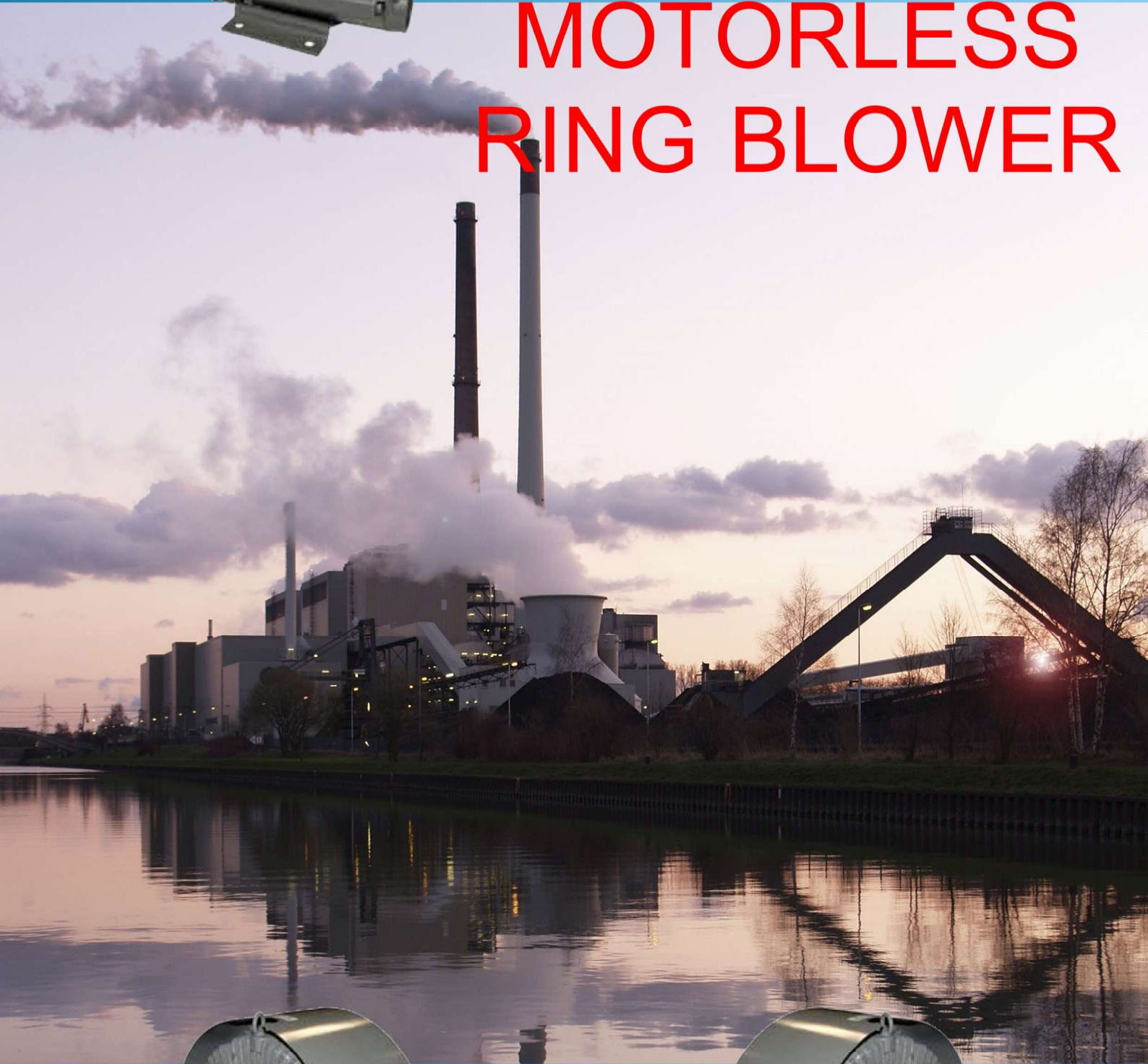




# AIRFLOW

## MOTORLESS RING BLOWER





Single Stage



Double Stage

**AIRFLOW** range of Motorless bare shaft Side Channel Vacuum Pumps and Blowers are used in combination with a V-Belt or Coupling Drive.

Construction in Aluminium, contact free operation, limited maintenance requirements, integrated silencers.

The solution for individual applications demanding variable motor classifications and standards, including flame proof and ATEX Motor Classifications.

Available as bare shaft side channel blower units or packaged units.

Rotation speeds up to 4500 rev/min optimising performance.

Single Stage and Double Stage options.

All models are Certified ISO 9001 and can be used as follows:

- Explosion Proof Applications.
- Three-Phase or Single-Phase.
- Standardised Motors.
- Flow Adjustment Optimising Performance.

Performance data for Pressure and Vacuum at rotation speeds:

- 2900 rev/min .
- 3400 rev/min.

## Performance Parameters (3400 rev/min)

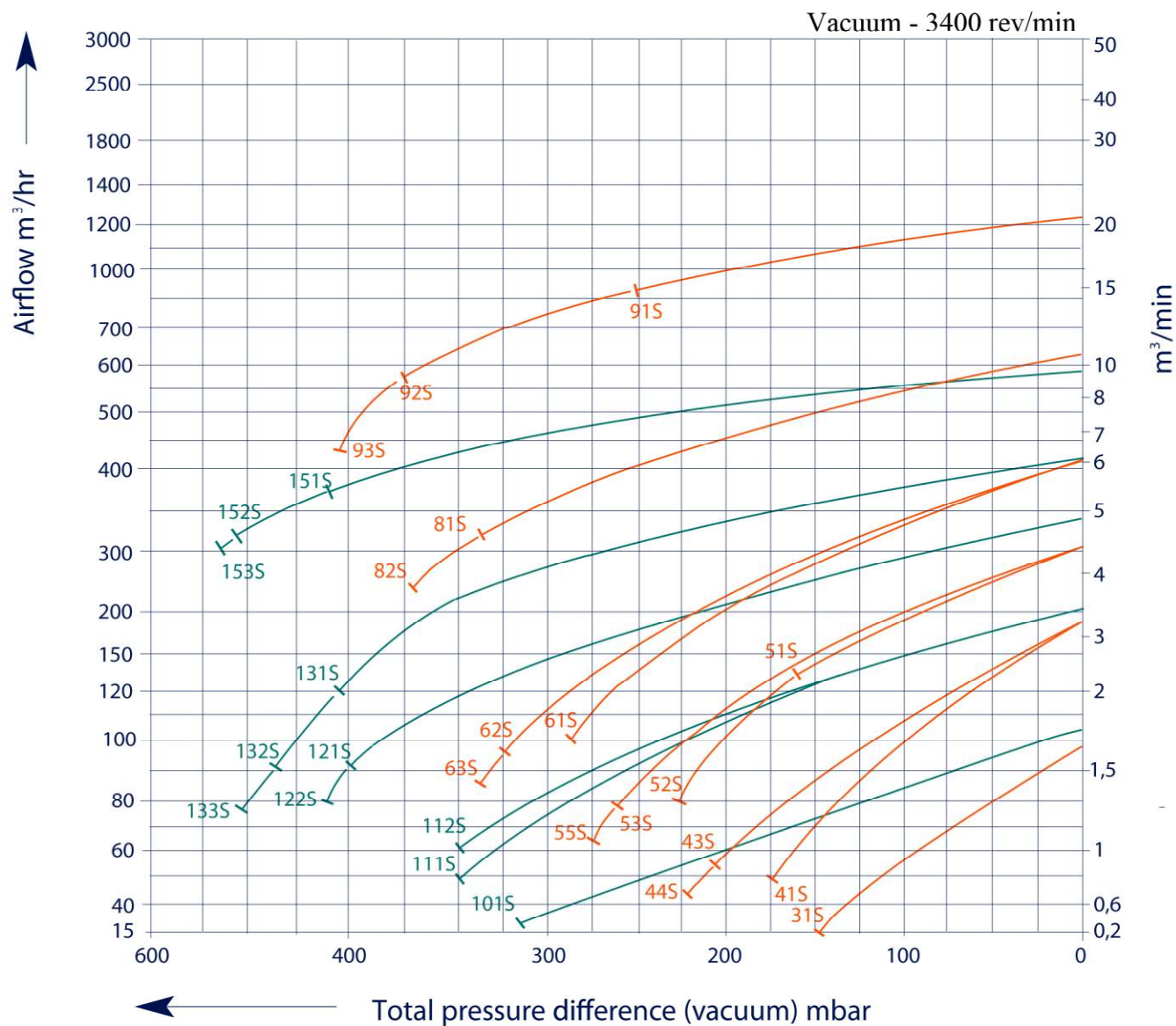
| Type     | Curve | Power<br>(kW) | Relief Valve (Vacuum)* | Relief Valve (Pressure)* | Intake Filter** |
|----------|-------|---------------|------------------------|--------------------------|-----------------|
| AFT-201  | 31S   | 0.50          | 1 x RV01-VZ            | 1 x RV01-PZ              | MF10            |
| AFT-301  | 41S   | 0.85          | 1 x RV01-VZ            | 1 x RV01-PZ              | MF12            |
|          | 43S   | 1.10          |                        |                          |                 |
|          | 44S   | 1.50          |                        |                          |                 |
| AFT-401  | 51S   | 1.10          | 1 x RV01-VZ            | 1 x RV01-PZ              | MF16            |
|          | 52S   | 1.50          |                        |                          |                 |
|          | 53S   | 1.90          |                        |                          |                 |
|          | 55S   | 2.60          |                        |                          |                 |
| AFT-601  | 61S   | 2.60          | 1 x RV01-VZ            | 1 x RV01-PZ              | MF16            |
|          | 62S   | 3.70          |                        | 1 x RV02-PZ              |                 |
|          | 63S   | 4.60          |                        |                          |                 |
| AFT-801  | 81S   | 6.30          | 1 x RV01-VZ            | 1 x RV02-PZ              | MF20            |
|          | 82S   | 8.60          | 1 x RV02-VZ            |                          |                 |
| AFT-901  | 91S   | 11.00         | 3 x RV01-VZ            | 3 x RV01-PZ              | MF32            |
|          | 92S   | 15.00         |                        |                          |                 |
|          | 93S   | 22.00         |                        |                          |                 |
| AFT-2301 | 101S  | 0.85          | 1 x RV01-VZ            | 1 x RV01-PZ              | MF10            |
| AFT-3301 | 111S  | 1.90          | 1 x RV01-VZ            | 1 x RV02-PZ              | MF12            |
|          | 112S  | 2.60          |                        |                          |                 |
| AFT-4301 | 121S  | 3.70          | 1 x RV02-VZ            | 1 x RV02-PZ              | MF16            |
|          | 122S  | 4.60          |                        |                          |                 |
| AFT-6301 | 131S  | 4.60          | 1 x RV02-VZ            | 1 x RV02-PZ              | MF16            |
|          | 132S  | 6.30          |                        | 2 x RV02-PZ              |                 |
|          | 133S  | 8.60          |                        |                          |                 |
| AFT-8301 | 151S  | 8.60          | 1 x RV02-VZ            | 2 x RV02-PZ              | MF20            |
|          | 152S  | 13.00         |                        | 2 x RV01-PZ              |                 |
|          | 153S  | 19.00         |                        |                          |                 |

