having a 3/16" minimum wall thickness. Housing halves should be attached with tapered lugs having a minimum 45 degree taper from centerline for additional strength. Inlets and outlets shall be round for convenient slip fit of duct work or hose. Blower sizes 14A and larger shall have a reversible housing that is rotatable. Blowers shall be AMCA type B spark resistant or better. Blower performance shall be derived from data as tested per AMCA Standard 210.

Blower wheels with tip speeds up to 13,000 feet per minute shall be 319 cast aluminum. Blower wheels with tip speeds over 13,000 feet per minute shall be 356 aluminum with a T6 heat treatment. Wheel hub shall be an integral part of the wheel casting. Wheels shall be locked onto the motor or fan shaft with two, knurled, cup point set screws with a locking patch or nylon insert. Set screws shall be 90° – 120° apart with one over shaft keyway. Up to 13" diameter wheels shall have 5/16-18 set screws torqued to 165 inch pounds. Wheels over 13" in diameter shall have 3/8-16 set screws torqued to 228 inch pounds.

Balancing shall be accomplished by removal of material only —no additional weights are to be used in the balancing process. Wheel diameters up to 13" shall be statically balanced. Wheel diameters above 13" shall be dynamically balanced.

Fan motor and bearing cap vibration levels shall not exceed 1.5 mils displacement at 3450 RPM.

All fan bases shall be a minimum of 12 gauge steel.

All motors shall be continuous duty type.

Inlet or outlet flanges (if required) shall be 319 cast aluminum and shall meet ANSI bolt circle and outside diameter dimensions (see dimensions on page 21).

**⚠ DANGER**

All fans & blowers shown have rotating parts and pinch points. Severe personal injury can result if operated without guards. Stay away from rotating equipment unless it is disconnected from its power source.

Read operating instructions.

# HOW TO SELECT A CINCINNATI PB BLOWER

**A word about ratings…**

Thirty years ago Cincinnati Fan manufactured one size blower and one size wheel. Today we stock eight sizes of blower housings and fifty-seven wheel sizes. Four of our eight housings are each available with three different inlet sizes. By combining different housings, wheels and inlet sizes, we can offer you more standard direct drive pressure blower ratings than any other fan company in the world. Because we have so many direct drive ratings, chances are good that we can meet your requirements with a compact, cost efficient direct drive Cincinnati PB instead of a heavier, more expensive V-belt driven alternative.

**Your Cincinnati Fan Representative is a ratings expert who is ready to help you select precisely the right PB blower for your application.**

## How to use the PB Series Direct-Drive Rating Tables

If you know the static pressure and CFM required for your blower application, you can determine which PB blowers you should consider by referring to the tables on Pages 8 and 9 of this catalog. To use the tables, follow these simple directions:

1. Reading to the right, find the column heading which displays the static pressure (SP) you require.
2. Reading down that column, find the line(s) displaying the CFM rating(s) which will satisfy your requirement.
3. Follow the line(s) to the left side of the table, where you will identify the wheel(s) and the blower housing model(s) used to achieve the CFM rating(s).

You may find that several ratings come close to meeting your requirements. Generally, the rating with the lowest brake horsepower requirement (BHP) is the best selection (highest efficiency, least noise). In some situations, other requirements, such as blower dimensions and/or specific inlet/outlet sizes, may override the lower horsepower rule-of-thumb. **Your Cincinnati Fan Representative is available to assist you with selection and pricing information.**

### Some DOs and DON'Ts

**DO**… consider that radial blades are self-cleaning in most applications. Backward curved (BC) blades are not self-cleaning and may collect dust which can cause balance problems.

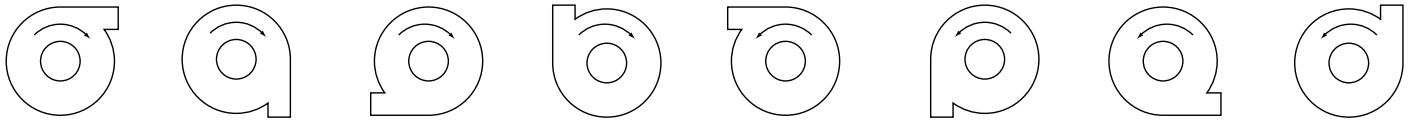
**DO**… specify heat-resistant construction (steel wheel) for use with airstreams having temperatures exceeding 200˚ F (93˚ C). BC wheels are not available in steel.

**WARNING**

**DO NOT** use a steel wheel and/or a steel blower housing in any type of environment where sparks could cause an explosion and/or fire. **See Page 5.**

**DO NOT** use any blower with an unducted inlet and/or outlet without an inlet and/or outlet guard. Severe personal injury could result. **See Page 7 for guard accessory.**

8 STANDARD DISCHARGE POSITIONS AVAILABLE. 45˚ DISCHARGE POSITIONS AT ADDITIONAL CHARGE.
Discharges shown are determined by viewing fan from motor or drive side.



Clockwise Top Horizontal Discharge | Clockwise Down-Blast Discharge | Clockwise Bottom Horizontal Discharge | Clockwise Up-Blast Discharge | Counter-Clockwise Top Horizontal Discharge | Counter-Clockwise Down-Blast Discharge | Counter-Clockwise Bottom Horizontal Discharge | Counter-Clockwise Up-Blast Discharge

# SPARK-RESISTANT CONSTRUCTION

**Type A:** All parts in contact with airstream are of nonferrous material. Blind bore in wheel and brass hardware in airstream. **Maximum Temperature 200°F.**

**Type B: Standard on all PBs.** Aluminum wheel and aluminum rubbing ring on motor shaft or fan shaft. **Maximum Temperature up to 400˚F except if with EXP motor, maximum temperature is 150˚F.**

## ⚠ WARNING

The use of aluminum or aluminum alloys in the presence of steel which has been allowed to rust requires special consideration. Research by the U.S. Bureau of Mines and others has shown that aluminum impellers rubbing on rusty steel may cause high intensity sparking.

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 a system.

# HIGH TEMPERATURE CONSTRUCTION

**MODEL PB: Arrangements 2, 4 & 4HM**

**Up To 150° F.** **Standard fan construction.**

**151 - 400° F.** Standard fan with heat slinger and slinger guard. External hub on wheel *or* a shaft extension may be required (except on Arr. 2). Wheel is either high temperature cast aluminum *or* fabricated steel. **NOTE: No BC type steel wheels.**

**Arrangements 1, 8 and 9**

**Up To 200° F.** **Standard fan construction.**

**201 - 300° F.** Standard fan with high temperature cast aluminum wheel *or* fabricated steel wheel. **NOTE: No BC type steel wheels.**

**301 - 400° F.** Standard fan with heat slinger and slinger guard. Wheel is either high temperature cast aluminum *or* fabricated steel. **NOTE: No BC type steel wheels.**

**MODEL PBS: Arrangements 2, 4 & 4HM**

**Up To 200° F.** **Standard fan construction. NOTE: No BC type steel wheels.**

**201 - 400° F.** Standard fan with heat slinger and slinger guard. External hub on wheel (except on Arr. 2). **NOTE: No BC type steel wheels.**

**Arrangements 1, 8 and 9**

**Up To 300° F.** **Standard fan construction. NOTE: No BC type steel wheels.**

**301 - 400° F.** Standard fan with heat slinger and slinger guard. **NOTE: No BC type steel wheels.**

**401 - 600° F.** Standard fan with heat slinger, slinger guard, fiberfrax shaft seal, high temperature aluminum paint and silicone gasketing. **NOTE: No BC type steel wheels.**

**601 - 750° F.** Standard fan with heat slinger, slinger guard, fiberfrax shaft seal and gasketing, high temperature aluminum paint and 316SS fan shaft. **NOTE: No BC type steel wheels.**

## TEMPERATURE - ALTITUDE CONVERSIONS

| AIR TEMP. F˚ | ALTITUDE IN FEET ABOVE SEA LEVEL | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 |
| 0˚ | .87 | .91 | .94 | .98 | 1.01 | 1.05 | 1.09 | 1.13 | 1.17 | 1.22 | 1.26 |
| 40˚ | .94 | .98 | 1.02 | 1.06 | 1.10 | 1.14 | 1.19 | 1 23 | 1.28 | 1.32 | 1.36 |
| 70˚ | 1.00 | 1.04 | 1.08 | 1.12 | 1.16 | 1.20 | 1.25 | 1.30 | 1.35 | 1.40 | 1.45 |
| 80˚ | 1.02 | 1.06 | 1.10 | 1.14 | 1.19 | 1.23 | 1.28 | 1.33 | 1.38 | 1.43 | 1.48 |
| 100˚ | 1.06 | 1.10 | 1.14 | 1.19 | 1.23 | 1.28 | 1.33 | 1.38 | 1.43 | 1.48 | 1.54 |
| 120˚ | 1.09 | 1.14 | 1.18 | 1.23 | 1.28 | 1.32 | 1.38 | 1.43 | 1.48 | 1.53 | 1.58 |
| 140˚ | 1.13 | 1.18 | 1.22 | 1.27 | 1.32 | 1.37 | 1.42 | 1.48 | 1.54 | 1.58 | 1.65 |
| 160˚ | 1.17 | 1.22 | 1.26 | 1.31 | 1.36 | 1.42 | 1.47 | 1.53 | 1.59 | 1.64 | 1.70 |
| 180˚ | 1.21 | 1.26 | 1.30 | 1.36 | 1.41 | 1.46 | 1.52 | 1.58 | 1.64 | 1.70 | 1.75 |
| 200˚ | 1.25 | 1.29 | 1.34 | 1.40 | 1.45 | 1.51 | 1.57 | 1.63 | 1.69 | 1.75 | 1.81 |
| 250˚ | 1.34 | 1.39 | 1.45 | 1.50 | 1.56 | 1.62 | 1.68 | 1.74 | 1.82 | 1.88 | 1.94 |
| 300˚ | 1.43 | 1.49 | 1.55 | 1.61 | 1.67 | 1.74 | 1.80 | 1.87 | 1.94 | 2.00 | 2.08 |
| 350˚ | 1.53 | 1.59 | 1.65 | 1.72 | 1.78 | 1.85 | 1.92 | 2.00 | 2.07 | 2.14 | 2.22 |
| 400˚ | 1.62 | 1.69 | 1.75 | 1.82 | 1.89 | 1.96 | 2.04 | 2.12 | 2.20 | 2.27 | 2.35 |
| 450˚ | 1.72 | 1.79 | 1.86 | 1.93 | 2.00 | 2.08 | 2.16 | 2.24 | 2.33 | 2.41 | 2.50 |
| 500˚ | 1.81 | 1.88 | 1.96 | 2.03 | 2.11 | 2.19 | 2.28 | 2.36 | 2.46 | 2.54 | 2.62 |
| 550˚ | 1.91 | 1.98 | 2.06 | 2.14 | 2.22 | 2.30 | 2.40 | 2.49 | 2.58 | 2.68 | 2.77 |
| 600˚ | 2.00 | 2.08 | 2.16 | 2.24 | 2.33 | 2.42 | 2.50 | 2.61 | 2.71 | 2.80 | 2.90 |
| 650˚ | 2.10 | 2.18 | 2.26 | 2.35 | 2.44 | 2.54 | 2.63 | 2.74 | 2.84 | 2.94 | 3.04 |
| 700˚ | 2.19 | 2.27 | 2.36 | 2.46 | 2.55 | 2.65 | 2.75 | 2.86 | 2.97 | 3.06 | 3.18 |
| 750˚ | 2.28 | 2.37 | 2.47 | 2.56 | 2.66 | 2.76 | 2.87 | 2.98 | 3.10 | 3.19 | 3.31 |

Fan performance tables are developed using standard air which is 70°F., 29.92" barometric pressure and .075 lbs. per cubic foot. Density changes resulting from temperature or barometric pressure variations (such as higher altitudes) must be corrected to standard conditions before selecting a fan based on standard performance data. Temperature and/or altitude conversion factors are used in making corrections to standard conditions.

### EXAMPLE:

Select a belt driven PB-15A to deliver 1500 CFM at 8.6" SP at 200°F., and 7000' altitude.

**STEP 1.** From the table, conversion factor is 1.63.

**STEP 2.** Correct static pressure is: 1.63 x 8.6" SP = 14" SP at standard conditions.

**STEP 3.** Check PB catalog for 1500 CFM at 14" SP. We select a belt driven PB-15A and interpolation gives 3456 RPM and 5.15 BHP.

**STEP 4.** Correct the BHP for the lighter air: 5.15 ÷ 1.63 = 3.16 BHP. A 5 HP motor will suffice at 200°F., and 7000' but not at standard conditions. Special motor insulation may be required above 3500 feet altitude. Consult Factory.

# 9 STANDARD ARRANGEMENTS

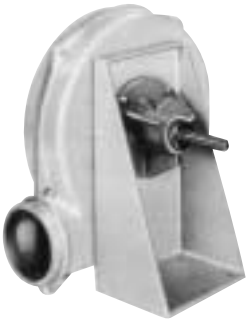
**Arrangement 4**
(Foot & flange motor)

**Arrangement 4**
(Flange mount-footless motor)

**Arrangement 4**
(Foot mounted motor)

**Arrangement 4HM**
(Horizontal mount)
(See page 18)

**Arrangement 1**



**Arrangement 2**

**Arrangement 8**

**Arrangement 9**

**Arrangement 4D**
(Double blower unit)

# BLOWER WHEELS

**CAST ALUMINUM RADIAL**

**CAST ALUMINUM B.C.**
(Backward Curve)

**OPTIONAL FABRICATED STEEL or STAINLESS STEEL (Not available in B.C.)**

All wheels have two set screws, 90°-120° apart, with one being over keyway. Up to 13” diameter wheels are dynamically, single plane balanced. Wheels over 13” in diameter are dynamically, 2 plane balanced. Use steel wheel for high abrasive or high temperature application above 200°F. (93° C). Stainless steel or coated wheels should be used in corrosive environments.

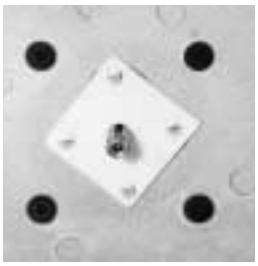
**See page 22 for max. wheel size with steel housings**

# OPTIONAL ACCESSORIES

**INLET/OUTLET FLANGE**
Cast aluminum drilled to ANSI-125 pound flange bolt circle dimensions if requested. **Outlet flange not available in downblast configuration. See dimensions on page 21.**

**INLET/OUTLET GUARD**
Spiral guard with nickel/chrome/lacquer finish. OSHA type. Available on 4, 5, 6, 7, 8 and 10 inch inlets or outlets. **Required by OSHA on non-ducted inlet and/or discharge.**

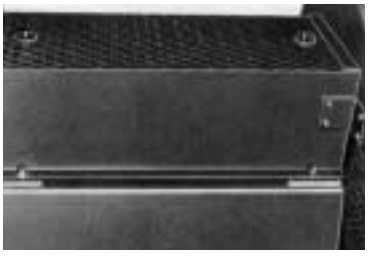
**SLIDE GATE DAMPER**
Available for 4, 5, 6, 7, 8 and 10 inch inlets or outlets. Cast aluminum frame, galvanized steel gate. Suitable for duct work. Dimensions on page 21. **Add inlet/outlet guard if not ducted. Not available on downblast discharge position.**



**TEFLON SHAFT SEAL**
1/8" thick teflon shaft seal good to 400°F. Ceramic fiber gasket material with steel cover plate above 400°F.

**STEEL HOUSING**
For high abrasive or high temperature applications. Also in 304 or 316 stainless steel for corrosive environments. 10 gauge steel. Rotatable not reversible. **See page 22 for dimensions and max wheel sizes. Not available on model PB-8.**

**INLET FILTERS**
Many layered fine wire mesh. Pleated paper media available on some sizes.



**SHAFT and/or HEAT SLINGER GUARD**
Available on arrangement 1 and 9. Covers bearings and shaft between fan housing and belt guard. Has extended lube lines. Meets OSHA standards.

**DRAIN**
1/2" drain with plug on PB series. 3/4" NPT with plug on PBS series. Not required on bottom horizontal discharges.

