

2WBE1 SERIES

Introduction:

2WBE1 series liquid ring vacuum pumps are the products with high efficiency and energy savings, which are manufactured by our company combining with the advanced technology. These series pumps are single stage and have many advantages. Such as: structure is simple, easy to maintain and reliable operation and so on. They can use to the large of water drainage and load shock wave and other hard conditions. Compare to the WSK, 2WSK, WSZ series liquid ring vacuum pumps, 2WBE1 series are the ideal replacement with high vacuum, low power and reliable operation.



Main Features:

1. The material of the impeller is welded with modular iron or steel to ensure the high stability and increase the lifetime of the pump greatly during any harsh conditions.
2. The coupling (driven directly) adopts standards high strength elastic product. The elastic element is made of polyurethane to keep the reliable operation and long lifetime of the pump.
3. The pump body is made of steel or stainless steel to increase the lifetime of the pump five times than normal material
4. The mechanical seals (optional) adopt the imported parts to fully ensure the pump in the long-running process without leakage.

Technical Data :

| Model | Ultimate Pressure (hpa) | Rotary (rpm) | Speed Pump Speed (m³/min) | Motor Power (kw) | Transmission Type | Weight (kg) | Inlet Diam (mm) | Outlet Diam (mm) |
|-----------|-------------------------|--------------|---------------------------|------------------|-------------------|-------------|-----------------|------------------|
| 2WBE1 102 | 33 | 1300 | 3.5 | 7.5 | Belt Drive | 295 | 65 | 65 |
| | | 1450 | 3.9 | 7.5 | Direct Drive | 311 | | |
| | | 1625 | 4.5 | 7.5 | Belt Drive | 311 | | |
| | | 1750 | 4.8 | 11 | Belt Drive | 346 | | |
| 2WBE1 103 | 33 | 1300 | 5.0 | 11 | Belt Drive | 347 | 65 | 65 |
| | | 1450 | 5.8 | 11 | Direct Drive | 363 | | |
| | | 1625 | 6.4 | 15 | Belt Drive | 388 | | |
| | | 1750 | 7.0 | 15 | Belt Drive | 388 | | |
| 2WBE1 151 | 33 | 1100 | 5.0 | 11 | Belt Drive | 428 | 100 | 100 |
| | | 1300 | 6.0 | 11 | Belt Drive | 444 | | |
| | | 1450 | 6.8 | 15 | Belt Drive | 469 | | |
| | | 1625 | 7.4 | 15 | Direct Drive | 469 | | |
| | | 1750 | 7.8 | 18.5 | Belt Drive | 503 | | |
| 2WBE1 152 | 33 | 1100 | 5.7 | 11 | Belt Drive | 437 | 100 | 100 |
| | | 1300 | 6.9 | 15 | Belt Drive | 481 | | |
| | | 1450 | 7.8 | 15 | Direct Drive | 481 | | |
| | | 1625 | 8.5 | 18.5 | Belt Drive | 515 | | |
| | | 1750 | 8.9 | 22 | Belt Drive | 533 | | |
| 2WBE1 153 | 33 | 1100 | 7.5 | 15 | Belt Drive | 486 | 100 | 100 |
| | | 1300 | 9.0 | 18.5 | Belt Drive | 533 | | |
| | | 1450 | 10.0 | 18.5 | Direct Drive | 533 | | |
| | | 1625 | 11.0 | 22 | Belt Drive | 551 | | |
| | | 1750 | 11.9 | 30 | Belt Drive | 601 | | |

