

# Side Channel Blower



DARGANG

**APEX DARGANG MACHINERY CORPORATION**

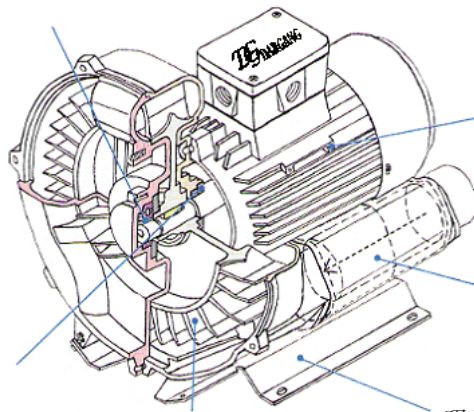


## 鼓風機構造 Side Channel Blower Construction

外側軸承 *External bearing*  
散熱良好 *Cool-running*  
運轉壽命長 *Long life*

### 油封 **Shaft Seal**

使用免保養的軸封保護馬達，將馬達與鼓風機本體隔離。  
*Motor protected by maintenance-free shaft seal*



使用高效率的鋁合金風葉  
*High-efficiency die-cast impellers for all types*

### 馬達 **Motor**

工業用 50/60Hz，鼠籠式馬達  
全密 F&H 級，IP55  
*Industrial quality 50/60Hz Squirrel-cage motor totally enclosed (IP55) with F & H class insulation*

### 消音器 **Silencer**

內藏式消音管 *Built-in silencer*

吸震式固定底座

*Shock-absorbing mounting plate*

## 鼓風機特性 Side Channel Blower Specific

### 安裝容易

可隨時安裝與使用，供壓縮空氣或用於抽真空，亦可任意安裝於水平或垂直的方向。

### *Easy to install*

The blower is a complete unit ready for immediate installation either as a vacuum pump or as a compressor. The unit can be mounted in any position, horizontally or vertically.

### 結構堅固，可靠性高

鼓風機與馬達外殼分開壓鑄，皆用鋁合金精密壓鑄成型，堅固耐用。除了風葉之外，鼓風機沒有其他動件，因此可靠性高幾乎免維修。

**Rugged**, the cast for the impeller and the motor are individual to be made by aluminum. The blower has the highly-developed design which results in a pump construction with one moving part, a feature ensuring maximum operating reliability. Maintenance free!

### 無污染

風葉旋轉時，不與任何部分零件接觸，免潤滑，無油氣無污染。

### *No oily odors*

The impeller rotates with absolutely no contact between it and the housing. This means no lubrication is required, guaranteeing 100% oil-free operation.

### 低噪音低震動

一體式的消音設施，低噪音馬達直接運轉，風葉均經過電腦平衡校正與高精度的機械加工，使震動及噪音降到最低。

### *Low Noise and Vibration*

The use of direct-driving low-noise motors and integral silencers ensure a low noise level. Dynamic balancing minimizes vibration.

### 最高品質

精密機械設計，專業製造經驗，每一台鼓風機在出廠前均經過嚴格測試。

### *High Efficiency*

Under serious QC control, the parts used in DG blower are of top quality. All blowers are made by professional technicians.



# 單相馬達 / Single Phase AC IP55 50Hz



| 型號<br>Model | 曲線編號<br>Curve No. | 頻率<br>Frequency<br>(Hz) | 功率<br>Output<br>(kW) | 電壓<br>Voltage<br>(V) | 滿載額定電流<br>Current<br>(A) | 靜壓<br>吸 Vacuum / 吐 Compressor<br>(mbar) | 最大風量<br>Max Airflow<br>(m³/min) | 噪音<br>Noise<br>(dB)A | 重量<br>Weight<br>(Kg) |
|-------------|-------------------|-------------------------|----------------------|----------------------|--------------------------|-----------------------------------------|---------------------------------|----------------------|----------------------|
| HB-129-S    | D1                | 50                      | 0.18                 | 200-240              | 1.25                     | 50                                      | 1.0                             | 52                   | 6.5                  |
| HB-229-S    | D2                | 50                      | 0.4                  | 200-240              | 2.90                     | 110                                     | 1.5                             | 58                   | 11.5                 |
| HB-229W-S   | D3                | 50                      | 0.4                  | 200-240              | 2.90                     | 110                                     | 1.5                             | 58                   | 12                   |
| HB-329-S    | D4                | 50                      | 0.75                 | 200-240              | 5.80                     | 140                                     | 2.6                             | 63                   | 16                   |
| HB-329W-S   | D5                | 50                      | 0.75                 | 200-240              | 5.80                     | 140                                     | 2.5                             | 63                   | 16.5                 |
| HB-429-S    | D8                | 50                      | 1.5                  | 200-240              | 10.0                     | 180                                     | 3.7                             | 70                   | 26                   |
| HB-429W-S   | D9                | 50                      | 1.5                  | 200-240              | 10.0                     | 180                                     | 3.7                             | 70                   | 26.5                 |
| HB-2308-S   | D10               | 50                      | 0.75                 | 200-240              | 4.50                     | 180                                     | 1.6                             | 60                   | 17.5                 |
| HB-3315-S   | D11               | 50                      | 1.5                  | 200-240              | 10.0                     | 240                                     | 2.6                             | 66                   | 28.5                 |

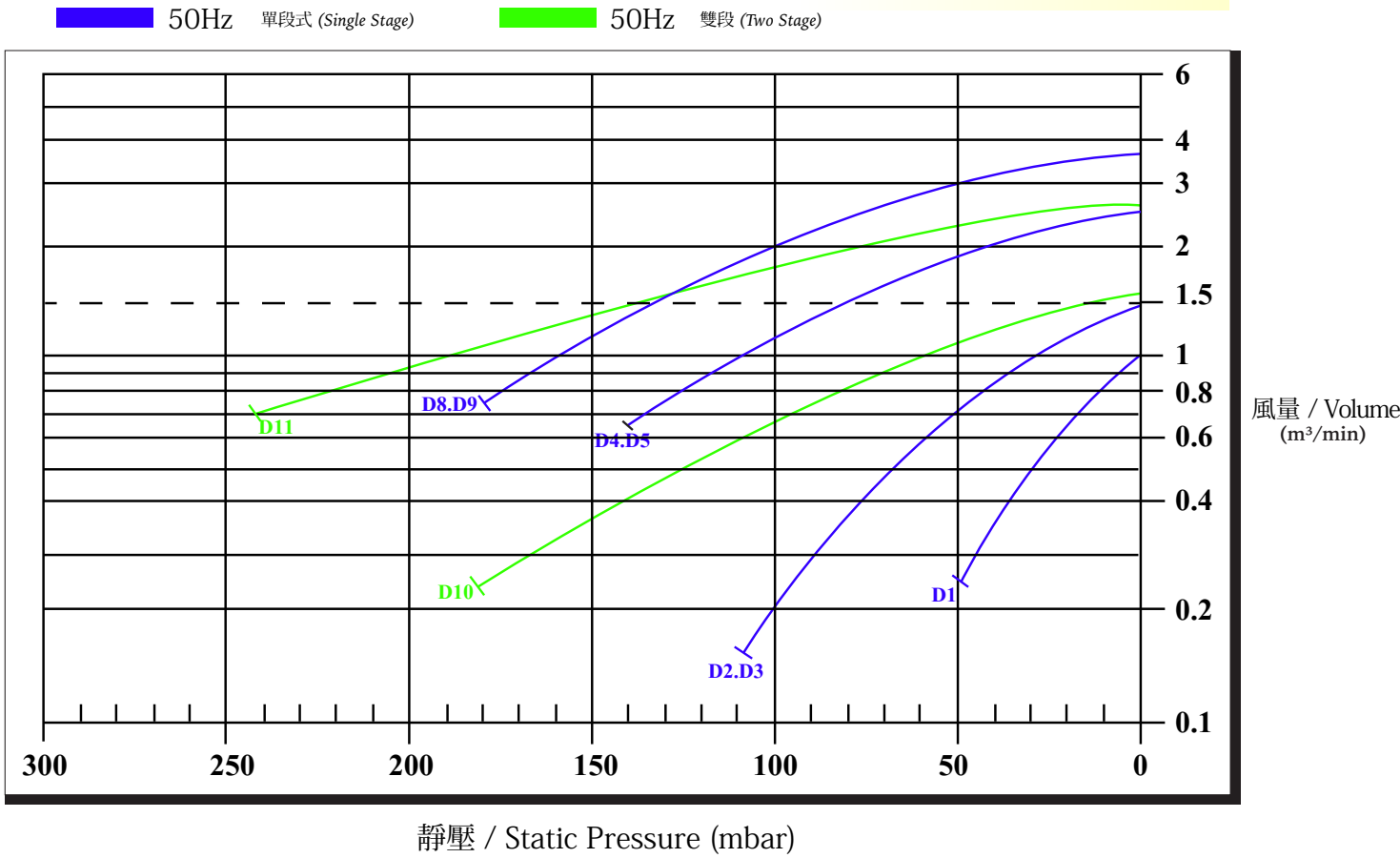
- 附註：
1. 上述資料供參考, 如有不同以實品為主。
  2. 本公司保有設計變更之權利, 恕不另行通知。
  3. 如有任何疑問請洽經銷商或本公司。