**BELT GUARD—STANDARD ARR. 9**
Bearing side is enclosed. Not available unless Cincinnati Fan mounts motor.

# PB SERIES DIRECT DRIVE RATING TABLES at 3450 RPM

**CFM and BHP at Static Pressure Shown** — **Ratings at 70˚F., .075 Density, Sea Level**

| MODEL NO. | WHEEL DIA. & WIDTH | O.D.INLET SIZE | 1" SP | | 2" SP | | 3" SP | | 4" SP | | 5" SP | | 6" SP | | 7" SP | | 8" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| **PB-8** | 7 x 2 7/16 | 4" | 280 | .30 | 230 | .26 | 140 | .24 | | | | | | | | | | |
| | 8 x 2 3/4 | | 343 | .36 | 294 | .33 | 227 | .28 | 125 | .23 | | | | | | | | |
| **PB-9** | 8 x 2 3/4 | | 388 | .39 | 341 | .36 | 287 | .32 | 160 | .25 | | | | | | | | |
| | 8 1/2 x 2 3/4 | | 435 | .46 | 385 | .41 | 325 | .37 | 240 | .33 | | | | | | | | |
| | 9 x 2 7/8 | | 490 | .52 | 450 | .48 | 380 | .42 | 310 | .37 | | | | | | | | |
| | 10 1/4 x 3 BC | 5" | 515 | .57 | 460 | .50 | 403 | .45 | 347 | .42 | 284 | .39 | 210 | .33 | | | | |
| | 9 3/4 x 2 7/8 | | 550 | .82 | 500 | .75 | 450 | .71 | 390 | .66 | 340 | .60 | 260 | .51 | | | | |
| | 10 5/8 x 2 5/8 | | 590 | .83 | 555 | .79 | 510 | .75 | 460 | .65 | 412 | .59 | 365 | .52 | 287 | .44 | | |
| **PB-10A** | 9 x 2 7/8 | | 577 | .70 | 500 | .64 | 427 | .58 | 319 | .49 | | | | | | | | |
| | 10 1/4 x 3 BC | | 609 | .78 | 544 | .71 | 480 | .65 | 397 | .59 | 295 | .53 | 124 | .42 | | | | |
| | 9 3/4 x 2 7/8 | | 706 | 1.04 | 649 | .94 | 594 | .89 | 519 | .82 | 422 | .72 | 321 | .63 | | | | |
| | 11 x 3 BC | 6" | 732 | 1.07 | 680 | 1.00 | 637 | .97 | 583 | .88 | 506 | .80 | 424 | .71 | 302 | .60 | | |
| | 10 5/8 x 2 5/8 | | 826 | 1.39 | 764 | 1.30 | 697 | 1.23 | 643 | 1.13 | 555 | 1.05 | 475 | .97 | 364 | .84 | | |
| | 11 x 2 3/4 | | 827 | 1.43 | 779 | 1.33 | 725 | 1.23 | 672 | 1.15 | 609 | 1.06 | 532 | .97 | 449 | .88 | 298 | .68 |
| | 11 1/2 x 2 7/8 | | 886 | 1.55 | 835 | 1.46 | 783 | 1.37 | 716 | 1.30 | 647 | 1.22 | 583 | 1.13 | 509 | 1.04 | 409 | .93 |
| **PB-12A** | 11 x 3 BC | | 874 | 1.10 | 805 | 1.03 | 733 | .98 | 639 | .88 | 541 | .81 | 418 | .71 | 177 | .52 | | |
| | 10 5/8 x 2 5/8 | | 1068 | 1.65 | 988 | 1.53 | 893 | 1.41 | 797 | 1.28 | 678 | 1.16 | 551 | .98 | 374 | .79 | | |
| | 11 x 2 3/4 | | 1166 | 1.93 | 1067 | 1.83 | 972 | 1.71 | 876 | 1.57 | 760 | 1.41 | 634 | 1.21 | 481 | 1.03 | | |
| | 11 1/2 x 2 7/8 | 7" | 1259 | 2.44 | 1182 | 2.28 | 1089 | 2.12 | 994 | 1.97 | 899 | 1.82 | 797 | 1.68 | 683 | 1.52 | 550 | 1.30 |
| | 12 x 2 7/8 | | 1307 | 2.54 | 1223 | 2.42 | 1139 | 2.29 | 1053 | 2.15 | 964 | 2.01 | 874 | 1.85 | 783 | 1.71 | 679 | 1.58 |
| | 13 x 3 1/4 BC | | 1294 | 2.58 | 1236 | 2.49 | 1163 | 2.39 | 1095 | 2.29 | 1018 | 2.18 | 945 | 2.08 | 868 | 1.96 | 793 | 1.84 |
| | 12 1/4 x 2 7/8 | | 1350 | 2.93 | 1276 | 2.75 | 1201 | 2.58 | 1116 | 2.41 | 1016 | 2.23 | 935 | 2.06 | 839 | 1.91 | 743 | 1.74 |
| | 13 x 3 1/4 | | 1446 | 3.17 | 1377 | 3.04 | 1307 | 2.92 | 1222 | 2.80 | 1148 | 2.66 | 1060 | 2.48 | 976 | 2.31 | 890 | 2.18 |
| **PB-14A** | 13 x 3 1/4 BC | 6" | 1315 | 2.48 | 1247 | 2.39 | 1179 | 2.30 | 1111 | 2.21 | 1034 | 2.11 | 948 | 1.97 | 854 | 1.81 | 737 | 1.61 |
| | 13 x 3 1/4 BC | 7" | 1360 | 2.47 | 1282 | 2.39 | 1206 | 2.29 | 1133 | 2.18 | 1060 | 2.07 | 964 | 1.94 | 860 | 1.80 | 744 | 1.65 |
| | 13 x 3 1/4 BC | 8" | 1414 | 2.50 | 1326 | 2.43 | 1239 | 2.32 | 1151 | 2.20 | 1063 | 2.09 | 969 | 1.96 | 868 | 1.81 | 762 | 1.66 |
| | 12 1/4 x 2 7/8 | 6" | 1486 | 2.95 | 1397 | 2.80 | 1307 | 2.65 | 1213 | 2.52 | 1106 | 2.33 | 999 | 2.14 | 884 | 1.96 | 745 | 1.74 |
| | 13 x 3 1/4 | 6" | 1504 | 3.56 | 1439 | 3.41 | 1373 | 3.27 | 1308 | 3.14 | 1242 | 3.01 | 1165 | 2.83 | 1079 | 2.61 | 976 | 2.39 |
| | 12 1/4 x 2 7/8 | 7" | 1575 | 3.33 | 1476 | 3.16 | 1377 | 2.99 | 1286 | 2.91 | 1178 | 2.74 | 1058 | 2.38 | 927 | 2.21 | 766 | 1.85 |
| | 14 x 3 1/4 BC | 6" | 1594 | 3.87 | 1520 | 3.73 | 1447 | 3.59 | 1369 | 3.43 | 1291 | 3.27 | 1213 | 3.11 | 1135 | 2.95 | 1041 | 2.75 |
| | 13 x 3 1/4 | 7" | 1571 | 3.65 | 1502 | 3.50 | 1433 | 3.35 | 1371 | 3.21 | 1311 | 3.07 | 1228 | 2.87 | 1134 | 2.66 | 1022 | 2.44 |
| | 12 1/4 x 2 7/8 | 8" | 1624 | 3.45 | 1528 | 3.30 | 1433 | 3.15 | 1328 | 2.95 | 1222 | 2.73 | 1097 | 2.55 | 948 | 2.30 | 776 | 2.05 |
| | 13 x 3 1/4 | 8" | 1630 | 3.77 | 1560 | 3.60 | 1491 | 3.42 | 1425 | 3.26 | 1363 | 3.09 | 1262 | 2.88 | 1167 | 2.67 | 1031 | 2.47 |
| | 14 x 3 1/4 BC | 7" | 1670 | 4.07 | 1587 | 3.88 | 1510 | 3.73 | 1426 | 3.56 | 1338 | 3.40 | 1249 | 3.22 | 1160 | 3.05 | 1071 | 2.89 |
| | 14 x 3 1/4 | 6" | 1649 | 4.65 | 1598 | 4.51 | 1548 | 4.36 | 1492 | 4.20 | 1412 | 3.96 | 1335 | 3.84 | 1258 | 3.76 | 1183 | 3.54 |
| | 14 x 3 1/4 BC | 8" | 1738 | 4.10 | 1658 | 3.95 | 1578 | 3.79 | 1493 | 3.64 | 1406 | 3.50 | 1313 | 3.31 | 1215 | 3.11 | 1122 | 2.94 |
| | 14 x 3 1/4 | 7" | 1829 | 5.20 | 1769 | 5.00 | 1709 | 4.79 | 1649 | 4.58 | 1570 | 4.40 | 1475 | 4.16 | 1377 | 3.77 | 1287 | 3.62 |
| | 14 3/4 x 4 | 6" | 1860 | 5.81 | 1791 | 5.63 | 1723 | 5.47 | 1656 | 5.30 | 1589 | 5.14 | 1526 | 4.97 | 1467 | 4.82 | 1404 | 4.65 |
| | 14 x 3 1/4 | 8" | 2002 | 5.49 | 1915 | 5.27 | 1827 | 5.06 | 1740 | 4.85 | 1646 | 4.62 | 1543 | 4.37 | 1435 | 4.10 | 1314 | 3.77 |
| | 14 3/4 x 4 | 7" | 1984 | 6.32 | 1918 | 6.14 | 1856 | 5.99 | 1784 | 5.78 | 1702 | 5.52 | 1620 | 5.26 | 1546 | 5.06 | 1473 | 4.86 |
| | 14 3/4 x 4 | 8" | 2103 | 6.81 | 2046 | 6.62 | 1972 | 6.40 | 1878 | 6.01 | 1788 | 5.69 | 1702 | 5.38 | 1614 | 5.10 | 1523 | 4.85 |
| **PB-15A** (1) | 14 x 3 1/4 BC | 6" | 1778 | 3.45 | 1690 | 3.60 | 1602 | 3.27 | 1494 | 3.06 | 1377 | 2.87 | 1253 | 2.70 | 1131 | 2.55 | 1002 | 2.32 |
| | 14 x 3 1/4 BC | 8" | 2109 | 4.34 | 2002 | 4.15 | 1882 | 3.91 | 1763 | 3.62 | 1614 | 3.34 | 1447 | 3.06 | 1266 | 2.74 | 1083 | 2.46 |
| | 14 x 3 1/4 BC | 10" | 2171 | 4.41 | 2051 | 4.21 | 1916 | 3.97 | 1797 | 3.76 | 1639 | 3.44 | 1459 | 3.05 | 1277 | 2.77 | 1083 | 2.53 |
| | 15 1/2 x 5 BC | 6" | 2059 | 5.38 | 1974 | 5.21 | 1889 | 5.03 | 1809 | 4.81 | 1711 | 4.64 | 1603 | 4.50 | 1524 | 4.32 | 1446 | 4.15 |
| | 14 x 3 1/4 | 6" | 2207 | 5.73 | 2127 | 5.62 | 2039 | 5.47 | 1917 | 5.24 | 1808 | 5.03 | 1725 | 4.83 | 1616 | 4.49 | 1479 | 4.14 |
| USE | 16 1/2 x 4 3/8 BC | 6" | 2247 | 6.47 | 2188 | 6.38 | 2119 | 6.27 | 2038 | 6.12 | 1948 | 5.94 | 1846 | 5.71 | 1716 | 5.35 | 1631 | 5.17 |
| 182T | 15 1/2 x 5 | 6" | 2382 | 8.22 | 2312 | 8.03 | 2241 | 7.84 | 2182 | 7.72 | 2105 | 7.51 | 2017 | 7.25 | 1928 | 6.99 | 1851 | 6.82 |
| FRAME | 15 1/2 x 5 BC | 8" | 2688 | 7.37 | 2576 | 7.14 | 2448 | 6.86 | 2319 | 6.55 | 2193 | 6.19 | 2063 | 5.82 | 1934 | 5.45 | 1803 | 5.11 |
| MIN | 16 1/2 x 4 3/8 | 6" | 2616 | 9.83 | 2552 | 9.65 | 2483 | 9.45 | 2413 | 9.25 | 2337 | 9.02 | 2257 | 8.79 | 2177 | 8.55 | 2098 | 8.31 |
| | 14 x 3 1/4 | 8" | 2930 | 8.01 | 2781 | 7.62 | 2626 | 7.24 | 2467 | 6.86 | 2314 | 6.39 | 2137 | 5.94 | 1958 | 5.48 | 1795 | 5.00 |
| | 16 1/2 x 4 3/8 BC | 8" | 2707 | 7.78 | 2635 | 7.66 | 2554 | 7.48 | 2470 | 7.27 | 2385 | 7.03 | 2282 | 6.76 | 2172 | 6.48 | 2062 | 6.20 |
| | 15 1/2 x 5 BC | 10" | 2812 | 7.85 | 2704 | 7.60 | 2591 | 7.29 | 2472 | 6.94 | 2344 | 6.64 | 2202 | 6.23 | 2055 | 5.78 | 1901 | 5.34 |
| | 16 1/2 x 4 3/8 BC | 10" | 2814 | 7.85 | 2748 | 7.69 | 2673 | 7.52 | 2587 | 7.32 | 2476 | 7.10 | 2362 | 6.86 | 2244 | 6.56 | 2126 | 6.26 |
| | 14 x 3 1/4 | 10" | 2983 | 8.36 | 2866 | 8.02 | 2742 | 7.66 | 2602 | 7.26 | 2444 | 6.79 | 2276 | 6.29 | 2085 | 5.78 | 1837 | 5.12 |
| | 15 1/2 x 5 | 8" | 3262 | 11.83 | 3154 | 11.45 | 3046 | 11.08 | 2939 | 10.68 | 2830 | 10.30 | 2714 | 9.95 | 2588 | 9.45 | 2459 | 8.91 |
| | 15 1/2 x 5 | 10" | 3459 | 12.83 | 3368 | 12.47 | 3277 | 12.10 | 3175 | 11.65 | 3060 | 11.09 | 2938 | 10.54 | 2786 | 10.02 | 2622 | 9.42 |
| | 16 1/2 x 4 3/8 | 8" | 3610 | 13.72 | 3521 | 13.44 | 3431 | 13.16 | 3339 | 12.87 | 3239 | 12.58 | 3118 | 12.13 | 2995 | 11.66 | 2871 | 11.18 |
| | 16 1/2 x 4 3/8 | 10" | 3696 | 14.22 | 3633 | 14.04 | 3569 | 13.86 | 3495 | 13.62 | 3405 | 13.28 | 3315 | 12.94 | 3203 | 12.49 | 3079 | 11.99 |
| **PB-18** | 14 x 3 1/4 BC | 6" | 1140 | 2.75 | 1098 | 2.71 | 1041 | 2.66 | 979 | 2.61 | 914 | 2.56 | 861 | 2.47 | 806 | 2.42 | 725 | 2.33 |
| | 14 x 3 1/4 | 6" | 1385 | 4.15 | 1339 | 4.10 | 1290 | 4.02 | 1234 | 3.93 | 1167 | 3.77 | 1112 | 3.63 | 1055 | 3.51 | 989 | 3.45 |
| | 14 x 3 1/4 BC | 8" | 1510 | 3.72 | 1450 | 3.64 | 1383 | 3.52 | 1307 | 3.39 | 1235 | 3.21 | 1145 | 3.05 | 1051 | 2.90 | 959 | 2.75 |
| | 16 1/2 x 4 3/8 BC | 6" | 1536 | 5.48 | 1492 | 5.46 | 1449 | 5.37 | 1407 | 5.28 | 1361 | 5.23 | 1316 | 5.17 | 1261 | 5.02 | 1206 | 4.86 |
| USE | 14 x 3 1/4 BC | 10" | 1593 | 3.83 | 1513 | 3.68 | 1440 | 3.56 | 1351 | 3.38 | 1268 | 3.23 | 1193 | 3.03 | 1098 | 2.93 | 1010 | 2.82 |
| 182T | 18 x 4 3/8 BC | 6" | 1595 | 6.35 | 1550 | 6.29 | 1508 | 6.27 | 1460 | 6.15 | 1418 | 6.07 | 1376 | 6.00 | 1339 | 5.96 | 1293 | 5.84 |
| FRAME | 14 x 3 1/4 | 8" | 1810 | 5.00 | 1735 | 4.90 | 1660 | 4.70 | 1590 | 4.60 | 1510 | 4.50 | 1440 | 4.30 | 1360 | 4.20 | 1280 | 4.10 |
| MIN. | 16 1/2 x 4 3/8 | 6" | 1783 | 7.40 | 1767 | 7.30 | 1727 | 7.18 | 1687 | 7.06 | 1644 | 6.89 | 1602 | 6.72 | 1557 | 6.61 | 1513 | 6.50 |
| | 14 x 3 1/4 | 10" | 1911 | 5.33 | 1845 | 5.19 | 1776 | 5.08 | 1705 | 4.86 | 1612 | 4.69 | 1523 | 4.44 | 1429 | 4.24 | 1351 | 4.14 |
| | 18 x 4 3/8 | 6" | 1961 | 9.64 | 1927 | 9.57 | 1890 | 9.38 | 1853 | 9.19 | 1810 | 9.11 | 1767 | 9.03 | 1727 | 8.79 | 1687 | 8.55 |
| | 16 1/2 x 4 3/8 BC | 8" | 2040 | 7.40 | 1995 | 7.25 | 1930 | 7.10 | 1865 | 6.90 | 1790 | 6.75 | 1715 | 6.50 | 1635 | 6.30 | 1560 | 6.10 |
| | 16 1/2 x 4 3/8 BC | 10" | 2210 | 8.07 | 2161 | 7.88 | 2091 | 7.73 | 2021 | 7.58 | 1946 | 7.39 | 1871 | 7.19 | 1797 | 6.91 | 1723 | 6.63 |
| | 18 x 4 3/8 BC | 8" | 2287 | 9.10 | 2235 | 9.00 | 2170 | 8.80 | 2105 | 8.60 | 2042 | 8.40 | 1980 | 8.20 | 1895 | 8.10 | 1810 | 8.00 |
| | 16 1/2 x 4 3/8 | 8" | 2350 | 9.80 | 2290 | 9.60 | 2230 | 9.40 | 2170 | 9.20 | 2110 | 9.10 | 2040 | 8.80 | 1970 | 8.60 | 1900 | 8.40 |
| | 18 x 4 3/8 BC | 10" | 2556 | 10.46 | 2512 | 10.31 | 2455 | 10.19 | 2399 | 10.06 | 2325 | 9.61 | 2252 | 9.16 | 2203 | 9.07 | 2155 | 8.97 |
| | 18 x 4 3/8 | 8" | 2520 | 12.60 | 2480 | 12.40 | 2437 | 12.15 | 2395 | 11.90 | 2347 | 11.60 | 2300 | 11.30 | 2250 | 11.10 | 2200 | 10.90 |
| | 16 1/2 x 4 3/8 | 10" | 2565 | 10.93 | 2530 | 10.86 | 2461 | 10.67 | 2393 | 10.47 | 2336 | 10.19 | 2280 | 9.90 | 2202 | 9.58 | 2125 | 9.25 |
| | 18 x 4 3/8 | 10" | 2868 | 13.35 | 2836 | 13.10 | 2780 | 12.85 | 2725 | 12.60 | 2667 | 12.25 | 2609 | 11.89 | 2548 | 11.69 | 2488 | 11.49 |
| **PB-18WA** | 16 1/2 x 5 BC | 8" | 2606 | 7.78 | 2490 | 7.58 | 2374 | 7.38 | 2258 | 7.18 | 2142 | 6.98 | 2040 | 6.75 | 1950 | 6.49 | 1854 | 6.24 |
| | 15 1/2 x 5 BC | 10" | 2745 | 7.34 | 2615 | 7.06 | 2485 | 6.79 | 2354 | 6.52 | 2241 | 6.25 | 2126 | 6.19 | 1968 | 5.90 | 1816 | 5.58 |
| | 15 1/2 x 5 | 8" | 2794 | 9.24 | 2683 | 8.96 | 2571 | 8.67 | 2459 | 8.39 | 2347 | 8.10 | 2214 | 7.80 | 2082 | 7.50 | 1981 | 7.22 |
| USE | 16 1/2 x 5 BC | 10" | 2932 | 8.38 | 2823 | 8.19 | 2715 | 8.00 | 2606 | 7.82 | 2498 | 7.63 | 2379 | 7.43 | 2236 | 7.21 | 2097 | 6.96 |
| 182T | 16 1/2 x 5 | 8" | 2994 | 11.27 | 2907 | 10.93 | 2821 | 10.60 | 2734 | 10.26 | 2647 | 9.92 | 2557 | 9.68 | 2466 | 9.47 | 2361 | 9.20 |
| FRAME | 17 x 6 | 8" | 3098 | 12.47 | 2995 | 12.16 | 2892 | 11.85 | 2790 | 11.54 | 2687 | 11.23 | 2584 | 10.92 | 2489 | 10.58 | 2397 | 10.21 |
| MIN. | 15 1/2 x 5 | 10" | 3390 | 12.27 | 3277 | 11.78 | 3164 | 11.29 | 3050 | 10.79 | 2937 | 10.30 | 2824 | 9.81 | 2690 | 9.32 | 2543 | 8.82 |
| | 17 x 6 | 10" | 3638 | 15.80 | 3540 | 15.31 | 3442 | 14.82 | 3344 | 14.32 | 3246 | 13.83 | 3148 | 13.33 | 3051 | 12.85 | 2953 | 12.40 |
| | 16 1/2 x 5 | 10" | 3715 | 16.01 | 3607 | 15.42 | 3498 | 14.83 | 3389 | 14.23 | 3280 | 13.64 | 3171 | 13.05 | 3055 | 12.50 | 2921 | 12.08 |
| | 18 1/2 x 6 | 10" | 4466 | 24.23 | 4330 | 23.37 | 4193 | 22.51 | 4057 | 21.65 | 3920 | 20.78 | 3783 | 19.92 | 3647 | 19.06 | 3510 | 18.20 |

(1) Additional ratings available with 7" inlet. Consult your local CFV representative.