\* Vacuum / Pressure Relief Valves supplied loose, for adapter / connection options please contact.

\*\* Supplied without connection pipework, MF Filter efficiency 100 micron.

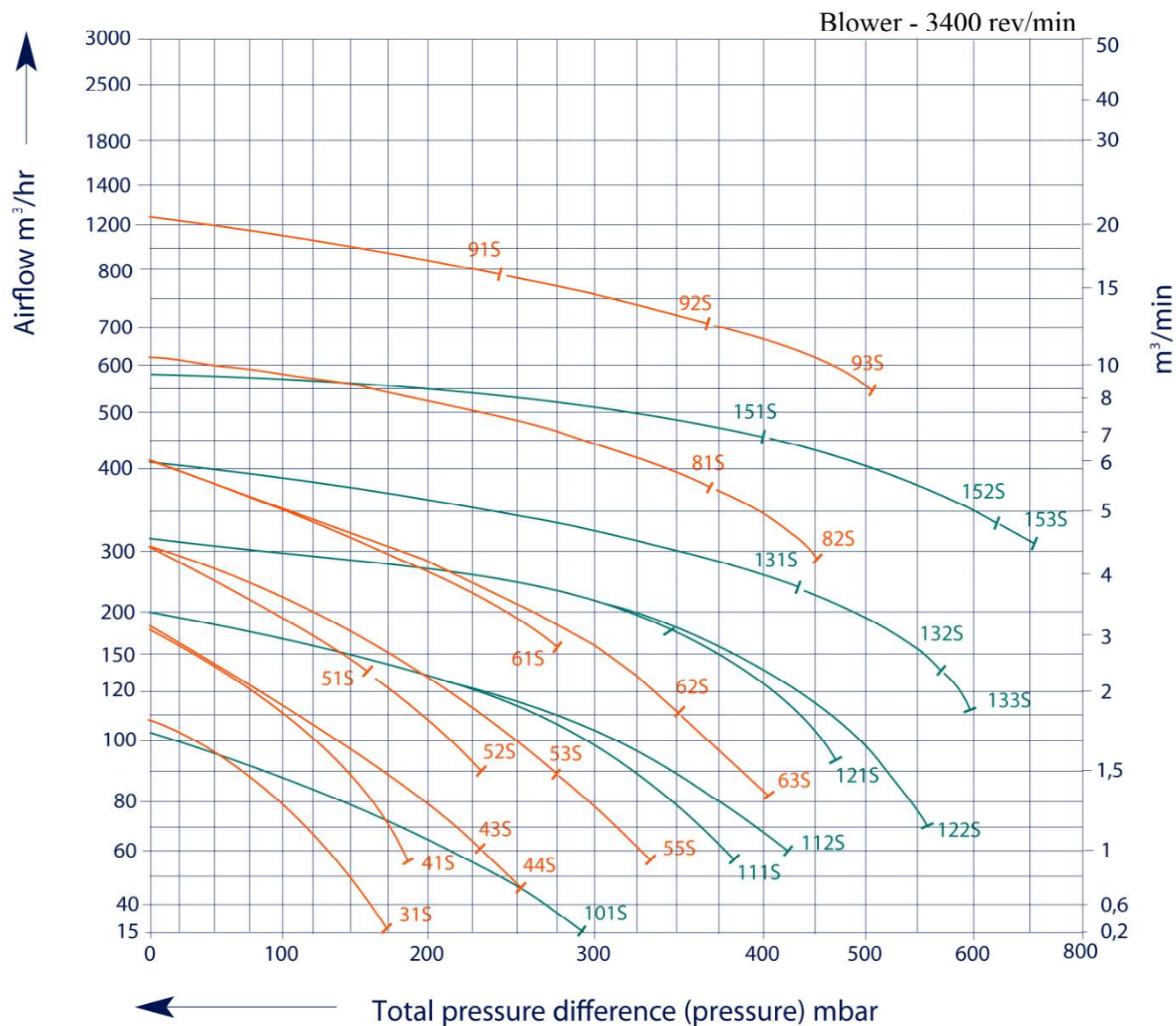


## Performance Curves (3400 rev/min)



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of  $\pm 10\%$ . The total pressure differences apply up to an intake and ambient temperature of 25°C.

## Performance Curves (3400 rev/min)



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of  $\pm 10\%$ . The total pressure differences apply up to an intake and ambient temperature of 25°C.

