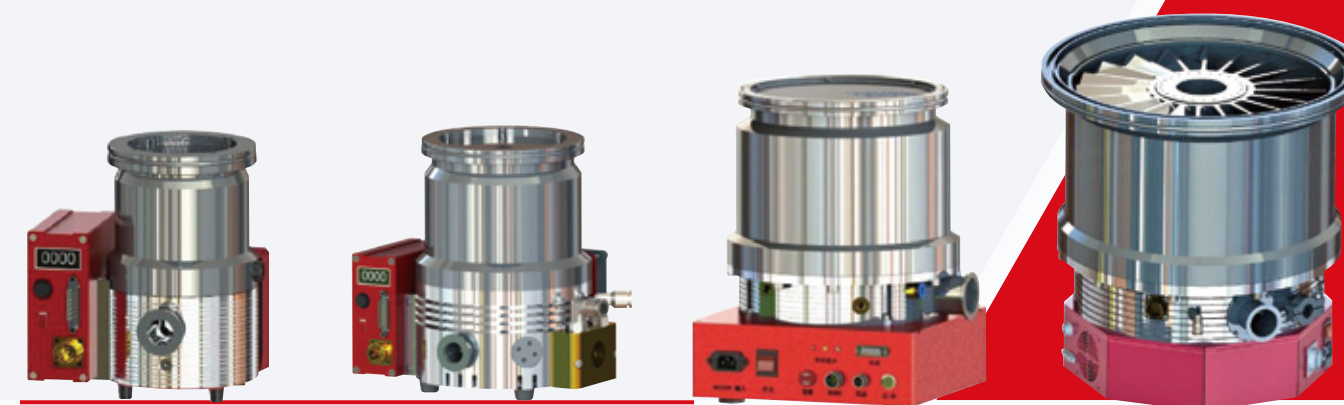


Vacuum Technology empowers high-end manufacturing,
supports scientific research and innovation,
serves a better life.

BROCHURE FOR THE JFB SERIES MOLECULAR PUMP AND UNIT PRODUCT

JFB 系列分子泵产品宣传册



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CONTENTS

JFB-63/81M(J) Grease-lubricated Molecular Pump-----03

JFB-63/81 Grease-lubricated Molecular Pump -----07

JFB-63/81 Double Flow Ports -----09

JFB-100/251 Grease-lubricated Molecular Pump-----11

JFB-100/301 & JFB-160/401 Grease-lubricated Molecular Pump -----14

JFB-160/701 Grease-lubricated Molecular Pump -----19

JFB-200/1401 Grease-lubricated Molecular Pump -----22

JFB-250/2201 Grease-lubricated Molecular Pump -----25

JFB-400/4201 Composite Molecular Pump -----28

JFB series molecular pumps

Brief Introduction:

Molecular pumps are a type of high - speed rotating momentum transfer vacuum pumps. Their operating pressure range is generally from 10^{-10} Pa to 10^{-7} Pa, and they are one of the important vacuum - generating devices for achieving high and ultra - high vacuum. Molecular pumps have advantages such as fast startup, wide operating range, low operating power consumption, relatively high cleanliness, and simple maintenance and operation.

The molecular pump products described in this brochure are the company's newly launched second - generation products. They are newly designed, optimized and upgraded mainly for the industrial vacuum and scientific research fields. The products include the industry - vacuum molecular pumps with integrated controllers (the first of their kind in China) and those with detachable controllers for flexible application scenarios. Divided by the caliber, there are mainly several models such as DN63, DN100, DN160, DN200, DN250, and DN400.

Features:

- Intelligent control: The detachable and integrated design of the controller facilitates centralized control and system integration, saves space, and enables one - button start/stop and multiple communication functions.
- Precision bearings: Precision ceramic bearings are suitable for high - speed rotation, can withstand high temperatures, and have a long service life.
- Product reliability: The turbine rotor is integrally formed and is driven by a high - speed motor without a position sensor.
- Diverse functions: Complete accessories are available, and customized solutions can be provided for customers.
- Adjustable rotation speed function: It can meet the customers' needs for a single pump with multiple pumping speeds.