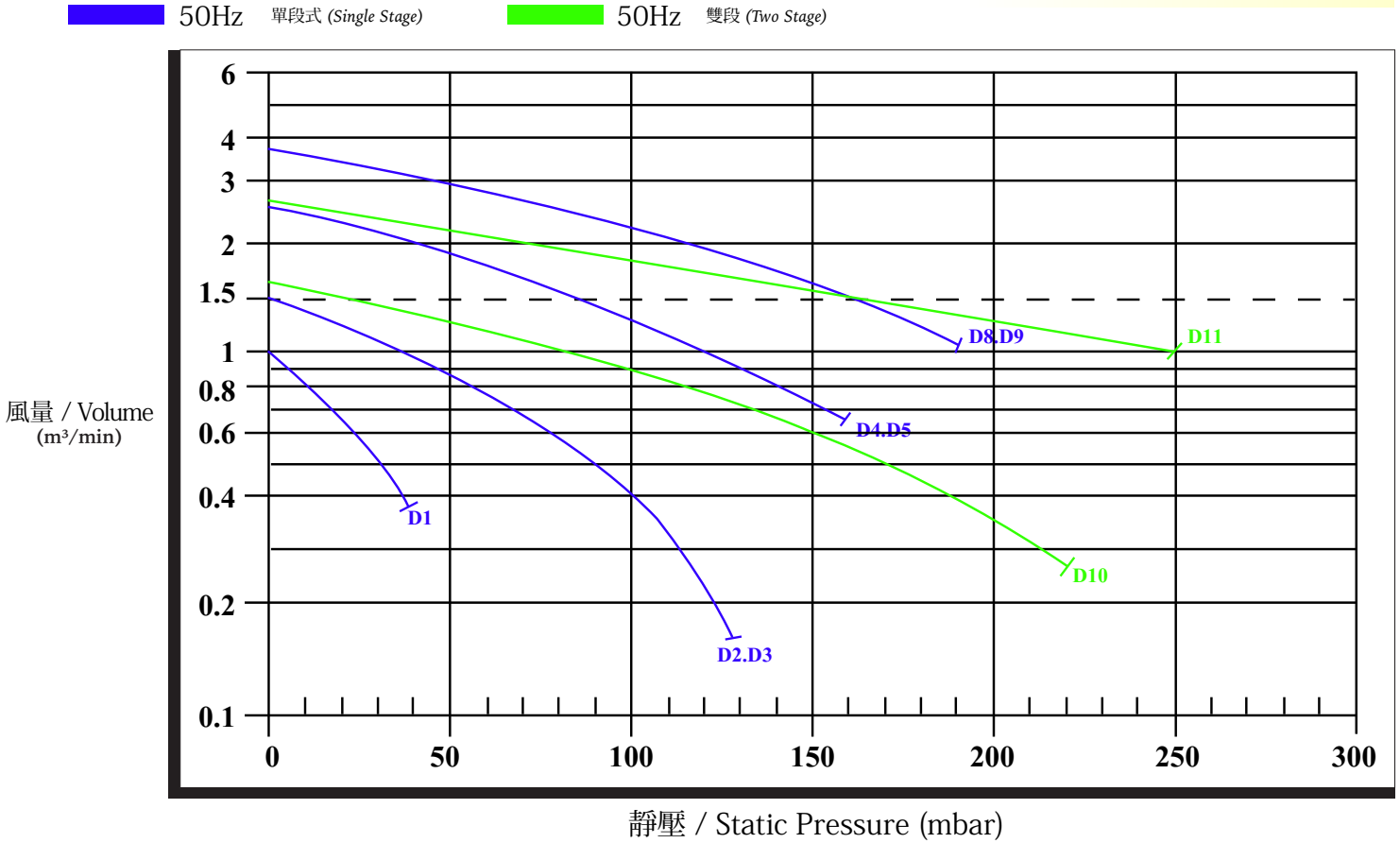
# 50Hz 單相曲線圖 / Single Phase Curve



吸 Vacuum



吐 Compressor



# 三相馬達 / Three Phase AC IP55 50Hz



| 型號<br>Model | 曲線編號<br>Curve No. | 頻率<br>Frequency<br>(Hz) | 功率<br>Output<br>(kW) | 電壓<br>Voltage<br>(V) | 滿載額定電流<br>Current<br>(A) | 靜壓<br>Static pressure<br>Vacuum / Compressor<br>(mbar) | 最大風量<br>Max Airflow<br>(m³/min) | 噪音<br>Noise<br>(dB)A | 重量<br>Weight<br>(Kg) |
|-------------|-------------------|-------------------------|----------------------|----------------------|--------------------------|--------------------------------------------------------|---------------------------------|----------------------|----------------------|
| HB-129      | D12               | 50                      | 0.18                 | 200-240 △ /345-415Y  | 1.20△/0.69Y              | 50/60                                                  | 1                               | 52                   | 6.5                  |
| HB-229      | D13               | 50                      | 0.4                  | 200-240 △ /345-415Y  | 2.20△/1.30Y              | 110/130                                                | 1.5                             | 58                   | 10.5                 |
| HB-329      | D15               | 50                      | 0.75                 | 200-240 △ /345-415Y  | 3.70△/2.14Y              | 140/140                                                | 2.6                             | 63                   | 14                   |
| HB-339      | D19               | 50                      | 1.3                  | 200-240 △ /345-415Y  | 4.60△/2.65Y              | 175/200                                                | 2.6                             | 63                   | 16                   |
| HB-429      | D22               | 50                      | 1.75                 | 200-240 △ /345-415Y  | 6.70△/3.90Y              | 210/220                                                | 3.7                             | 70                   | 23                   |
| HB-439      | D25               | 50                      | 2.2                  | 200-240 △ /345-415Y  | 7.80△/4.50Y              | 220/270                                                | 3.7                             | 70                   | 26                   |
| HB-529      | D26               | 50                      | 2.2                  | 200-240 △ /345-415Y  | 9.70△/5.60Y              | 220/210                                                | 5.5                             | 72                   | 32                   |
| HB-629      | D29               | 50                      | 3.4                  | 200-240 △ /345-415Y  | 12.5△/7.20Y              | 255/270                                                | 5.5                             | 72                   | 34                   |
| HB-639      | D31               | 50                      | 4                    | 200-240 △ /345-415Y  | 14.3△/8.20Y              | 270/320                                                | 5.5                             | 72                   | 37                   |
| HB-729      | D32               | 50                      | 5.5                  | 200-240 △ /345-415Y  | 25.3△/14.6Y              | 270/290                                                | 9.5                             | 74                   | 77                   |
| HB-829      | D33               | 50                      | 7.5                  | 200-240 △ /345-415Y  | 31.5△/18.2Y              | 295/390                                                | 9.5                             | 74                   | 88                   |
| HB-919      | D34               | 50                      | 9                    | 200-240 △ /345-415Y  | 36.0△/20.8Y              | 200/190                                                | 18.9                            | 76                   | 100                  |
| HB-929      | D35               | 50                      | 13                   | 200-240 △ /345-415Y  | 46.8△/27.0Y              | 290/270                                                | 18.9                            | 76                   | 112                  |
| HB-939      | D36               | 50                      | 20                   | 200-240 △ /345-415Y  | 66.7△/38.6Y              | 350/440                                                | 18.9                            | 76                   | 159                  |
| HB-2308     | D37               | 50                      | 0.75                 | 200-240 △ /345-415Y  | 3.70△/2.14Y              | 200/240                                                | 1.6                             | 60                   | 17                   |
| HB-3319     | D38               | 50                      | 1.75                 | 200-240 △ /345-415Y  | 6.70△/3.90Y              | 275/300                                                | 2.6                             | 66                   | 25                   |
| HB-3326     | D39               | 50                      | 2.2                  | 200-240 △ /345-415Y  | 7.80△/4.50Y              | 320/390                                                | 2.6                             | 66                   | 28                   |
| HB-4337     | D40               | 50                      | 3.4                  | 200-240 △ /345-415Y  | 12.5△/7.20Y              | 345/410                                                | 3.7                             | 74                   | 40                   |
| HB-4346     | D41               | 50                      | 4                    | 200-240 △ /345-415Y  | 14.3△/8.20Y              | 355/460                                                | 3.7                             | 74                   | 43                   |
| HB-6346     | D42               | 50                      | 4                    | 200-240 △ /345-415Y  | 14.3△/8.20Y              | 350/350                                                | 5.5                             | 75                   | 55                   |
| HB-6355     | D43               | 50                      | 5.5                  | 200-240 △ /345-415Y  | 21.6△/12.5Y              | 410/500                                                | 5.5                             | 75                   | 72                   |
| HB-6375     | D44               | 50                      | 7.5                  | 200-240 △ /345-415Y  | 31.5△/18.2Y              | 420/580                                                | 5.5                             | 75                   | 82                   |
| HB-6455     | D45               | 50                      | 5.5                  | 200-240 △ /345-415Y  | 25.3△/14.6Y              | 200/220                                                | 7.9                             | 75                   | 72                   |
| HB-6475     | D46               | 50                      | 7.5                  | 200-240 △ /345-415Y  | 31.5△/18.2Y              | 240/275                                                | 7.9                             | 75                   | 82                   |
| HB-8310     | D47               | 50                      | 7.5                  | 200-240 △ /345-415Y  | 31.5△/18.2Y              | 350/350                                                | 9.5                             | 76                   | 112                  |
| HB-8315     | D48               | 50                      | 13                   | 200-240 △ /345-415Y  | 46.8△/27.0Y              | 430/600                                                | 9.5                             | 76                   | 142                  |
| HB-8320     | D49               | 50                      | 20                   | 200-240 △ /345-415Y  | 66.7△/38.6Y              | 450/700                                                | 9.6                             | 76                   | 160                  |
| HB-8410     | D50               | 50                      | 7.5                  | 200-240 △ /345-415Y  | 31.5△/18.2Y              | 180/145                                                | 14.2                            | 76                   | 110                  |
| HB-8415     | D51               | 50                      | 13                   | 200-240 △ /345-415Y  | 46.8△/27.0Y              | 250/250                                                | 14.2                            | 76                   | 140                  |