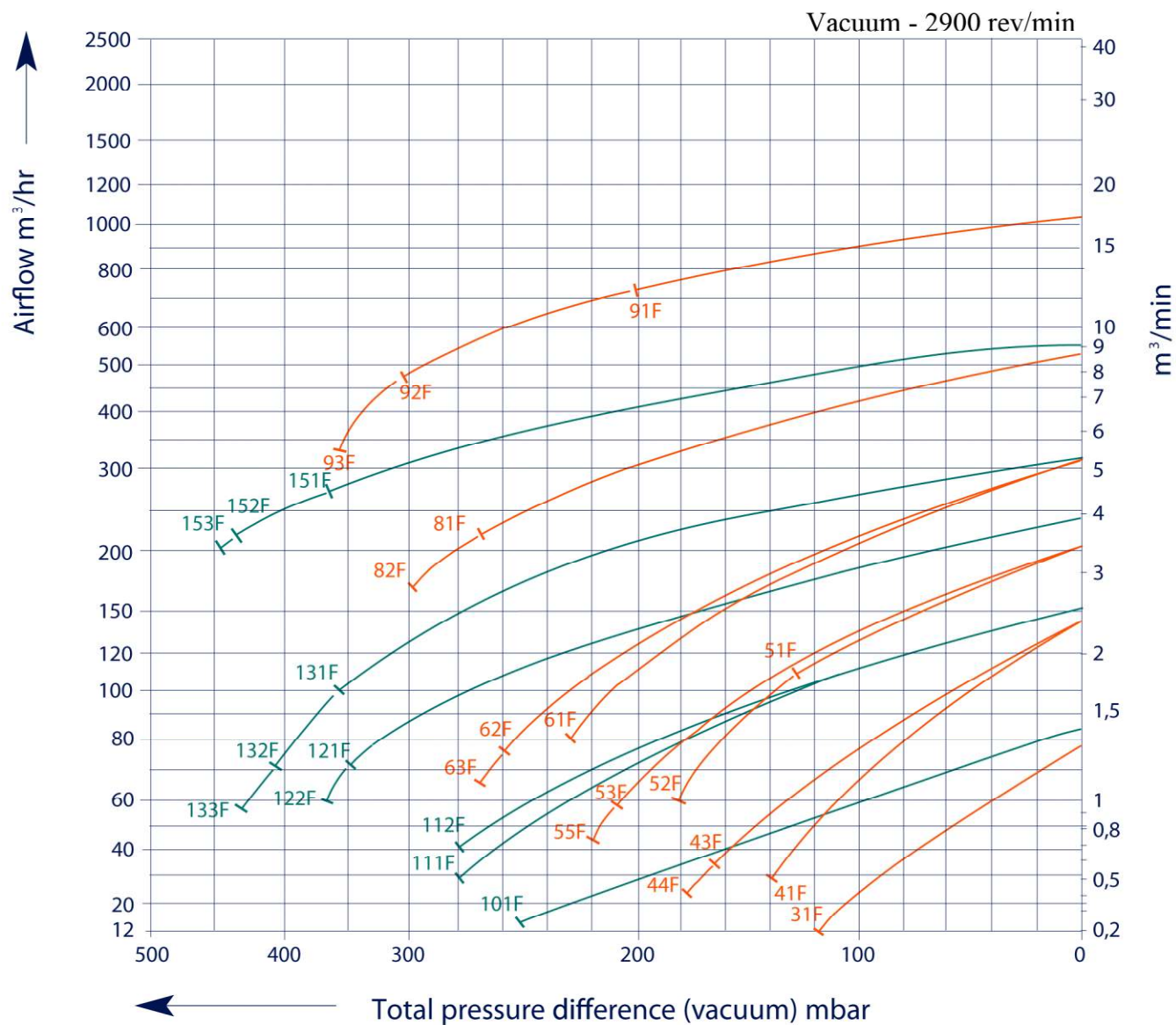
## Performance Parameters (2900 rev/min)

| Type     | Curve | Power (kW) | Relief Valve (Vacuum)* | Relief Valve (Pressure)* | Intake Filter** |
|----------|-------|------------|------------------------|--------------------------|-----------------|
| AFT-201  | 31F   | 0.40       | 1 x RV01-VZ            | 1 x RV01-PZ              | MF10            |
|          | 41F   | 0.75       | 1 x RV01-VZ            | 1 x RV01-PZ              | MF12            |
| AFT-301  | 43F   | 0.90       |                        |                          |                 |
|          | 44F   | 1.30       | 1 x RV01-VZ            | 1 x RV01-PZ              | MF16            |
| AFT-401  | 51F   | 0.90       |                        |                          |                 |
|          | 52F   | 1.30       |                        |                          |                 |
|          | 53F   | 1.75       |                        |                          |                 |
|          | 55F   | 2.20       |                        |                          |                 |
| AFT-601  | 61F   | 2.20       | 1 x RV01-VZ            | 1 x RV01-PZ              | MF16            |
|          | 62F   | 3.40       |                        | 1 x RV02-PZ              |                 |
|          | 63F   | 4.00       |                        | 1 x RV02-PZ              |                 |
| AFT-801  | 81F   | 5.50       | 1 x RV01-VZ            | 1 x RV02-PZ              | MF20            |
|          | 82F   | 7.50       | 1 x RV02-VZ            |                          |                 |
| AFT-901  | 91F   | 9.00       | 3 x RV01-VZ            | 3 x RV01-PZ              | MF32            |
|          | 92F   | 13.00      |                        |                          |                 |
|          | 93F   | 20.00      |                        |                          |                 |
| AFT-2301 | 101F  | 0.75       | 1 x RV01-VZ            | 1 x RV01-PZ              | MF10            |
| AFT-3301 | 111F  | 1.75       | 1 x RV01-VZ            | 1 x RV02-PZ              | MF12            |
|          | 112F  | 2.20       |                        |                          |                 |
| AFT-4301 | 121F  | 3.40       | 1 x RV02-VZ            | 1 x RV02-PZ              | MF16            |
|          | 122F  | 4.00       |                        |                          |                 |
| AFT-6301 | 131F  | 4.00       | 1 x RV02-VZ            | 1 x RV02-PZ              | MF16            |
|          | 132F  | 5.50       |                        | 2 x RV02-PZ              |                 |
|          | 133F  | 7.50       |                        | 2 x RV02-PZ              |                 |
| AFT-8301 | 151F  | 7.50       | 1 x RV02-VZ            | 2 x RV02-PZ              | MF20            |
|          | 152F  | 11.00      |                        | 2 x RV01-PZ              |                 |
|          | 153F  | 16.00      |                        | 2 x RV01-PZ              |                 |

\* Vacuum / Pressure Relief Valves supplied loose, for adapter / connection options please contact.

\*\* Supplied without connection pipework, MF Filter efficiency 100 micron.

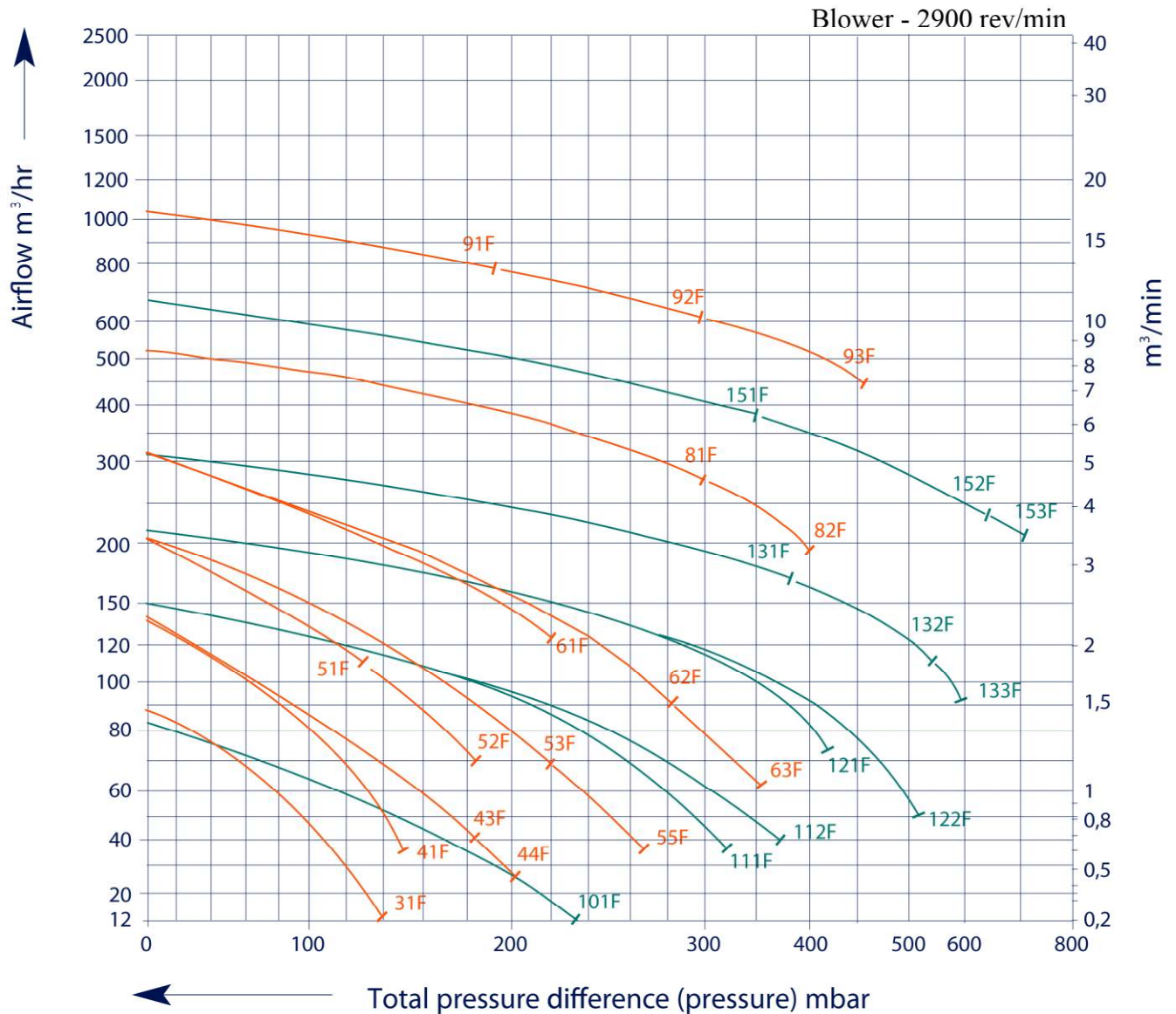
## Performance Curves (2900 rev/min)



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of  $\pm 10\%$ . The total pressure differences apply up to an intake and ambient temperature of 25°C.