CONTINUED ON PAGE 9

# PB SERIES DIRECT DRIVE RATING TABLES at 3450 RPM

(Continued from Page 8)

| MODEL NO. | WHEEL DIA. & WIDTH | O.D.INLET SIZE | 9" SP | | 10" SP | | 11" SP | | 12" SP | | 14" SP | | 16" SP | | 18" SP | | 20" SP ★ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| **PB-12A** | 12 x 2⅞ | | 550 | 1.34 | | | | | | | | | | | | | | |
| | 12¼ x 2⅞ | 7" | 637 | 1.55 | 432 | 1.25 | | | | | | | | | | | | |
| | 13 x 3¼ BC | | 704 | 1.69 | 582 | 1.59 | 346 | 1.26 | | | | | | | | | | |
| | 13 x 3¼ | | 805 | 2.05 | 725 | 1.85 | 568 | 1.57 | | | | | | | | | | |
| **PB-14A** | 12¼ x 2⅞ | 7" | 565 | 1.44 | | | | | | | | | | | | | | |
| | 12¼ x 2⅞ | 8" | 576 | 1.75 | | | | | | | | | | | | | | |
| | 12¼ x 2⅞ | 6" | 573 | 1.46 | 231 | .88 | | | | | | | | | | | | |
| | 13 x 3¼ BC | 6" | 587 | 1.38 | 430 | 1.13 | | | | | | | | | | | | |
| | 13 x 3¼ BC | 8" | 602 | 1.42 | 405 | 1.10 | | | | | | | | | | | | |
| | 13 x 3¼ BC | 7" | 615 | 1.48 | 421 | 1.10 | | | | | | | | | | | | |
| | 13 x 3¼ | 6" | 859 | 2.17 | 719 | 1.90 | | | | | | | | | | | | |
| | 13 x 3¼ | 8" | 880 | 2.16 | 707 | 1.79 | | | | | | | | | | | | |
| | 13 x 3¼ | 7" | 877 | 2.18 | 728 | 1.90 | | | | | | | | | | | | |
| | 14 x 3¼ BC | 6" | 944 | 2.55 | 839 | 2.33 | 698 | 2.01 | 495 | 1.56 | | | | | | | | |
| | 14 x 3¼ BC | 7" | 974 | 2.68 | 863 | 2.41 | 743 | 2.11 | 580 | 1.68 | | | | | | | | |
| | 14 x 3¼ BC | 8" | 1028 | 2.78 | 891 | 2.49 | 739 | 2.16 | 533 | 1.68 | | | | | | | | |
| | 14 x 3¼ | 6" | 1108 | 3.31 | 1014 | 3.04 | 910 | 2.75 | 765 | 2.28 | | | | | | | | |
| | 14 x 3¼ | 7" | 1189 | 3.42 | 1080 | 3.13 | 951 | 2.85 | 795 | 2.48 | | | | | | | | |
| | 14 x 3¼ | 8" | 1194 | 3.46 | 1080 | 3.23 | 949 | 2.87 | 788 | 2.44 | | | | | | | | |
| | 14¾ x 4 | 6" | 1309 | 4.39 | 1215 | 4.14 | 1120 | 3.88 | 1007 | 3.56 | 777 | 2.90 | | | | | | |
| | 14¾ x 4 | 7" | 1382 | 4.60 | 1289 | 4.34 | 1195 | 4.07 | 1102 | 3.80 | 799 | 2.92 | | | | | | |
| | 14¾ x 4 | 8" | 1431 | 4.61 | 1340 | 4.37 | 1249 | 4.12 | 1126 | 3.79 | 834 | 3.01 | | | | | | |
| **PB-15A** | 14 x 3¼ BC | 10" | 870 | 2.21 | 606 | 1.86 | | | | | | | | | | | | |
| (1) | 14 x 3¼ BC | 6" | 858 | 2.03 | 661 | 1.86 | 458 | 1.60 | | | | | | | | | | |
| | 14 x 3¼ BC | 8" | 906 | 2.29 | 683 | 1.92 | 320 | 1.35 | | | | | | | | | | |
| | 14 x 3¼ | 6" | 1336 | 3.87 | 1179 | 3.55 | 1008 | 3.17 | 767 | 2.53 | | | | | | | | |
| USE | 15½ x 5 BC | 6" | 1350 | 4.00 | 1248 | 3.77 | 1132 | 3.50 | 973 | 3.20 | 610 | 2.41 | | | | | | |
| 182T | 14 x 3¼ | 8" | 1594 | 4.47 | 1342 | 3.87 | 1070 | 3.27 | 778 | 2.59 | | | | | | | | |
| FRAME | 14 x 3¼ | 10" | 1646 | 4.55 | 1369 | 3.85 | 1102 | 3.32 | | | | | | | | | | |
| MIN. | 16½ x 4⅜ BC | 6" | 1547 | 4.99 | 1453 | 4.81 | 1335 | 4.60 | 1227 | 4.35 | 904 | 3.53 | 397 | 2.52 | | | | |
| | 15½ x 5 BC | 8" | 1662 | 4.85 | 1517 | 4.48 | 1371 | 4.12 | 1189 | 3.69 | 673 | 2.53 | | | | | | |
| | 15½ x 5 BC | 10" | 1725 | 4.91 | 1535 | 4.47 | 1368 | 4.09 | 1208 | 3.71 | | | | | | | | |
| | 15½ x 5 | 6" | 1770 | 6.59 | 1682 | 6.23 | 1594 | 5.87 | 1485 | 5.53 | 1202 | 4.73 | 671 | 3.00 | | | | |
| | 16½ x 4⅜ BC | 8" | 1945 | 5.94 | 1816 | 5.68 | 1646 | 5.32 | 1475 | 4.96 | 1213 | 4.29 | 708 | 2.99 | | | | |
| | 16½ x 4⅜ BC | 10" | 1992 | 5.99 | 1848 | 5.72 | 1677 | 5.37 | 1506 | 5.03 | 1143 | 4.29 | 636 | 2.99 | | | | |
| | 16½ x 4⅜ | 6" | 2018 | 8.07 | 1921 | 7.87 | 1822 | 7.69 | 1729 | 7.43 | 1552 | 6.78 | 1295 | 5.84 | 780 | 3.77 | | |
| | 15½ x 5 | 8" | 2298 | 8.22 | 2130 | 7.56 | 1974 | 7.02 | 1822 | 6.53 | 1513 | 5.61 | 909 | 3.85 | | | | |
| | 15½ x 5 | 10" | 2425 | 8.60 | 2247 | 7.95 | 2085 | 7.41 | 1926 | 6.89 | 1571 | 5.77 | | | | | | |
| | 16½ x 4⅜ | 8" | 2748 | 10.71 | 2586 | 10.22 | 2399 | 9.43 | 2215 | 8.69 | 1869 | 7.61 | 1541 | 6.67 | | | | |
| | 16½ x 4⅜ | 10" | 2946 | 11.41 | 2797 | 10.79 | 2624 | 10.14 | 2469 | 9.62 | 2128 | 8.48 | 1734 | 7.16 | | | | |
| **PB-18** | 14 x 3¼ BC | 6" | 634 | 2.28 | 570 | 2.13 | 461 | 1.96 | 352 | 1.79 | | | | | | | | |
| | 14 x 3¼ BC | 8" | 855 | 2.60 | 740 | 2.45 | 590 | 2.22 | 440 | 1.98 | | | | | | | | |
| | 14 x 3¼ BC | 10" | 914 | 2.63 | 767 | 2.45 | 563 | 2.20 | | | | | | | | | | |
| | 14 x 3¼ | 6" | 921 | 3.25 | 854 | 3.14 | 772 | 2.99 | 690 | 2.83 | | | | | | | | |
| USE | 16½ x 4⅜ BC | 6" | 1145 | 4.81 | 1084 | 4.75 | 1007 | 4.62 | 931 | 4.48 | 767 | 4.28 | 609 | 4.05 | 393 | 3.51 | | |
| 182T | 14 x 3¼ | 8" | 1200 | 3.90 | 1105 | 3.70 | 1012 | 3.55 | 920 | 3.40 | | | | | | | | |
| FRAME | 14 x 3¼ | 10" | 1244 | 3.87 | 1153 | 2.72 | 1050 | 3.56 | 947 | 3.40 | | | | | | | | |
| MIN. | 18 x 4⅜ BC | 6" | 1243 | 5.76 | 1193 | 5.68 | 1138 | 5.55 | 1084 | 5.42 | 995 | 5.13 | 844 | 4.63 | 694 | 4.12 | 543 | 3.62 |
| | 16½ x 4⅜ BC | 8" | 1480 | 5.90 | 1405 | 5.75 | 1322 | 5.58 | 1240 | 5.40 | 1030 | 5.00 | 800 | 4.45 | 460 | 3.70 | | |
| | 16½ x 4⅜ | 6" | 1465 | 6.31 | 1418 | 6.11 | 1367 | 5.89 | 1316 | 5.67 | 1193 | 5.32 | 1041 | 4.85 | 825 | 4.22 | | |
| | 16½ x 4⅜ BC | 10" | 1628 | 6.40 | 1533 | 6.17 | 1447 | 5.94 | 1362 | 5.70 | 1180 | 5.13 | 947 | 4.69 | 528 | 3.91 | | |
| | 18 x 4⅜ | 6" | 1644 | 8.37 | 1602 | 8.19 | 1557 | 8.04 | 1513 | 7.89 | 1429 | 7.53 | 1316 | 7.11 | 1180 | 6.60 | 963 | 5.94 |
| | 18 x 4⅜ BC | 8" | 1745 | 7.70 | 1680 | 7.40 | 1605 | 7.13 | 1530 | 6.85 | 1370 | 6.30 | 1200 | 5.65 | 1005 | 5.05 | 720 | 4.10 |
| | 16½ x 4⅜ | 8" | 1840 | 8.10 | 1770 | 7.90 | 1705 | 7.65 | 1640 | 7.40 | 1490 | 6.70 | 1350 | 6.10 | 1110 | 5.10 | | |
| | 16½ x 4⅜ | 10" | 2049 | 9.09 | 1974 | 8.93 | 1888 | 8.65 | 1803 | 8.37 | 1650 | 7.76 | 1482 | 7.19 | 1244 | 6.45 | | |
| | 18 x 4⅜ BC | 10" | 2088 | 8.69 | 2021 | 8.40 | 1941 | 8.02 | 1861 | 7.63 | 1669 | 6.99 | 1553 | 6.44 | 1316 | 5.82 | 1026 | 4.99 |
| | 18 x 4⅜ | 8" | 2140 | 10.55 | 2080 | 10.20 | 2015 | 9.95 | 1950 | 9.70 | 1810 | 9.10 | 1680 | 8.60 | 1550 | 8.00 | 1360 | 7.30 |
| | 18 x 4⅜ | 10" | 2417 | 11.22 | 2346 | 10.94 | 2278 | 10.74 | 2211 | 10.53 | 2044 | 9.98 | 1878 | 9.30 | 1705 | 8.66 | 1513 | 7.81 |
| **PB-18WA** | 15½ x 5 BC | 10" | 1646 | 5.31 | 1446 | 4.91 | 1246 | 4.51 | 1057 | 4.12 | 525 | 3.24 | | | | | | |
| | 16½ x 5 BC | 8" | 1747 | 6.03 | 1635 | 5.80 | 1508 | 5.55 | 1377 | 5.28 | 1075 | 4.64 | 734 | 3.95 | | | | |
| | 15½ x 5 | 8" | 1879 | 6.94 | 1754 | 6.59 | 1627 | 6.23 | 1468 | 5.86 | 1112 | 5.01 | 631 | 3.85 | | | | |
| | 16½ x 5 BC | 10" | 1967 | 6.62 | 1830 | 6.29 | 1670 | 5.97 | 1509 | 5.64 | 1105 | 4.81 | 537 | 3.68 | | | | |
| USE | 16½ x 5 | 8" | 2251 | 8.92 | 2141 | 8.59 | 2033 | 8.25 | 1901 | 7.91 | 1616 | 7.20 | 1325 | 6.37 | 868 | 5.11 | | |
| 182T | 15½ x 5 | 10" | 2348 | 8.25 | 2126 | 7.65 | 1936 | 7.19 | 1758 | 6.78 | 1349 | 5.78 | 751 | 4.44 | | | | |
| FRAME | 17 x 6 | 8" | 2303 | 9.86 | 2190 | 9.60 | 2076 | 9.35 | 1969 | 9.09 | 1746 | 8.51 | 1442 | 7.65 | 1207 | 6.86 | | |
| MIN. | 16½ x 5 | 10" | 2779 | 11.61 | 2614 | 11.00 | 2448 | 10.40 | 2276 | 9.82 | 1922 | 8.69 | 1528 | 7.59 | 1104 | 6.34 | | |
| | 17 x 6 | 10" | 2846 | 11.98 | 2708 | 11.64 | 2574 | 11.29 | 2447 | 10.91 | 2137 | 9.95 | 1792 | 8.92 | 1457 | 7.86 | | |
| | 18½ x 6 | 10" | 3397 | 17.71 | 3294 | 17.35 | 3185 | 16.87 | 3069 | 16.25 | 2877 | 15.04 | 2631 | 14.08 | 2374 | 13.25 | 2087 | 12.34 |

**For static pressures above 20", see "HP" Series catalog.**
**For higher CFM values, see "RBE" Series catalog.**

(1) Additional ratings available with 7" inlet. Consult your local CFV representative.

# PB SERIES BELT DRIVE RATING TABLES

**Ratings at 70˚F., .075 Density, Sea Level**

## PB-8

Outlet Area (Sq. Ft.) 0.087 — **Wheel Diameter 8"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 50 | 1231 | .01 | 1711 | .03 | 2089 | .05 | 2408 | .08 | 2690 | .10 | 2944 | .14 | 3178 | .17 | 3396 | .20 | 3601 | 24 | 3795 | .28 |
| 100 | 1447 | .02 | 1838 | .04 | 2168 | .06 | 2463 | .09 | 2727 | .12 | 2976 | .15 | 3206 | .19 | **3421** | **.23** | 3625 | .27 | 3818 | .31 |
| 150 | **1743** | **.04** | 2093 | .07 | 2384 | .10 | 2637 | .12 | 2871 | .15 | 3093 | .19 | 3304 | .22 | **3502** | **.26** | 3694 | .30 | 3876 | .35 |
| 200 | 2111 | .08 | 2390 | .11 | 2656 | .14 | 2894 | .18 | 3111 | .21 | 3309 | .25 | **3495** | **.29** | 3676 | .33 | 3847 | .37 | | |
| 250 | 2574 | .15 | 2726 | .17 | 2958 | .21 | 3180 | .25 | 3382 | .29 | 3572 | .33 | 3751 | .38 | 3919 | .42 | | | | |
| 300 | 3046 | .25 | 3143 | .27 | 3295 | .30 | **3486** | **.34** | 3679 | .39 | 3858 | .44 | | | | | | | | |
| 350 | 3523 | .38 | 3608 | .40 | 3689 | .43 | 3830 | .47 | 3994 | .52 | | | | | | | | | | |

**4" O.D. INLET**

## PB-9

Outlet Area (Sq. Ft.) 0.087 — **Wheel Diameter 9"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 6.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 50 | 1514 | .02 | 1854 | .04 | 2143 | .06 | | | | | | | | | | | | | | |
| 100 | 1564 | .03 | 1876 | .05 | 2151 | .07 | 2396 | .09 | 2624 | .12 | 2833 | .15 | 3027 | .17 | 3210 | .20 | 3383 | .24 | 3708 | .31 |
| 150 | **1710** | **.05** | 1986 | .07 | 2232 | .09 | 2455 | .11 | 2662 | .14 | 2863 | .17 | 3050 | .20 | 3226 | .23 | 3392 | .27 | 3712 | .34 |
| 200 | 1894 | .07 | 2152 | .09 | 2379 | .12 | 2584 | .15 | 2772 | .17 | 2956 | .21 | 3129 | .24 | 3291 | .27 | **3444** | **.31** | 2753 | .39 |
| 250 | 2108 | .10 | 2341 | .13 | 2553 | .16 | 2749 | .19 | 2930 | .22 | 3100 | .26 | 3259 | .29 | **3409** | **.33** | 3559 | .37 | 3843 | .45 |
| 300 | 2351 | .15 | 2553 | .18 | 2749 | .21 | 2930 | .25 | 3104 | .28 | 3267 | .32 | **3420** | **.36** | 3568 | .40 | 3709 | .44 | 3972 | .52 |
| 350 | 2640 | .22 | 2793 | .25 | 2965 | .28 | 3134 | .32 | 3296 | .36 | **3447** | **.40** | 3597 | .44 | 3740 | .49 | 3875 | .53 | | |
| 400 | 2958 | .31 | 3053 | .34 | 3205 | .37 | 3356 | .41 | **3502** | **.45** | 3650 | .50 | 3789 | .54 | 3921 | .59 | | | | |
| 450 | 3280 | .43 | 3368 | .46 | **3453** | **.48** | 3597 | .53 | 3733 | .57 | 3861 | .62 | 3994 | .67 | | | | | | |
| 500 | 3606 | .58 | 3687 | .61 | 3765 | .64 | 3845 | .67 | 3975 | .72 | | | | | | | | | | |
| 550 | 3935 | .76 | | | | | | | | | | | | | | | | | | |

**5" O.D. INLET**

## PB-10A

Outlet Area (Sq. Ft.) 0.136 — **Wheel Diameter 10.625"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.00 | | 2.00 | | 3.00 | | 4.00 | | 5.00 | | 6.00 | | 7.00 | | 8.00 | | 9.00 | | 10.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 100 | 1288 | .04 | 1806 | .10 | 2204 | .17 | 2539 | .25 | 2835 | .33 | 3101 | .43 | 3348 | .53 | 3576 | .64 | 3791 | .76 | 3995 | .88 |
| 200 | 1421 | .07 | 1852 | .13 | 2241 | .21 | 2576 | .31 | 2872 | .41 | 3139 | .53 | 3384 | .64 | 3613 | .77 | 3827 | .90 | | |
| 300 | 1667 | .12 | 2050 | .21 | 2362 | .30 | 2648 | .40 | 2909 | .50 | 3176 | .63 | **3421** | **.76** | 3650 | .90 | 3865 | 1.05 | | |
| 400 | 1983 | .23 | 2296 | .32 | 2595 | .44 | 2843 | .55 | 3076 | .68 | 3299 | .80 | 3509 | .93 | 3705 | 1.05 | 3902 | 1.20 | | |
| 500 | 2310 | .38 | 2579 | .49 | 2837 | .61 | 3092 | .76 | 3307 | .89 | **3504** | **1.03** | 3697 | 1.19 | 3878 | 1.35 | | | | |
| 600 | 2626 | .58 | 2920 | .75 | 3115 | .85 | 3335 | 1.00 | 3554 | 1.17 | 3759 | 1.35 | 3935 | 1.51 | | | | | | |
| 700 | 2958 | .86 | 3244 | 1.06 | **3459** | **1.24** | 3622 | 1.35 | 3806 | 1.50 | 3995 | 1.69 | | | | | | | | |
| 800 | 3295 | 1.20 | 3565 | 1.45 | 3796 | 1.68 | 3967 | 1.86 | | | | | | | | | | | | |
| 900 | 3635 | 1.64 | 3885 | 1.91 | | | | | | | | | | | | | | | | |

