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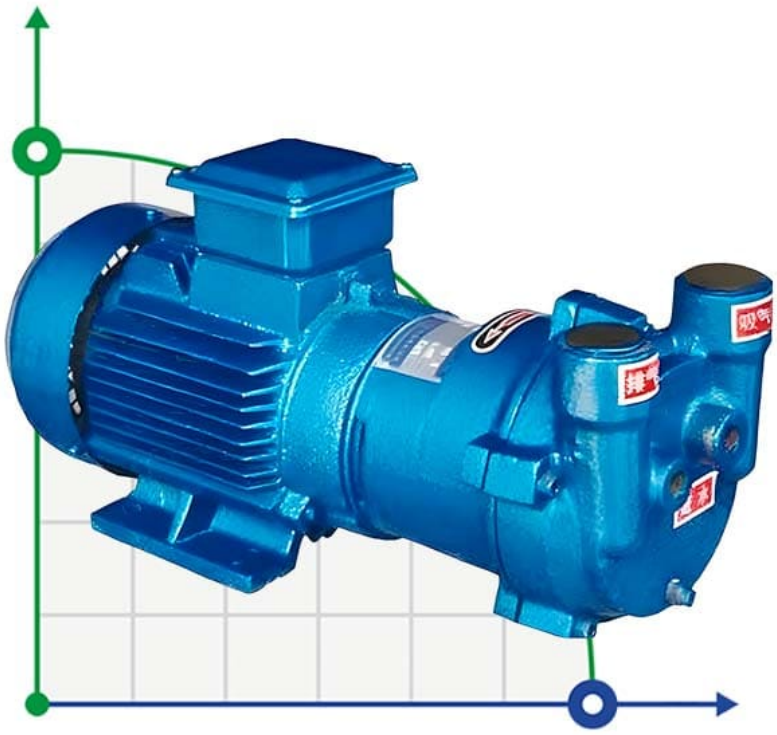


# Catalog 2BV series

## water ring vacuum pumps

# 2BV series water ring vacuum pumps

2BV serious can be used to pumping air and steam. The suction absolute pressure can reach 33mbar (vacuum degree 97%).When the vacuum pump always works in the condition that the gas pressure is below 80mbar, cavitation protection tube is supposed to be linked. If air ejector is equipped, the suction pressure can reach 10mbar.The ejector can be Installed directly on the pump. Worked as a compressor, 2BVA's highest pressure can reach 0.26Mpa (absolute pressure).

Water ring vacuum pumps and compressors are widely used in petrochemical engineering, medicine, food, sugar industry and other areas. In the gas compression processes, the temperature is constent, so this serious, which should be used more widely, can be more safe when pumping explosion hazard gases.

## Usage and characteristics

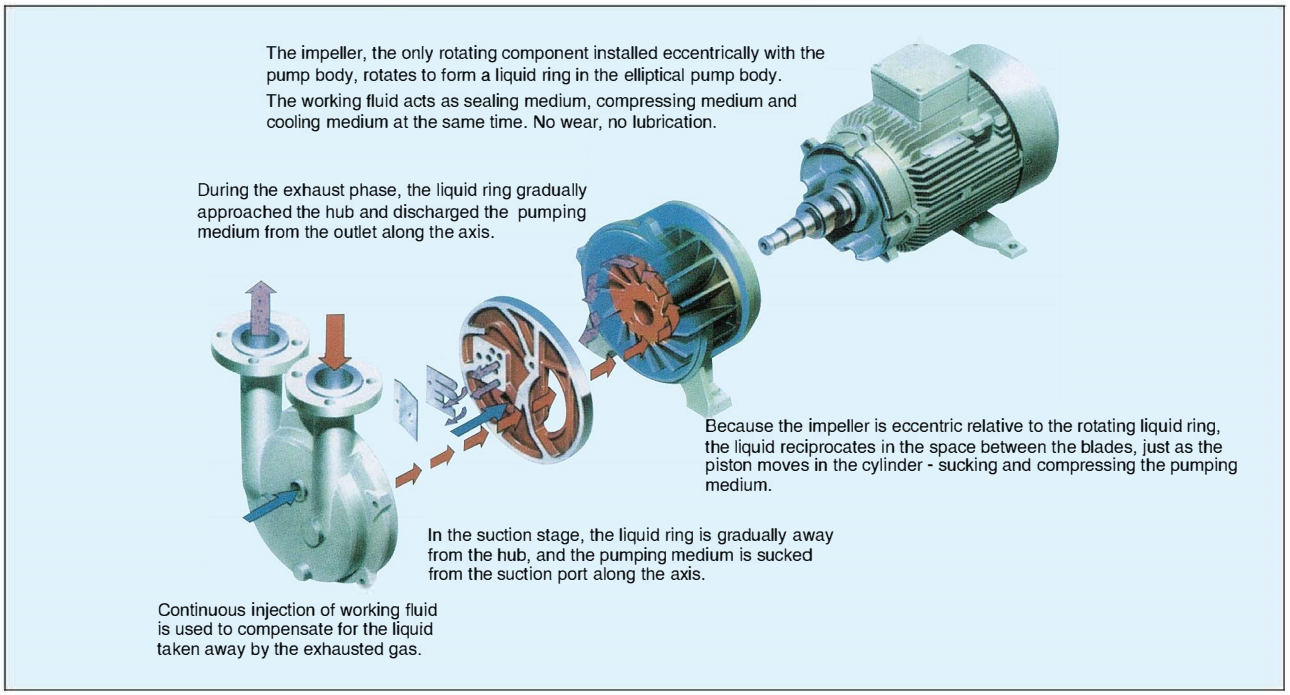
With coaxial direct design, pumps become space-saving and easy to install.