## Performance Curves (2900 rev/min)

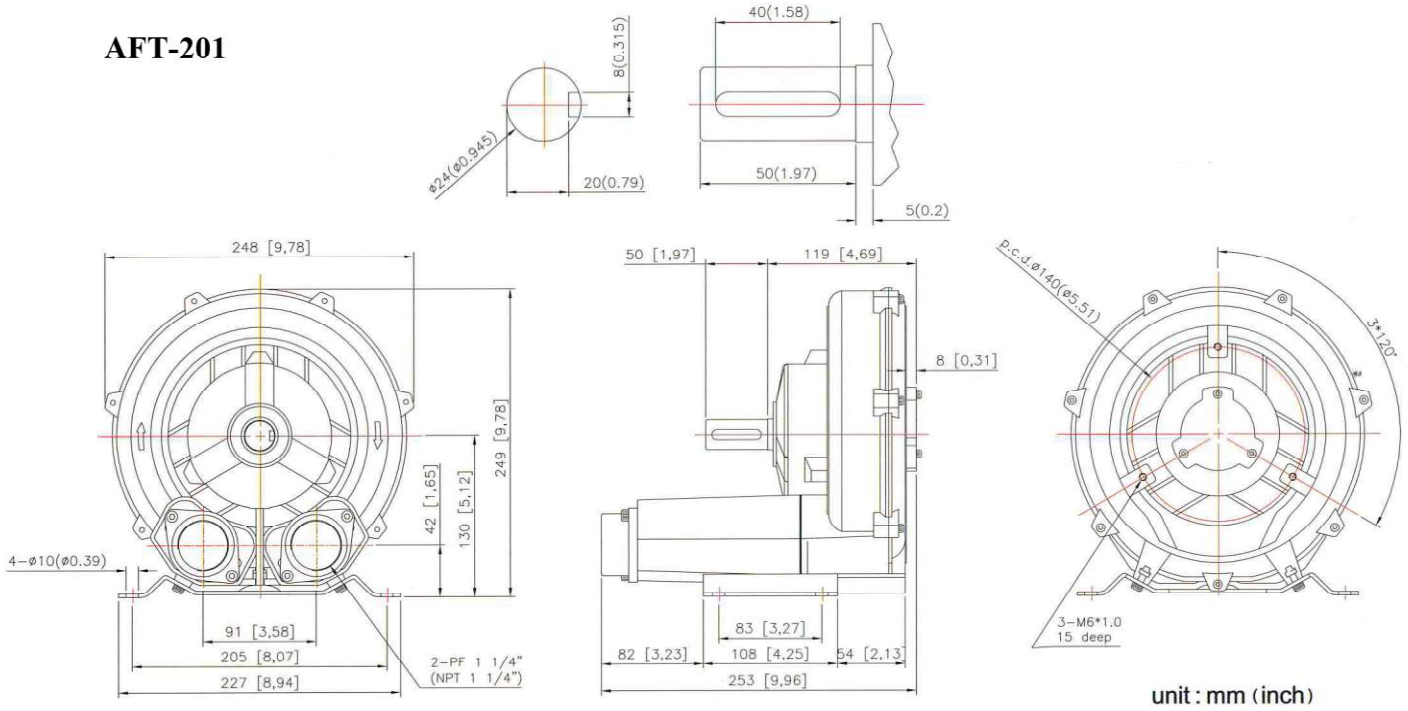


The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of  $\pm 10\%$ . The total pressure differences apply up to an intake and ambient temperature of 25°C.