## 附註/Remark:

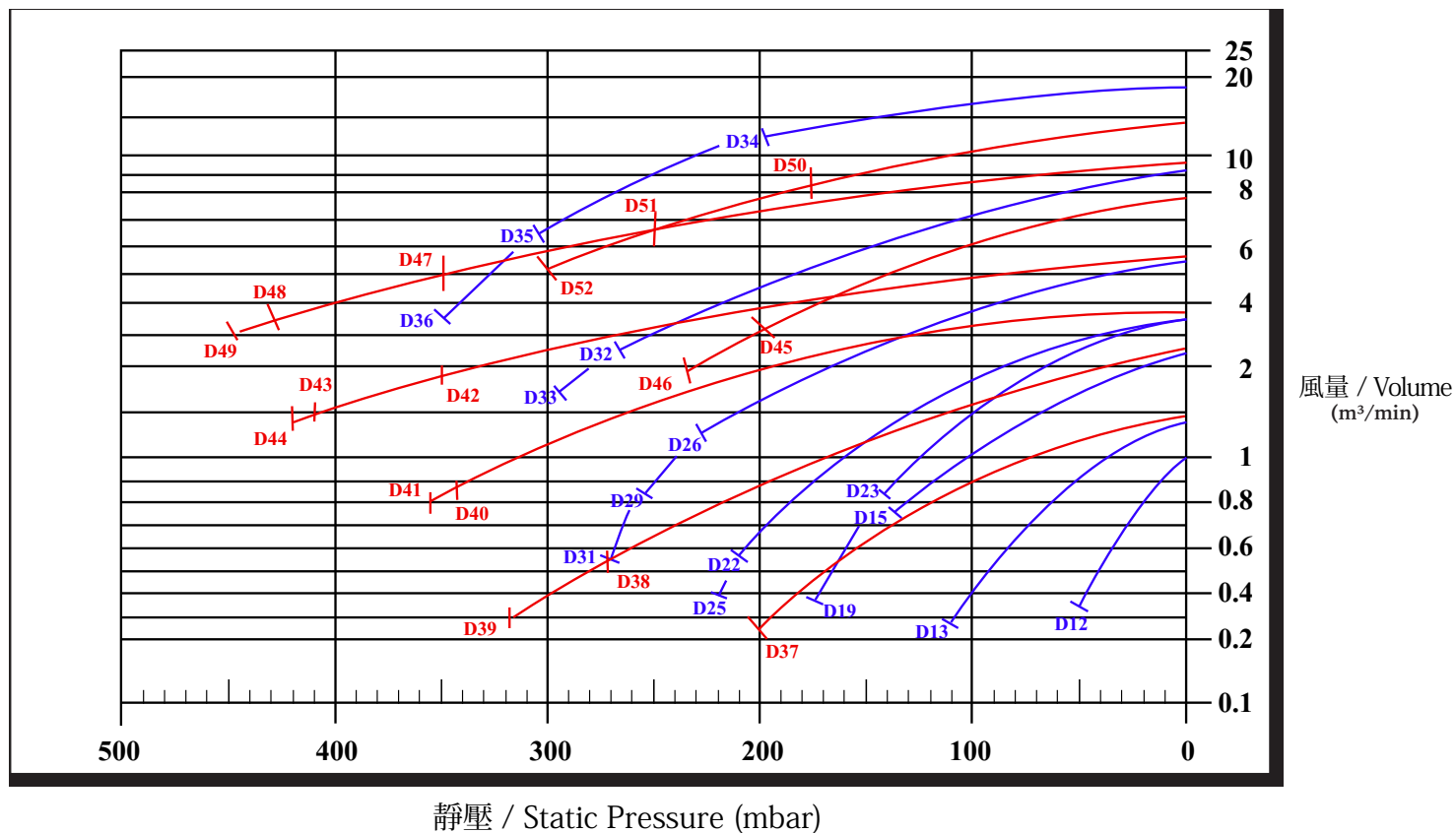
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# 50Hz 三相曲線圖 / Three Phase Curve

吸 Vacuum

50Hz 單段式 (Single Stage)

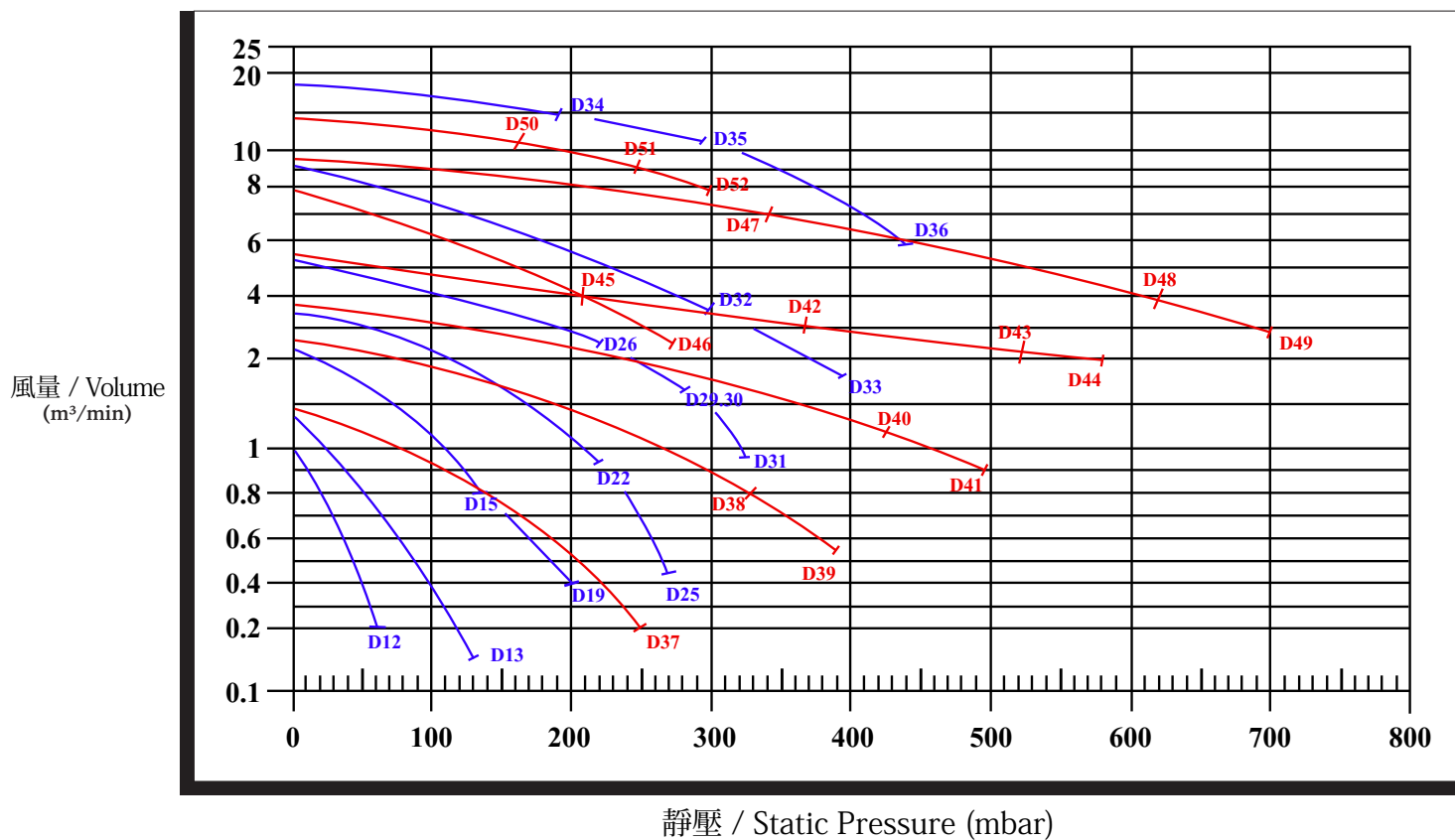
50Hz 雙段 (Two Stage)