| | | | | | | | | |
|------------|----|------|------|------|--------------|------|-----|-----|
| 2WBE1 202 | 33 | 790 | 9.5 | 18.5 | Belt Drive | 850 | 125 | 125 |
| | | 880 | 11.0 | 18.5 | Belt Drive | 850 | | |
| | | 980 | 12.0 | 22 | Direct Drive | 875 | | |
| | | 1100 | 14.0 | 30 | Belt Drive | 940 | | |
| | | 1170 | 15.0 | 30 | Belt Drive | 945 | | |
| | | 1300 | 15.8 | 37 | Belt Drive | 995 | | |
| 2WBE1 203 | 33 | 790 | 14.0 | 30 | Belt Drive | 995 | 125 | 125 |
| | | 880 | 16.0 | 30 | Belt Drive | 995 | | |
| | | 980 | 18.0 | 37 | Direct Drive | 1065 | | |
| | | 1100 | 20.0 | 45 | Belt Drive | 1085 | | |
| | | 1170 | 21.0 | 45 | Belt Drive | 1085 | | |
| | | 1300 | 23.3 | 55 | Belt Drive | 1170 | | |
| 2BWE1 252 | 33 | 558 | 20.0 | 30 | Belt Drive | 1460 | 150 | 150 |
| | | 660 | 25.0 | 37 | Belt Drive | 1515 | | |
| | | 740 | 28.0 | 45 | Direct Drive | 1693 | | |
| | | 832 | 30.0 | 55 | Belt Drive | 1645 | | |
| | | 885 | 33.0 | 75 | Belt Drive | 1805 | | |
| | | 938 | 35.0 | 75 | Belt Drive | 1805 | | |
| 2WBE1 253 | 33 | 560 | 28.0 | 45 | Belt Drive | 1695 | 150 | 150 |
| | | 660 | 35.0 | 55 | Belt Drive | 1785 | | |
| | | 740 | 39.0 | 75 | Belt Drive | 1945 | | |
| | | 740 | 39.0 | 75 | Direct Drive | 2215 | | |
| | | 792 | 42.7 | 75 | Belt Drive | 1945 | | |
| | | 833 | 45.0 | 90 | Belt Drive | 2055 | | |
| | | 885 | 47.8 | 90 | Belt Drive | 2060 | | |
| | | 938 | 50.3 | 110 | Belt Drive | 2295 | | |
| 2WBE1 303 | 33 | 466 | 41.7 | 55 | Belt Drive | 2645 | 200 | 200 |
| | | 521 | 45.0 | 75 | Belt Drive | 2805 | | |
| | | 583 | 51.7 | 75 | Belt Drive | 2810 | | |
| | | 590 | 53.3 | 75 | Direct Drive | 3200 | | |
| | | 657 | 59.7 | 90 | Belt Drive | 2925 | | |
| | | 740 | 66.7 | 110 | Direct Drive | 3200 | | |
| | | 743 | 66.7 | 132 | Belt Drive | 3290 | | |
| 2WBE1 305 | 33 | 490 | 52.5 | 75 | Belt Drive | 2950 | 200 | 200 |
| | | 521 | 55.3 | 75 | Belt Drive | 3000 | | |
| | | 583 | 61.2 | 90 | Belt Drive | 3100 | | |
| | | 590 | 62.5 | 90 | Direct Drive | 3800 | | |
| | | 657 | 68.8 | 110 | Belt Drive | 3300 | | |
| | | 740 | 77.5 | 132 | Belt Drive | 3800 | | |
| | | 743 | 77.5 | 132 | Belt Drive | 3450 | | |
| 2WBE1 353 | 33 | 390 | 59.7 | 75 | Belt Drive | 3500 | 250 | 250 |
| | | 415 | 61.7 | 90 | Belt Drive | 3665 | | |
| | | 464 | 68.3 | 110 | Belt Drive | 3905 | | |
| | | 520 | 77.0 | 132 | Belt Drive | 4040 | | |
| | | 585 | 86.7 | 160 | Belt Drive | 4100 | | |
| | | 590 | 88.3 | 160 | Direct Drive | 4750 | | |
| | | 620 | 91.7 | 160 | Belt Drive | 4100 | | |
| | | 660 | 97.5 | 185 | Belt Drive | 4240 | | |
| 2WBE1 3 55 | | 390 | 69.7 | 90 | Belt Drive | 3920 | | |
| | | 435 | 76.7 | 110 | Belt Drive | 4150 | | |
| | | 464 | 80.8 | 110 | Belt Drive | 4160 | | |

| | | | | | | | |
|-----|-----|-------|-----|--------------|------|-----|-----|
| 160 | 520 | 90.8 | 132 | Belt Drive | 4290 | 250 | 250 |
| | 555 | 96.7 | 132 | Belt Drive | 4300 | | |
| | 585 | 101.7 | 160 | Belt Drive | 4330 | | |
| | 590 | 103.3 | 160 | Direct Drive | 5000 | | |
| | 620 | 107.5 | 185 | Belt Drive | 4450 | | |