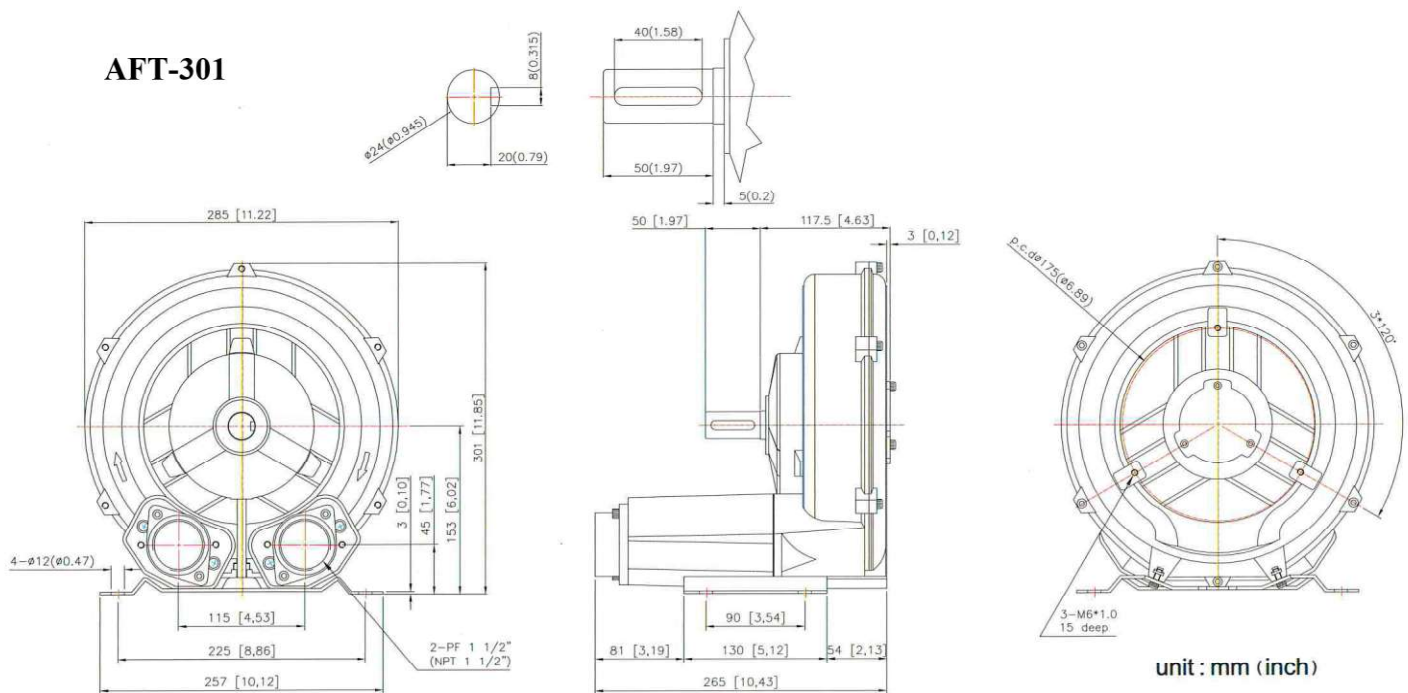


## Dimensions

### AFT-201



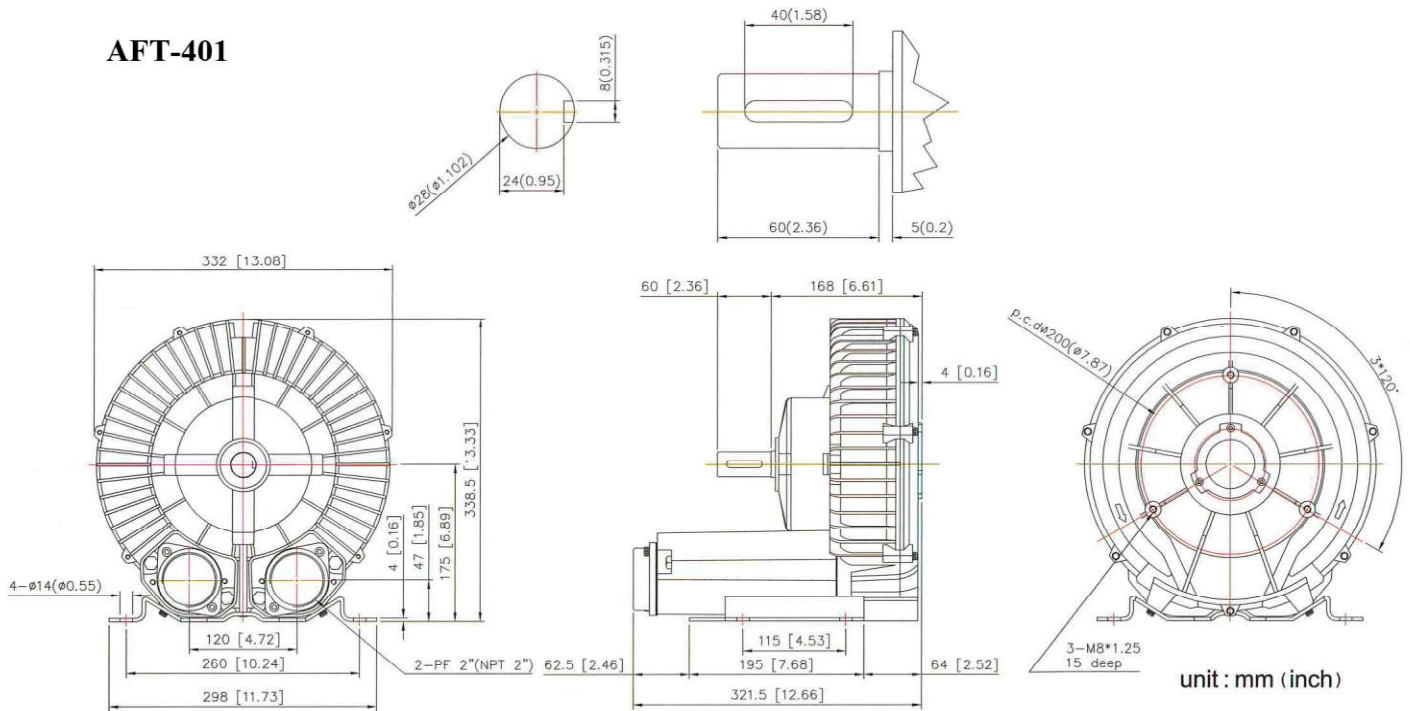
### AFT-301



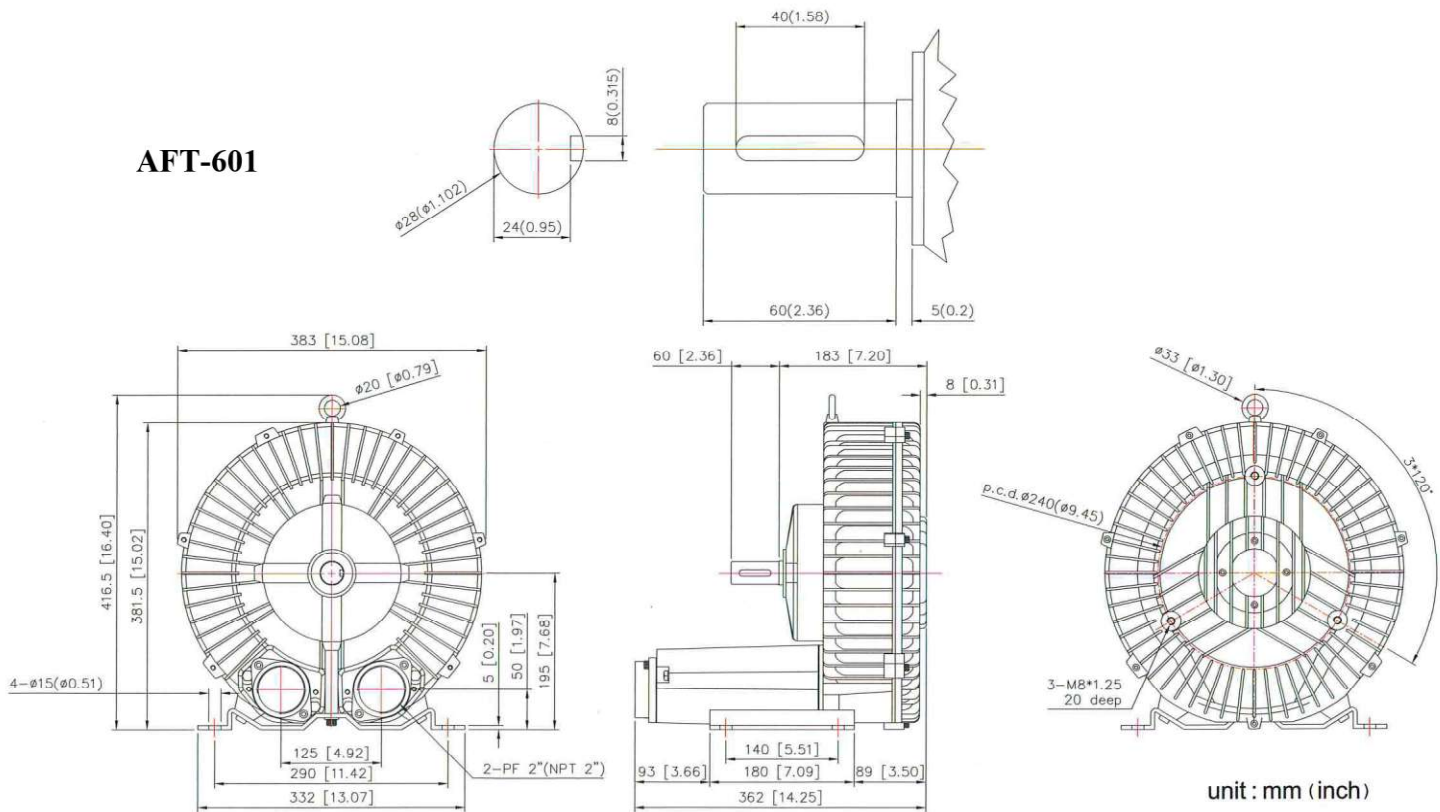
**Note :** pulley size could be designed to revise the rotation speed to gain better side channel vacuum pump / compressor performance.

## Dimensions

### AFT-401



### AFT-601

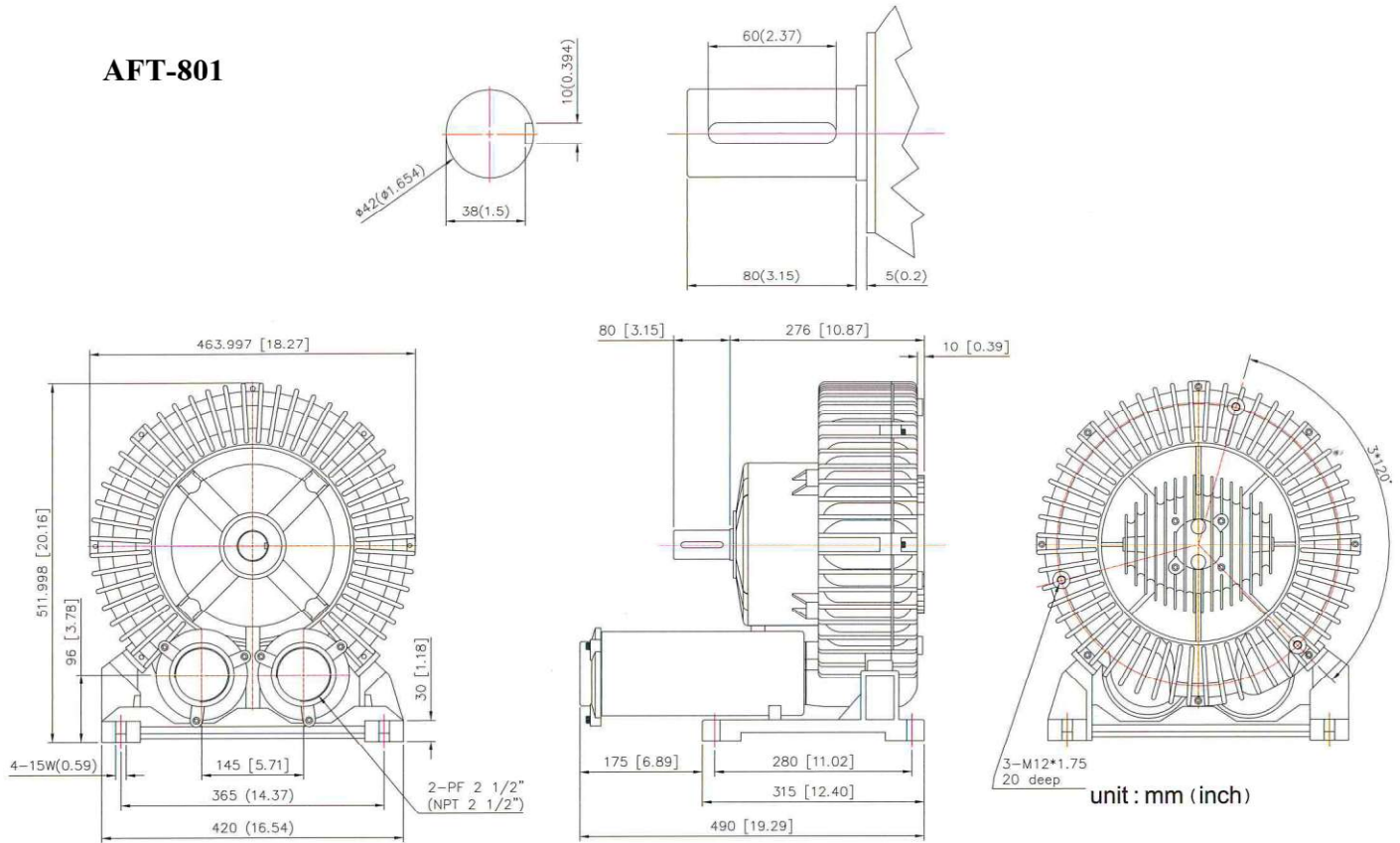


**Note :** pulley size could be designed to revise the rotation speed to gain better side channel vacuum pump / compressor performance.