吐 Compressor

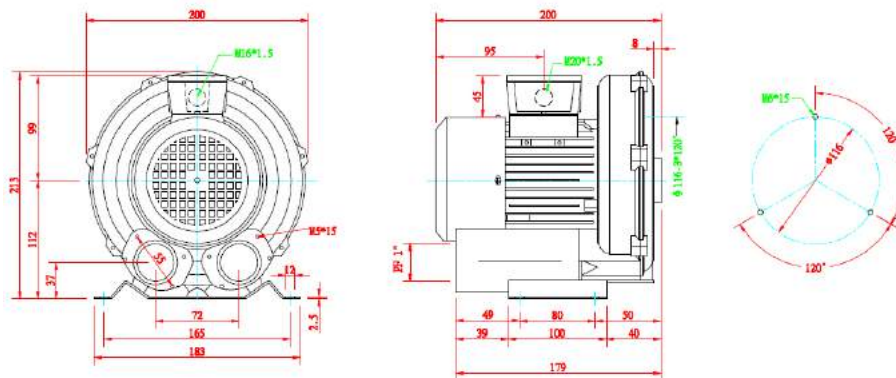
50Hz 單段式 (Single Stage)

50Hz 雙段 (Two Stage)



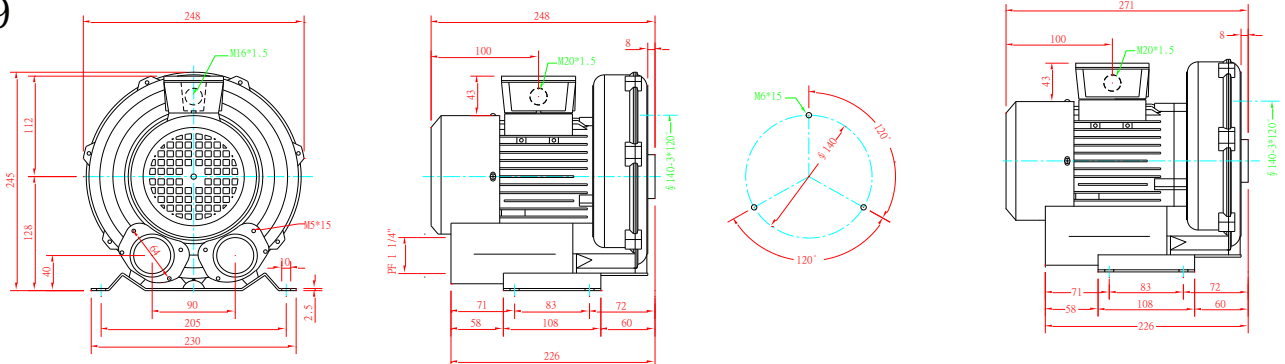
# 鼓風機之尺寸表 (Dimensions)

## HB-129-S 系列 (Series) HB-129



## HB-229-S 系列 (Series) HB-229

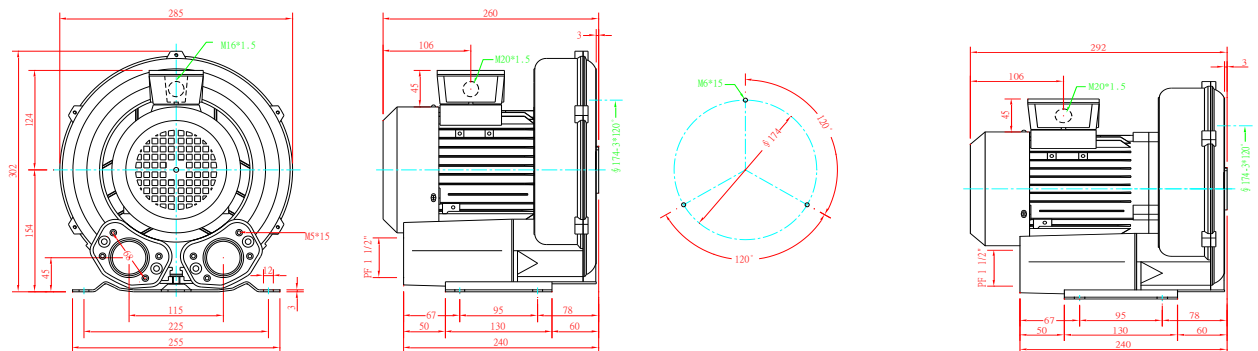
only HB-229 \*\*W



## HB-329-S 系列 (Series) HB-329

only HB-329 \*\*W

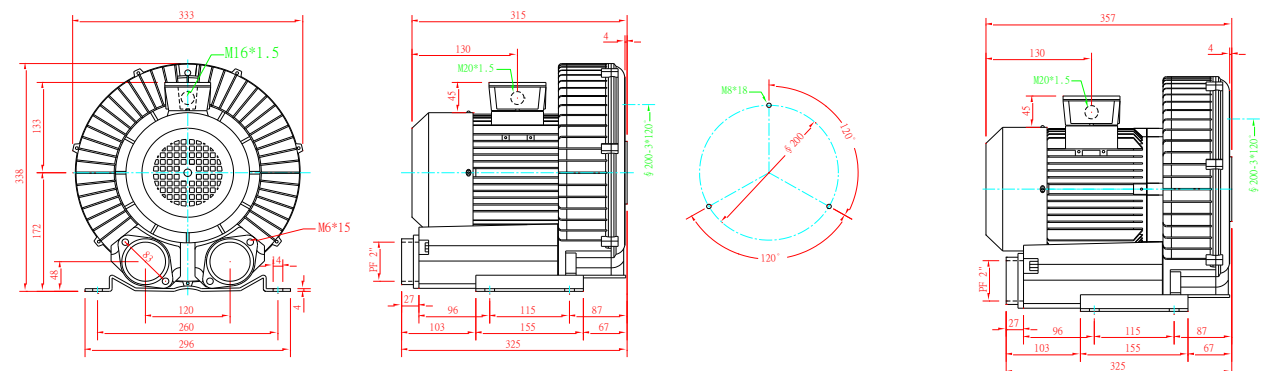
## HB-329-1 HB-339



## HB-429-2-S 系列 (Series)

only HB-429 \*\*W

## HB-429-S HB-429-1 HB-429-2 HB-429 HB-429-9 HB-429L HB-439





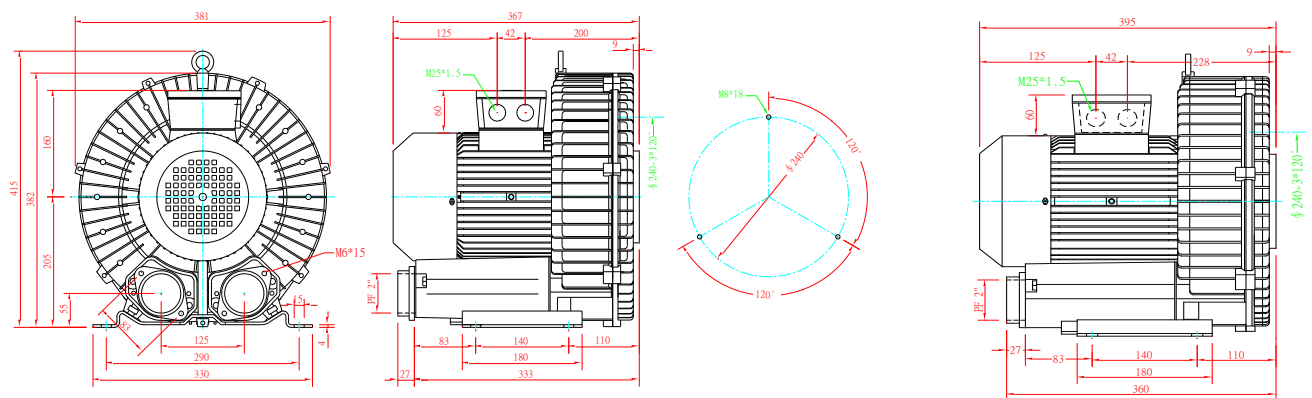
# 鼓風機之尺寸表 (Dimensions)