This series of products is mainly applicable to multiple fields such as industrial coating for PVD, CVD, liquid crystal panels, etc., as well as scientific research in areas like mass spectrometry analysis, high-energy physics, vacuum leak detection, medicine and bioengineering.



JFB-63/81M(J) Grease-lubricated Molecular Pump



JFB-63/81M(LF63)

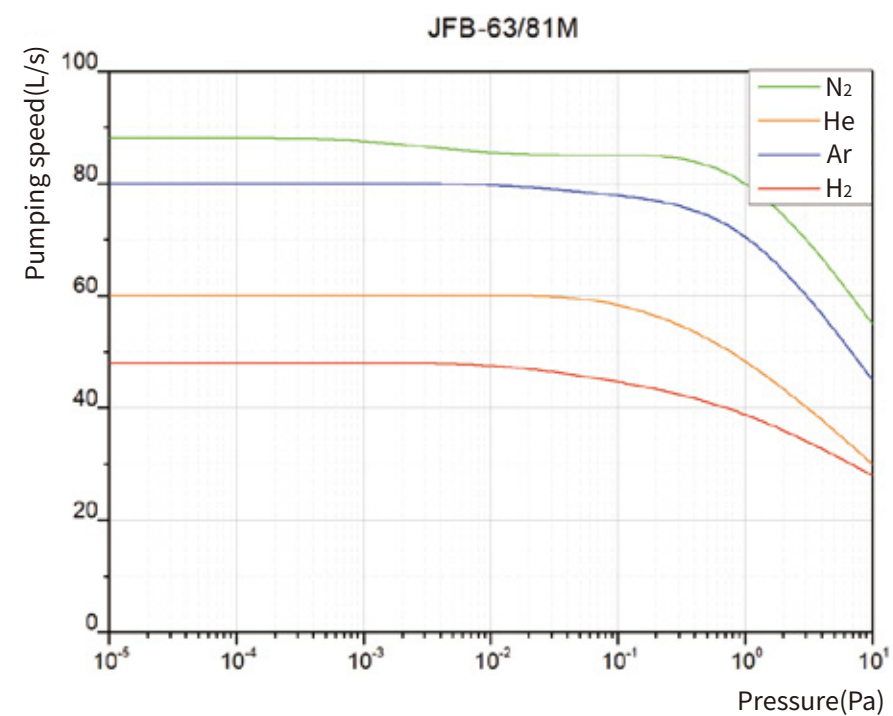


JFB-63/81M(CF63)



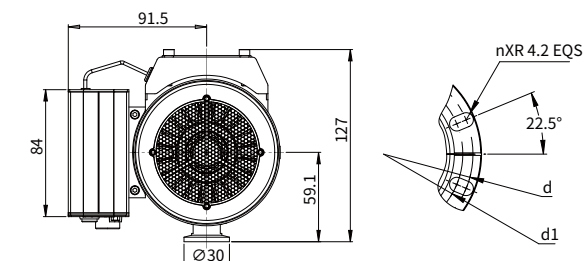
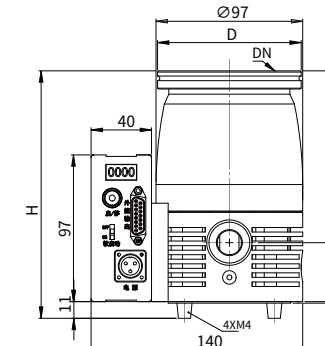
JFB-63/81MJ

Pumping Speed Curve:

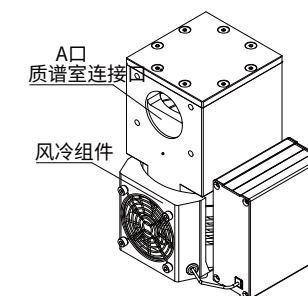
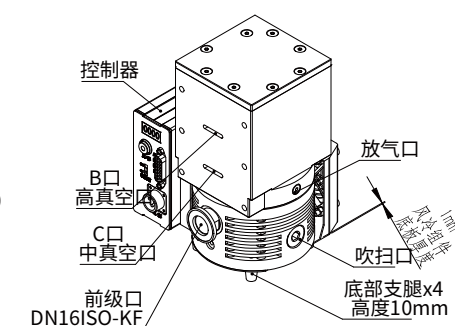
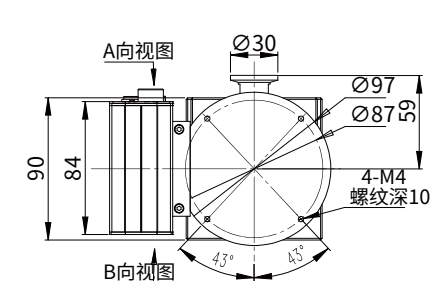
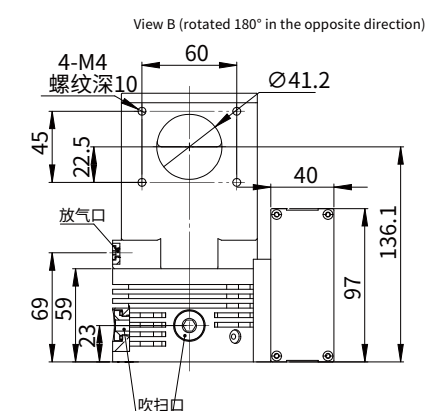
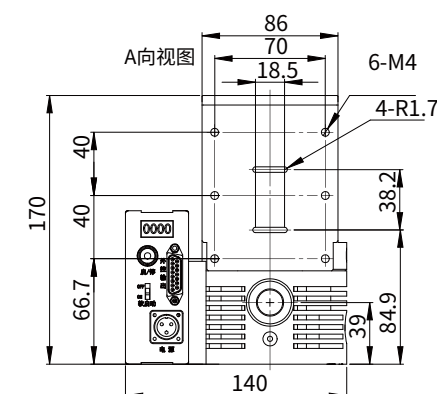


Overall Dimensions:

JFB-63/81M



JFB-63/81MJ



Dimension Comparison Table

Model	DN	H	H1	D	d	n
JFB-63/81M (LF)	LF63	163.6	113.6	Ø95	-	-
JFB-63/81M (CF)	CF63	179.4	129.4	Ø114	Ø92.2	8

Performance Indicators:

Model	JFB-63/81M	JFB-63/81MJ
Inlet Flange	DN63 ISO-K (LF)or CF	Multiple Inlet Ports(A, B, C)

● Vacuum Parameters				
Pumping Rate	N2	He	N2	He
	85 L/s	58 L/s	A:40 L/s	A:45 L/s
			B:8 L/s	B:10 L/s
			C:4 L/s	C:5 L/s
Ultimate Pressure	< 5 × 10 ⁻⁶ Pa (LF);< 5 × 10 ⁻⁷ Pa (CF)		< 1 × 10 ⁻⁵ Pa (A);< 1 × 10 ⁻⁴ Pa (B);< 1 × 10 ⁻³ Pa (C)	
Compression Ratio	1 × 10 ¹⁰	1 × 10 ⁷	A:2 × 10 ⁹	A:2 × 10 ⁶
			B:5 × 10 ⁷	B:7 × 10 ⁴
			C:3 × 10 ⁴	C:2 × 10 ²
Maximum Continuous Inlet Pressure	3Pa	5Pa	A:5Pa	A:10Pa
			B:40Pa	B:50Pa
			C:160Pa	C:180Pa
Maximum Continuous Outlet Pressure	1400 Pa			
Critical Outlet Pressure	2200 Pa			

● Physical Parameters		
Outlet Flange	KF16	
Purge Port	KF16	
Weight	2.9Kg (LF); 3.9Kg (CF); 3.1Kg (Multiple Inlet Ports);	
Vibration	≤0.05 μm	
Noise	≤50 dB (Standard Air Cooling)	
Bearing	Maglev + Precision Ceramic Bearing	
Installation Angle	Any Angle	
Maximum Tolerable Magnetic Field	Radial: ≤3mT; Axial: ≤5mT	
Cooling Method	Air cooling or water cooling, or natural convection (0~30°C, without air load condition)	
Ambient Temperature	Air cooling	0~35°C (Under the condition of 0~30°C and without air load, natural convection cooling is available)
	Water cooling	0~40°C (Water cooling is required when the flange is baked and there are external air load and other working conditions)
Cooling Water Parameters	Water temperature: 15~25°C; Flow rate: ≥1L/min; PH value 6-8, clear; Pressure: 0.15Mpa; Interface pipe diameter: 6mm	
Recommended Pre-stage Pump	0.5~2 L/s	