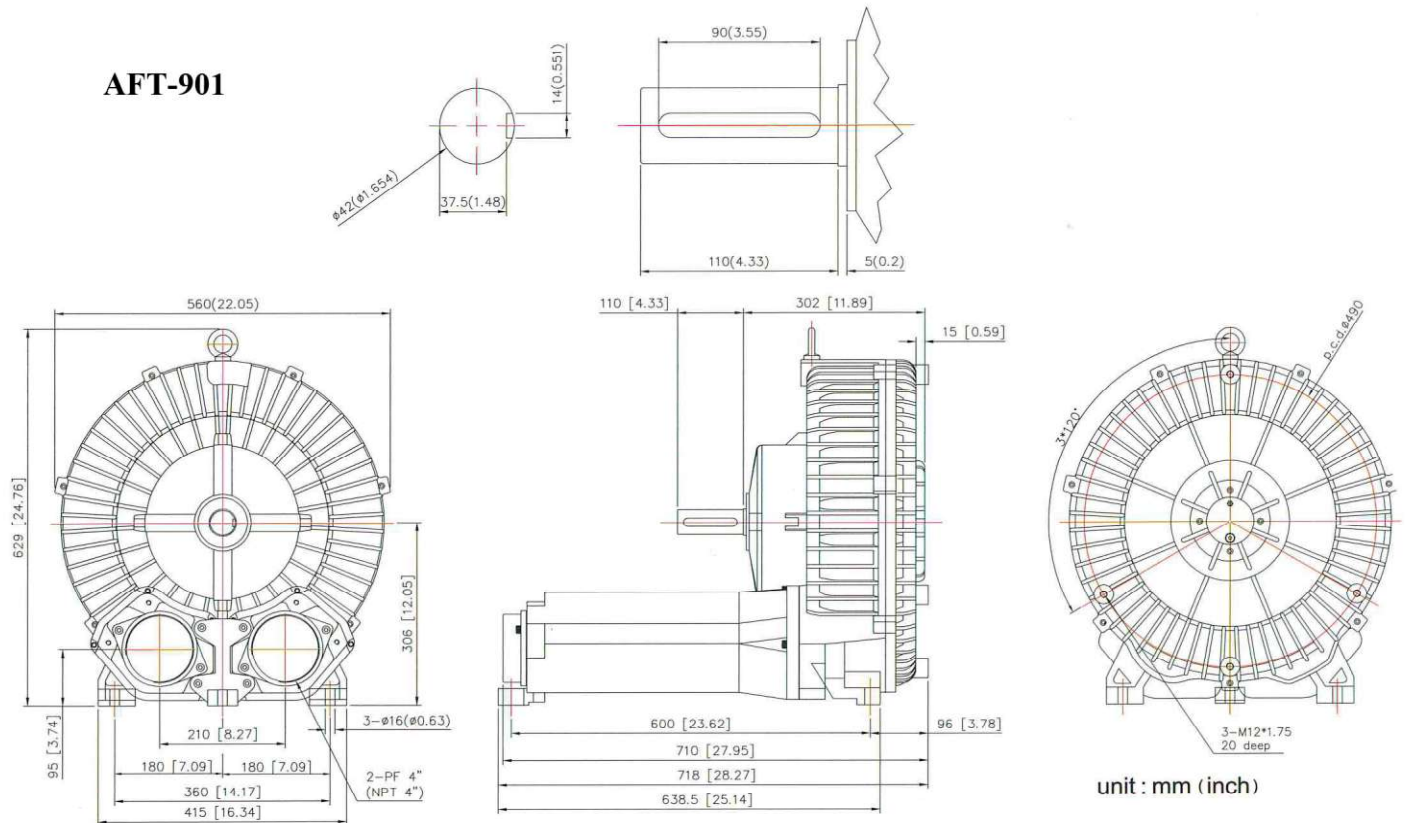


## Dimensions

### AFT-801



### AFT-901



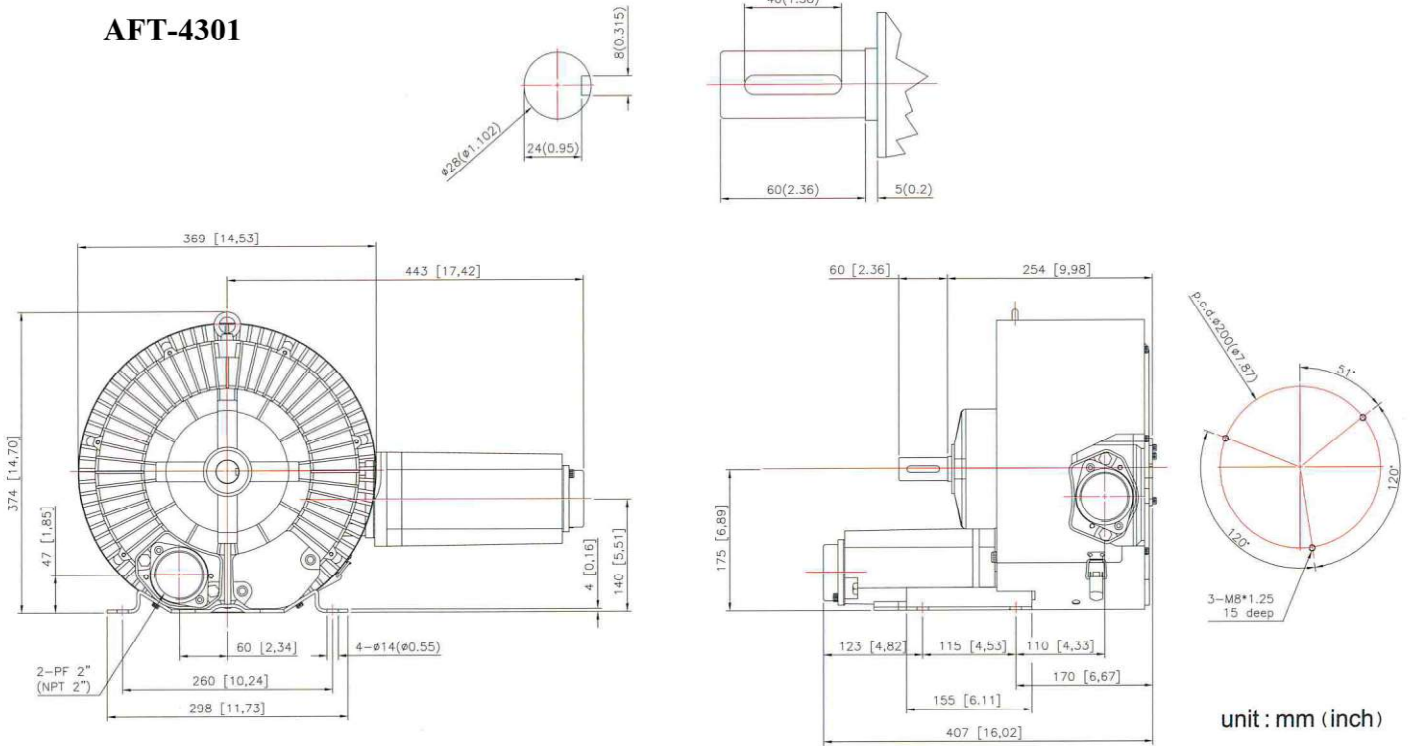
**Note :** pulley size could be designed to revise the rotation speed to gain better side channel vacuum pump / compressor performance.