HB-529 系列 (Series)

HB-629

HB-639

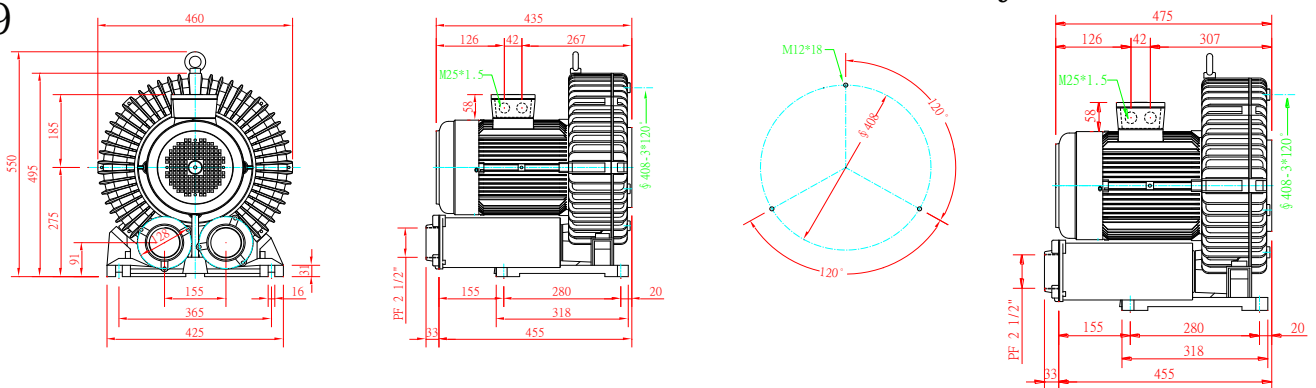
only HB-529 \*\*W



HB-729 系列 (Series)

HB-829

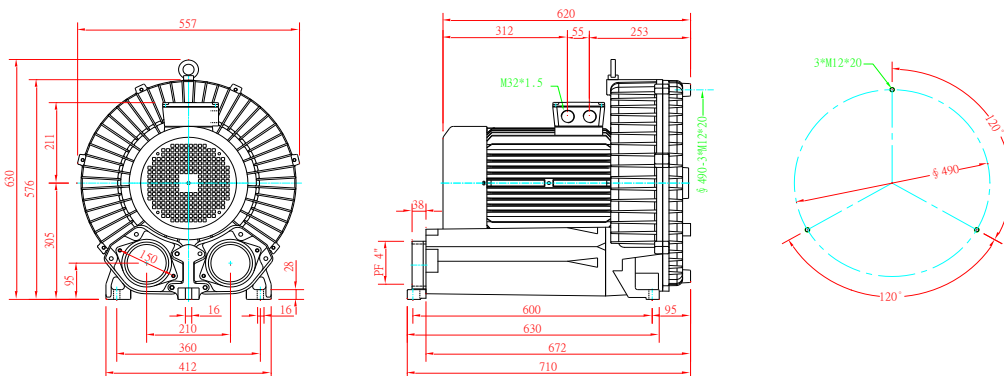
only HB-729 \*\*W



HB-919 系列 (Series)

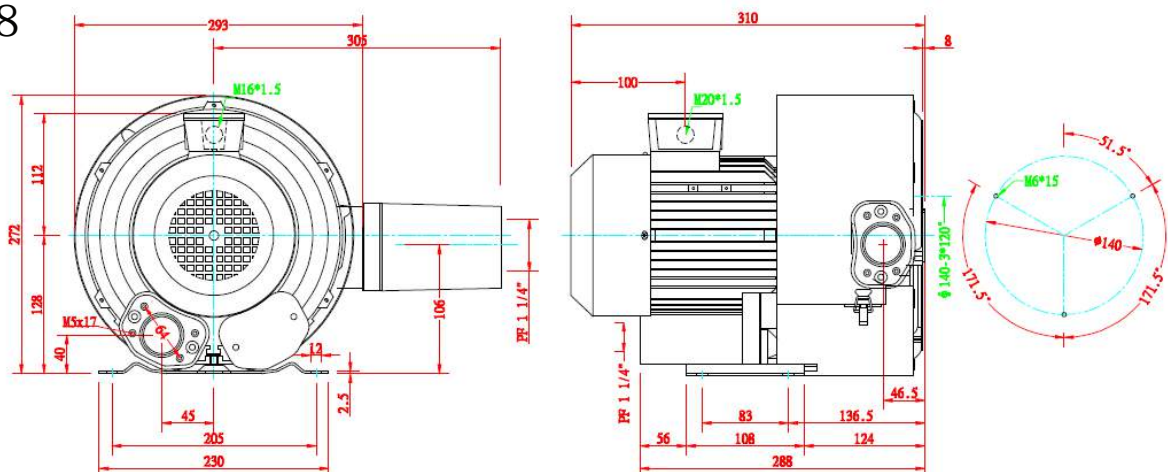
HB-929

HB-939



HB-2308-S 系列 (Series)

HB-2308



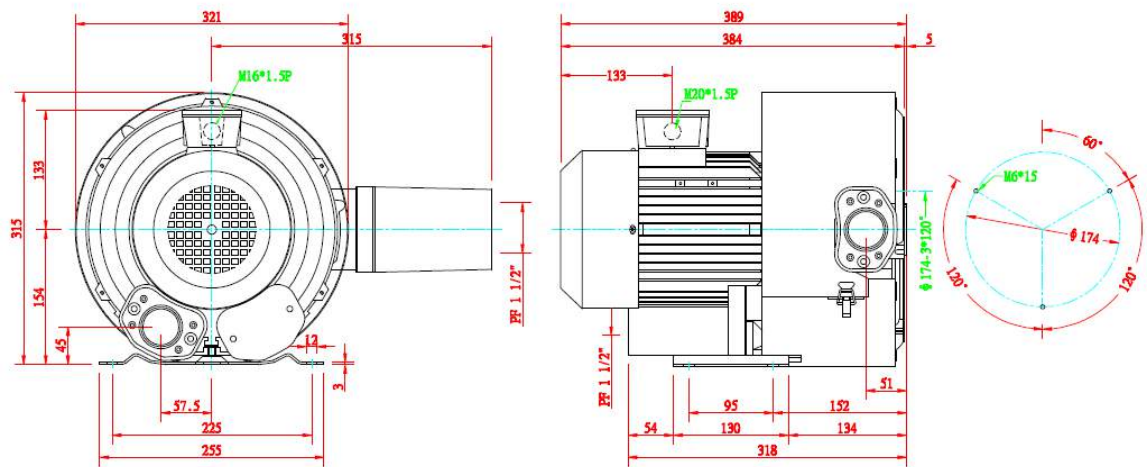


# 鼓風機之尺寸表 (Dimensions)

HB-3315-S 系列 (Series)

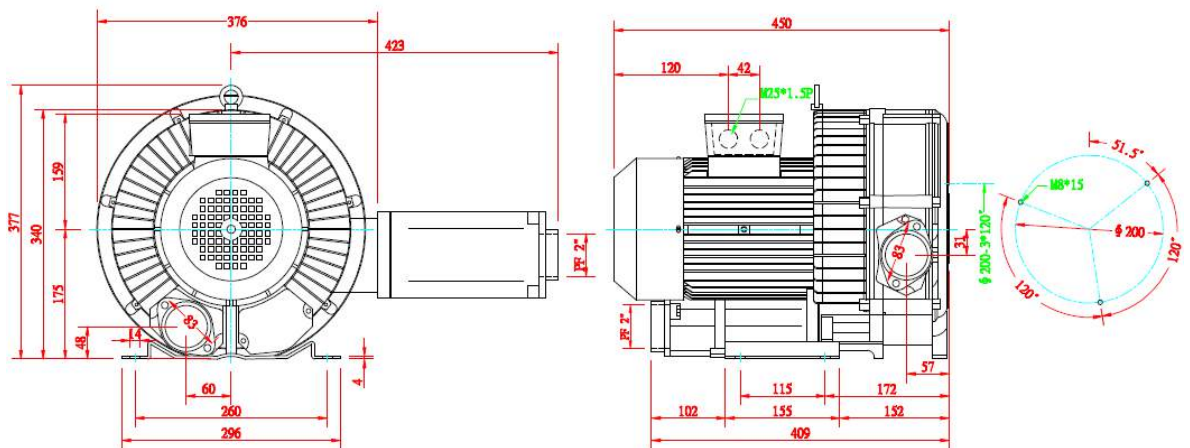
HB-3319

HB-3326



HB-4337 系列 (Series)