● Electrical Parameters	
Adapted Controller	JFB-I
Rated Rotational Speed	90000rpm (1500Hz)
Idling Speed	63000rpm
Startup/Shutdown Control Mode	Control startup and shutdown through the controller buttons / Control startup and shutdown via RS485 / Control startup and shutdown via DB15
Acceleration Time	~2.5min
Brake Shutdown Time	~3.5min
Power Supply Voltage	24VDC±5%
Maximum Power	100W
Rated Power	~7W
Normal Operating Current	<0.5A
Maximum Starting Current	<3.5A
Communication Mode	RS485

Order Number:

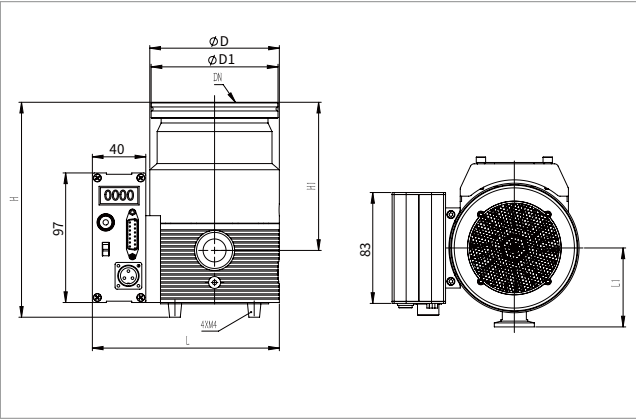
Model	Accessories	LF	CF
JFB-63/81M	Standard Product Pump (Air cooling is the standard configuration by default)	A3109	A3110
	Purge Valve Assembly (Small Flow Rate)	A3109-A	A3110-A
	Water Cooling Assembly	A3109-B	A3110-B
	Purge Valve Assembly, Water Cooling Assembly	A3109-C	A3110-C

Model	配件	Order Number	Instructions
JFB-63/81MJ	Standard product pump (Air cooling is standard by default)	A3108	Multi-inlet port pump (Air cooling is the standard configuration by default)

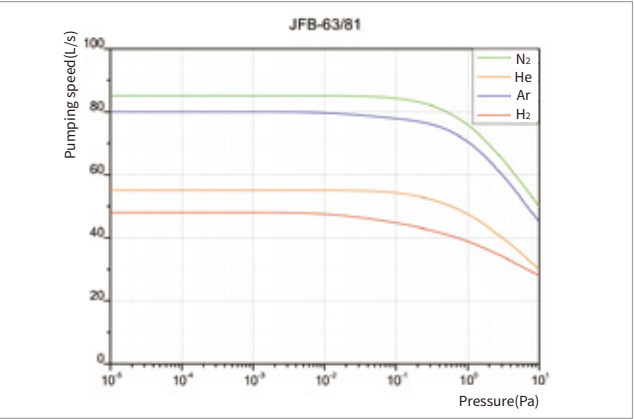
JFB-63/81 Grease-lubricated Molecular Pump



Overall Dimensions:



Pumping Speed Curve:



Dimension Comparison Table

Model	DN	H	H1	D1	d	d1	n
JFB-63/81(LF)	LF63	160.9	110.4	Ø95	—	—	—
JFB-63/81(CF)	CF63	178.4	128.4	Ø114	Ø92.2	Ø104	8
JFB-63/81(KF40)	KF40	168.9	119	Ø55	—	—	—

Performance Indicators:

Model	JFB-63/81		
Inlet Flange	LF63	CF63	KF40

● Vacuum Parameters						
Pumping Rate	N2	He	N2	He	N2	He
	85 L/s	55 L/s	85 L/s	55 L/s	38 L/s	35L/s
Ultimate Pressure	< 8×10 ⁻⁶ Pa		< 8×10 ⁻⁷ Pa		< 8×10 ⁻⁶ Pa	
Compression ratio	N2:10 ⁸ He:10 ⁶					
Maximum Continuous Inlet Pressure	N2:2Pa He:4 Pa					
Maximum Continuous Outlet Pressure	N2:650 Pa He:300 Pa					
Critical Outlet Pressure	N2:950 Pa He:500 Pa					
Maximum Inlet Flow Rate (N2)	Water cooling:140sccm;Air cooling:100sccm					