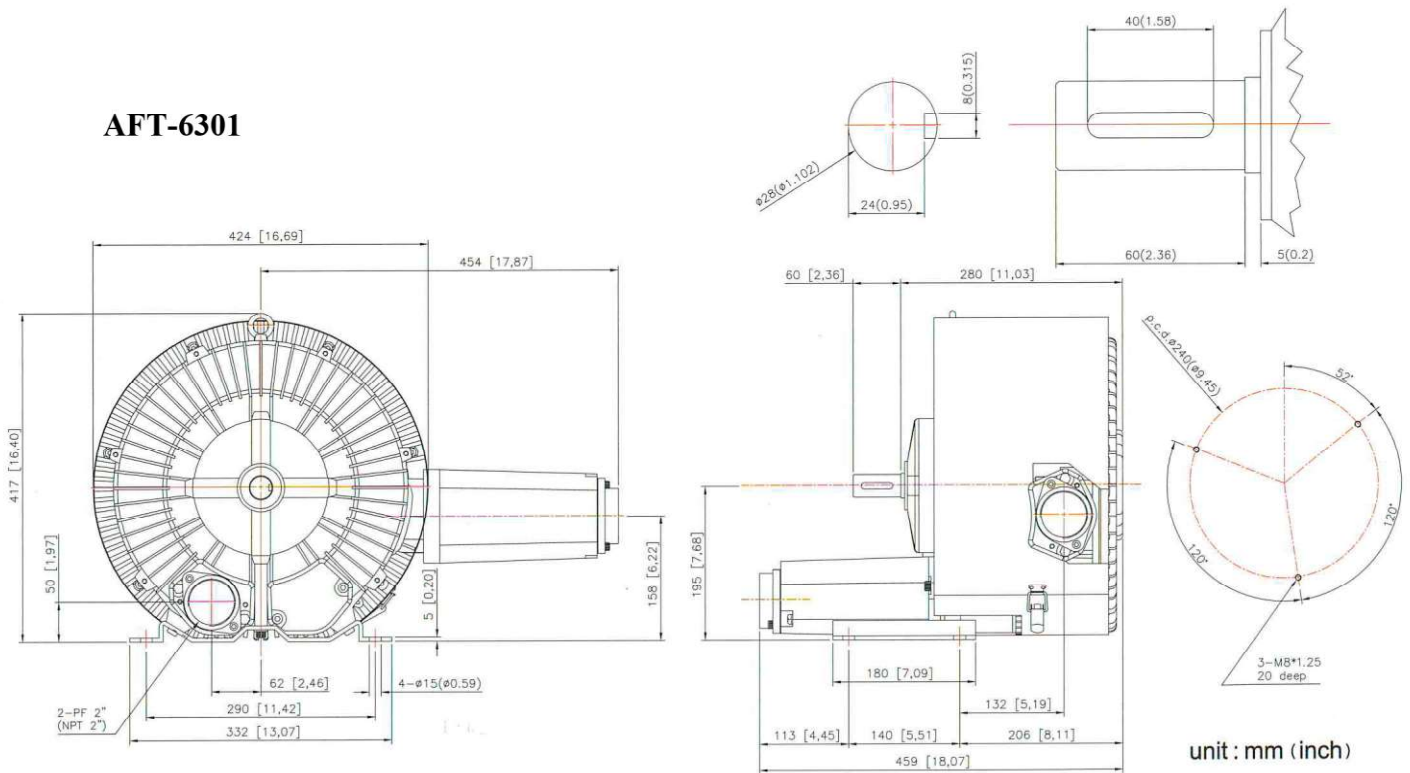


## Dimensions

### AFT-4301



### AFT-6301

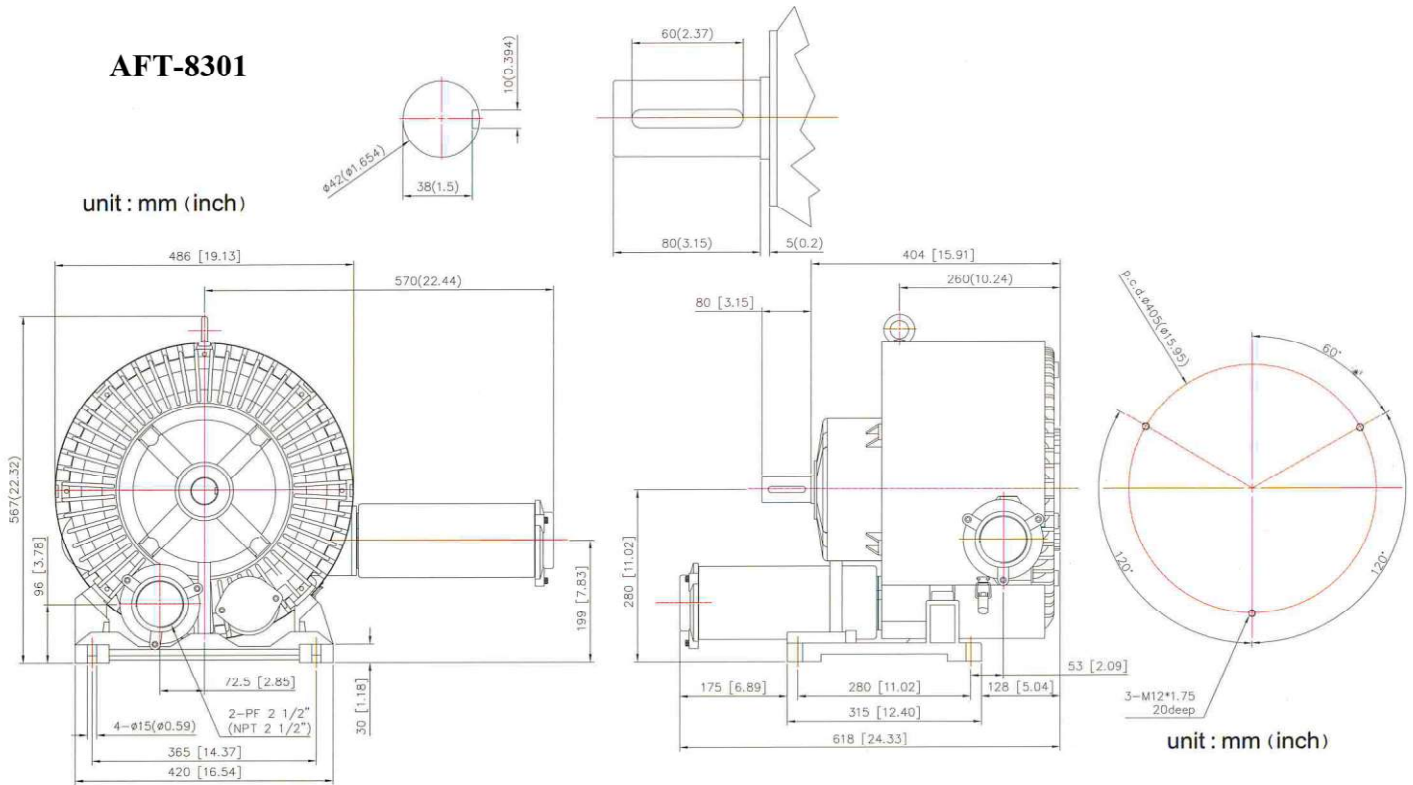


**Note :** pulley size could be designed to revise the rotation speed to gain better side channel vacuum pump / compressor performance.

