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SHANGHAI HANBELL PRECISE MACHINERY CO., LTD.

SHANGHAI HANBELL PRECISE MACHINERY CO., LTD.

No.108,Jiangong Road,Fengjing Area,Jinshan District,Shanghai

Tel: +86-21-31106868 57350280

Fax: +86-21-51368588

E-mail:Nicholas.fan@hanbell.cn

**Oil-sealed
Rotary Vane Vacuum Pumps**



SHANGHAI HANBELL PRECISE MACHINERY CO., LTD.



Shanghai Hanbell Precise Machinery Co.,Ltd. is one of the largest manufacturers of vacuum pumps and compressors in the world. Our product range comprises the largest selection of solutions for vacuum and overpressure technology in all industry sectors worldwide. We can draw on more than 20 years of experience in vacuum pump manufacture. Hanbell can provide a complete range of products and industrial vacuum technology most widely all over the world.

Our company was founded in 1998. With branch companies and agencies in more than 30 countries worldwide, we can provide sound advice and practical support to our customers wherever they are. All our products are available with a variety of options and advanced design features to match a diverse range of applications, so our customers benefit from the most appropriate and cost-effective solutions. We constantly evaluate our activities in order to maintain the highest standards, and continue to develop innovative technologies that will define the future of vacuum system

Our headquarters are located in Taiwan (China), listed in China.

The main manufacturing facilities are located in Taiwan and Shanghai. The Hanbell workforce of more than 1,000 employees worldwide includes many physical and chemical engineering, mechanical engineering and service specialists. With our global service network we offer seamless service for vacuum pumps and systems to our clients. Our manufacturing sites use the latest manufacturing techniques, machinery and equipment. We offer all necessary certifications to meet the specific requirements of all our clients.



PX series single rotary vane vacuum pumps ——The best reliable vacuum technology

The Hanbell vacuum technology plays a vital role in the industrial field. We are always trying to solve the customer's specific problem. Our high reliable products meet the needs of customers in different industries.

Applications



Packaging



Semiconductors



Power engineering



Medicine technology



PV



Petroleum industry



Electrical engineering



Ceramic industry



Automotive industry

PX Single Rotary Vane Vacuum Pumps

High Reliability



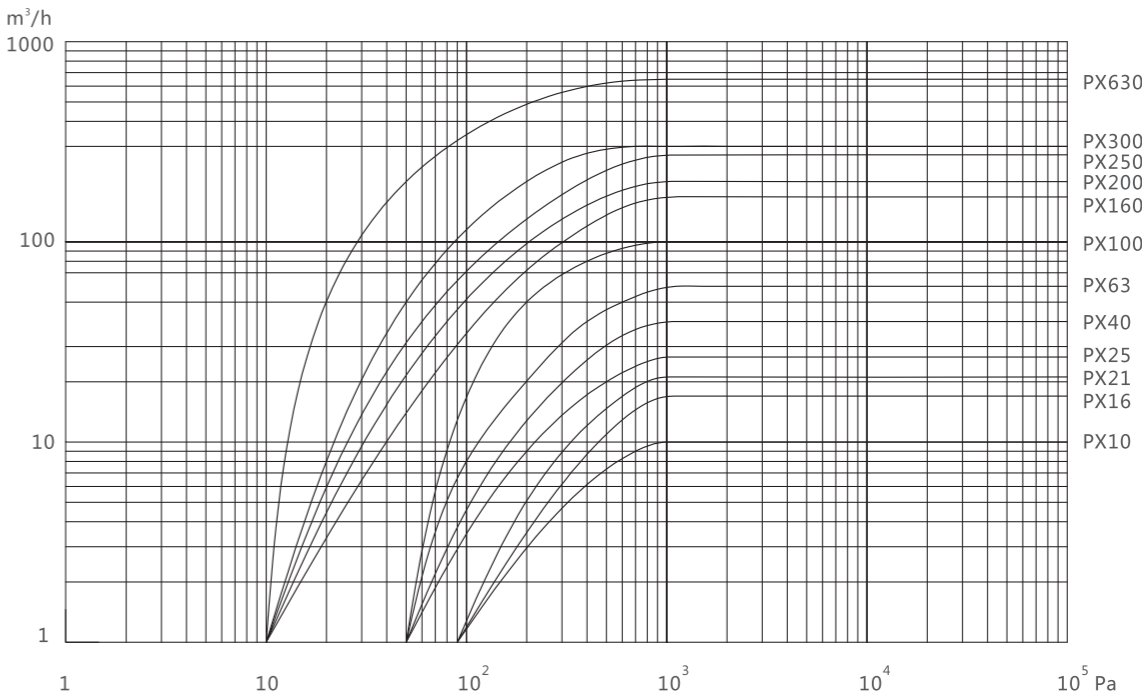
- High quality oil mist filters solves lampblack effectively.
- The seals are made of fluorine rubber to improve corrosion resistance and eliminate oil leakage problems.
- Gas ballast designed to meet customers' vacuum requirements and water treatment capacity.