Notes : The motor recommended above can work under most conditions. Ex. The exhaust pressure exceeds the range of 0.02-0.05Mpa, then increase the motor. If the shaft power of 2WBE1 vacuum pump is minor in normal working, also can choose the motor with lower power near to the shaft power can save more energy.

Notes : The water temperature of **Liquid ring vacuum pump** is great impact on its performance, but the performance curve is tested under water temperature at 15?, so when actual selection of the vacuum pump, the suction rate should be corrected. Correction method refers to: water temperature impact on pump performance.

2 WBE1 series vacuum pump water consumption(m3/h), the tolerance is 20%

| Model | Rotary speed (rpm) | Speed range (rpm) | Water consumption of the following suction pressure (mbar) [m3/h] | | | | | | | |
|------------|--------------------|-------------------|---|------|------|------|------|------|------|------|
| | | | 160 | 200 | 300 | 400 | 500 | 600 | 700 | 800 |
| 2 WBE1-102 | 1450 | 1300~1750 | 1.1 | 1.1 | 0.73 | 0.73 | 0.73 | 0.73 | 0.36 | 0.36 |
| 2 WBE1-103 | 1450 | 1300~1750 | 1.4 | 1.4 | 0.93 | 0.93 | 0.93 | 0.93 | 0.47 | 0.47 |
| 2 WBE1-151 | 1450 | 1100~1750 | 1.5 | 1.5 | 1 | 1 | 1 | 1 | 0.5 | 0.5 |
| 2 WBE1-152 | 1450 | 1100~1750 | 1.7 | 1.7 | 1.13 | 1.13 | 1.13 | 1.13 | 0.57 | 0.57 |
| 2 WBE1-153 | 1450 | 1100~1750 | 1.9 | 1.9 | 1.27 | 1.27 | 1.27 | 1.27 | 0.63 | 0.63 |
| 2 WBE1-202 | 980 | 790~1300 | 2.1 | 2.1 | 1.4 | 1.4 | 1.4 | 1.4 | 0.7 | 0.7 |
| 2 WBE1-203 | 980 | 790~1300 | 2.6 | 2.6 | 1.73 | 1.73 | 1.73 | 1.73 | 0.87 | 0.87 |
| 2 WBE1-252 | 740 | 558~938 | 4.4 | 4.4 | 2.93 | 2.93 | 2.93 | 2.93 | 1.47 | 1.47 |
| 2 WBE1-253 | 740 | 560~938 | 5.2 | 5.2 | 3.47 | 3.47 | 3.47 | 3.47 | 1.73 | 1.73 |
| 2 WBE1-303 | 660 | 466~743 | 8.5 | 8.5 | 6.8 | 6.8 | 5.7 | 5.7 | 2.9 | 2.9 |
| 2 WBE1-305 | 660 | 466~743 | 8.2 | 8.2 | 7.8 | 7.0 | 6.0 | 5.1 | 4.2 | 3.3 |
| 2 WBE1-306 | 660 | 466~743 | 8.2 | 8.2 | 7.8 | 7.0 | 6.0 | 5.1 | 4.2 | 3.3 |
| 2 WBE1-353 | 530 | 372~660 | - | 12.1 | 10.5 | 9.0 | 7.4 | 5.8 | 4.3 | 2.7 |
| 2 WBE1-355 | 530 | 372~660 | 10.9 | 10.9 | 10.4 | 9.3 | 8.0 | 6.7 | 5.5 | 4.3 |

Notes :

1. Type of working liquid the water is used in the usual condition with standard temperature at 15? (or its range from 0? to 65?) or at least its temperature is lower 10? than the boiling point.
2. The above water consumption indicates the data under standard speed of the pump. For various speeds, the practical value in the chart should multiply the ratio between the practical speed and the standard speed.