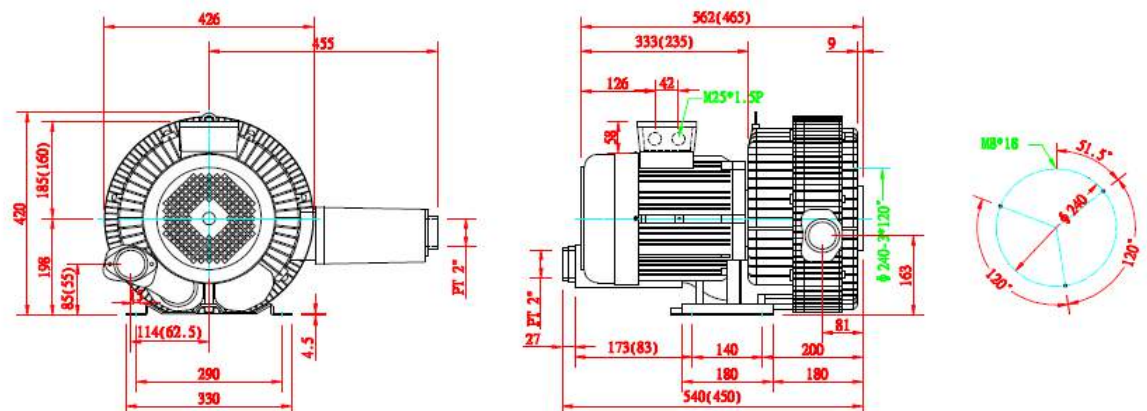
HB-4346



HB-6346 系列 (Series)

HB-6355

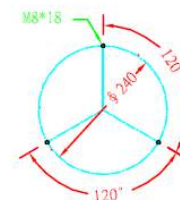
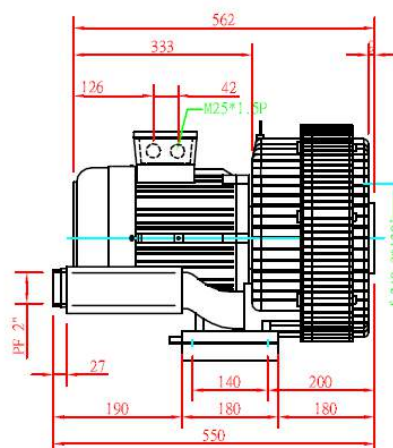
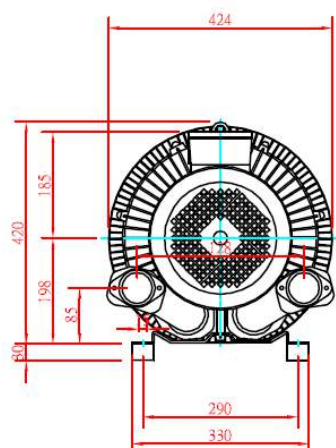
HB-6375



# 鼓風機之尺寸表 (Dimensions)

HB-6455 系列 (Series)

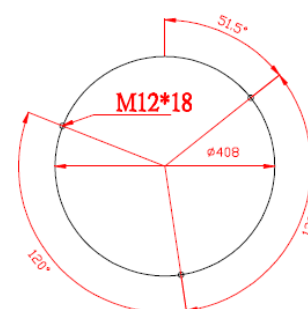
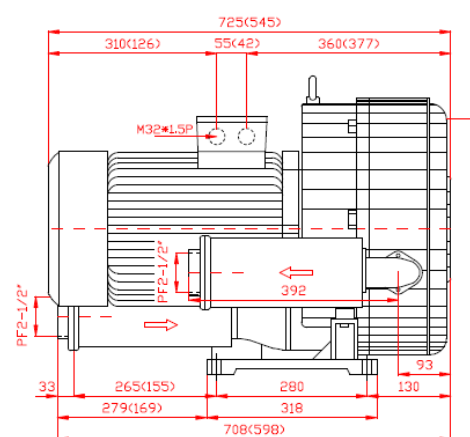
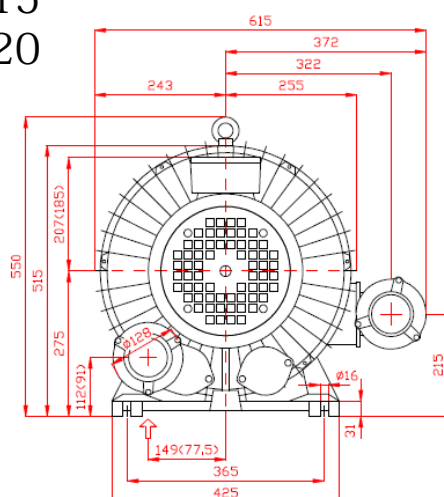
HB-6475



HB-8310 系列 (Series)

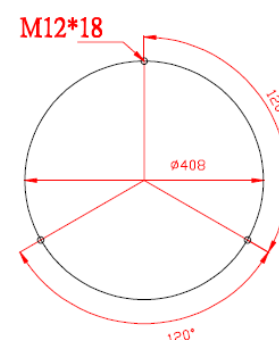
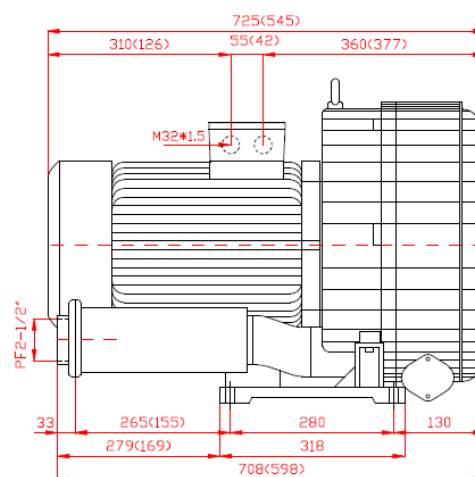
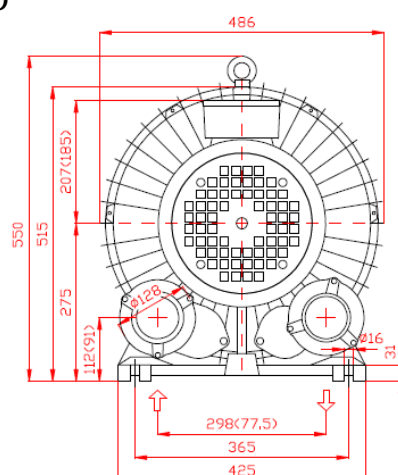
HB-8315

HB-8320



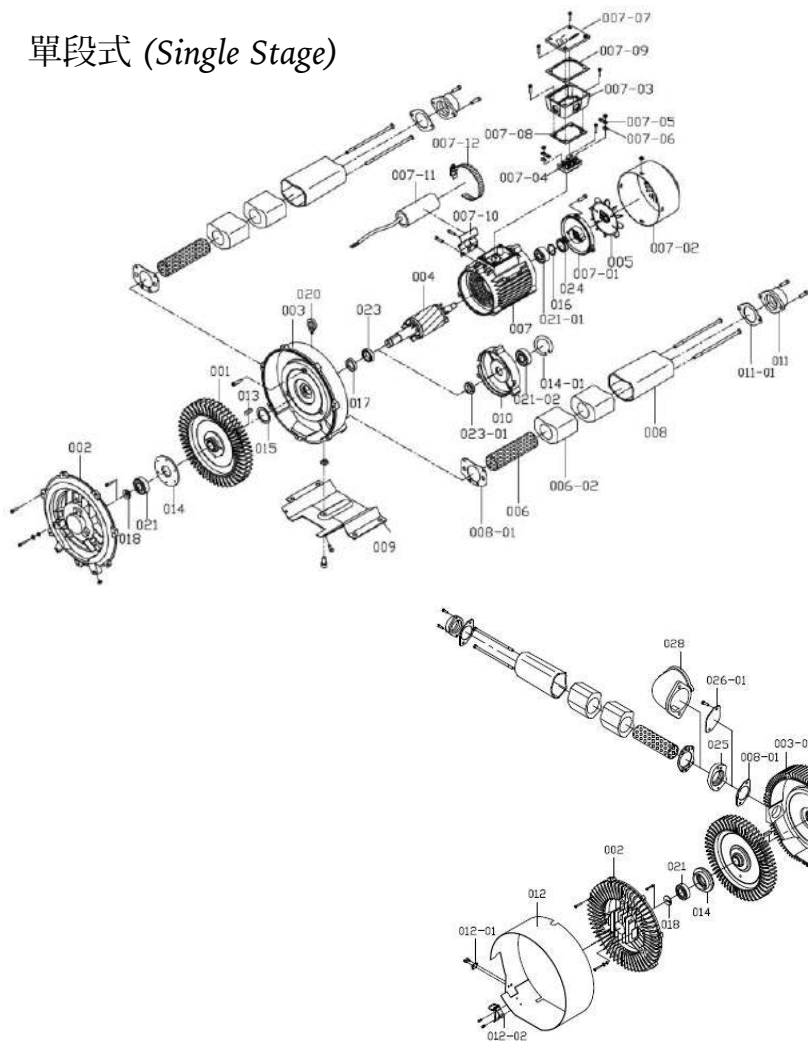
HB-8410 系列 (Series)

