

# High Pressure Air Suspension Centrifugal Blower Powerful Assistant For Process Challenges

### **Basic Information**

- Place of Origin:
- Brand Name:
- Model Number: Air Suspension Blowers

China

Aipu

Negotiable

T/T, L/C

Export Standard Packaging

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- Minimum Order Quantity:
- Price:
- Packaging Details:
- Payment Terms:



### **Product Specification**

- Flow Range:
- Boost:
- Temperature:
- Filter Density:
- Filtration Accuracy:
- Filtration Efficiency:
- Highlight:

5-500m <sup>3</sup> /min										
5-120kPa										
Up To 60°C										
F8										
PM2.5										

- Up To 85 Per Cent
- high pressure air suspension centrifugal blower , high pressure air bearing blower, pm2.5 air bearing blower



**Our Product Introduction** 

## High-Pressure Air Suspension Blowers - A Powerful Assistant for Process Challenges

#### **Product Description**

#### Product Overview

Engineered to withstand the rigors of high-pressure industrial applications, these air suspension blowers provide robust, reliable airflow output even in the face of demanding process requirements. Leveraging an innovative compressor design and reinforced air bearing construction, these high-pressure blowers are capable of delivering air at pressures up to 10 bar - making them an invaluable asset for a wide range of manufacturing, packaging, and other industrial processes that require strong, consistent air supply.

Key Technical Features

High-Pressure Air Compressor

Specialized multi-stage compression system achieves pressures up to 10 bar Reinforced air bearing and rotor design withstands intense operating stresses Ensures stable, high-flow airflow output even under heavy process loads Energy-Efficient Performance Optimized aerodynamic flow path minimizes pressure losses and maximizes efficiency Variable frequency drive enables precise speed control and optimization Reduces overall energy consumption and operating costs

Rugged, Reliable Design

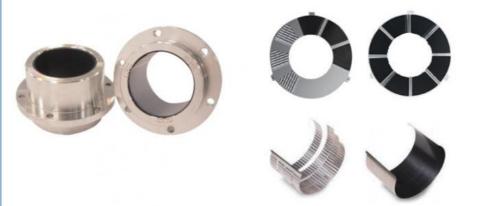
Heavily reinforced cast iron and steel construction for long-term durability Able to endure harsh vibrations, temperature extremes, and other industrial stresses Maximizes equipment uptime and operational lifespan Advanced Monitoring and Control

Integrated PLC with touchscreen HMI provides real-time system oversight Predictive maintenance algorithms monitor equipment health and performance Remote access and cloud-based analytics enable 24/7 optimization Key Advantages

Delivers powerful, high-pressure airflow to support demanding process applications Energy-efficient operation minimizes utility costs and environmental impact Rugged, industrial-grade design ensures reliable, long-lasting performance Comprehensive monitoring and control features optimize uptime and productivity

# Foll Bearing Technology

Foil bearing has physical contact between therotor and the bearing before starting, therelative movement of the rotor and the bearinggenerates air pressure when starting, when therotor rotates, the speed of the air around therotor can be converted into pressure energy, andthe air pressure makes the rotor float when therotor reaches a certain rotation speed and playsa lubricatingrole. Foil bearing technologyeffectively solves theproblems of lowefficiency, short life, and the need forregularmaintenance and lubrication of the traditionalmechanical support transmission system.



## Air Suspension Bearing High Speed Centrifugal Blower Series Selection

Air Flow (m/min):1atm,20°C,65%RH, density=12kg/m3, Tolerance=+5%															
model	Out	let p	ress	ure	(bar	)				power	IVVAIMI	Outlet calibre	Dimension (mm)		
number															
number	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.2	kw	kg	PN1.0 MPa	elder	width	height
	Inle	t Flo	w(m	<sup>3</sup> /mi	n)		-								
ZGK15	24	17	14	13	10	/	/	/	/	15	300	DN150	1300	800	1230
ZGK22	36	29	24	21	18	16	/	/	1	22	310				
ZGK30	49	39	33	28	25	22	/	/	/	30	330				
ZGK37	62	48	41	35	31	28	25	22	19	37	350				
ZGK45	78	62	51	45	31	34	32	28	23	45	550				

ZGK55	94	76	60	54	47	40	38	34	28	55	630	DN200	1500	1100	1580
ZGK75	124	95	76	69	63	55	49	45	37	75	650	1			
ZGK90	157	120	95	86	79	69	62	56	46	90	830	1			
ZGK110	190	150	115	104	93	85	72	67	57	11	880	DN300	1500	1100	1580
ZGK132	221	170	136	122	108	99	86	79	67	132	930	1			
ZGK150	252	190	156	140	122	112	9	90	77	150	1450	-DN300	1800	1500	2080
ZGK185	314	230	190	171	155	136	124	112	91	185	1720		1000	1300	2000
ZGK225	380	290	228	208	183	164	145	132	111	225	2140	-DN400	2300	1700	21/0
ZGK300	504	378	312	276	243	220	198	181	150	300	2320		2000	1700	2140

When the atmospheric conditions and medium are varied, the relative performance conversion calculation will be different, we can re-designed in accordance with the requirement of users to adapt to different working condition. There are two cooling methods for air suspension centrifugal blower: self-circulating water cooling and forced air cooling. If you have special requirements on the cooling mode, please tell us in advance.



## Scope of application

It is suitable for sewage treatment industry, petrochemical industry, food and drug industry, textile industry, metallurgy industry, cement and construction materials industry, printing and dyeing industry and other industries.

### **Market Distribution**

We have 42 offices throughout the country, in addition to Taiwan Province, 33 provinces in the country's ad-ministrative regions have a sound sales and service network. We can provide you with pre-sale, in-sale and after-sales service in a timely and convenient manner, understand your needs, and constantly improve the service and quality system while meeting the customized needs of customers.

### High Performance Aerodynamic Design Methodology for Wide Service Conditions

By studying the influence of impeller and volute flow on efficiency and working stability, the R&D team proposed a flow control method and a pneumatic optimization design method to improve the performance of the main engine, which greatly improved the efficiency of the main engine.

# Manufacturing & Equipment Base

has built laboratories, R& D buildings, processing workshops, etc., with internationally advanced and China leading high-precision processing equipment.



### High power density permanent magnet synchronous motor technology

Based on the thermal multiphysics coupling design technology of electro magneticmachine, the R&D team independently developed a permanent magnet synchronous motor (PMSM); Through the electromagnetic optimization design technology of high speed permanent magnet motor coordinated with the control strategy, the problems of large rotor heat, high torque ripple and large motor noise are solved, so that it has the advantages of high reliability, high temperature resistance and low wind resistance loss. The design and process of rotor structural integrity were overcome, and a permanent magnet magnet synchronous motor with high power density, low cost and high efficiency was developed.



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