Using mechanical seal as normal technology, avoiding revealing, it is easy to repair and reliable when operating, with noise below 62DB.

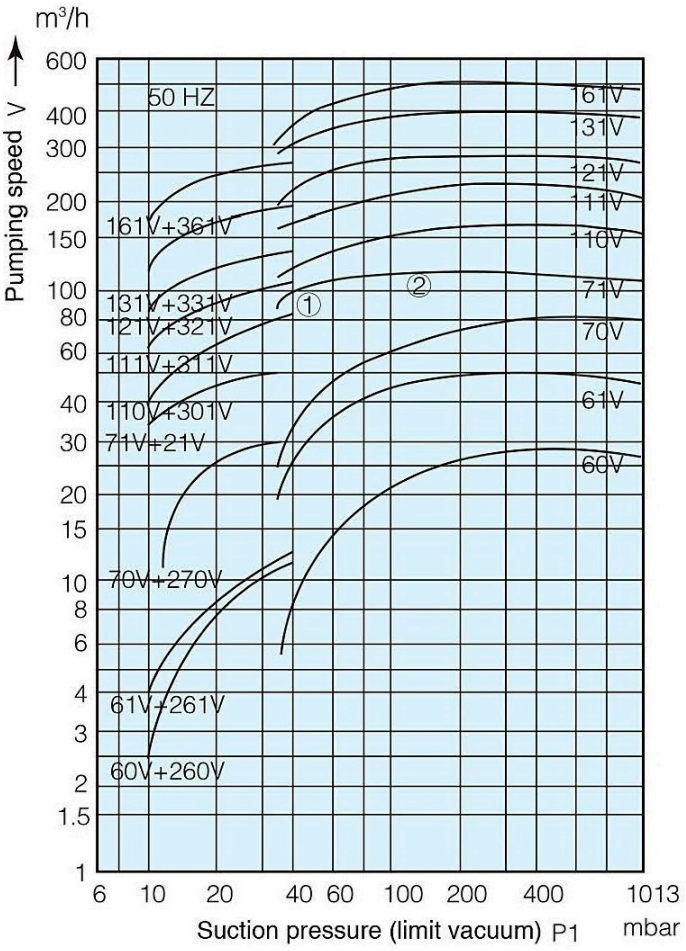
With corrosion resistance to uniform design, bronze impellers and stainless steel material, pumps are resistant to corrosion.

With special flexibility exhaust port desigh, avoiding overcompression, 2BVA can reach the best efficiency in the performance range.

## Decomposition structure diagram



## Performance curve




## Example of selection

1. Design parameter points
   Inspiratory capacity: V=100m³/h
   Inhalation pressure plus P1 = 40mbar.
2. The remaining parameters are in the same standard state (see note) Selection and design of the nearest curve at point 1.
3. This example is 71V.
   According to the curve number, the corresponding product type (i.e. order number,but only standard type) can be found. For example, the pump type which can be checked from the curve chart is 2BV-2071.

Note: The performance curve is obtained under the condition of saturated air with 20 ℃ inhalation medium,15 ℃ working fluid temperature and 1013 mbar exhaust pressure. Performance allowed 10% of the difference. On the left side of the figure is the performance curve of the air ejector.

## 2BV Series Main Technical Parameters

| Curve num | Model | Power (kw) | Pumping speed | | Limit vacuum | | Speed (r.p.m) | Fluid-flow (L/min) | Noise dB(A) | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | m³/min | m³/h | Pa | -Mpa | | | | |
| 60V | 2BV2060 | 0.81 | 0.45 | 27 | 3300 | 0.098 | 2880 | 2 | 62 | 35 |
| 61V | 2BV2061 | 1.45 | 0.86 | 52 | 3300 | 0.098 | 2880 | 2 | 65 | 37 |
| 70V | 2BV2070 | 2.35 | 1.33 | 80 | 3300 | 0.098 | 2850 | 2.5 | 66 | 56 |
| 71V | 2BV2071 | 3.85 | 1.83 | 110 | 3300 | 0.098 | 2860 | 4.2 | 72 | 65 |
| 110V | 2BV5110 | 4 | 2.75 | 165 | 3300 | 0.098 | 1450 | 6.7 | 63 | 106 |
| 111V | 2BV5111 | 5.5 | 3.83 | 230 | 3300 | 0.098 | 1450 | 8.3 | 68 | 125 |
| 121V | 2BV5121 | 7.5 | 4.66 | 280 | 3300 | 0.098 | 1450 | 10 | 69 | 150 |
| 131V | 2BV5131 | 11 | 6.66 | 400 | 3300 | 0.098 | 1450 | 15 | 73 | 195 |
| 161V | 2BV5161 | 15 | 8.33 | 500 | 3300 | 0.098 | 970 | 20 | 74 | 330 |
| 110V | 2BV6110 | 4 | 2.75 | 165 | 3300 | 0.098 | 1450 | 6.7 | 63 | 167 |
| 111V | 2BV6111 | 5.5 | 3.83 | 230 | 3300 | 0.098 | 1450 | 8.3 | 68 | 207 |
| 121V | 2BV6121 | 7.5 | 4.66 | 280 | 3300 | 0.098 | 1450 | 10 | 69 | 268 |
| 131V | 2BV6131 | 11 | 6.66 | 400 | 3300 | 0.098 | 1450 | 15 | 73 | 324 |
| 161V | 2BV6161 | 15 | 8.33 | 500 | 3300 | 0.098 | 970 | 20 | 74 | 460 |

1.The data is listed in the table in the condition that air temperature of 20°C, the water temperature of 15°C,exhaust pressure 1013 hpa, suction medium for saturated air.
2.2BV6 Series is Explosion-proof Products