**6" O.D. INLET**

## PB-12A

Outlet Area (Sq. Ft.) 0.196 — **Wheel Diameter 12.250"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.00 | | 3.00 | | 4.00 | | 5.00 | | 6.00 | | 7.00 | | 8.00 | | 9.00 | | 10.00 | | 12.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 100 | 1508 | .08 | 1840 | .14 | 2120 | .21 | 2366 | .28 | 2589 | .37 | 2794 | .45 | 2985 | .55 | 3164 | .65 | 3333 | .75 | 3648 | .98 |
| 200 | 1545 | .11 | 1874 | .18 | 2152 | .26 | 2398 | .35 | 2621 | .44 | 2826 | .54 | 3016 | .65 | 3196 | .76 | 3365 | .88 | 3680 | 1.13 |
| 300 | 1625 | .16 | 1927 | .25 | 2192 | .34 | 2437 | .44 | 2658 | .54 | 2861 | .65 | 3050 | .76 | 3228 | .88 | 3397 | 1.01 | 3713 | 1.28 |
| 400 | **1768** | **.24** | 2033 | .33 | 2272 | .43 | 2499 | .54 | 2705 | .66 | 2902 | .79 | 3091 | .92 | 3268 | 1.05 | **3436** | **1.19** | 3749 | 1.48 |
| 500 | 1926 | .35 | 2181 | .46 | 2401 | .57 | 2604 | .68 | 2792 | .80 | 2981 | .95 | 3157 | 1.09 | 3322 | 1.24 | *3478* | *1.39* | 3790 | 1.55 |
| 600 | 2100 | .49 | 2338 | .62 | 2553 | .76 | 2746 | .89 | 2922 | 1.02 | 3092 | 1.16 | 3251 | 1.30 | **3409** | **1.45** | 3565 | 1.62 | 3855 | 1.97 |
| 700 | 2286 | .67 | 2506 | .81 | 2712 | .97 | 2900 | 1.13 | 3073 | 1.28 | 3234 | 1.44 | 3385 | 1.59 | 3532 | 1.75 | 3673 | 1.91 | 3943 | 2.25 |
| 800 | 2458 | .87 | 2696 | 1.07 | 2878 | 1.22 | 3060 | 1.40 | 3230 | 1.59 | 3388 | 1.77 | 3536 | 1.95 | 3676 | 2.12 | 3810 | 2.29 | | |
| 900 | 2648 | 1.13 | 2872 | 1.36 | 3067 | 1.56 | 3228 | 1.72 | 3391 | 1.92 | 3546 | 2.13 | 3692 | 2.35 | 3830 | 2.55 | 3962 | 2.75 | | |
| 1000 | 2856 | 1.47 | 3046 | 1.67 | 3250 | 1.94 | **3418** | **2.15** | 3563 | 2.33 | 3708 | 2.54 | 3852 | 2.78 | 3988 | 3.01 | | | | |
| 1100 | 3068 | 1.87 | 3238 | 2.07 | **3421** | **2.34** | 3603 | 2.63 | 3753 | 2.86 | 3886 | 3.05 | | | | | | | | |
| 1200 | 3282 | 2.34 | **3446** | **2.57** | 3597 | 2.79 | 3774 | 3.11 | 3938 | 3.43 | | | | | | | | | | |
| 1300 | **3500** | **2.87** | 3656 | 3.14 | 3801 | 3.38 | 3948 | 3.65 | | | | | | | | | | | | |
| 1400 | 3721 | 3.52 | 3870 | 3.79 | | | | | | | | | | | | | | | | |
| 1500 | 3945 | 4.24 | | | | | | | | | | | | | | | | | | |

**7" O.D. INLET**

## PB-14A

Outlet Area (Sq. Ft.) 0.196 — **Wheel Diameter 14"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.00 | | 4.00 | | 6.00 | | 8.00 | | 10.00 | | 12.00 | | 14.00 | | 16.00 | | 18.00 | | 20.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 200 | 1353 | .10 | 1894 | .22 | 2310 | .36 | 2661 | .53 | 2969 | .71 | 3249 | .90 | **3506** | **1.11** | 3745 | 1.32 | 3969 | 1.55 | | |
| 400 | 1466 | .22 | 1959 | .41 | 2355 | .60 | 2705 | .82 | 3014 | 1.04 | 3293 | 1.27 | 3550 | 1.51 | 3789 | 1.76 | | | | |
| 600 | 1670 | .40 | 2104 | .66 | 2461 | .95 | 2789 | 1.23 | 3080 | 1.51 | 3342 | 1.79 | 3595 | 2.10 | 3834 | 2.43 | | | | |
| 800 | 1925 | .69 | 2308 | 1.03 | 2635 | 1.36 | 2932 | 1.74 | 3195 | 2.12 | **3453** | **2.50** | 3693 | 2.87 | 3918 | 3.25 | | | | |
| 1000 | 2192 | 1.13 | 2555 | 1.51 | 2849 | 1.96 | 3121 | 2.37 | 3372 | 2.80 | 3609 | 3.27 | 3827 | 3.75 | | | | | | |
| 1200 | 2494 | 1.74 | 2811 | 2.25 | 3097 | 2.67 | 3341 | 3.23 | 3578 | 3.72 | 3796 | 4.20 | | | | | | | | |
| 1400 | 2823 | 2.62 | 3080 | 3.12 | 3352 | 3.69 | 3594 | 4.19 | 3808 | 4.84 | | | | | | | | | | |
| 1600 | 3160 | 3.77 | 3370 | 4.23 | 3615 | 4.96 | 3850 | 5.55 | | | | | | | | | | | | |
| 1800 | **3502** | **5.23** | 3695 | 5.76 | 3890 | 6.37 | | | | | | | | | | | | | | |

**7" O.D. INLET**

**NOTE: DRIVE LOSSES ARE NOT INCLUDED IN BHP.**

CONTINUED ON PAGE 11

**CONSULT FACTORY FOR SPEEDS HIGHER THAN THOSE SHOWN.**

**FOR RPMs & BHPs IN BOLD PRINT, DIRECT DRIVE BLOWERS SHOULD BE CONSIDERED.**

# PB SERIES BELT DRIVE RATING TABLES

**(Continued from Page 10)**

## PB-15A

Outlet Area (Sq. Ft.) 0.349 — **Wheel Diameter 15.5"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.00 | | 4.00 | | 6.00 | | 8.00 | | 10.00 | | 12.00 | | 14.00 | | 16.00 | | 18.00 | | 20.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 200 | 1200 | .12 | 1690 | .28 | 2066 | .46 | 2383 | .67 | 2662 | .89 | 2916 | 1.14 | 3150 | 1.42 | 3368 | 1.73 | 3572 | 2.05 | 3765 | 2.39 |
| 400 | 1238 | .20 | 1716 | .44 | 2087 | .70 | 2401 | .98 | 2680 | 1.28 | 2933 | 1.59 | 3165 | 1.92 | 3381 | 2.26 | 3583 | 2.61 | 3776 | 2.97 |
| 600 | 1316 | .32 | **1760** | **.61** | 2120 | .93 | 2432 | 1.29 | 2708 | 1.67 | 2957 | 2.06 | 3186 | 2.47 | 3399 | 2.89 | 3601 | 3.32 | 3793 | 3.76 |
| 800 | 1445 | .50 | 1840 | .85 | 2179 | 1.23 | 2475 | 1.64 | 2741 | 2.06 | 2990 | 2.53 | 3219 | 3.01 | **3432** | **3.50** | 3632 | 4.01 | 3821 | 4.53 |
| ★ | | | | | | | | | | | | | | | | | | | | |
| 1000 | 1574 | .74 | 1958 | 1.16 | 2262 | 1.59 | 2547 | 2.07 | 2799 | 2.56 | 3038 | 3.07 | 3258 | 3.60 | **3465** | **4.14** | 3665 | 4.72 | | |
| 1200 | 1702 | 1.06 | 2087 | 1.56 | 2382 | 2.06 | 2632 | 2.57 | 2882 | 3.14 | 3110 | 3.72 | 3319 | 4.31 | 3520 | 4.91 | 3713 | 5.53 | | |
| 1400 | 1857 | 1.48 | 2216 | 2.05 | 2511 | 2.64 | 2759 | 3.23 | 2979 | 3.82 | 3193 | 4.45 | **3402** | **5.12** | 3597 | 5.79 | 3780 | 6.47 | | |
| 1600 | 2020 | 2.01 | 2343 | 2.65 | 2639 | 3.32 | 2889 | 4.00 | 3108 | 4.67 | 3306 | 5.34 | **3490** | **6.01** | 3680 | 6.76 | | | | |
| 1800 | 2191 | 2.64 | 2486 | 3.39 | 2769 | 4.12 | 3017 | 4.89 | 3237 | 5.64 | **3435** | **6.40** | 3617 | 7.16 | 3787 | 7.90 | | | | |
| 2000 | 2368 | 3.42 | 2642 | 4.29 | 2896 | 5.07 | 3148 | 5.90 | 3365 | 6.76 | 3564 | 7.60 | 3747 | 8.44 | | | | | | |
| 2200 | 2550 | 4.37 | 2803 | 5.33 | 3041 | 6.21 | 3274 | 7.10 | **3495** | **8.00** | 3692 | 8.95 | | | | | | | | |
| 2400 | 2736 | 5.49 | 2973 | 6.51 | 3197 | 7.52 | **3405** | **8.45** | 3622 | 9.45 | 3822 | 10.44 | | | | | | | | |
| 2600 | 2923 | 6.78 | 3145 | 7.86 | 3356 | 9.02 | 3558 | 10.05 | 3750 | 11.07 | | | | | | | | | | |
| 2800 | 3112 | 8.28 | 3323 | 9.44 | 3522 | 10.70 | 3714 | 11.86 | | | | | | | | | | | | |

**8" O.D. INLET**

## PB-18

Outlet Area (Sq. Ft.) 0.196 — **Wheel Diameter 18"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4.00 | | 6.00 | | 8.00 | | 10.00 | | 12.00 | | 14.00 | | 16.00 | | 18.00 | | 20.00 | | 22.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 200 | 1438 | .27 | **1758** | **.44** | 2029 | .63 | 2268 | .85 | 2483 | 1.09 | 2682 | 1.34 | 2866 | 1.60 | 3040 | 1.87 | 3204 | 2.16 | 3360 | 2.46 |
| 400 | 1458 | .43 | **1769** | **.67** | 2039 | .94 | 2278 | 1.22 | 2493 | 1.51 | 2691 | 1.81 | 2875 | 2.13 | 3048 | 2.45 | 3212 | 2.78 | 3367 | 3.13 |
| 600 | 1537 | .64 | 1819 | .95 | 2069 | 1.28 | 2299 | 1.63 | 2507 | 1.98 | 2702 | 2.36 | 2886 | 2.75 | 3059 | 3.16 | 3223 | 3.57 | 3379 | 4.00 |
| 800 | 1689 | .98 | 1923 | 1.31 | 2148 | 1.70 | 2356 | 2.11 | 2556 | 2.55 | 2739 | 2.99 | 2916 | 3.45 | 3083 | 3.91 | 3241 | 4.38 | 3392 | 4.86 |
| ★ | | | | | | | | | | | | | | | | | | | | |
| 1000 | 1875 | 1.47 | 2087 | 1.86 | 2280 | 2.27 | 2458 | 2.70 | 2641 | 3.20 | 2811 | 3.70 | 2977 | 4.23 | 3137 | 4.77 | 3288 | 5.32 | **3432** | **5.88** |
| 1200 | 2069 | 2.11 | 2273 | 2.60 | 2451 | 3.07 | 2615 | 3.54 | 2773 | 4.05 | 2921 | 4.56 | 3073 | 5.14 | 3222 | 5.74 | 3362 | 6.35 | **3500** | **6.97** |
| 1400 | 2277 | 2.99 | 2465 | 3.52 | 2638 | 4.08 | 2794 | 4.63 | 2939 | 5.18 | 3078 | 5.74 | 3214 | 6.33 | 3343 | 6.93 | **3467** | **7.54** | | |
| 1600 | 2495 | 4.11 | 2668 | 4.69 | 2830 | 5.30 | 2982 | 5.94 | 3123 | 6.58 | 3254 | 7.21 | 3379 | 7.83 | **3500** | **8.47** | | | | |
| 1800 | 2730 | 5.56 | 2880 | 6.16 | 3031 | 6.81 | 3175 | 7.50 | 3312 | 8.23 | **3441** | **8.95** | 3562 | 9.66 | | | | | | |
| 2000 | 2970 | 7.32 | 3103 | 7.95 | 3242 | 8.66 | 3376 | 9.39 | **3505** | **10.15** | | | | | | | | | | |
| 2200 | 3213 | 9.44 | 3338 | 10.15 | **3457** | **10.84** | 3586 | 11.66 | | | | | | | | | | | | |
| 2400 | **3459** | **11.96** | 3577 | 12.74 | | | | | | | | | | | | | | | | |

**8" O.D. INLET**

## PB-18WA

Outlet Area (Sq. Ft.) 0.349 — **Wheel Diameter 18.5"**

| VOLUME CFM | SP (IN.) WG | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4.00 | | 6.00 | | 8.00 | | 10.00 | | 12.00 | | 14.00 | | 16.00 | | 18.00 | | 20.00 | | 22.00 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 200 | 1374 | .40 | 1686 | .71 | 1949 | 1.07 | | | | | | | | | | | | | | |
| 400 | 1393 | .54 | 1696 | .90 | 1952 | 1.29 | 2177 | 1.72 | 2381 | 2.19 | 2568 | 2.68 | 2748 | 3.23 | 2916 | 3.81 | 3076 | 4.41 | | |
| 600 | 1421 | .70 | 1719 | 1.12 | 1975 | 1.58 | 2200 | 2.08 | 2403 | 2.61 | 2591 | 3.17 | 2765 | 3.76 | 2928 | 4.36 | 3083 | 5.00 | 3230 | 5.65 |
| 800 | 1491 | .94 | **1763** | **1.40** | 1998 | 1.89 | 2223 | 2.46 | 2426 | 3.06 | 2613 | 3.68 | 2787 | 4.34 | 2951 | 5.01 | 3106 | 5.71 | 3253 | 6.44 |
| ★ | | | | | | | | | | | | | | | | | | | | |
| 1000 | 1568 | 1.19 | 1834 | 1.76 | 2061 | 2.34 | 2265 | 2.92 | 2449 | 3.51 | 2636 | 4.21 | 2810 | 4.93 | 2974 | 5.68 | 3128 | 6.45 | 3275 | 7.24 |
| 1200 | 1667 | 1.54 | 1911 | 2.14 | 2135 | 2.82 | 2333 | 3.53 | 2516 | 4.21 | 2685 | 4.90 | 2843 | 5.61 | 2997 | 6.37 | 3151 | 7.21 | 3298 | 8.07 |
| 1400 | **1766** | **1.93** | 2006 | 2.63 | 2213 | 3.33 | 2409 | 4.12 | 2588 | 4.93 | 2754 | 5.75 | 2911 | 6.55 | 3058 | 7.35 | 3198 | 8.17 | 3331 | 9.00 |
| 1600 | 1883 | 2.50 | 2107 | 3.20 | 2308 | 3.99 | 2488 | 4.78 | 2665 | 5.67 | 2829 | 6.58 | 2982 | 7.52 | 3127 | 8.46 | 3266 | 9.36 | 3399 | 10.28 |
| 1800 | 2008 | 3.23 | 2205 | 3.82 | 2410 | 4.74 | 2586 | 5.62 | 2747 | 6.50 | 2907 | 7.47 | 3059 | 8.49 | 3203 | 9.52 | 3339 | 10.57 | **3468** | **11.64** |
| 2000 | 2128 | 4.03 | 2332 | 4.81 | 2507 | 5.54 | 2688 | 6.57 | 2847 | 7.54 | 2995 | 8.51 | 3137 | 9.54 | 3280 | 10.65 | **3415** | **11.78** | 3544 | 12.93 |
| 2200 | 2257 | 4.93 | 2456 | 5.91 | 2623 | 6.66 | 2786 | 7.56 | 2949 | 8.69 | 3096 | 9.76 | 3233 | 10.83 | 3362 | 11.90 | **3494** | **13.08** | | |
| 2400 | 2388 | 5.96 | 2576 | 7.09 | 2752 | 8.07 | 2895 | 8.82 | 3047 | 9.88 | 3197 | 11.11 | 3334 | 12.29 | **3462** | **13.45** | 3585 | 14.62 | | |
| 2600 | 2511 | 7.17 | 2703 | 8.39 | 2872 | 9.54 | 3023 | 10.51 | 3153 | 11.32 | 3295 | 12.50 | **3434** | **13.83** | 3564 | 15.13 | | | | |
| 2800 | 2634 | 8.54 | 2833 | 9.83 | 2992 | 11.16 | 3148 | 12.34 | 3280 | 13.31 | **3401** | **14.17** | 3532 | 15.44 | | | | | | |
| 3000 | 2760 | 10.09 | 2963 | 11.46 | 3120 | 12.89 | 3267 | 14.25 | **3408** | **15.50** | 3528 | 16.48 | | | | | | | | |
| 3200 | 2888 | 11.83 | 3085 | 13.32 | 3250 | 14.80 | 3389 | 16.33 | 3527 | 17.71 | | | | | | | | | | |
| 3400 | 3016 | 13.75 | 3208 | 15.38 | 3382 | 16.91 | 3518 | 18.55 | | | | | | | | | | | | |
| 3600 | 3147 | 15.90 | 3333 | 17.64 | **3504** | **19.30** | | | | | | | | | | | | | | |
| 3800 | 3278 | 18.25 | **3460** | **20.12** | | | | | | | | | | | | | | | | |
| 4000 | **3412** | **20.86** | 3589 | 22.87 | | | | | | | | | | | | | | | | |

**10" O.D. INLET**

**NOTE: DRIVE LOSSES ARE NOT INCLUDED IN BHP.**

**CONSULT FACTORY FOR SPEEDS HIGHER THAN THOSE SHOWN.**

**FOR RPMs & BHPs IN BOLD PRINT, DIRECT DRIVE BLOWERS SHOULD BE CONSIDERED.**

★ Motor frame size above line must be 182T minimum even though BHP is available in smaller frame size.