Technical parameters

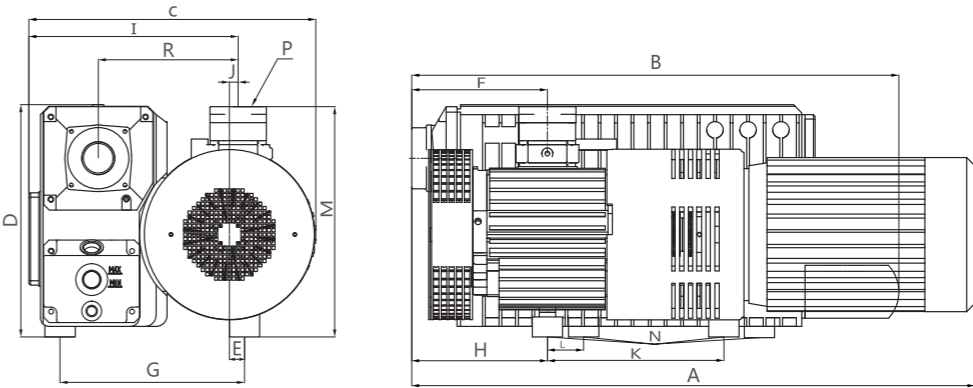
| Models | PX10 | PX16 | PX21 | PX25 | PX40 | PX63 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Pumping speed (m³/h) | 10 | 16 | 20 | 25 | 40 | 63 |
| Ultimate total pressure(mbar) | 2 | 2 | 1 | 0.5 | 0.5 | 0.5 |
| Motor power (Kw) | 0.37 | 0.55 | 0.75 | 0.75 | 1.1 | 1.5 |
| Motor speed (r/min) | 2800 | 2800 | 2800 | 1450 | 1450 | 1450 |
| Water vapor capacity (Kg/h) | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 1 |
| Noise (dB) | 62 | 63 | 64 | 64 | 64 | 64 |
| Oil capacity (L) | 0.5 | 0.5 | 0.5 | 1 | 1 | 2 |
| Inlet port (inch) | G1/2" | G1/2" | G1/2" | G1 1/4" | G1 1/4" | G1 1/4" |
| Weight (kg) | 16 | 16 | 19 | 38 | 43 | 49 |
| Dimensions (L*W*H) | 308*215*207 | 308*215*207 | 421*232*218 | 580*286*266 | 605*308*266 | 620*405*280 |

| Models | PX100 | PX160 | PX200 | PX250 | PX300 | PX630 |
|-------------------------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Pumping speed (m³/h) | 100 | 160 | 200 | 250 | 300 | 630 |
| Ultimate total pressure(mbar) | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Motor power (Kw) | 2.2/3.0 | 4 | 4.0/5.5 | 5.5 | 5.5/7.5 | 15 |
| Motor speed (r/min) | 1450 | 1450 | 1450 | 1450 | 1450 | 825 |
| Water vapor capacity (Kg/h) | 1.5 | 2.5 | 4 | 4 | 4.5 | 26 |
| Noise (dB) | 65 | 70 | 72 | 72 | 74 | 75 |
| Oil capacity (L) | 2 | 6 | 6 | 8 | 8 | 25 |
| Inlet port (inch) | G1 1/4" | G2" | G2" | G2" | G2" | DN100 |
| Weight (kg) | 69 | 142 | 145 | 190 | 212 | 660 |
| Dimensions (L*W*H) | 710*405*290 | 761*495*411 | 795*495*411 | 965*585*411 | 1010*585*411 | 1488*888*752 |

Curve of pumping speed



Dimension diagram



| Dimension | A | B | C | D | E | F | G | H | I | J | K | L | M | N | P |
|-----------|-----|------|-----|-----|------|-----|-----|-----|-----|------|-----|----|-----|-------|--------|
| PX-40 | 630 | 605 | 308 | 286 | 25 | 255 | 275 | 165 | 235 | 12 | 240 | 30 | 266 | 3*M8 | G11/4" |
| PX-63 | 595 | 620 | 405 | 290 | 25 | 275 | 275 | 165 | 305 | 12 | 240 | 30 | 280 | 3*M8 | G11/4" |
| PX-100 | 685 | 710 | 405 | 290 | 25 | 390 | 275 | 195 | 305 | 15 | 240 | 35 | 290 | 3*M8 | G11/4" |
| PX-160 | 755 | 761 | 495 | 411 | 25 | 400 | 310 | 225 | 345 | 15 | 240 | 35 | 420 | 4*M10 | G2" |
| PX-200 | 775 | 795 | 495 | 435 | 25 | 425 | 310 | 225 | 345 | 15 | 240 | 35 | 420 | 4*M10 | G2" |
| PX-250 | 936 | 980 | 585 | 440 | 30 | 430 | 355 | 260 | 385 | 20 | 300 | 40 | 411 | 4*M10 | G2" |
| PX-300 | 956 | 1010 | 585 | 440 | 37.5 | 430 | 355 | 260 | 385 | 27.5 | 300 | 40 | 411 | 4*M10 | G2" |

