Permanent Magnet Driven Magnetic Levitation Blower 3D Flow Field Optimised Fans 66-168m³/min

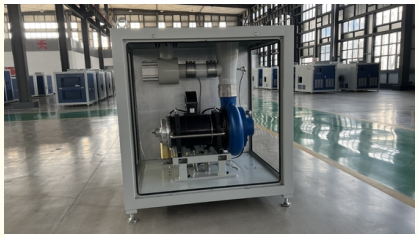
Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Aipu
- Model Number: GF150
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Export Standard Packaging
- Payment Terms: T/T, L/C

Product Specification

- Typology: Centrifugal Fan
- Flow Range: 66-168m³/min
- Boost: 40-120kPa
- Bear: Autonomous Domestic Magnetic Bearings
- Efficiency: 97%
- Highlight: **permanent magnetic levitation blower**, **permanent magnetic levitation bearings**, **168m³/min magnetic levitation blower**



Product Description

Magnetic Levitation High Efficiency Permanent Magnet Driven 3D Flow Field Optimised Fans

Product Description

This magnetic levitation high efficiency permanent magnet driven 3D flow optimised fan incorporates a number of cutting edge technologies to achieve outstanding levels of efficiency, reliability and performance.
Key technical features
Magnetic Levitation Bearings
Electromagnetic levitation technology completely eliminates mechanical contact and friction.
Dramatically increases system life and reliability
Supports high speed rotation, optimising airflow output performance
High-efficiency permanent magnet motor drive
Adopts high efficiency permanent magnet motor as power source
Higher efficiency and power density than traditional induction motors
Fast response characteristics for rapid speed and output adjustment
Three-dimensional flow field optimisation design
Adopts three-dimensional streamline optimised impeller and flow path design.
Creates complex vortex airflow patterns to improve overall aerodynamic efficiency.
Reduced flow losses and noise and vibration
Directly coupled structure
The motor is directly coupled to the impeller, eliminating the need for gearboxes or belts.
Simplifies the overall structural design and improves transmission efficiency.

Product Advantages
Ultra-high efficiency: the perfect combination of magnetic levitation, high-efficiency motors and a three-dimensional optimised flow field significantly reduces energy consumption.
Superior Reliability: Virtually maintenance-free due to contactless maglev and permanent magnet motor construction.
High speed performance: Maglev technology supports higher speeds and optimised airflow output.

Performance Features

Energy saving and high efficiency
High-speed permanent magnet motor and high-efficiency ternary flow impeller are directly coupled.
More than 30% energy-saving than traditional Roots fan.
More than 20% energy-saving than multi-stage centrifugal blower.
More than 10% energy-saving than single-stage high-speed centrifugal blower.

Low noise
Adopting self-balancing technology, the vibration amount of magnetic levitation bearing is one order of magnitude smaller than that of traditional bearing and no friction. At the same time to take the active damping design, stable operation, body vibration is very small, fan noise at 80dB (A) or so.

Maintenance-free
Integrated design, skid mounted structure, easy installation, one key start and stop. Daily operation, free of mechanical maintenance, only need to replace the filter.

Intelligent control
Adopting PLC+GPRS/3G/4G, it can monitor the running status of the fan in real time, and realise the intelligent regulation of wind volume, wind pressure, rotational speed, etc. as well as manual mode control. In case of failure, it can also be remotely repaired and debugged.

Magnetic Levitation Blower Series Selection

Product Series	GF 50	GF 75	GF 100	GF125	GF 150	GF175	GF 200	GF 250	GF 300	GF350	GF 400
Motor power (KW)	50	75	100	125	150	175	200	250	300	350	400
Boost (kPa)	Inlet flow rate (m^3/min) 1atm 20°C										
40	55	86	110	156	168	208	219	270	323	425	443
50	50	74	100	132	149	185	198	247	297	375	396
60	43	64	85	113	127	158	169	210	253	320	356
70	37	55	74	99	111	140	148	184	222	280	312
80	33	49	65	86	97	120	129	160	193	240	271
90	28	44	57	75	84	105	112	139	167	210	235
100		40	52	68	77	96	102	127	153	190	215
110					71	88	95	118	142	175	199
120					66	82	88	110	132	165	185
130									124	152	165
150											148

sizes(mm)	1700×1500×1480		1850×1700×1780			2150×1750×1700			2370×2260×2080		
Weight (kg)	800	1000	1200	1350	1500	1800	2000	2500	2800	3200	3500

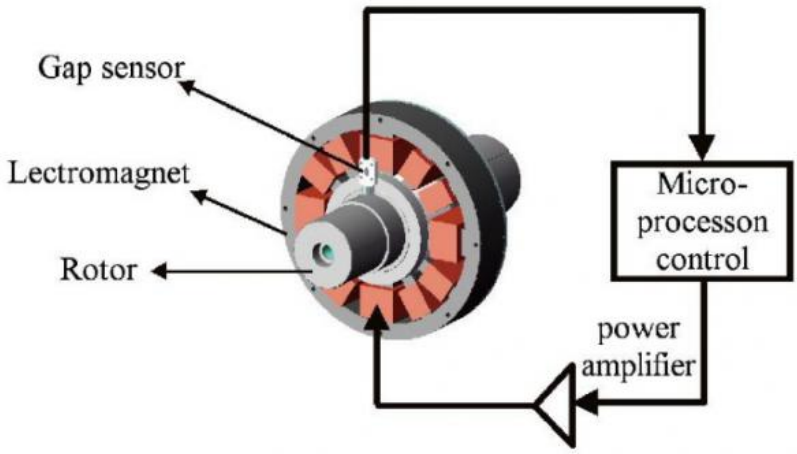
When the use conditions of the blower and the above table does not match, the need for performance conversion, our company can be non-standard design according to user requirements to meet the specific needs of users of various working conditions.

core technology

Core Technology with independent intellectual property right-Magnetic Bearing design and control technology

With independent intellectual property rights of 5 degrees of freedom magnetic levitation bearing technology, can ensure that when the equipment is energised, the rotor system can be levitated by electromagnetic force. The controller ensures more than 10,000 times of signal acquisition per second and gives real-time correction signals synchronously to ensure the stable levitation of the high-speed rotor.

With redundant power supply system and protection bearings to achieve multiple protection, will not cause any damage due to sudden power failure or fault shutdown.



magnetic levitation bearing

controllers

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