# PB SERIES DIRECT DRIVE RATING TABLES at 2850 RPM

**NOTE: THESE RATINGS ARE FOR 50 CYCLE MOTORS ONLY.**

**CFM and BHP at Static Pressure Shown** — **Ratings at 70°F., .075 Density, Sea Level**

| MODEL NO. | WHEEL DIA. & WIDTH | O.D.INLET SIZE | 1" SP | | 2" SP | | 3" SP | | 4" SP | | 5" SP | | 6" SP | | 7" SP | | 8" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| **PB-8** | 7 x 2 7/16 | 4" | 212 | .16 | 120 | .15 | | | | | | | | | | | | |
| | 8 x 2 3/4 | | 264 | .20 | 191 | .16 | | | | | | | | | | | | |
| **PB-9** | 8 x 2 3/4 | 5" | 340 | .25 | 271 | .21 | | | | | | | | | | | | |
| | 9 x 2 7/8 | | 389 | .28 | 317 | .24 | 220 | .20 | | | | | | | | | | |
| | 10 1/4 x 3 BC | | 404 | .30 | 336 | .26 | 266 | .23 | 181 | .19 | | | | | | | | |
| | 9 3/4 x 2 7/8 | | 435 | .44 | 374 | .40 | 305 | .36 | 223 | .30 | | | | | | | | |
| | 10 5/8 x 2 5/8 | | 473 | .46 | 423 | .42 | 364 | .35 | 306 | .30 | | | | | | | | |
| **PB-10A** | 9 x 2 7/8 | 6" | 443 | .38 | 358 | .33 | 229 | .26 | | | | | | | | | | |
| | 10 1/4 x 3 BC | | 477 | .43 | 400 | .37 | 297 | .32 | 135 | .25 | | | | | | | | |
| | 9 3/4 x 2 7/8 | | 567 | .56 | 494 | .51 | 401 | .45 | 276 | .36 | | | | | | | | |
| | 11 x 3 BC | | 584 | .59 | 529 | .54 | 458 | .48 | 360 | .41 | 203 | .31 | | | | | | |
| | 10 5/8 x 2 5/8 | | 666 | .76 | 579 | .69 | 504 | .62 | 403 | .55 | | | | | | | | |
| | 11 x 2 3/4 | | 668 | .78 | 601 | .70 | 535 | .63 | 449 | .55 | 341 | .47 | | | | | | |
| | 11 1/2 x 2 7/8 | | 712 | .85 | 650 | .78 | 565 | .72 | 490 | .64 | 397 | .57 | | | | | | |
| | 12 x 2 7/8 | | 751 | 1.09 | 704 | 1.04 | 643 | .98 | 570 | .91 | 496 | .83 | 372 | .72 | | | | |
| | 12 1/4 x 2 7/8 | | 784 | 1.21 | 746 | 1.14 | 702 | 1.05 | 642 | 1.00 | 561 | .92 | 468 | .82 | 207 | .52 | | |
| **PB-12A** | 11 x 3 BC | 7" | 696 | .60 | 610 | .56 | 496 | .48 | 361 | .40 | | | | | | | | |
| | 10 5/8 x 2 5/8 | | 851 | .90 | 744 | .80 | 623 | .70 | 471 | .56 | | | | | | | | |
| | 11 x 2 3/4 | | 925 | 1.06 | 808 | .97 | 686 | .85 | 539 | .70 | 350 | .54 | | | | | | |
| | 11 1/2 x 2 7/8 | | 1010 | 1.33 | 905 | 1.20 | 790 | 1.07 | 670 | .96 | 529 | .82 | | | | | | |
| | 12 x 2 7/8 | | 1048 | 1.40 | 945 | 1.30 | 842 | 1.18 | 732 | 1.06 | 619 | .94 | 482 | .79 | | | | |
| | 13 x 3 1/4 BC | | 1053 | 1.43 | 965 | 1.35 | 885 | 1.27 | 790 | 1.18 | 697 | 1.08 | 597 | .97 | 445 | .87 | | |
| | 12 1/4 x 2 7/8 | | 1087 | 1.61 | 997 | 1.46 | 886 | 1.32 | 784 | 1.17 | 667 | 1.05 | 545 | .90 | 271 | .61 | | |
| | 14 x 3 1/4 BC | | 1092 | 1.71 | 1000 | 1.59 | 908 | 1.48 | 819 | 1.38 | 722 | 1.27 | 626 | 1.15 | 525 | 1.04 | 385 | .85 |
| | 13 x 3 1/4 | | 1168 | 1.75 | 1084 | 1.65 | 994 | 1.55 | 886 | 1.42 | 783 | 1.27 | 680 | 1.17 | 573 | 1.01 | | |
| | 14 x 3 1/4 | | 1302 | 2.62 | 1218 | 2.45 | 1119 | 2.26 | 1030 | 2.04 | 941 | 1.91 | 833 | 1.76 | 727 | 1.60 | 615 | 1.44 |
| **PB-14A** | 13 x 3 1/4 BC | 6" | 1060 | 1.37 | 978 | 1.30 | 895 | 1.23 | 793 | 1.12 | 677 | .99 | 511 | .80 | 302 | .57 | | |
| | 13 x 3 1/4 BC | 7" | 1093 | 1.37 | 1001 | 1.30 | 912 | 1.21 | 808 | 1.11 | 682 | .99 | 530 | .86 | | | | |
| | 13 x 3 1/4 BC | 8" | 1134 | 1.39 | 1028 | 1.31 | 922 | 1.22 | 812 | 1.12 | 689 | 1.00 | 526 | .83 | | | | |
| | 12 1/4 x 2 7/8 | 6" | 1193 | 1.62 | 1085 | 1.50 | 969 | 1.39 | 837 | 1.22 | 697 | 1.07 | 514 | .87 | | | | |
| | 12 1/4 x 2 7/8 | 7" | 1263 | 1.83 | 1143 | 1.69 | 1029 | 1.61 | 887 | 1.37 | 730 | 1.22 | 506 | .85 | | | | |
| | 13 x 3 1/4 | 6" | 1217 | 1.97 | 1138 | 1.85 | 1059 | 1.74 | 972 | 1.61 | 865 | 1.43 | 732 | 1.25 | 546 | 1.00 | | |
| | 12 1/4 x 2 7/8 | 8" | 1305 | 1.91 | 1189 | 1.78 | 1062 | 1.62 | 921 | 1.45 | 742 | 1.25 | 513 | 1.03 | | | | |
| | 13 x 3 1/4 | 7" | 1271 | 2.02 | 1188 | 1.89 | 1113 | 1.78 | 1025 | 1.63 | 910 | 1.46 | 750 | 1.26 | 568 | 1.03 | | |
| | 14 x 3 1/4 BC | 6" | 1288 | 2.15 | 1200 | 2.03 | 1105 | 1.90 | 1011 | 1.77 | 914 | 1.63 | 796 | 1.46 | 663 | 1.27 | 480 | .99 |
| | 13 x 3 1/4 | 8" | 1320 | 2.08 | 1235 | 1.94 | 1157 | 1.80 | 1054 | 1.64 | 934 | 1.47 | 753 | 1.26 | 544 | .95 | | |
| | 14 x 3 1/4 BC | 7" | 1345 | 2.23 | 1252 | 2.11 | 1149 | 1.97 | 1042 | 1.83 | 935 | 1.69 | 824 | 1.54 | 690 | 1.32 | 516 | 1.01 |
| | 14 x 3 1/4 BC | 8" | 1405 | 2.27 | 1308 | 2.14 | 1205 | 2.02 | 1096 | 1.89 | 979 | 1.72 | 865 | 1.59 | 703 | 1.36 | 506 | 1.05 |
| | 14 x 3 1/4 | 6" | 1343 | 2.59 | 1281 | 2.46 | 1206 | 2.31 | 1111 | 2.17 | 1019 | 2.08 | 928 | 1.90 | 815 | 1.67 | 667 | 1.36 |
| | 14 x 3 1/4 | 7" | 1488 | 2.88 | 1415 | 2.71 | 1343 | 2.54 | 1230 | 2.38 | 1113 | 2.09 | 1001 | 1.97 | 868 | 1.72 | 706 | 1.49 |
| | 14 3/4 x 4 | 6" | 1510 | 3.23 | 1427 | 3.09 | 1346 | 2.95 | 1267 | 2.82 | 1195 | 2.69 | 1098 | 2.51 | 983 | 2.30 | 858 | 2.06 |
| | 14 x 3 1/4 | 8" | 1620 | 3.04 | 1514 | 2.86 | 1408 | 2.69 | 1287 | 2.49 | 1155 | 2.26 | 1006 | 1.98 | 866 | 1.78 | 703 | 1.46 |
| | 14 3/4 x 4 | 7" | 1613 | 3.51 | 1537 | 3.38 | 1447 | 3.20 | 1347 | 2.98 | 1258 | 2.82 | 1158 | 2.63 | 1045 | 2.41 | 931 | 2.19 |
| | 14 3/4 x 4 | 8" | 1715 | 3.79 | 1635 | 3.60 | 1520 | 3.31 | 1416 | 3.06 | 1308 | 2.83 | 1198 | 2.63 | 1088 | 2.43 | 963 | 2.20 |
| **PB-15A** (1) | 14 x 3 1/4 BC | 6" | 1435 | 1.92 | 1328 | 1.86 | 1199 | 1.68 | 1049 | 1.53 | 902 | 1.41 | 739 | 1.17 | 505 | 1.02 | | |
| | 14 x 3 1/4 BC | 8" | 1707 | 2.40 | 1561 | 2.21 | 1408 | 1.98 | 1216 | 1.74 | 994 | 1.47 | 779 | 1.31 | 517 | 1.03 | | |
| | 14 x 3 1/4 BC | 10" | 1752 | 2.45 | 1590 | 2.25 | 1435 | 2.05 | 1227 | 1.75 | 1006 | 1.53 | 756 | 1.28 | | | | |
| | 15 1/2 x 5 BC | 6" | 1670 | 2.99 | 1565 | 2.84 | 1468 | 2.66 | 1333 | 2.55 | 1238 | 2.41 | 1132 | 2.27 | 1009 | 2.09 | 840 | 1.85 |
| USE | 14 x 3 1/4 | 6" | 1795 | 3.21 | 1689 | 3.09 | 1544 | 2.91 | 1434 | 2.74 | 1300 | 2.45 | 1128 | 2.21 | 940 | 1.95 | 689 | 1.53 |
| 182T | 16 1/2 x 4 3/8 BC | 6" | 1836 | 3.62 | 1754 | 3.54 | 1654 | 3.41 | 1541 | 3.25 | 1395 | 2.98 | 1292 | 2.84 | 1175 | 2.68 | 1037 | 2.50 |
| FRAME | 15 1/2 x 5 | 6" | 1941 | 4.58 | 1855 | 4.43 | 1783 | 4.32 | 1676 | 4.11 | 1572 | 3.91 | 1477 | 3.76 | 1371 | 3.46 | 1256 | 3.17 |
| MIN. | 15 1/2 x 5 BC | 8" | 2177 | 4.10 | 2030 | 3.88 | 1874 | 3.61 | 1719 | 3.31 | 1562 | 3.01 | 1397 | 2.77 | 1222 | 2.47 | 1029 | 2.15 |
| | 14 x 3 1/4 | 8" | 2363 | 4.41 | 2179 | 4.10 | 1988 | 3.76 | 1786 | 3.38 | 1573 | 3.00 | 1360 | 2.59 | 1052 | 2.10 | 716 | 1.58 |
| | 14 x 3 1/4 | 10" | 2419 | 4.62 | 2273 | 4.33 | 2101 | 4.00 | 1902 | 3.59 | 1653 | 3.14 | 1392 | 2.63 | 1070 | 2.07 | | |
| | 15 1/2 x 5 BC | 10" | 2281 | 4.36 | 2147 | 4.12 | 2000 | 3.85 | 1835 | 3.55 | 1658 | 3.17 | 1458 | 2.82 | 1227 | 2.46 | 1053 | 2.19 |
| | 16 1/2 x 4 3/8 BC | 8" | 2208 | 4.35 | 2115 | 4.22 | 2013 | 4.05 | 1898 | 3.83 | 1765 | 3.60 | 1628 | 3.38 | 1464 | 3.15 | 1258 | 2.85 |
| | 16 1/2 x 4 3/8 | 6" | 2136 | 5.49 | 2055 | 5.34 | 1970 | 5.17 | 1874 | 4.97 | 1777 | 4.78 | 1681 | 4.58 | 1565 | 4.41 | 1448 | 4.24 |
| | 16 1/2 x 4 3/8 BC | 10" | 2299 | 4.38 | 2213 | 4.25 | 2100 | 4.08 | 1964 | 3.89 | 1822 | 3.64 | 1670 | 3.41 | 1490 | 3.17 | 1283 | 2.89 |
| | 15 1/2 x 5 | 8" | 2653 | 6.57 | 2522 | 6.26 | 2393 | 5.93 | 2255 | 5.64 | 2103 | 5.23 | 1928 | 4.72 | 1727 | 4.18 | 1538 | 3.75 |
| | 15 1/2 x 5 | 10" | 2822 | 7.14 | 2712 | 6.84 | 2585 | 6.44 | 2445 | 5.98 | 2261 | 5.55 | 2037 | 4.95 | 1820 | 4.39 | 1628 | 3.97 |
| | 16 1/2 x 4 3/8 | 8" | 2948 | 7.66 | 2840 | 7.43 | 2726 | 7.19 | 2590 | 6.88 | 2441 | 6.49 | 2291 | 6.09 | 2097 | 5.65 | 1870 | 5.00 |
| | 16 1/2 x 4 3/8 | 10" | 3029 | 7.97 | 2952 | 7.82 | 2858 | 7.60 | 2749 | 7.32 | 2612 | 6.95 | 2457 | 6.50 | 2274 | 5.99 | 2073 | 5.50 |
| **PB-18** | 14 x 3 1/4 BC | 6" | 925 | 1.54 | 863 | 1.50 | 787 | 1.46 | 717 | 1.40 | 643 | 1.35 | 539 | 1.29 | 447 | 1.18 | 315 | 1.04 |
| | 14 x 3 1/4 | 6" | 1126 | 2.33 | 1068 | 2.27 | 997 | 2.18 | 924 | 2.06 | 853 | 1.97 | 772 | 1.86 | 688 | 1.75 | 588 | 1.62 |
| | 14 x 3 1/4 BC | 8" | 1224 | 2.08 | 1146 | 1.99 | 1056 | 1.87 | 956 | 1.73 | 843 | 1.61 | 724 | 1.48 | 579 | 1.35 | 397 | 1.15 |
| | 14 x 3 1/4 BC | 10" | 1285 | 2.12 | 1193 | 2.01 | 1088 | 1.87 | 994 | 1.72 | 883 | 1.63 | 771 | 1.51 | 590 | 1.35 | | |
| USE | 16 1/2 x 4 3/8 BC | 6" | 1251 | 3.08 | 1199 | 3.03 | 1147 | 2.96 | 1092 | 2.92 | 1026 | 2.80 | 956 | 2.72 | 879 | 2.66 | 786 | 2.55 |
| 3 HP | 18 x 4 3/8 BC | 6" | 1300 | 3.56 | 1246 | 3.54 | 1192 | 3.46 | 1141 | 3.39 | 1093 | 3.34 | 1035 | 3.26 | 973 | 3.18 | 907 | 3.08 |
| 182T | 14 x 3 1/4 | 8" | 1466 | 2.79 | 1375 | 2.66 | 1287 | 2.57 | 1197 | 2.44 | 1101 | 2.35 | 1005 | 2.22 | 893 | 2.06 | 781 | 1.94 |
| MIN. | 16 1/2 x 4 3/8 | 6" | 1466 | 4.15 | 1428 | 4.05 | 1379 | 3.94 | 1328 | 3.80 | 1274 | 3.71 | 1218 | 3.58 | 1160 | 3.41 | 1098 | 3.23 |
| | 14 x 3 1/4 | 10" | 1553 | 2.97 | 1471 | 2.87 | 1378 | 2.70 | 1268 | 2.52 | 1159 | 2.37 | 1046 | 2.21 | 930 | 2.07 | 805 | 1.94 |
| | 16 1/2 x 4 3/8 BC | 8" | 1667 | 4.13 | 1598 | 4.01 | 1516 | 3.86 | 1425 | 3.68 | 1330 | 3.52 | 1236 | 3.35 | 1143 | 3.22 | 1043 | 3.07 |
| | 18 x 4 3/8 | 6" | 1606 | 5.42 | 1563 | 5.30 | 1516 | 5.16 | 1464 | 5.10 | 1415 | 4.91 | 1365 | 4.74 | 1313 | 4.60 | 1260 | 4.47 |
| | 16 1/2 x 4 3/8 BC | 10" | 1807 | 4.50 | 1731 | 4.36 | 1644 | 4.23 | 1554 | 4.07 | 1464 | 3.84 | 1361 | 3.64 | 1248 | 3.44 | 1144 | 3.25 |
| | 18 x 4 3/8 BC | 8" | 1869 | 5.10 | 1796 | 4.97 | 1718 | 4.80 | 1642 | 4.64 | 1542 | 4.55 | 1452 | 4.38 | 1371 | 4.13 | 1281 | 3.91 |
| | 16 1/2 x 4 3/8 | 8" | 1918 | 5.47 | 1848 | 5.31 | 1772 | 5.16 | 1693 | 4.98 | 1608 | 4.81 | 1530 | 4.60 | 1448 | 4.42 | 1369 | 4.21 |
| | 16 1/2 x 4 3/8 | 10" | 2105 | 6.14 | 2037 | 6.02 | 1958 | 5.84 | 1889 | 5.60 | 1798 | 5.34 | 1706 | 5.14 | 1612 | 4.99 | 1509 | 4.76 |
| | 18 x 4 3/8 BC | 10" | 2094 | 5.86 | 2031 | 5.75 | 1957 | 5.57 | 1868 | 5.20 | 1807 | 5.09 | 1736 | 4.93 | 1652 | 4.68 | 1555 | 4.36 |
| | 18 x 4 3/8 | 8" | 2066 | 7.05 | 2016 | 6.86 | 1962 | 6.64 | 1905 | 6.39 | 1845 | 6.22 | 1778 | 5.99 | 1704 | 5.71 | 1625 | 5.51 |
| | 18 x 4 3/8 | 10" | 2356 | 7.46 | 2300 | 7.25 | 2232 | 7.02 | 2161 | 6.72 | 2088 | 6.55 | 2008 | 6.36 | 1923 | 6.14 | 1841 | 5.97 |
| **PB-18WA** | 16 1/2 x 5 BC | 8" | 2108 | 4.33 | 1968 | 4.17 | 1827 | 4.00 | 1695 | 3.83 | 1587 | 3.61 | 1462 | 3.42 | 1323 | 3.23 | 1170 | 3.02 |
| | 15 1/2 x 5 BC | 10" | 2217 | 4.06 | 2060 | 3.84 | 1908 | 3.61 | 1771 | 3.51 | 1584 | 3.27 | 1394 | 3.08 | 1152 | 2.76 | 915 | 2.38 |
| | 15 1/2 x 5 | 8" | 2265 | 5.13 | 2130 | 4.90 | 1995 | 4.66 | 1844 | 4.42 | 1692 | 4.18 | 1571 | 3.95 | 1422 | 3.66 | 1249 | 3.36 |
| USE | 16 1/2 x 5 BC | 10" | 2380 | 4.67 | 2249 | 4.52 | 2118 | 4.37 | 1981 | 4.21 | 1809 | 4.02 | 1647 | 3.77 | 1478 | 3.50 | 1284 | 3.24 |
| 5 HP | 16 1/2 x 5 | 8" | 2440 | 6.27 | 2335 | 5.99 | 2230 | 5.71 | 2123 | 5.47 | 2012 | 5.30 | 1878 | 5.06 | 1746 | 4.79 | 1603 | 4.51 |
| 182T | 17 x 6 | 8" | 2520 | 6.95 | 2395 | 6.70 | 2271 | 6.44 | 2147 | 6.18 | 2031 | 5.90 | 1920 | 5.60 | 1785 | 5.38 | 1650 | 5.17 |
| MIN. | 15 1/2 x 5 | 10" | 2757 | 6.79 | 2620 | 6.39 | 2483 | 5.98 | 2345 | 5.57 | 2182 | 5.16 | 1978 | 4.72 | 1709 | 4.23 | 1493 | 3.89 |
| | 17 x 6 | 10" | 2968 | 8.78 | 2849 | 8.37 | 2730 | 7.96 | 2612 | 7.56 | 2494 | 7.16 | 2374 | 6.80 | 2208 | 6.51 | 2051 | 6.21 |
| | 16 1/2 x 5 | 10" | 3027 | 8.87 | 2895 | 8.38 | 2764 | 7.89 | 2632 | 7.40 | 2488 | 6.97 | 2323 | 6.62 | 2125 | 6.12 | 1920 | 5.63 |
| | 18 1/2 x 6 | 10" | 3637 | 13.43 | 3472 | 12.72 | 3306 | 12.01 | 3141 | 11.30 | 2975 | 10.59 | 2824 | 10.02 | 2699 | 9.73 | 2562 | 9.26 |

(1) Additional ratings available with 7" inlet. Consult your local CFV representative.