PZ Double Rotary Vane Vacuum Pumps



PX series double rotary vane vacuum pumps ——The most comprehensive vacuum technology

In pursuit of the highest technical standards of PZ series vacuum pump of Hanbell, the quality has reached a higher level which the cylinder structure, innovative lubricating system, automatic non-return valve and the gas ballast create a comprehensive vacuum products.

Application



Medical industry

Plasma sterilizer, vacuum freeze drying, vacuum mixing, etc.. In view of the large amount of H_2O_2 in the reaction environment of the plasma sterilizer, a special vacuum pump for resisting weak corrosive gas has been developed.

Analytical instrument

Spectrometer, chromatograph, physical and chemical analysis instrument, electron microscope, leak detector ,etc for ultra clean environment (it is recommended to configure the oil mist filter).



Power industry

SF_6 recovery, testing instruments, oil purifier and so on.

Electronics, semiconductor industry

Vacuum oven, glove box, industrial furnace (Sapphire furnace, single crystal furnace, sintering furnace, melt spinning furnace), coating equipment (ion plating, sputtering equipment, etc.), as molecular pump or roots pump front auxiliary pump.



Refrigeration industry

Air conditioner, refrigerator (a full set of accessories are available), refrigerant injection machine, helium leak detection systems, helium recovery system etc..

PZ Double Rotary Vane Vacuum Pumps

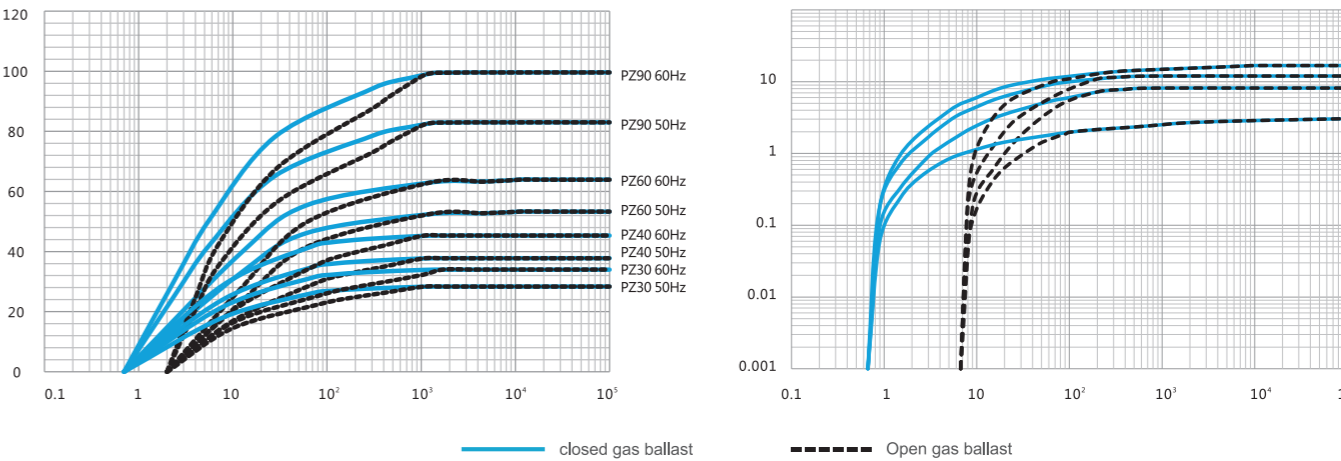


- Gas ballast design to meet customers' the vacuum requirements and water treatment capacity.
- Anti-suckback valve to protect vacuum chamber from oil pollution.
- The lubrication: internal gear pump provides optimal oil supply and improves operational stability.
- Simple maintenance.
- Low noise gives a better working environment