HB-8415

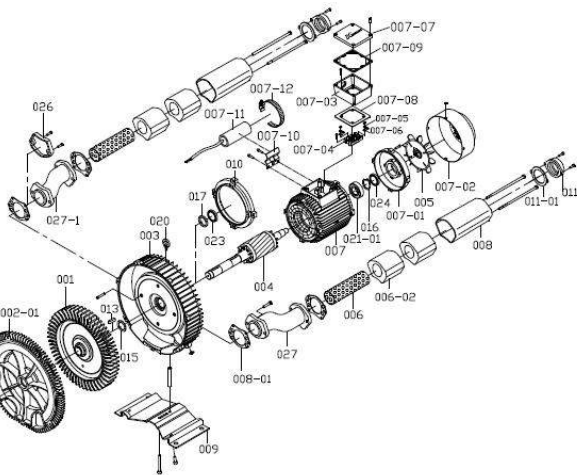


# 鼓風機之零件圖 (Parts Illustration)

單段式 (Single Stage)



雙段式 (Double Stage)



| 編號     | 零件名稱                          | 編號     | 零件名稱                         | 編號     | 零件名稱                  |
|--------|-------------------------------|--------|------------------------------|--------|-----------------------|
| ITEM   | PARTS NAME                    | ITEM   | PARTS NAME                   | ITEM   | PARTS NAME            |
| 001    | 風葉 Impeller                   | 007-08 | 配線盒墊片 Terminal box washer    | 015    | 風葉墊片 Washer           |
| 002    | 風蓋 Compressor cover           | 007-09 | 配線盒蓋墊片 Terminal cover washer | 016    | 波浪墊片 Ware washer      |
| 002-01 | 中風蓋 Middle compressor cover   | 007-10 | 電容器固定片 Capacitor washer      | 017    | 羊毛氈 Cotton seal       |
| 003    | 風桶 Compressor housing         | 007-11 | 電容器 Capacitor                | 018    | 前軸承墊片 Washer          |
| 003-01 | 中風桶 Middle compressor housing | 007-12 | 管束 Steel clip                | 020    | 吊環 Bronze ring        |
| 004    | 轉子 Rotor                      | 008    | 腳管 Silencer housing          | 021    | 前軸承 Front bearing     |
| 005    | 散熱葉 Fan                       | 008-01 | 腳管墊片 Silencer washer         | 021-01 | 後軸承 Rear bearing      |
| 006    | 消音鐵網 Silencer mesh pipe       | 009    | 腳座 Mounting plate            | 021-02 | 前軸承 Front bearing     |
| 006-02 | 消音海綿 Silencer sponge          | 010    | 馬達中蓋 Middle motor cover      | 023    | 前軸封 Front oil seal    |
| 007    | 馬達 Motor                      | 011    | 牙口 Inlet/outlet              | 023-01 | 軸封 VA-seal            |
| 007-01 | 馬達後蓋 Motor cover              | 011-01 | 牙口墊片 Inlet/outlet washer     | 024    | 後軸封 Rear oil seal     |
| 007-02 | 散熱鐵蓋 Fan cover                | 012    | 外觀鐵片 Protection steel skin   | 025    | 腳管固定座 Silencer socket |
| 007-03 | 配線盒 Terminal box              | 012-01 | 上箱扣 Buckle (up)              | 026    | 出口封蓋 Outlet cover     |
| 007-04 | 配線端子 Wire socket              | 012-02 | 下箱扣 Buckle (down)            | 026-01 | 封蓋 Cover              |
| 007-05 | 銅片 Wire connection slice      | 013    | 鍵 Rotor pin                  | 027    | 彎管 Extend pipe        |
| 007-06 | 壓板 Fixed slice                | 014    | 前軸承固定片 Bearing washer        | 027-01 | 彎管 Extend pipe        |
| 007-07 | 配線盒蓋 Terminal cover           | 014-01 | 軸承C 型扣環 Bearing washer       | 028    | 90°彎管 90°extend pipe  |

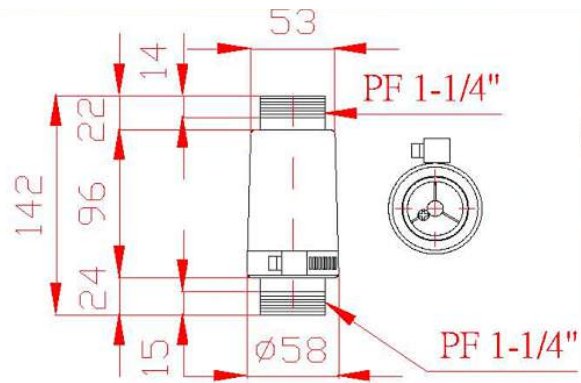
\* 訂購時請告知型號+零件編號 (例如: **HB-629+002**)  
\* Please notify model+parts item when you purchase.  
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## (Accessories)

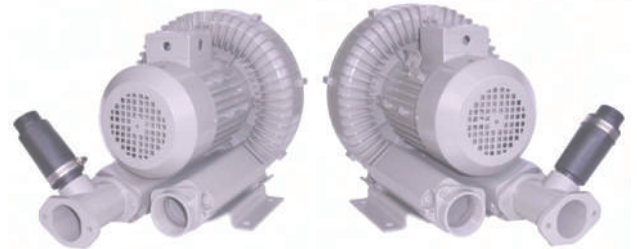
### Pressure Relief Valve

| Type  | PF     | L<br>(mm) | Dimension  |
|-------|--------|-----------|------------|
| RV-01 | 1 1/4" | 142       | 0~3000mmAq |
| RV-02 | 1 1/4" | 142       | 0~6000mmAq |

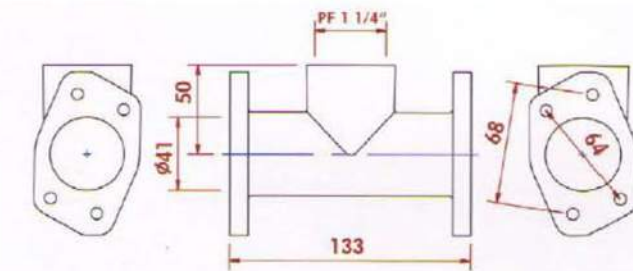


### Tee Pipe (mm)

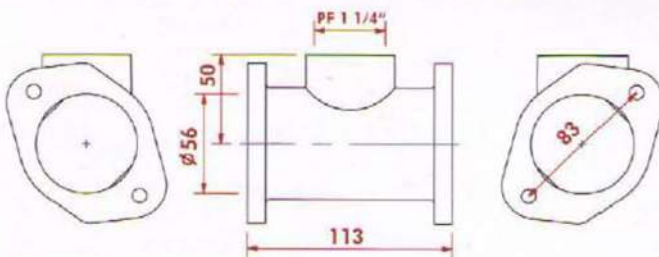
| Type  | Application                                                                                                              |
|-------|--------------------------------------------------------------------------------------------------------------------------|
| TP-01 | HB-229-S, 229, 2308-S, 2308, 329-S, 329, 329-1, 339, 3315-S, 3319, 3326 (Serial)                                         |
| TP-02 | HB-429-9-S, 429-S, 429-1, 429-2, 429, 429-9, 429L, 439, 4337, 4346, 529, 629, 639, 6346, 6355, 6375, 6455, 6475 (Serial) |