CONTINUED ON PAGE 13

# PB SERIES DIRECT DRIVE RATING TABLES at 2850 RPM

**NOTE: THESE RATINGS ARE FOR 50 CYCLE MOTORS ONLY.**

(CONTINUED FROM PAGE 12)

| MODEL NO. | WHEEL DIA. & WIDTH | O.D.INLET SIZE | 9" SP | | 10" SP | | 11" SP | | 12" SP | | 13" SP | | 14" SP | | 15" SP | | 16" SP ★ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP |
| **PB-14A** | 14 x 3¼ | 6" | 407 | .93 | | | | | | | | | | | | | | |
| | 14¾ x 4 | 6" | 719 | 1.79 | 548 | 1.45 | | | | | | | | | | | | |
| | 14¾ x 4 | 7" | 763 | 1.85 | 577 | 1.48 | | | | | | | | | | | | |
| | 14¾ x 4 | 8" | 787 | 1.87 | 610 | 1.55 | | | | | | | | | | | | |
| **PB-15A** | 15½ x 5 BC | 6" | 645 | 1.60 | 385 | 1.16 | | | | | | | | | | | | |
| (1) | 15½ x 5 BC | 10" | 704 | 1.63 | | | | | | | | | | | | | | |
| | 15½ x 5 BC | 8" | 751 | 1.75 | | | | | | | | | | | | | | |
| | 16½ x 4⅜ BC | 6" | 917 | 2.27 | 606 | 1.76 | 308 | 1.40 | | | | | | | | | | |
| USE | 16½ x 4⅜ BC | 10" | 1080 | 2.66 | 828 | 2.19 | | | | | | | | | | | | |
| 182T | 16½ x 4⅜ BC | 8" | 1081 | 2.57 | 863 | 2.17 | 561 | 1.64 | | | | | | | | | | |
| FRAME | 15½ x 5 | 6" | 1096 | 2.88 | 909 | 2.50 | 521 | 1.63 | | | | | | | | | | |
| MIN. | 15½ x 5 | 8" | 1365 | 3.40 | 1122 | 2.91 | 690 | 2.06 | | | | | | | | | | |
| | 16½ x 4⅜ | 6" | 1342 | 3.97 | 1234 | 3.71 | 1051 | 3.25 | 808 | 2.61 | | | | | | | | |
| | 15½ x 5 | 10" | 1436 | 3.54 | 1173 | 3.00 | | | | | | | | | | | | |
| | 16½ x 4⅜ | 8" | 1660 | 4.53 | 1452 | 4.14 | 1258 | 3.72 | 1069 | 3.27 | | | | | | | | |
| | 16½ x 4⅜ | 10" | 1883 | 5.08 | 1658 | 4.54 | 1409 | 3.99 | | | | | | | | | | |
| **PB-18** | 16½ x 4⅜ BC | 6" | 688 | 2.46 | 590 | 2.37 | 492 | 2.27 | 361 | 2.04 | | | | | | | | |
| | 16½ x 4⅜ BC | 8" | 921 | 2.91 | 788 | 2.72 | 644 | 2.48 | 438 | 2.17 | | | | | | | | |
| | 18 x 4⅜ BC | 6" | 851 | 2.96 | 781 | 2.83 | 690 | 2.59 | 599 | 2.38 | 508 | 2.17 | 416 | 1.96 | 326 | 1.76 | | |
| | 16½ x 4⅜ BC | 10" | 1035 | 3.02 | 911 | 2.81 | 761 | 2.62 | 508 | 2.30 | | | | | | | | |
| USE | 16½ x 4⅜ | 6" | 1026 | 3.08 | 944 | 2.91 | 849 | 2.71 | 718 | 2.45 | 525 | 2.10 | | | | | | |
| 3 HP | 18 x 4⅜ BC | 8" | 1185 | 3.68 | 1085 | 3.43 | 981 | 3.17 | 863 | 2.92 | 706 | 2.57 | 493 | 2.10 | | | | |
| 182T | 18 x 4⅜ | 6" | 1208 | 4.33 | 1149 | 4.17 | 1080 | 3.99 | 998 | 3.78 | 880 | 3.53 | 740 | 3.23 | 583 | 2.89 | 265 | 1.90 |
| MIN. | 16½ x 4⅜ | 8" | 1281 | 3.94 | 1193 | 3.67 | 1103 | 3.41 | 958 | 2.99 | 717 | 2.43 | | | | | | |
| | 16½ x 4⅜ | 10" | 1414 | 4.51 | 1317 | 4.27 | 1212 | 4.03 | 1068 | 3.72 | 837 | 3.27 | | | | | | |
| | 18 x 4⅜ BC | 10" | 1443 | 4.09 | 1347 | 3.84 | 1271 | 3.61 | 1127 | 3.35 | 961 | 3.04 | 720 | 2.64 | | | | |
| | 18 x 4⅜ | 8" | 1542 | 5.27 | 1460 | 5.04 | 1381 | 4.83 | 1302 | 4.58 | 1198 | 4.30 | 1061 | 3.97 | 886 | 3.56 | | |
| | 18 x 4⅜ | 10" | 1744 | 5.75 | 1643 | 5.50 | 1542 | 5.22 | 1438 | 4.96 | 1325 | 4.63 | 1187 | 4.25 | 1008 | 3.83 | | |
| **PB-18WA** | 15½ x 5 BC | 10" | 626 | 2.01 | | | | | | | | | | | | | | |
| | 16½ x 5 BC | 10" | 1076 | 2.90 | 774 | 2.55 | 409 | 2.02 | | | | | | | | | | |
| | 16½ x 5 BC | 8" | 988 | 2.76 | 822 | 2.51 | 583 | 2.19 | | | | | | | | | | |
| USE | 15½ x 5 | 8" | 1050 | 3.04 | 812 | 2.65 | 472 | 2.08 | | | | | | | | | | |
| 3 HP | 15½ x 5 | 10" | 1268 | 3.47 | 976 | 3.05 | 585 | 2.45 | | | | | | | | | | |
| 182T | 16½ x 5 | 8" | 1427 | 4.23 | 1262 | 3.91 | 1077 | 3.56 | 843 | 3.11 | | | | | | | | |
| MIN. | 17 x 6 | 8" | 1529 | 4.96 | 1356 | 4.64 | 1180 | 4.29 | 1045 | 3.97 | 806 | 3.50 | | | | | | |
| | 16½ x 5 | 10" | 1708 | 5.16 | 1490 | 4.70 | 1243 | 4.24 | 988 | 3.72 | | | | | | | | |
| | 17 x 6 | 10" | 1882 | 5.86 | 1671 | 5.41 | 1463 | 5.00 | 1260 | 4.56 | 1005 | 3.97 | | | | | | |
| | 18½ x 6 | 10" | 2438 | 8.75 | 2327 | 8.26 | 2150 | 7.91 | 2004 | 7.56 | 1853 | 7.22 | 1652 | 6.81 | 1446 | 6.37 | 1220 | 5.70 |

(1) Additional ratings available with 7" inlet. Consult your local CFV representative.

★ For static pressures above 16", see “HP” Series catalogs. For higher CFM values, see “RBE” Series catalog.

## HOUSING SIDE PLATES

On models PB-8 through PB-12A, the inlet collar and motor mounting pad are an integral part of the housing halves. Housings are rotatable but not reversible.

On models PB-14A through PB-18WA, the inlet collars and motor side plates are separate castings which are bolted to the housing halves. These housings are rotatable and reversible. Note, however, BC type wheels are not reversible.

# MATERIAL CONVEYING

Bulky materials such as those shown in Table 1, page 15, can be conveyed pneumatically using a Cincinnati Fan "PB" series cast aluminum pressure blower. Follow the steps below to determine the fan best suited for your application.

EXAMPLE: Assume a requirement to move 900 pounds per hour of barley through 75 feet of straight, horizontal, round duct. See notes 1 & 2 below.

I. Convert pounds per hour to pounds per minute: 900 lbs/hr ÷ 60 = 15 lbs/min

II. Refer to Table 1, page 15. Find "barley" under material (column A) and read horizontally. Barley weighs 38 pounds per cubic foot (column B), requires 38 CFM of air per pound of material (column C) and a minimum of 5000 feet per minute conveying velocity (column D).

III. Determine the *minimum* cubic feet per minute (CFM) requirements:

| | | |
|---|---|---|
| CFM/LB of Material | 38 | (from column C) |
| x lbs/Minute = | x 15 | (from step 1) |
| | 570 | Total minimum CFM required @ 5000 ft/min conveying velocity (column D) |

IV. Determine the system static pressure requirements from Table 2, page 15. Read across the 5000 ft/min velocity line to the 6" duct size column.

We have selected 6" duct size with 980 CFM (actual) to maintain a velocity of 5000 ft/min.

The friction loss is 8.02" SP per 100' x .75 = 6.01" plus 3.5" SP suction pickup (column E, Table 1) = 9.51" total system static pressure for 75 feet of straight 6" duct.

V. Check direct drive rating tables for 980 CFM at 9.51" SP at the lowest horsepower. We suggest a Model PB-14A, 14 x 3¼ wheel, 6" inlet. Interpolate 2.94 BHP. **Do not use B.C. type wheels for material conveying.**

VI. If material being conveyed will be going through the fan, the fan BHP can be significantly increased. The approximate increase is calculated as:

$$\text{Actual BHP} = \frac{\text{lbs/Minute of air + lbs/Minute of material}}{\text{lbs/Minute of air}} \times \text{Fan BHP (2.94, Step V)}$$

In this example: lbs/Minute of air = 980 (Actual CFM, Step IV) x .075 lbs/ft$^3$ $\left(\frac{\text{Standard}}{\text{Density}}\right)$ = 73.5 (See note 3)

lbs/Minute of material = 15

Therefore: $\frac{73.5 + 15}{73.5} = \frac{88.5}{73.5}$ = 1.20 x 2.94 = 3.53 Actual BHP

**NOTES:**
1. For each 10 feet of vertical duct, add 10 feet to your total straight duct length.
2. For equivalent losses through elbows, see chart on page 9 of our Engineering Data catalog.
3. Make sure you use correct density for location of fan.

# YOUR MATERIAL CONVEYING CALCULATIONS

(1) Material Being Conveyed (1)_____

(2) Pounds Conveyed/Hour (2)_____

\+ 60

(3) Pounds/Minute (3) _____

(4) Feet of Straight Horizontal Duct (4)_____ See note 1 above

(5) Number of 90˚ Elbows (5) + _____ See note 2 above

(6) Total Equivalent Feet of Duct (6) _____

(7) Material Weight, Lbs./Cu. Ft. (col. B) (7) _____

(8) CFM/Pound of Material (col. C) (8)_____

(9) Pounds/Minute (step 3) (9) x _____

(10) Total Min. CFM Required (10) _____

(11) Min. Conveying Velocity in FPM (col. D) (11) _____

(12) Duct Size to Get Total CFM (step 10) @ Minimum Velocity (step 11) per table 2 (12) _____ DUCT SIZE

(13) Actual CFM for Duct (step 12) (13)*_____ ACTUAL CFM*

(14) Friction Loss/100 Ft. (14)_____

(15) Total Equivalent Feet of Duct (step 6) (in 100's of feet) (15) x _____ (in 100's of feet)

(16) Suction Pickup in Inches of WC (col. E) (16) + _____

(17) Total System SP (17) _____ TOTAL SYSTEM SP

NOTE: If conveying long, stringy material, be sure to specify paper trim type wheel.

FAN MODEL TO GET #13 (Actual CFM) & #17 (Total SP) ABOVE _____

FAN RPM _____

ACTUAL FAN BHP _____ (See VI above)

*Must be equal or greater than Step 10.

## TABLE 1

| A | B | C | D | E |
|---|---|---|---|---|
| **Material** | **Approx. Weight (Lbs./Cu. Ft.)** | **Cu. Ft. of Air Per Lb. of Material** | **Min. Conveying Velocity (In fpm*)** | **Suction Pickup (Inches of W.C.)** |
| Ashes, Coal | 30 | 42 | 4500 | 3.0 |
| Barley | 38 | 38 | 5000 | 3.5 |
| Beans, Soy | 47 | 36 | 5200 | 4.0 |
| Bran | 16 | 56 | 3500 | 2.0 |
| Cement, Portland | 100 | 35 | 7000 | 5.0 |
| Cinders, Coal | 45 | 36 | 6000 | 4.0 |
| Coal, Powdered | 30 | 42 | 4000 | 3.0 |
| Coffee, Beans | 42 | 36 | 3500 | 3.0 |
| Cork, Ground | 14 | 59 | 3500 | 1.5 |
| Corn, Cobs | 25 | 44 | 5000 | 2.5 |
| Corn, Meal | 40 | 38 | 5500 | 3.5 |
| Corn, Shelled | 45 | 36 | 5500 | 3.5 |
| Cotton, Dry | 5 | 94 | 4000 | 2.0 |
| Dust, Grinding | 30 | 42 | 5000 | 3.0 |
| Fruit, Dried | 30 | 42 | 4000 | 3.0 |
| Hair or Feathers, Dry | 5 | 94 | 3000 | 1.5 |
| Lime, Hydrated | 30 | 42 | 5000 | 3.0 |
| Malt, Dry | 35 | 39 | 4800 | 3.0 |
| Oats | 26 | 44 | 4500 | 3.0 |
| Paper, Shredded | 20 | 49 | 5000 | 3.0 |
| Plastic, Granulated | 35 | 42 | 5400 | 3.0 |
| Rags, Dry | 30 | 42 | 4500 | 2.5 |
| Salt, Coarse | 45 | 36 | 5500 | 4.0 |
| Sand, Dry | 105 | 35 | 7000 | 5.0 |
| Sawdust, Dry | 13 | 63 | 3700 | 2.5 |
| Wheat, Dry | 46 | 37 | 5800 | 4.0 |
| Wood Chips, Heavy | 24 | 45 | 4500 | 3.0 |
| Wood Shavings, Light | 9 | 73 | 3400 | 2.0 |
| Wool, Dry | 5 | 94 | 5000 | 2.0 |

*** Feet per minute**

**⚠ WARNING**

When fans are used in material conveying applications, care must be used in their selection and location within each material conveying system. The material should be crushed, shredded or pulverized ***BEFORE*** it passes through the fan to eliminate premature fan housing, wheel and/or bearing failure which could cause severe, personal injury and/or complete system failure. Please contact a Cincinnati Fan sales engineer in your area for selection assistance for your specific application.

## TABLE 2

**Friction Loss (FL) in Inches of Water per 100 Feet of Straight, Horizontal, Round Duct**

| VEL FPM | PIPE DIAMETER & AREA IN SQ. FT. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4" .087 | | 5" .136 | | 6" .196 | | 7" .267 | | 8" .349 | | 10" .545 | | 12" .785 | | 14" 1.069 | | 16" 1.396 | | 18" 1.767 | | 20" 2.182 | |
| | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL | CFM | FL |
| 2600 | 227 | 3.26 | 355 | 2.60 | 511 | 2.17 | 695 | 1.86 | 909 | 1.63 | 1420 | 1.30 | SEE "RBE" CATALOG | | | | | | | | | |
| 2800 | 245 | 3.76 | 382 | 3.01 | 550 | 2.52 | 748 | 2.15 | 977 | 1.89 | 1530 | 1.61 | | | | | | | | | | |
| 3000 | 262 | 4.33 | 409 | 3.46 | 588 | 2.88 | 802 | 2.47 | 1048 | 2.08 | 1638 | 1.73 | | | | | | | | | | |
| 3200 | 279 | 4.93 | 437 | 3.94 | 628 | 3.28 | 855 | 2.82 | 1118 | 2.47 | 1748 | 1.97 | | | | | | | | | | |
| 3400 | 297 | 5.56 | 464 | 4.45 | 668 | 3.71 | 910 | 3.18 | 1188 | 2.78 | 1855 | 2.22 | | | | | | | | | | |
| 3500 | 304 | 5.89 | 476 | 4.71 | 686 | 3.93 | 935 | 3.37 | 1222 | 2.95 | 1908 | 2.35 | | | | | | | | | | |
| 3600 | 314 | 6.23 | 492 | 4.98 | 707 | 4.15 | 962 | 3.56 | 1258 | 3.12 | 1965 | 2.49 | | | | | | | | | | |
| 3700 | 322 | 6.59 | 503 | 5.26 | 725 | 4.38 | 988 | 3.76 | 1291 | 3.30 | 2017 | 2.63 | | | | | | | | | | |
| 3800 | 332 | 6.95 | 518 | 5.55 | 746 | 4.62 | 1018 | 3.97 | 1327 | 3.48 | 2070 | 2.78 | | | | | | | | | | |
| 4000 | 350 | 7.69 | 546 | 6.15 | 796 | 5.13 | 1070 | 4.40 | 1396 | 3.85 | 2184 | 3.08 | | | | | | | | | | |
| 4200 | 367 | 8.48 | 573 | 6.78 | 825 | 5.65 | 1125 | 4.85 | 1467 | 4.25 | 2290 | 3.49 | | | | | | | | | | |
| 4400 | 384 | 9.26 | 600 | 7.41 | 864 | 6.18 | 1176 | 5.30 | 1536 | 4.63 | 2400 | 3.71 | | | | | | | | | | |
| 4500 | 392 | 9.70 | 612 | 7.77 | 882 | 6.48 | 1202 | 5.55 | 1571 | 4.86 | 2453 | 3.89 | | | | | | | | | | |
| 4800 | 418 | 11.05 | 654 | 8.85 | 944 | 7.38 | 1284 | 6.32 | 1676 | 5.55 | 2620 | 4.43 | | | | | | | | | | |
| 5000 | 435 | 12.02 | 680 | 9.67 | 980 | 8.02 | 1335 | 6.88 | 1745 | 6.02 | 2725 | 4.82 | | | | | | | | | | |
| 5200 | 454 | 13.00 | 710 | 10.50 | 1022 | 8.66 | 1390 | 7.44 | 1818 | 6.50 | 2840 | 5.21 | | | | | | | | | | |
| 5500 | 479 | 14.68 | 748 | 11.64 | 1078 | 9.68 | 1469 | 8.31 | 1920 | 7.28 | 2997 | 5.81 | | | | | | | | | | |
| 5600 | 490 | 15.25 | 764 | 12.05 | 1100 | 10.05 | 1496 | 8.61 | 1954 | 7.55 | 3060 | 6.03 | | | | | | | | | | |
| 5800 | 505 | 16.27 | 789 | 12.95 | 1137 | 10.78 | 1549 | 9.25 | 2024 | 8.10 | 3161 | 6.47 | | | | | | | | | | |
| 6000 | 524 | 17.30 | 818 | 13.85 | 1176 | 11.52 | 1604 | 9.89 | 2096 | 8.66 | 3276 | 6.92 | | | | | | | | | | |
| 7000 | 611 | 23.60 | 955 | 18.90 | 1375 | 15.65 | 1873 | 13.50 | 2445 | 11.80 | 3820 | 9.41 | | | | | | | | | | |

# DIMENSIONS and SPECIFICATIONS

**NOTE: The table below contains blower housing dimensions common to all arrangements on pages 17, 18, 19 and 20.**

| MODEL | C | D | J | M | N | O | P | R | S | T | AA ①②③ | DD ④ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PB-8 | 1 | 3 3/4 | 2 7/8 | 4 1/8 | 1 1/8 | 4 5/8 | 5 9/16 | 6 1/2 | 4 7/8 | 1 1/8 | 4 | 4 |
| PB-9 | 1 1/16 | 4 1/8 | 3 1/8 | 5 5/8 | 1 3/16 | 6 1/16 | 7 1/2 | 7 7/8 | 6 5/8 | 1 | 5 | 4 |
| PB-10A | 1 1/4 | 4 1/4 | 3 3/8 | 6 9/16 | 1 | 6 7/8 | 9 7/16 | 8 15/16 | 7 13/16 | 1 | 6 | 5 |
| PB-12A | 1 1/4 | 5 | 3 3/4 | 7 9/16 | 7/8 | 8 | 9 5/8 | 11 | 9 7/16 | 1 | 7 | 6 |
| PB-14A | 1 1/4 | 6 | 4 1/4 | 8 1/16 | 1 1/8 | 8 11/16 | 10 1/4 | 11 5/16 | 10 1/4 | 1 | 7① | 6 |
| PB-15A | 1 1/4 | 7 1/4 | 4 7/8 | 7 7/8 | 1 | 9 13/16 | 11 3/8 | 12 13/16 | 10 13/16 | 1 | 8② | 8 |
| PB-18 | 1 1/4 | 6 1/4 | 4 3/8 | 10 1/2 | 15/16 | 10 1/2 | 12 11/16 | 13 3/4 | 11 3/8 | 1 | 8② | 6 |
| PB-18WA | 1 1/4 | 8 1/16 | 5 5/16 | 9 7/8 | 7/8 | 11 | 12 7/8 | 14 1/8 | 11 13/16 | 1 | 10③ | 8 |

① PB-14A ALSO AVAILABLE WITH 6" AND 8" INLETS.
② PB-15A AND PB-18 ALSO AVAILABLE WITH 6" AND 10" INLETS.
③ PB-18WA ALSO AVAILABLE WITH 8" INLET.
④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

### APPROXIMATE SHIPPING WEIGHT IN POUNDS★

| MODEL | ARR.1 (No motor) | ARR.2 (No motor) | ARR.4 | ARR.4HM | ARR.8 | ARR.9 | NOMINAL MOTOR HP-WT. |
|---|---|---|---|---|---|---|---|
| PB-8 | 60 | 30 | 50 | 42 | 130 | 104 | 1/3-21 |
| PB-9 | 66 | 37 | 57 | 48 | 138 | 111 | 1/2-22 |
| PB-10A | 78 | 43 | 63 | 54 | 150 | 126 | 1-22 |
| PB-12A | 85 | 61 | 91 | 75 | 187 | 157 | 2-41 |
| PB-14A | 140 | 84 | 139 | 118 | 259 | 226 | 3-54 |
| PB-15A | 155 | 99 | 176 | 155 | 296 | 273 | 5-76 |
| PB-18 | 163 | 105 | 190 | 181 | 320 | 299 | 7 1/2-87 |
| PB-18WA | 197 | — | 262 | 197 (1) | 399 | 389 | 10-122 |

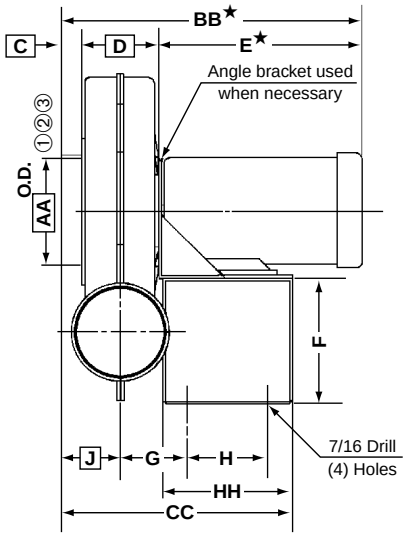
★ ARRANGEMENT 4, 4HM, 8 and 9 WEIGHTS INCLUDE NOMINAL HP AND CORRESPONDING MOTOR WEIGHT INDICATED IN COLUMN EIGHT, MAKE CORRECTIONS AS NECESSARY BY DEDUCTING NOMINAL WEIGHT AND ADDING WEIGHT OF ACTUAL MOTOR TO BE USED.
(1) WITH 7 1/2 HP MOTOR MAX. CONSULT FACTORY FOR LARGER SIZES.