● Physical Parameters			
Outlet Flange		KF16	
Purge Port		KF16	
Weight		2.5kg	3.7 kg 2.5kg
Vibration		≤0.05 μm	
Noise		≤50 dB	
Bearing		Grease-lubricated ceramic ball bearing	
Installation Angle		At any angle	
Cooling Method		Air cooling / water cooling / natural convection (0~30°C, no-load working condition)	
Ambient Temperature	Air cooling	0-35°C	
	Water cooling	0-40°C	
Cooling Water Parameters		The water temperature is 15-25°C; the flow rate is 1L/min; the water is free of grease particles with a pH value ranging from 6 to 8; the pressure is 0.15 Mpa	
Recommended Pre-stage Pump		0.5~2 L/s	

Electrical Parameters	
Adapted Controller	JFB-I
Rated Rotational Speed	1250Hz (75000rpm) (600~1250HzIt can be adjusted between)
Recommended Starting Pressure	≤500Pa
Acceleration time	≤2.5min
Brake Stop Time	≤3.5min
Driving Voltage	24VDC±5%
Power consumption under no-load condition	~10W
Communication mode	RS485, Modbus, RTU
Maximum Tolerable Magnetic Field	Radial direction:3mT;Axial direction:5mT

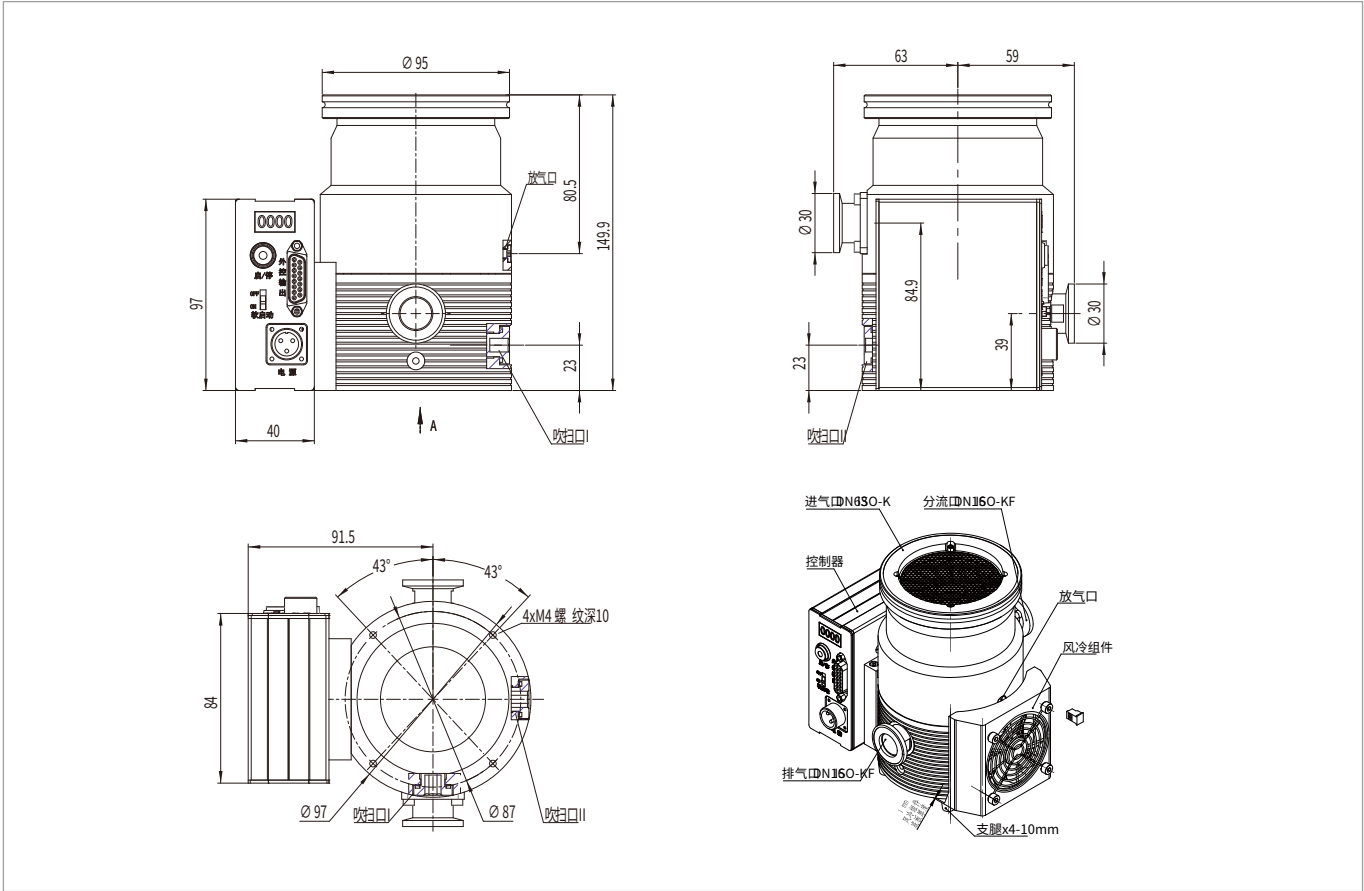
Order Number:

Accessories	LF	CF	KF40
Standard product pump (Air cooling is the standard configuration by default)	A3119	A3120	A3117
Purge Valve Assembly	A3119-A	A3120-A	A3117-A
Water cooling assembly	A3119-B	A3120-B	A3117-B
Purge valve assembly and water cooling assembly	A3119-C	A3120-C	A3117-C

JFB-63/81 Double Flow Ports



Overall Dimensions:



Performance Indicators:

Model	JFB-63/81
Inlet Flange	Double flow ports

Vacuum Parameters		
Pumping Rate	LF63Caliber	Shunt port
	85 L/s	3.5 L/s
Ultimate Pressure	< 8×10 ⁻⁶ Pa	
Compression Ratio	10 ⁸	10 ⁴
Maximum Continuous Inlet Pressure	2 Pa	350 Pa
Maximum Continuous Outlet Pressure	650 Pa	
Critical outlet pressure	950 Pa	
Maximum Inlet Flow Rate (N2)	Water cooling: 140sccm; Air cooling: 100sccm	

Physical Parameters		
Inlet flange	LF63	KF16
Outlet Flange	KF16	
Purge Port	KF16	
Weight	2.5kg	
Vibration	≤0.05 μm	
Noise	≤50 dB	
Bearing	Maglev + Precision Ceramic Bearing	
Installation Angle	Any Angle	
Cooling Method	Air cooling/Water cooling/Natural convection (0~30°C, under no-load working conditions)	
Ambient Temperature	Air cooling	0-35°C
	Water cooling	0-40°C
Cooling Water Parameters	The water temperature is 15-25°C; the flow rate is 1L per minute; the pH value is between 6 and 8, and there are no grease particles; the pressure is 0.15 megapascals	
Recommended Pre-stage Pump	0.5~2 L/s	

Electrical Parameters	
Adapted Controller	JFB-I
Rated Rotational Speed	1250Hz (75000rpm) (600~1250HzIt can be adjusted between)
Recommended starting pressure	≤500Pa
Acceleration Time	≤2.5min
Brake Shutdown Time	≤3.5min
Driving voltage	24VDC±5%
Power consumption under no-load condition	~10W
Communication method	RS485, Modbus, RTU
Maximum tolerable magnetic field	Radial: 3mT; Axial: 5mT

Order Number:

Accessories	Double flow ports
Standard product pump (Air cooling is the standard configuration by default)	A3116
Purge Valve Assembly	A3116-A
Water cooling assembly	A3116-B
Purge valve assembly and water cooling assembly	A3116-C

JFB-100/251 Grease-lubricated Molecular Pump



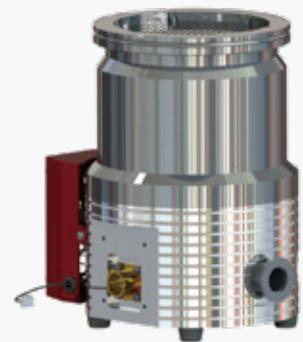
JFB-100/251(LF)



JFB-100/251(CF)