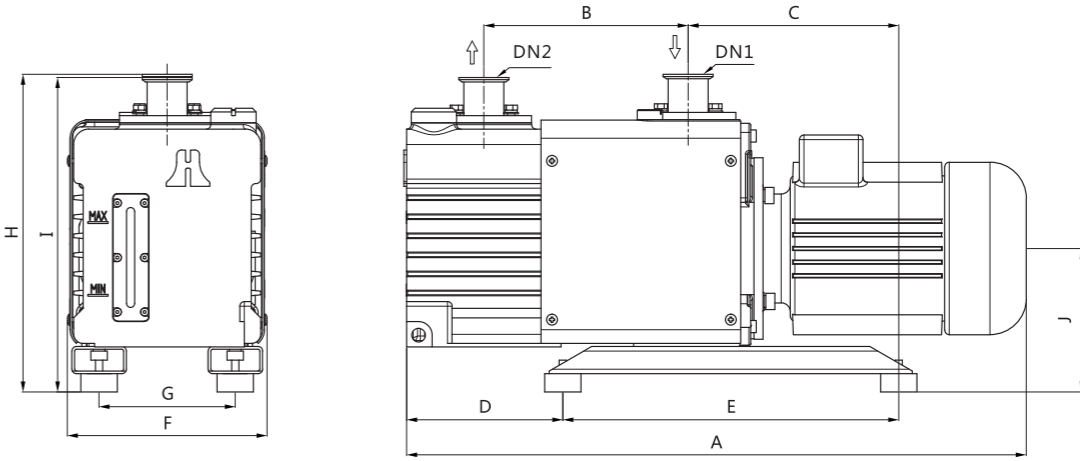
Technical parameters

| Models | | PZ4 | PZ8 | PZ12 | PZ20 | PZ30 | PZ40 | PZ60 | PZ90 |
|--|------|-------------|-------------|-------------|-------------|----------------------|----------------------|----------------------|----------------------|
| Pumping speed (m³/h) | 50HZ | 4 | 8 | 12 | 20 | 30 | 40 | 60 | 90 |
| | 60HZ | 4.8 | 9.6 | 14.4 | 24 | 36 | 48 | 72 | 108 |
| Ultimate total pressure without gas ballast (Pa) | | 1 | 1 | 1 | 1 | 6.7*10 ⁻¹ | 6.7*10 ⁻¹ | 6.7*10 ⁻¹ | 6.7*10 ⁻¹ |
| Ultimate total pressure with gas ballast (Pa) | | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 |
| Power supply | | single/3-ph | single/3-ph | single/3-ph | single/3-ph | 3-ph | 3-ph | 3-ph | 3-ph |
| Motor power (kw) | | 0.25 | 0.37 | 0.55 | 0.75 | 1 | 1.5 | 2.2 | 4 |
| Inlet port DN(mm) | | KF25 | KF25 | KF25 | KF25 | KF40 | KF40 | KF50 | KF50 |
| Oil capacity (L) | | 0.6~1 | 0.6~1 | 0.9~1.5 | 0.9~1.5 | 1.5~2.0 | 1.5~2.0 | 3.0~4.0 | 3.0~4.0 |
| Motor speed (rpm) | 50HZ | 1440 | 1440 | 1440 | 1440 | 1440 | 1440 | 1440 | 1440 |
| | 60HZ | 1720 | 1720 | 1720 | 1720 | 1720 | 1720 | 1720 | 1720 |
| operating ambient temperature (°C) | | 5-40 | 5-40 | 5-40 | 5-40 | 5-40 | 5-40 | 5-40 | 5-40 |
| Noise (dB) | | ≤56 | ≤56 | ≤58 | ≤58 | ≤60 | ≤62 | ≤63 | ≤65 |
| Weight (Kg) | | 19 | 21 | 30 | 35 | 59 | 61 | 90 | 105 |

Pumping speed curves



Key dimensions



| Dimensions | DN1 | DN2 | A | B | C | D | E | F | G | H | I | J |
|------------|------|------|-----|-------|-------|-----|-----|-----|-----|-------|-------|-------|
| PZ4 | KF25 | KF25 | 426 | 75.5 | 122.5 | 77 | 220 | 108 | 145 | 234.5 | 226.5 | 107.5 |
| PZ8 | KF25 | KF25 | 490 | 111.5 | 79.5 | 52 | 250 | 133 | 173 | 249 | 249 | 128 |
| PZ12 | KF25 | KF25 | 515 | 111.5 | 79.5 | 77 | 250 | 133 | 173 | 249 | 249 | 128 |
| PZ20 | KF25 | KF25 | 519 | 132 | 65 | 107 | 210 | 134 | 180 | 277 | 277 | 126 |
| PZ30 | KF40 | KF40 | 663 | 205 | 232 | 152 | 370 | 220 | 150 | 350 | 346 | 158 |
| PZ40 | KF40 | KF40 | 683 | 225 | 232 | 172 | 370 | 220 | 150 | 350 | 346 | 158 |
| PZ60 | KF50 | KF40 | 804 | 255 | 234 | 50 | 530 | 280 | 200 | 408 | 405 | 194 |
| PZ90 | KF50 | KF40 | 854 | 305 | 234 | 100 | 530 | 280 | 200 | 408 | 405 | 194 |