Oil-Free Screw Vacuum Pump

Product introduction

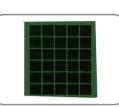


Oil-free screw vacuum pump is a mechanical vacuum pump that can operate without any oil lubrication. It is small in size, easy to install and maintain, and will not pollute the environment.

- High vacuum degree, vacuum degree can be maintained for a long time;
- Low motor power, energy saving 50%, water saving 90%;
- It is conducive to the recovery of exhaust gas and can obtain a clean vacuum;
- ➤ Green environmental protection products, no secondary water pollution, reduce the pressure of pollution control.

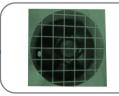












Advantages of intelligent controller

Intelligent control system, improve the practical performance of the vacuum pump system controller, realize the Internet of things remote control of multiple machines automatically switch working mode humanized man-machine interface.

Air intake filter

Unique design of pre-filter inside the machine , keep the whole machine clean to extend the maintenance cycle, easy to disassemble and clean, can be reused.

Intelligent frequency converter

Adopt the top frequency system in China, support the Internet of Things program to reduce the cost of the system, multi-power built-in DC reactor, improve the overall efficiency of the dual-stage control, to ensure that the pressure transmitter signal out, the real dual-stage operation.

High accuracy sensor

Signal processing adopts stable and efficient linear strict test and aging to ensure that the transmitter has high purity, good stability, strong anti-interference ability, reverse polarity protection and instant over-current protection, in line with EMI protection requirements through internal electrical appliances, can realize the precise adjustment of zero point, range; All stainless steel structure, pressure interface in various forms, with flush model; Protection grade IP65.

Intelligent silent exhaust system

The cooling fan adopts frequency conversion control, more energy saving, according to the exhaust air temperature control fan speed, inhibit power waste, stabilize the system and the overall components, so as to improve the durability of the components, the frequency conversion control of the fan reduces the noise, with high efficiency, low noise, no wind b lind area, pressure curve is stable and other advantages.

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- 1. The main engine is designed independently, and the large rotor runs at low speed to achieve high efficiency, low noise, energy saving and environmental protection;
- 2. Germany SKF heavy duty bearing and chisel wheel, stable operation;
- **3.** Imported high-end machining center processing host, high precision , high efficiency;
- **4.** Ultra-low maintenance cost, reduce operating costs;
- **5.** Overtemperature anticorrosive coating design, high temperature oper ation life is long.





High efficiency permanent magnet motor (with independent fan)

- 1.內High temperature stable permanent magnetic steel (SH-40) is used for internal mining, low risk of high temperature demagnetization resistance;
- 2. Soft start operation, stable running flow rate;
- **3.** The constant torque range and weak magnetic range are wider, and the control performance is better.
- 4. Adopt elongated core design, increase motor torque, low frequency operation performance is good;
- 5. Independent fan design, reduce low frequency motor heating;
- **6.** Independent motor bearing temperature control system to ensure no bearing dam age to the motor.

Oil-Free Screw Vacuum Pump parameter

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Product parameters

m o d el	negative pressure (kpa)	volu m e flow M³/min	p ower KW	p ower supply		co n sum	allow ambient temperat ure range			we ig ht Kg	external dimensions (length * width * height mm)	air intake size	ai r outlet s i ze
XR-15 PM	-10Kpa~ -50Kpa	2.40-17.65	15/20	380V 50HZ 60HZ	Permanent magnet synchrono us direct integrated drive	0.15	≤46	≤55	76±5	855	1500*1050*1300	DN150	DN150
XR-22 PM		3.38-23.76	22/30			0.20			78±5	885	1500*1050*1300	DN150	DN150
XR-30 PM		4.60-32.21	30/40			0.20			78±5	1080	1500*1050*1300	DN150	DN150
XR-37 PM		6.23-43.60	37/50			0.20			79±5	1880	1700*1350*1300	DN200	DN200
XR-45 PM		7.15-50.03	45/60			0.20			82±5	1950	1980*1450*1300	DN200	DN200
XR-55 PM		8.73-61.03	55/75			0.30			83±5	2080	1980*1450*1300	DN200	DN200
XR-75 PM		13.14- 91.89	75/100			0.35			85±5	2300	2100*1510*1400	DN250	DN250
XR-90 PM		15.37- 107.65	90/125			0.45			91±5	3600	2100*1510*1400	DN300	DN300
XR-110 PM		17.35- 121.09	110/150			0.50			93±5	3900	2650*1850*1750	DN300	DN300
XR-110+ PM		25.55- 178.84	110/150			0.50			95±5	4600	2650*2030*1750	Dn350	Dn350

Oil-Free Screw Vacuum Pump parameter



Product parameters

model	negatiVe pressure (kpa)	Volume flow M³/min	power KW	drive mode	water ConsUmp tion	Allow ambient temperatu re range	air inlet temperat u re	noise e le v el dB	weight Kg	external dimensions (length * width * height mm)	air intake si Z e	air outlet size
XR-15 PM-II		2. 05-14. 40	15	Permanent magnet synchronous direct integrated drive	0. 15	= \$46	_	76 ± 2	1400	1500*1250*1100	DN125	DN125
XR-22 PM-II	-50ka~	3. 21–22. 52	22		0. 20			78±2	1700	1600*1250*1100	DN150	DN125
XR-30 PM-II		4. 72-31. 08	30		0. 20			78±2	1800	1600*1250*1100	DN150	DN125
XR-37 PM-II		5. 72-40. 10	37		0. 20			79±2	1900	2100*1250*1700	DN200	DN150
XR-45 PM-II		7. 32–51. 23	45		0. 20			82±2	2050	2100*1250*1700	DN200	DN150
XR-55 PM-II		8. 61–60. 29	55		0.30			82±2	2800	2200*1350*1800	DN200	DN200
XR-75 PM-II		11. 70- 81. 88	75		0.35			87±2	3000	2200*1350*1800	DN200	DN200
XR-90 PM-II	-70kpa	24. 15- 99. 75	90		0. 37		≤55	89±2	3600	2600*1350*2100	DN250	DN200
XR-110 PM-II		30. 45- 121. 80	110		0.40			89±2	3750	2600*1350*2100	DN250	DN200
XR- 132 PM-II		36. 75– 152. 25	132		0. 50			91±2	4300	2600*1350*2100	DN300	DN250
XR-160 PM-II		48. 30- 194. 25	160		0. 55			91±2	4900	2950*1850*2100	DN300	DN250
XR-185 PM-II		65. 10- 262. 50	185		0.80			92±2	5600	2950*1850*2100	DN350	DN250
XR-220 PM-II		78. 75- 312. 90	220		0.83			92±2	5900	3200*2050*2400	DN350	DN250
XR-250 PM-II		86. 10- 341. 25	250		0.86			92±2	7000	3200*2050*2400	DN400	DN300

Comparison of oil-free screw vacuum pump

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Product comparison





	pollution level	Sewage is dis Ch arged all y ear ro u nd, Cau sing pollution to the surrounding en v ironment						
	noise	Loud, 100 db						
	space	A large area						
S	afety performance	The circuit is exposed and the safety factor is low						
	service life							
	fail u re rate	Perennial contact with water, easy to rust and wear, frequent maintenance, high maintenance costs						
	pUmping speed (1台37KW)	18m³/min						



pollution level	non-poll u tion						
noise	Low noise, 80 db						
spa c e	small occupation of land						
safet y performan c e	Circuit integrated in the chassis, high safety factor						
service life	10 y ears						
	Except for normal maintenance, there is no other failure						
p u mping speed	$22.5 \text{m}^3/\text{min}$						