JFB-100/251 Double flow ports

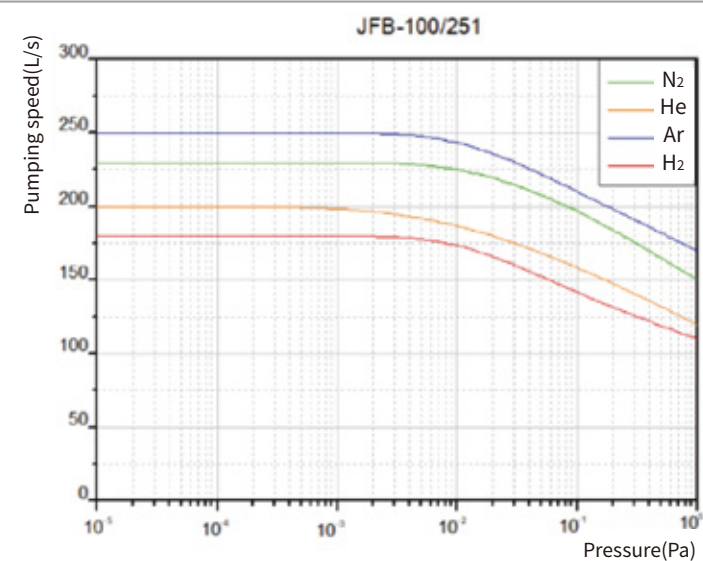


JFB-100/251(Split type)