## Dimensions

### AFT-8301

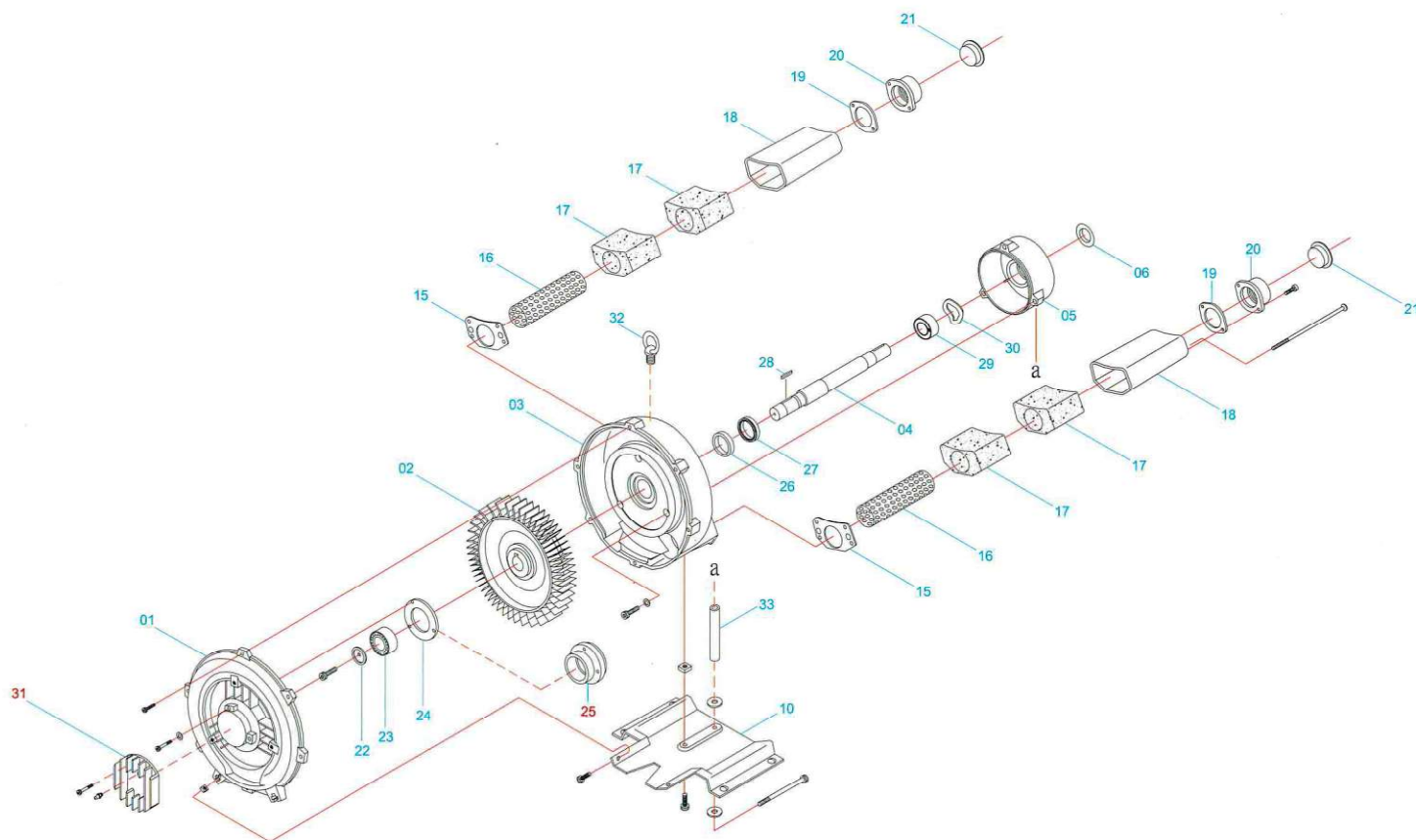
unit : mm (inch)



**Note :** pulley size could be designed to revise the rotation speed to gain better side channel vacuum pump / compressor performance.



## Parts List (Single-Stage Blower)

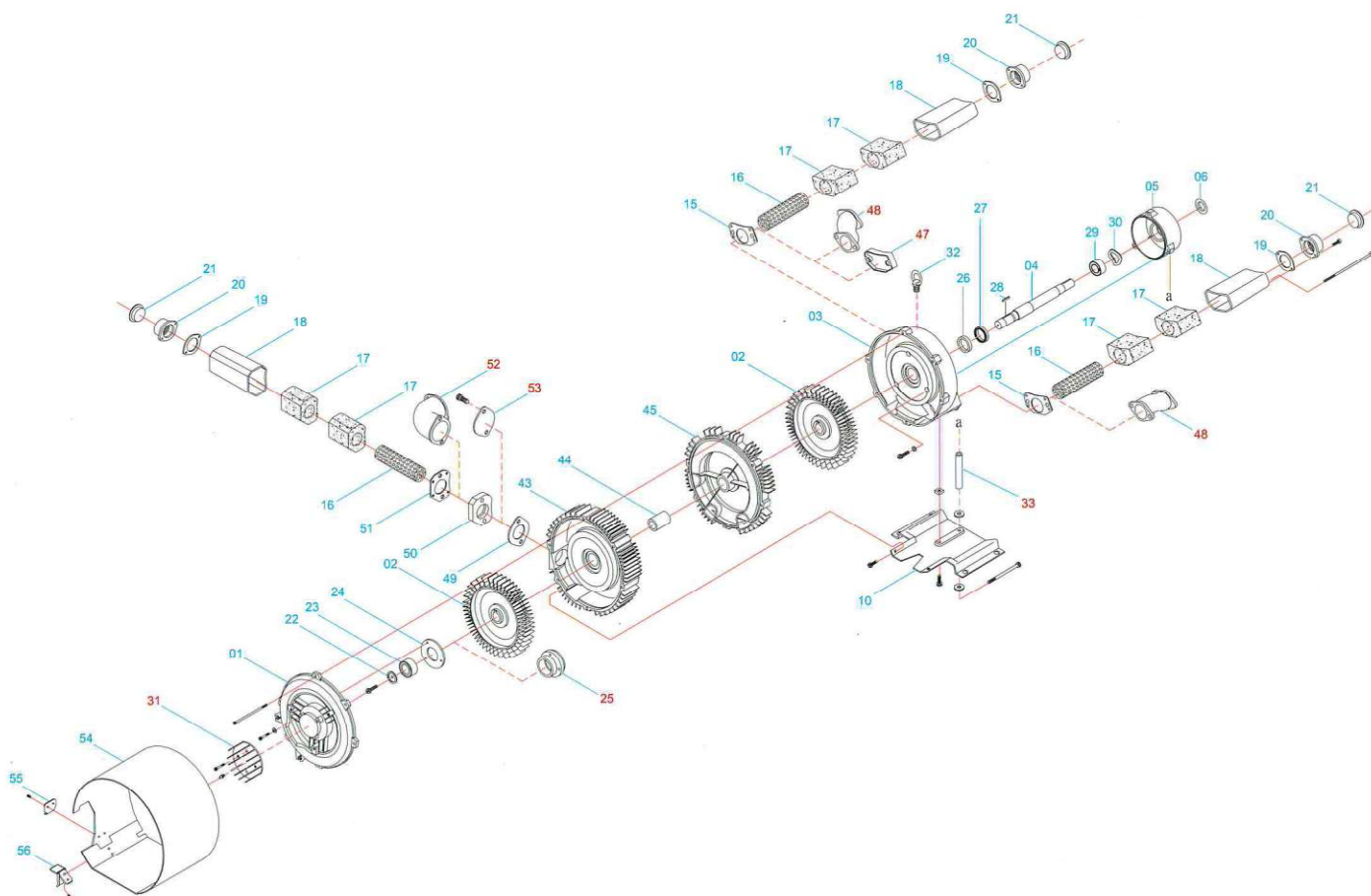


| No. | Name               |
|-----|--------------------|
| 01  | Compressor cover   |
| 02  | Impeller           |
| 03  | Compressor housing |
| 04  | Shaft              |
| 05  | End bell           |
| 06  | Shaft seal         |
| 10  | Base               |
| 15  | Silencer gasket    |
| 16  | Silencer mesh      |

| No. | Name                  |
|-----|-----------------------|
| 17  | Silencer foam         |
| 18  | Silencer casing       |
| 19  | Inlet / Outlet gasket |
| 20  | Inlet / Outlet flange |
| 21  | Inlet / Outlet plug   |
| 22  | Bearing washer        |
| 23  | Front bearing         |
| 24  | Bearing disc          |
| 25  | Bearing bucket        |

| No. | Name                |
|-----|---------------------|
| 26  | Felt ring           |
| 27  | Oil seal            |
| 28  | Key                 |
| 29  | Rear bearing        |
| 30  | Wave washer         |
| 31  | Front bearing cover |
| 32  | Eye bolt            |
| 33  | Support             |

## Parts List (Double-Stage Blower)



| No. | Name                  |
|-----|-----------------------|
| 01  | Compressor cover      |
| 02  | Impeller              |
| 03  | Compressor housing    |
| 04  | Shaft                 |
| 05  | End bell              |
| 06  | Shaft seal            |
| 10  | Base                  |
| 15  | Silencer gasket       |
| 16  | Silencer mesh         |
| 17  | Silencer foam         |
| 18  | Silencer casing       |
| 19  | Inlet / Outlet gasket |
| 20  | Inlet / Outlet flange |

| No. | Name                |
|-----|---------------------|
| 21  | Inlet / Outlet plug |
| 22  | Bearing washer      |
| 23  | Front bearing       |
| 24  | Bearing disc        |
| 25  | Bearing bucket      |
| 26  | Felt ring           |
| 27  | Oil seal            |
| 28  | Key                 |
| 29  | Rear bearing        |
| 30  | Wave washer         |
| 31  | Front bearing cover |
| 32  | Eye bolt            |
| 33  | Support             |

| No. | Name                   |
|-----|------------------------|
| 43  | Middle housing         |
| 44  | Impeller fixing set    |
| 45  | Middle cover           |
| 47  | Outlet cover           |
| 48  | Extend pipe            |
| 49  | Silencer socket gasket |
| 50  | Silencer socket        |
| 51  | Silencer gasket        |
| 52  | 90° Extended pipe      |
| 53  | End cover              |
| 54  | Protection cowl        |
| 55  | Buckle (up)            |
| 56  | Buckle (down)          |