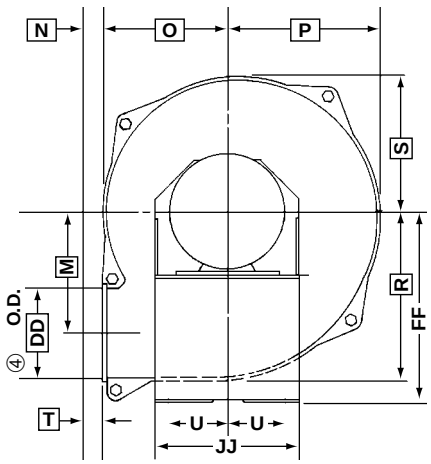
## METRIC CONVERSION FACTORS

| | | |
|---|---|---|
| POWER: | 1 HP = .7457 kw<br>1 kw = 1.34 HP | HP = Horse power<br>kw = kilowatts |
| VOLUME:<br>FLOW: | 1 cfm = .00047 $m^3/s$<br>1$m^3/s$ = 2118.88 cfm | cfm = cubic feet per minute<br>$m^3/s$ = cubic meters per second |
| PRESSURE: | 1 in. wg = 248.36 Pa<br>1 Pa = .004 in. wg | in. wg = inches water gauge<br>Pa = Pascals |
| DENSITY: | 1$lb/ft^3$ = 16.02 $kg/m^3$<br>1 $kg/m^3$ = .0624 $lb/ft^3$ | $lb/ft^3$ = Pounds per cubic foot<br>$kg/m^3$ = kilograms per cubic meter |
| TEMPERATURE: | ˚C = (˚F - 32) x .5556<br>˚F = (˚C x 1.8) + 32 | C = Centigrade<br>F = Fahrenheit |
| DIMENSIONAL: | 1 in. = 25.40 mm<br>1 mm = .03937 in. | in. = inches<br>mm = millimeters |
| WEIGHT: | 1 lb = .4536 kgs.<br>1 kg. = 2.205 lbs. | lb = pounds<br>kg = kilograms |

# DIMENSIONS and SPECIFICATIONS

## Arrangement #4, Direct Drive




★ Varies with motor.

**Note: For common boxed blower housing dimensions, see Page 16.**

**DIMENSIONS IN INCHES** ± 1/8" DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

| MODEL NO. | MOTOR FRAME | ★ E | F | G | H | U | ★ BB | CC | FF | HH | JJ | KK | MM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PB-8 | 56 | 12 1/2 | 5 | 3 3/16 | 5 | 2 3/4 | 17 1/4 | 12 1/8 | 8 9/16 | 7 1/8 | 7 | 1 5/16 | 3 3/16 |
| PB-9 | 56 | 12 1/2 | 6 7/8 | 3 3/8 | 5 3/4 | 2 3/4 | 17 11/16 | 13 5/16 | 10 7/16 | 7 7/8 | 7 | 1 3/8 | 3 7/16 |
| | 143T-145T | 12 | 8 1/4 | 4 3/16 | 5 | 3 3/4 | 17 3/16 | 13 13/16 | 11 7/8 | 8 | 9 | | |
| PB-10A | 56 | 12 1/2 | 6 7/8 | 3 7/16 | 5 3/4 | 2 3/4 | 18 | 13 11/16 | 10 7/16 | 7 7/8 | 7 | 1 9/16 | 3 11/16 |
| | 143T-145T | 12 | 8 1/4 | 4 1/4 | 5 | 3 3/4 | 17 1/2 | 14 3/16 | 11 7/8 | 8 | 9 | | |
| PB-12A | 56 | 12 1/2 | 8 1/4 | 4 1/4 | 5 | 3 3/4 | 18 3/4 | 14 1/2 | 11 7/8 | 8 | 9 | 1 9/16 | 4 1/16 |
| | 143T-145T | 12 | 8 1/4 | 4 5/8 | 5 | 3 3/4 | 18 1/4 | 14 7/8 | | 8 | 9 | | |
| | 182T-184T | 15 1/2 | 6 7/16 | 5 | 8 3/4 | 4 15/16 | 21 3/4 | 19 | | 11 3/4 | 12 | | |
| PB-14A | 56 | 12 1/2 | 9 15/16 | 5 1/2 | 8 3/4 | 4 15/16 | 19 3/4 | 20 | 15 3/16 | 11 3/4 | 12 | 1 9/16 | 4 9/16 |
| | 143T-145T | 12 | | | | | 19 1/4 | | | | | | |
| | 182T-184T | 15 1/2 | | | | | 22 3/4 | | | | | | |
| PB-15A | 182T-184T | 15 1/2 | 9 15/16 | 6 1/8 | 8 3/4 | 4 15/16 | 24 | 21 1/4 | 15 3/16 | 11 3/4 | 12 | 1 9/16 | 5 3/16 |
| | 213T-215T | 16 | | | | | 24 1/2 | | | | | | |
| | 254T-256T | 19 | 8 15/16 | | 13 | | 27 1/2 | 25 1/2 | | 16 | 16 1/2 | | |
| PB-18 | 182T-184T | 15 1/2 | 9 15/16 | 5 5/8 | 8 3/4 | 4 15/16 | 23 | 20 1/4 | 15 3/16 | 11 3/4 | 12 | 1 9/16 | 4 11/16 |
| | 213T-215T | 16 | | | | | 23 1/2 | | | | | | |
| | 254T-256T | 19 | 8 15/16 | | 13 | | 26 1/2 | 24 1/2 | | 16 | 16 1/2 | | |
| PB-18WA | 182T-184T | 15 1/2 | 12 3/4 | 6 1/2 | 10 3/4 | 6 1/4 | 24 13/16 | 24 1/16 | 18 | 13 3/4 | 16 1/2 | 1 9/16 | 5 5/8 |
| | 213T-215T | 16 | | | | | 25 5/16 | | | | | | |
| | 254T-256T | 19 | 11 3/4 | | 15 3/4 | | 28 5/16 | 29 1/16 | | 18 3/4 | | | |
| | 284T-286T | 22 | 11 | | | | 31 5/16 | | | | | | |

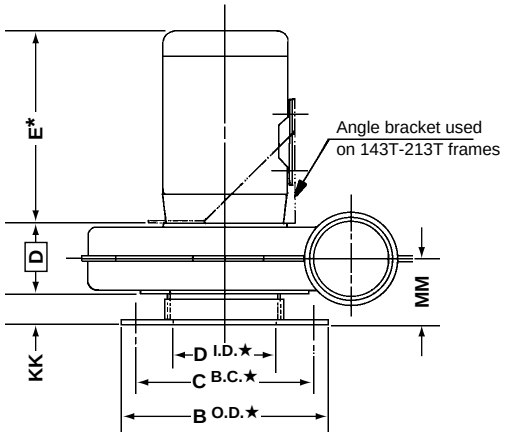
① PB-14A ALSO AVAILABLE WITH 6" AND 8" INLETS.
② PB-15A AND PB-18 ALSO AVAILABLE WITH 6" AND 10" INLETS.
③ PB-18WA ALSO AVAILABLE WITH 8" INLET.
④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

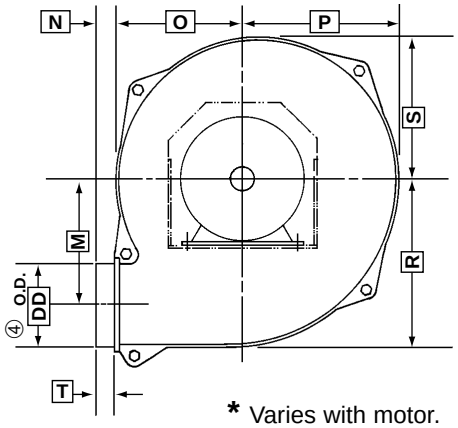
KK & MM pertain to arrangement #4HM on page 18 only.

# DIMENSIONS and SPECIFICATIONS

## Arrangement #4 HM, (Horizontal Mount) Direct Drive

NOTE: Inlet flange is optional on arrangement #4HM.




* Varies with motor.

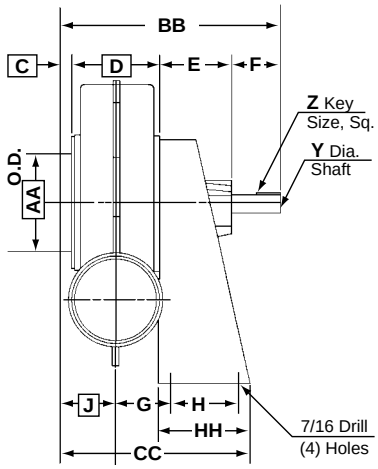
| MAX.MOTOR FRAME SIZE | |
|---|---|
| MODEL | FRAME |
| PB-8 | 56 |
| PB-9 | 145T |
| PB-10A | 145T |
| PB-12A | 184T |
| PB-14A | 184T |
| PB-15A | 215T⑥ |
| PB-18 | 215T⑥ |
| PB-18WA | 215T⑥ |

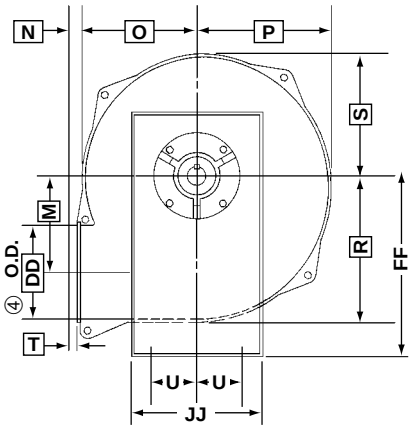
⑥ Max. frame is one size smaller than shown on EXP and Mill & Chem motors

**Note: For common boxed blower housing dimensions, see Page 16.**

★ For inlet flange dimensions B, C and D above, see flange dimension table on page 21 for corresponding A dimension. For KK and MM dimensions, see page 17.

## Arrangement #2, Belt Drive




**Note: For common boxed blower housing dimensions, see Page 16.**

**DIMENSIONS IN INCHES** ± 1/8"

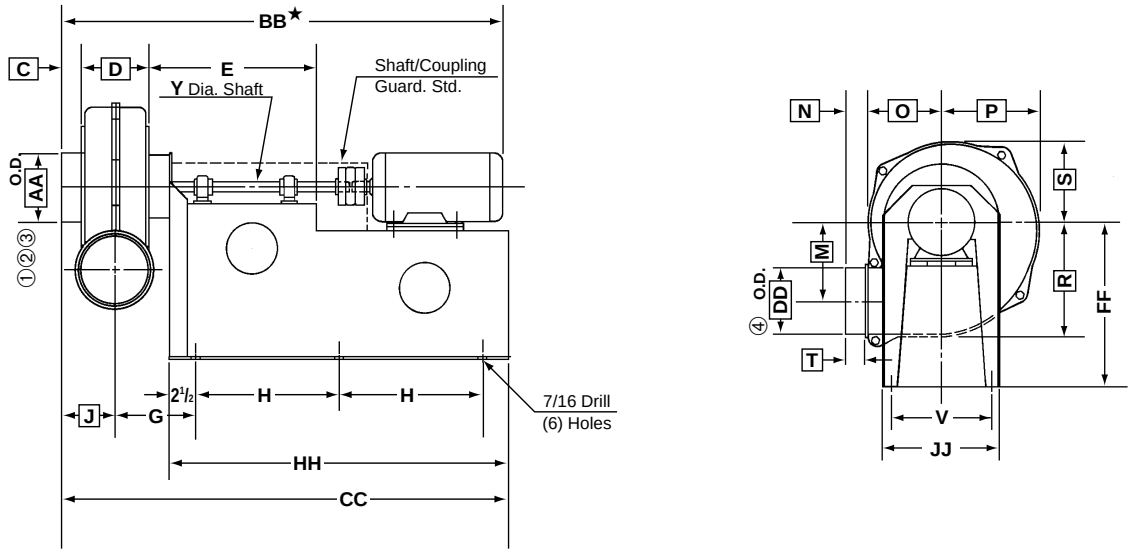
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

| MODEL NO. | E | F | G | H | U | Y | Z | BB | CC | FF | HH | JJ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PB-8 | 3 1/2 | 3 | 2 7/8 | 3 1/4 | 2 7/8 | 5/8 | 3/16 | 11 1/4 | 9 3/4 | 7 13/16 | 5 | 7 3/4 |
| PB-9 | 3 11/16 | 3 | 3 1/16 | 4 1/4 | 2 7/8 | 3/4 | 3/16 | 11 7/8 | 11 3/16 | 9 7/8 | 6 | 7 3/4 |
| PB-10A | 3 11/16 | 3 | 3 1/8 | 4 1/4 | 2 7/8 | 3/4 | 3/16 | 12 1/4 | 11 9/16 | 9 7/8 | 6 | 7 3/4 |
| PB-12A | 5 1/2 | 4 | 4 | 4 1/2 | 3 1/8 | 1 | 1/4 | 15 3/4 | 13 1/4 | 11 1/2 | 7 | 9 |
| PB-14A | 5 3/16 | 4 | 4 1/2 | 5 1/2 | 3 3/4 | 1 7/16 | 3/8 | 16 7/16 | 15 1/4 | 15 | 8 | 10 1/4 |
| PB-15A | 5 3/16 | 4 | 5 1/8 | 5 1/2 | 3 3/4 | 1 7/16 | 3/8 | 17 11/16 | 16 1/2 | 15 | 8 | 10 1/4 |
| PB-18 | 5 3/16 | 4 | 4 5/8 | 5 1/2 | 3 3/4 | 1 7/16 | 3/8 | 16 11/16 | 15 1/2 | 15 | 8 | 10 1/4 |

④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

# DIMENSIONS and SPECIFICATIONS

## Arrangement #8, Direct Connected




**Note: For common boxed blower housing dimensions, see Page 16.**

**DIMENSIONS IN INCHES** ± 1/8"

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

| MODEL NO. | MOTOR FRAME | E | G | H | V | Y | ★ BB | CC | FF | HH | JJ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PB-8 | 56 | 12 | 5 5/8 | 12 1/4 | 11 3/8 | 3/4 | 35 3/16 | 35 1/2 | 14 | 29 1/2 | 12 7/8 |
| PB-9 | 56-145T | 12 | 5 13/16 | 12 1/4 | 11 3/8 | 3/4 | 35 11/16 | 35 15/16 | 14 | 29 1/2 | 12 7/8 |
| PB-10A | 56-145T | 12 | 5 7/8 | 12 1/4 | 11 3/8 | 3/4 | 36 1/16 | 36 5/16 | 14 | 29 1/2 | 12 7/8 |
| PB-12A | 56-145T | 12 | 6 1/4 | 12 1/4 | 11 3/8 | 1 | 36 3/4 | 37 | 14 | 29 1/2 | 12 7/8 |
| | 182T-215T | 13 | | 15 1/8 | 16 | | 42 9/16 | 42 3/4 | 18 | 35 1/4 | 17 1/2 |
| PB-14A | 56-145T | 12 | 6 3/4 | 12 1/4 | 11 3/8 | 1 3/16 | 37 3/4 | 38 | 14 | 29 1/2 | 12 7/8 |
| | 182T-215T | 13 | | 15 1/8 | 16 | | 43 9/16 | 43 3/4 | 18 | 35 1/4 | 17 1/2 |
| PB-15A | 182T-215T | 13 | 7 3/8 | 15 1/8 | 16 | 1 3/16 | 44 7/16 | 45 | 18 | 35 1/4 | 17 1/2 |
| | 254T-256T | | | 18 3/4 | 17 1/4 | | 48 5/8 | 52 1/4 | 23 | 42 1/2 | 19 |
| PB-18 | 182T-215T | 13 | 6 7/8 | 15 1/8 | 16 | 1 3/16 | 43 13/16 | 44 | 18 | 35 1/4 | 17 1/2 |
| | 254T-256T | | | 18 3/4 | 17 1/4 | 1 7/16 | 48 | 51 1/4 | 23 | 42 1/2 | 19 |
| PB-18WA | 182T-215T | 13 | 7 3/4 | 15 1/8 | 16 | 1 7/16 | 45 5/8 | 45 13/16 | 18 | 35 1/4 | 17 1/2 |
| | 254T-286T | | | 18 3/4 | 17 1/4 | | 52 15/16 | 53 1/16 | 23 | 42 1/2 | 19 |

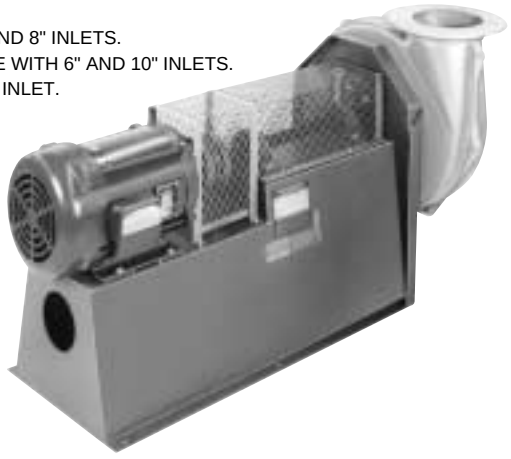
★ DIMENSIONS "BB" VARIES WITH MOTOR. MOTOR MAY EXTEND PAST END OF BASE.