TP-01



TP-02



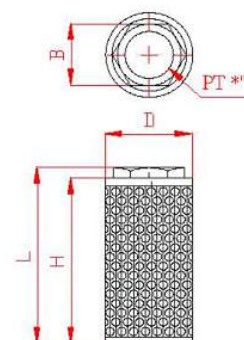
TP-01



TP-02

### MF Type Suction Filter

| Symbol<br>Type | PT     | D<br>(mm) | L<br>(mm) | H<br>(mm) | B<br>(mm) | Filtration mesh | (kg)<br>Weight |
|----------------|--------|-----------|-----------|-----------|-----------|-----------------|----------------|
| MF-08          | 1"     | 58        | 170       | 155       | 42        | 100             | 0.20           |
| MF-10          | 1 1/4" | 71        | 186       | 170       | 54        | 100             | 0.35           |
| MF-12          | 1 1/2" | 85        | 196       | 182       | 65        | 100             | 0.49           |
| MF-16          | 2"     | 103       | 215       | 202       | 75        | 100             | 0.65           |
| MF-20          | 2 1/2" | 148       | 274       | 252       | 97        | 100             | 1.20           |
| MF-32          | 4"     | 208       | 380       | 357       | 142       | 100             | 2.45           |

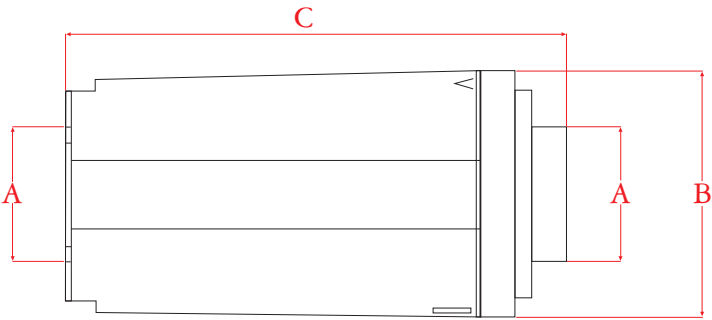




# 鼓風機配件表 (Accessories)

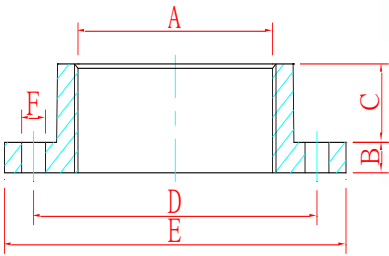
消音器

| 符號 Symbol<br>型號Type | A         | B<br>(mm) | C<br>(mm) |
|---------------------|-----------|-----------|-----------|
| SI-01               | PF 1 1/4" | 83        | 180       |
| SI-02               | PF 1 1/2" | 98        | 180       |
| SI-03               | PF 2"     | 117       | 266       |
| SI-04               | PF 2 1/2" | 145       | 325       |



牙口/ Threaded Flange[mm]

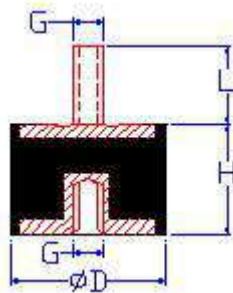
| 符號 Symbol<br>型號 Type | A         | B  | C  | D   | E   | F |
|----------------------|-----------|----|----|-----|-----|---|
| 2-011                | PF 1 1/4" | 7  | 22 | 64  | 79  | 6 |
| 3-011                | PF 1 1/2" | 7  | 24 | 68  | 86  | 6 |
| 6-011                | PF 2"     | 7  | 18 | 83  | 100 | 7 |
| 8-011                | PF 2 1/2" | 15 | 16 | 128 | 144 | 7 |
| 9-011                | PF 4"     | 8  | 22 | 150 | 170 | 9 |



防震腳墊供垂直或水平安裝

Footprint dimensions for vertical/horizontal mounting[mm]

| 型號 Type | D  | H  | G   | L  |
|---------|----|----|-----|----|
| MFB2520 | 25 | 20 | M6  | 12 |
| MFB3025 | 30 | 25 | M8  | 15 |
| MFB7540 | 75 | 40 | M12 | 20 |
| MFB7545 | 75 | 45 | M12 | 37 |



附註：若需要其他配件，請與本公司或經銷商連絡  
If you need other accessories, please contact us or distributors.

# 單位換算表 Unit Conversion Table

| 壓力 / Pressure |                     |      |       |                               |       |      |        |      |
|---------------|---------------------|------|-------|-------------------------------|-------|------|--------|------|
| mmAq          | kg /cm <sup>2</sup> | mmHg | inHg  | PSIG<br>(lb/in <sup>2</sup> ) | % 真空  | Troo | K.pa   | mbar |
| 0             | 0.                  | 0.   | 0.    | 0.                            | 0.    | 760  | 0.     | 0.   |
| 500           | 0.05                | 37   | 1.45  | 0.71                          | 48    | 723  | 4.90   | 49   |
| 1000          | 0.1                 | 74   | 2.89  | 1.42                          | 9.7   | 686  | 9.81   | 98   |
| 1500          | 0.15                | 110  | 4.34  | 2.13                          | 14.5  | 650  | 14.71  | 147  |
| 2000          | 0.2                 | 147  | 5.79  | 2.84                          | 19.3  | 613  | 19.61  | 196  |
| 3000          | 0.3                 | 221  | 8.68  | 4.26                          | 29.0  | 539  | 29.42  | 294  |
| 5000          | 0.5                 | 368  | 14.47 | 7.10                          | 48.4  | 392  | 49.03  | 490  |
| 10000         | 1.0                 | 735  | 28.95 | 14.20                         | 96.7  | 25   | 98.07  | 981  |
| 10336         | 1.0336              | 760  | 29.92 | 14.68                         | 100.0 | 0    | 101.36 | 1014 |

同 / same

mmH<sub>2</sub>O, mmW.g, mmW.C, mmW.S, kg/m<sup>3</sup>kp, kg. f/m<sup>3</sup>, KP/m<sup>3</sup>

| 風量 / Air Flow       |       |                             |                      |
|---------------------|-------|-----------------------------|----------------------|
| m <sup>3</sup> /min | l/min | CFM<br>ft <sup>3</sup> /min | in <sup>3</sup> /min |
| 0.                  | 0     | 0.                          | 0                    |
| 0.005               | 5     | 0.18                        | 305                  |
| 0.01                | 10    | 0.35                        | 610                  |
| 0.02                | 20    | 0.71                        | 1220                 |
| 0.05                | 50    | 1.77                        | 3051                 |
| 0.1                 | 100   | 3.53                        | 6102                 |
| 0.2                 | 200   | 7.06                        | 12205                |
| 0.5                 | 500   | 17.65                       | 30512                |
| 1.0                 | 1000  | 35.3                        | 61024                |
| 2.0                 | 2000  | 70.6                        | 122047               |
| 5.0                 | 5000  | 176.5                       | 305119               |
| 10.0                | 1000  | 353.0                       | 610237               |

| 風速 / Air Speed |       |        |
|----------------|-------|--------|
| m/sec          | Km/H  | in/sec |
| 0              | 0.    | 0.     |
| 1              | 3.6   | 39.4   |
| 2              | 7.2   | 78.7   |
| 5              | 18.0  | 196.9  |
| 10             | 36.0  | 393.7  |
| 20             | 72.0  | 787.4  |
| 50             | 180.0 | 1968.5 |
| 100            | 360.0 | 3937.0 |
| 200            | 720.0 | 7874.0 |

| 馬力 / Electrical Power |       |        |
|-----------------------|-------|--------|
| W                     | kW    | hp     |
| 1                     | 0.001 | 0.0013 |
| 1000                  | 1     | 1.341  |
| 745.7                 | 0.746 | 1      |

## 單段式 Single stage



HB-129 系列 Series



HB-229 系列 Series



HB-329 系列 Series



HB-429 系列 Series



HB-529 系列 Series



HB-729 系列 Series



HB-919 系列 Series



皮帶式系列 V-Belt series

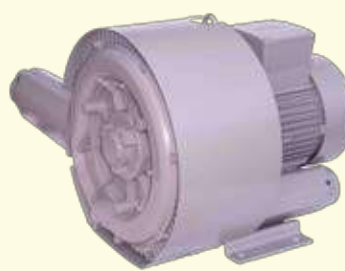
## 雙段式 Double stage



HB-2308 系列 Series



HB-3315 系列 Series



HB-4337 系列 Series



HB-6346 系列 Series



HB-6455 系列 Series



HB-8310 系列 Series



HB-8410 系列 Series



皮帶式系列 V-Belt series