① PB-14A ALSO AVAILABLE WITH 6" AND 8" INLETS.

② PB-15A AND PB-18 ALSO AVAILABLE WITH 6" AND 10" INLETS.

③ PB-18WA ALSO AVAILABLE WITH 8" INLET.

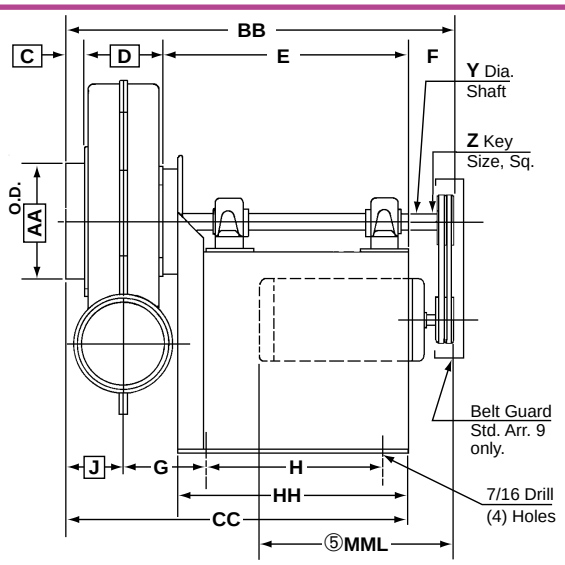
④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.

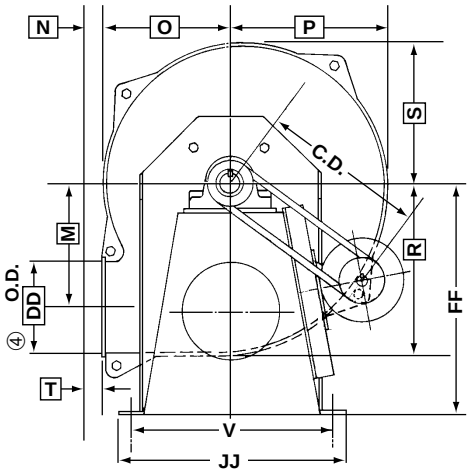


# DIMENSIONS and SPECIFICATIONS

## Arrangement #1 and #9, Belt Drive

NOTE: Arrangement 9 dimensions are the same as arrangement 1 with exception of dimensions C.D. and MML which are for arrangement 9 only.



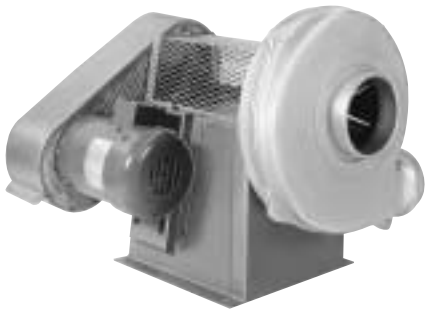

Unit shown is arrangement 9-R (motor on right side).
For motor on left side, specify arrangement 9-L.

**Note: For common boxed blower housing dimensions, see Page 16.**

**DIMENSIONS IN INCHES** ± 1/8" DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

| MODEL NO. | MOTOR FRAME | E | F | G | H | V | Y | Z | BB | CC | FF | HH | JJ | ⑤ MML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PB-8 | 56-145T | 16 1/4 | 3 | 5 3/8 | 10 | 11 3/8 | 3/4 | 3/16 | 24 | 21 | 14 | 15 | 12 7/8 | 15 |
| PB-9 | 56-145T | 16 1/4 | 3 | 5 13/16 | 10 | 11 3/8 | 3/4 | 3/16 | 24 7/16 | 21 7/16 | 14 | 15 | 12 7/8 | 15 |
| PB-10A | 56-145T | 16 1/4 | 3 | 5 7/8 | 10 | 11 3/8 | 3/4 | 3/16 | 24 13/16 | 21 13/16 | 14 | 15 | 12 7/8 | 15 |
| PB-12A ★ | 56-145T★ | 16 1/4 | 4 | 6 1/4 | 10 | 11 3/8 | 1 | 1/4 | 26 1/2 | 22 1/2 | 14 | 15 | 12 7/8 | 15 |
| | 182T-215T | 19 1/4 | | | 13 | 16 | | | 29 1/2 | 25 1/2 | 18 | 18 | 17 1/2 | 19 |
| PB-14A | 56-215T | 19 1/4 | 4 | 6 3/4 | 13 | 16 | 1 7/16 | 3/8 | 30 1/2 | 26 1/2 | 18 | 18 | 17 1/2 | 19 |
| PB-15A ★ | 182T-215T★ | 19 1/4 | 4 | 7 3/8 | 13 | 16 | 1 7/16 | 3/8 | 31 3/4 | 27 3/4 | 18 | 18 | 17 1/2 | 19 |
| | 254T-256T | 25 3/4 | | | 19 1/2 | 17 1/4 | 1 11/16 | 3/8 | 38 1/4 | 34 1/4 | 23 | 24 1/2 | 19 | 26 |
| PB-18 ★ | 182T-215T★ | 19 1/4 | 4 | 6 7/8 | 13 | 16 | 1 7/16 | 3/8 | 30 3/4 | 26 3/4 | 18 | 18 | 17 1/2 | 19 |
| | 254T-256T | 25 3/4 | | | 19 1/2 | 17 1/4 | 1 11/16 | | 37 1/4 | 33 1/4 | 23 | 24 1/2 | 19 | 26 |
| PB-18WA ★ | 182T-215T★ | 19 1/4 | 4 | 7 3/4 | 13 | 16 | 1 7/16 | 3/8 | 32 9/16 | 28 9/16 | 18 | 18 | 17 1/2 | 19 |
| | 254T-286T | 25 3/4 | 6 | | 19 1/2 | 17 1/4 | 1 11/16 | | 41 1/16 | 35 1/16 | 23 | 24 1/2 | 19 | 26 |

④ ALL MODELS, DISCHARGE FLANGE NOT AVAILABLE FOR DOWN BLAST POSITION.
⑤ MML IS MAXIMUM MOTOR LENGTH ON CUSTOMER-SUPPLIED MOTOR. MOTOR MANUFACTURERS "C" DIMENSION CANNOT EXCEED MML.
★ ALL ARRANGEMENT 1 UNITS USE SMALL BASE DIMENSIONS.



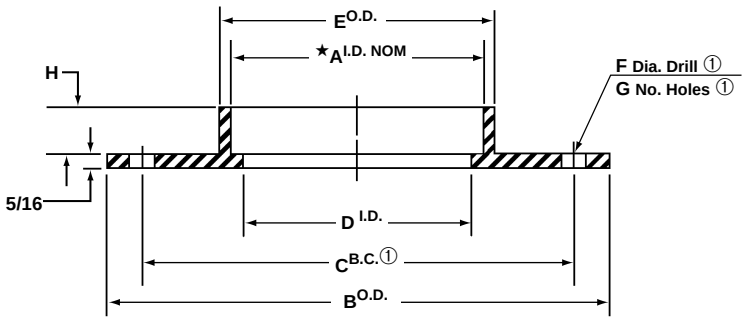
### C.D. BELT CENTER DISTANCE

(Dimensions in Inches)

| MODEL NO. | MOTOR FRAME SIZE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 56-145T | | 182T-184T | | 213T-215T | | 254T-256T | | 284T-286T | |
| | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. |
| PB-8 | 10 1/4 | 11 1/4 | | | | | | | | |
| PB-9 | 10 1/4 | 11 1/4 | | | | | | | | |
| PB-10A | 10 1/4 | 11 1/4 | | | | | | | | |
| PB-12A | 10 1/4 | 11 1/4 | 13 5/8 | 14 5/8 | 14 3/8 | 15 1/2 | | | | |
| PB-14A | 12 | 13 | 13 5/8 | 14 5/8 | 14 3/8 | 15 1/2 | | | | |
| PB-15A | | | 13 5/8 | 14 5/8 | 14 3/8 | 15 1/2 | 17 | 18 5/8 | | |
| PB-18 | | | 13 5/8 | 14 5/8 | 14 3/8 | 15 1/2 | 17 | 18 5/8 | | |
| PB-18WA | | | 13 5/8 | 14 5/8 | 14 3/8 | 15 1/2 | 17 | 18 5/8 | 17 3/8 | 19 1/4 |

# DIMENSIONS and SPECIFICATIONS

## INLET AND DISCHARGE FLANGE DIMENSIONS FOR PB-8 THROUGH PB-18WA




Dimensions in inches

| A★ | B* | C* | D | E | F | G | H |
|---|---|---|---|---|---|---|---|
| 4 1/16 | 9 | 7 1/2 | 3 11/16 | 4 9/16 | 7/16 | 4 | 15/16 |
| 5 1/16 | 11 | 8 1/2 | 4 9/16 | 5 9/16 | 7/16 | 4 | 15/16 |
| 6 1/16 | 11 | 9 1/2 | 5 1/2 | 6 9/16 | 7/16 | 4 | 1 1/16 |
| 7 1/16 | 11 | 9 | 6 7/16 | 7 5/8 | 7/16 | 8 | 15/16 |
| 8 1/16 | 13 1/2 | 11 3/4 | 7 1/2 | 8 5/8 | 7/16 | 8 | 1 |
| 10 1/16 | 16 | 14 1/4 | 9 11/16 | 10 9/16 | 7/16 | 8 | 1 |

★ "A" fits over inlet or outlet of blower, "AA" or "DD" dimension.

* Meet ANSI-125 pound flange dimensions.

① Holes will not be drilled unless customer specifies. If drilled per our standard, holes will be drilled on centerlines unless specified otherwise on order. Dimensions "C, F & G" can be made to customer specifications; at an additional charge.

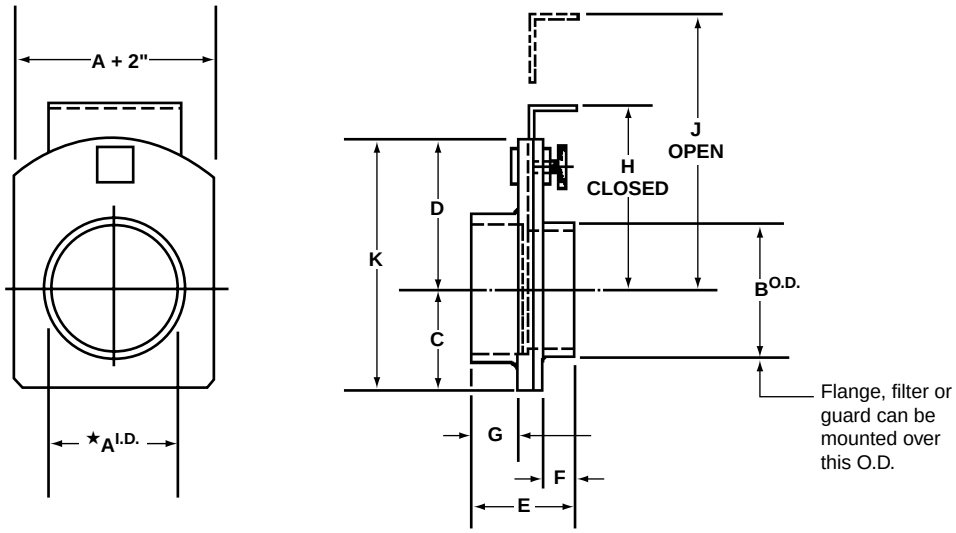
② All dimensions are ±1/8" except C & F.

③ All flanges are 319 cast aluminum.

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

♦ DISCHARGE FLANGES NOT AVAILABLE ON DOWNBLAST DISCHARGE POSITION.

## INLET AND DISCHARGE SLIDE GATE DIMENSIONS FOR PB-8 THROUGH PB-18WA ❖




❖ NOT AVAILABLE ON DOWNBLAST DISCHARGE POSITION.

① Gate halves are 319 cast aluminum.
Slide gate is 12 gauge galvanized steel.
Aluminum slide gate available at additional charge.
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

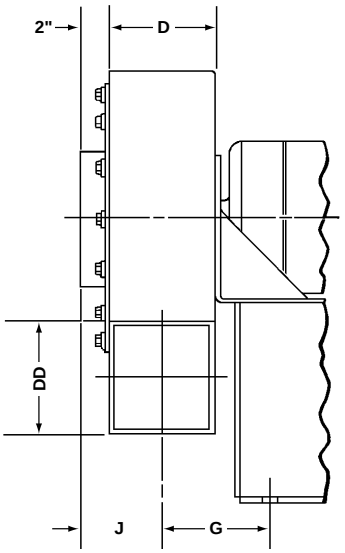
DIMENSIONS IN INCHES

| MODEL | A★ | B | C | D | E | F | G | H | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| FG-4 | 4 1/16 | 3 15/16 | 3 1/4 | 4 1/2 | 2 11/16 | 1 | 1 1/16 | 5 5/8 | 9 | 7 3/4 |
| FG-5 | 5 1/16 | 4 15/16 | 3 1/2 | 5 1/2 | 2 9/16 | 1 1/8 | 7/8 | 6 1/8 | 10 1/2 | 9 |
| FG-6 | 6 1/16 | 5 15/16 | 4 | 5 1/2 | 2 11/16 | 1 1/16 | 1 | 6 1/4 | 11 1/2 | 9 1/2 |
| FG-7 | 7 1/16 | 6 15/16 | 4 1/2 | 5 1/2 | 2 7/8 | 1 1/8 | 1 1/8 | 6 1/4 | 12 1/2 | 10 |
| FG-8 | 8 1/16 | 7 15/16 | 5 | 6 3/4 | 2 13/16 | 1 | 1 3/16 | 7 3/4 | 15 | 11 3/4 |
| FG-10 | 10 1/16 | 9 15/16 | 6 | 8 | 3 1/16 | 1 5/16 | 1 | 9 | 18 1/2 | 14 |

★ "A" FITS OVER INLET OR OUTLET OF BLOWER, "AA" OR "DD" DIMENSION

# FABRICATED STEEL HOUSING DIMENSIONS

## For All Arrangements




All housings are 10 gauge steel

NOTE

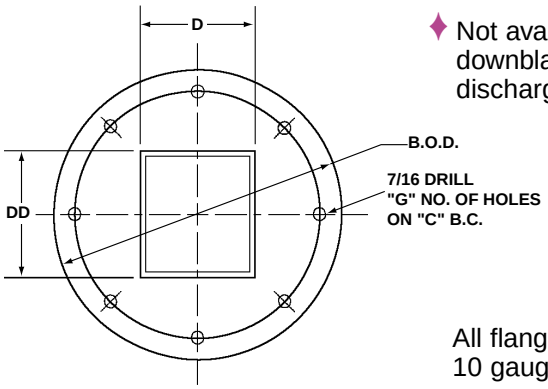
DIMENSIONS IN INCHES

| MODEL No. | MOTOR FRAME SIZE | D | ★ G | J | DD | MAX. ALLOWABLE WHEEL DIA. |
|---|---|---|---|---|---|---|
| PBS-8 | — | NOT AVAILABLE THIS SIZE | | | | — |
| PBS-9 | 56 | 3 5/8 | 3 1/8 | 3 13/16 | 4 | 9 3/4 |
| | 143T-145T | | 3 15/16 | | | |
| PBS-10A | 56 | 4 | 3 5/16 | 4 | 4 3/8 | 11 1/2 |
| | 143T-145T | | 4 1/8 | | | |
| PBS-12A | 56 | 4 5/8 | 4 1/16 | 4 5/16 | 5 1/2 | 13 |
| | 143T-145T | | 4 7/16 | | | |
| | 182T-184T | | 4 13/16 | | | |
| PBS-14A | ALL | 5 1/8 | 5 1/16 | 4 9/16 | 6 | 14 |
| PBS-15A | ALL | 5 7/8 | 5 7/16 | 4 15/16 | 8 | 16 1/2 |
| PBS-18 | ALL | 5 1/4 | 5 1/8 | 4 5/8 | 6 | 18 |
| PBS-18WA | ALL | 6 3/4 | 5 7/8 | 5 3/8 | 7 | 18 1/2 |

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.
★ FOR ARRANGEMENT 4 ONLY

## Steel Housing Discharge Flange Dimensions ♦

**For Steel housing inlet flanges, see dimensions A, B, C, F & G on Page 21.**



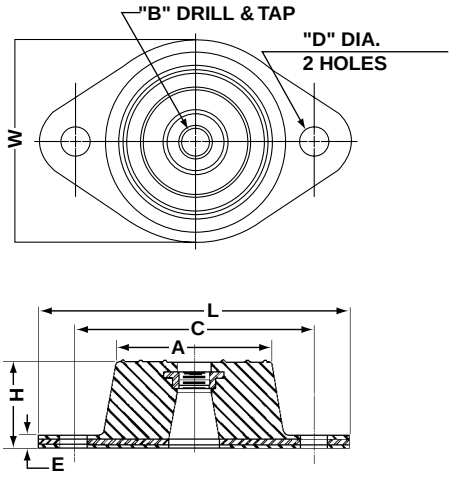

♦ Not available on downblast discharge position

All flanges are 10 gauge steel.

DIMENSIONS IN INCHES

| MODEL No. | B | C | D | DD | G |
|---|---|---|---|---|---|
| PBS-8 | NOT AVAILABLE THIS SIZE | | | | |
| PBS-9 | 9 | 7 1/2 | 3 5/8 | 4 | 4 |
| PBS-10A | 10 | 8 1/2 | 4 | 4 3/8 | 4 |
| PBS-12A | 11 | 9 1/2 | 4 5/8 | 5 1/2 | 4 |
| PBS-14A | 11 | 9 1/2 | 5 1/8 | 6 | 4 |
| PBS-15A | 13 1/2 | 11 3/4 | 5 7/8 | 8 | 8 |
| PBS-18 | 11 | 9 1/2 | 5 1/4 | 6 | 4 |
| PBS-18WA | 13 1/2 | 11 3/4 | 6 3/4 | 7 | 8 |

## RUBBER-IN-SHEAR (RIS) VIBRATION ISOLATORS




**Do not use RIS Isolators on any arrangement 1 or 2 fans.**

| TYPE R NEOPRENE IN SHEAR MOUNTINGS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TYPE | | MAX. LOAD EACH LBS. | DEFLECTION IN INCHES | DIMENSION IN INCHES | | | | | | | |
| | | | R | L | W | H | A | B | C | D | E |
| R1 | BLACK | 45 | 0.20 | 3 1/8 | 1 3/4 | 1 | 1 1/4 | 5/16"-18NC | 2 3/8 | 11/32 | 3/16 |
| | RED | 70 | | | | | | | | | |
| | GREEN | 120 | | | | | | | | | |
| R2 | BLUE | 135 | 0.25 | 3 7/8 | 2 3/8 | 1 1/4 | 1 3/4 | 3/8"-16NC | 3 | 11/32 | 7/32 |
| | BLACK | 170 | | | | | | | | | |
| | RED | 240 | | | | | | | | | |
| | GREEN | 380 | | | | | | | | | |

# EXAMPLES OF CUSTOM PRODUCTS

These are just a few of the many custom blowers designed to meet the customers' exact requirements. Let us design one to yours ....

PB-14 with special motor and mounting plate for cooling traction motors on rapid transit systems. All aluminum parts were black anodized.

PB-12 with special wider housing (PB-12W) and integral discharge flange. Blower used to cool large DC motors.

PB-9 with air motor. Cast aluminum blower with non-electric motor required to handle highly volatile substances at variable flow rates.

PB-14 with continuous flange added to ensure meeting "low leakage" requirement in evacuating oil mist at 14" SP WG on discharge.

PB-14 with special inlet mounting pad used to pressurize calendar rolls on corrugated paper machines.