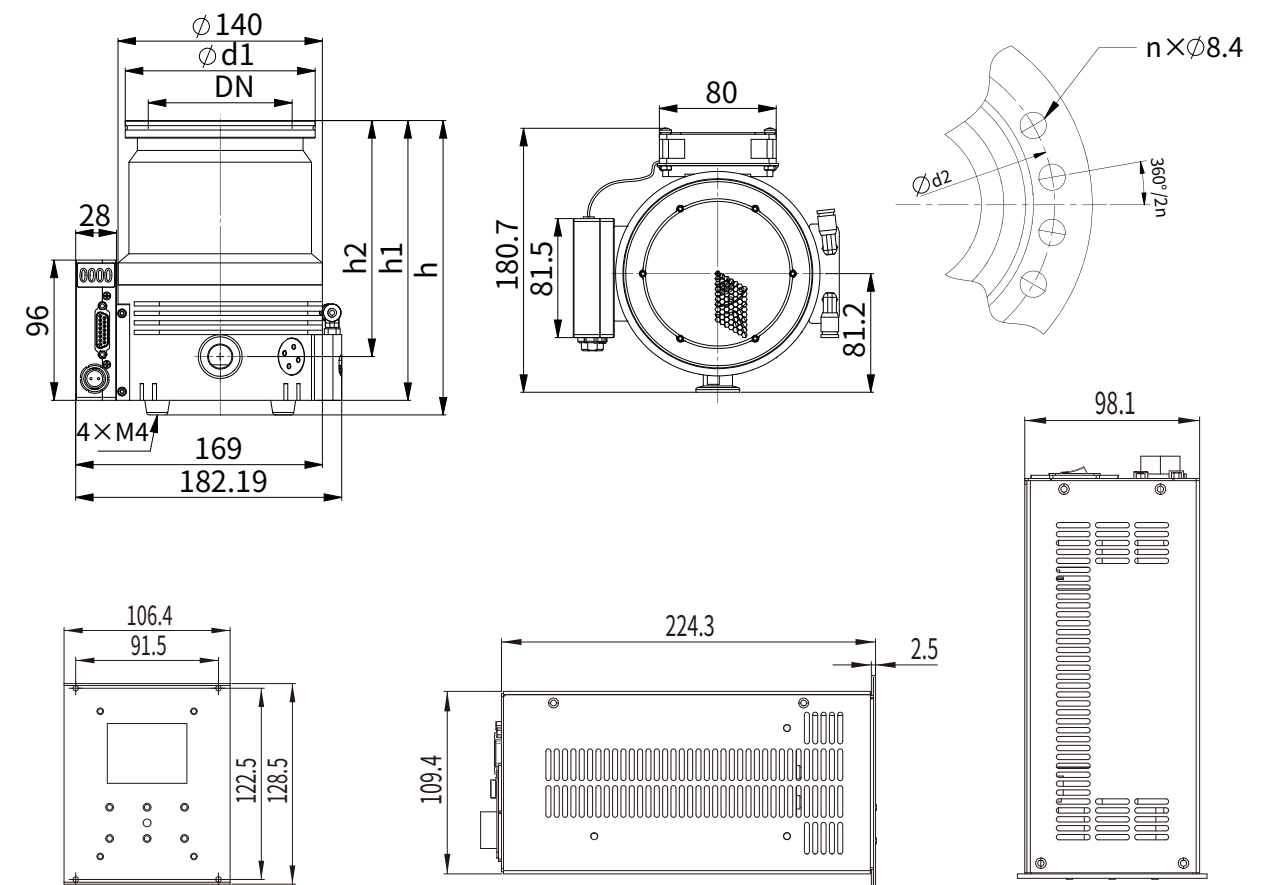


JFD-II Split controller

Pumping Speed Curve:



Overall Dimensions:



Dimension Comparison Table

Model	DN	$\Phi d1$	h	h1	h2	$\Phi d2$	n
JFB-100/251 (LF)	LF100	130	201.3	191.6	161.6	-	-
JFB-100/251 (CF)	CF100	152	208	198	168	$\Phi 130.3$	16

Performance Indicators:

Model		JFB-100/251				
		LF100		CF100		Double flow port
● Vacuum Parameters						
Pumping Rate	N2	He	N2	He	LF100	Intermediate stage
	250 L/s	200 L/s	250 L/s	200 L/s	250 L/s	25 L/s
Ultimate Pressure	< 5×10 ⁻⁶ Pa(LF); < 5×10 ⁻⁷ Pa(CF);					
Compression Ratio	>1×10 ⁸				10 ⁸	
Maximum Continuous Inlet Pressure	~2 Pa					~10 Pa
Maximum Continuous Outlet Pressure	1200 Pa					
Critical outlet pressure	2200 Pa					
● Physical Parameters						
Inlet flange	DN100 ISO-K(LF)		DN100 CF		DN100 ISO-K(LF) & KF25 Intermediate stage	
Outlet Flange	DN16 ISO-KF, KF25 Optional					
Purge Port	DN16 ISO-KF					
Weight	6 kg		7.9 kg		6.5 kg	
Vibration	≤0.05 μm					
Noise	≤50 dB (Air cooling is standard)					
Bearing	Grease-lubricated ceramic ball bearing					
Installation Angle	At any angle					
The magnetic field of the working environment		≤3 mT (The maximum is 10mT, and customization is required)				
Ambient Temperature	Air cooling	0-35°C				
	Water cooling	0-40°C (The flange is baked. Water cooling is required in working conditions such as the presence of external airborne substances)				
Cooling Water Parameters		Water temperature: 15-25°C; Pressure: 0.15MPa; PH value: 6-8, clear, free of grease; Flow rate: 1L/min;				
Recommended Pre-stage Pump		1~4 L/s				
● Electrical Parameters						
Adapted Controller	JFB-II-G3; JFD-II					
Rated Rotational Speed	900Hz (54000rpm)					
Idle speed	630Hz					
acceleration time	≈3min					
driving voltage	24VDC±2%(JFB-II-G3); 220VAC (JFD-II)					
no-load power consumption	~25W					
communication mode	RS485 (Modbus RTU 协议)					

Order Number:

Model	Accessory	Integrated pump		Separate pump		Molecular pump with double flow ports
		LF	CF	LF	CF	
JFB-100/251	Standard product pump	A3125	A3126	A3125-F	A3126-F	A3125-D
	Purge Valve Assembly	A3125-A	A3126-A	A3125-FA	A3126-FA	A3125-DA
	Water cooling assembly	A3125-B	A3126-B	A3125-FB	A3126-FB	A3125-DB
	Purge valve assembly, water cooling assembly	A3125-C	A3126-C	A3125-FC	A3126-FC	A3125-DC
	Separate controller (JFD-II)	—		A3267		—

JFB-100/301 & JFB-160/401 vGrease-lubricated Molecular Pumps



JFB-100/301(LF)



JFB-100/301(CF)

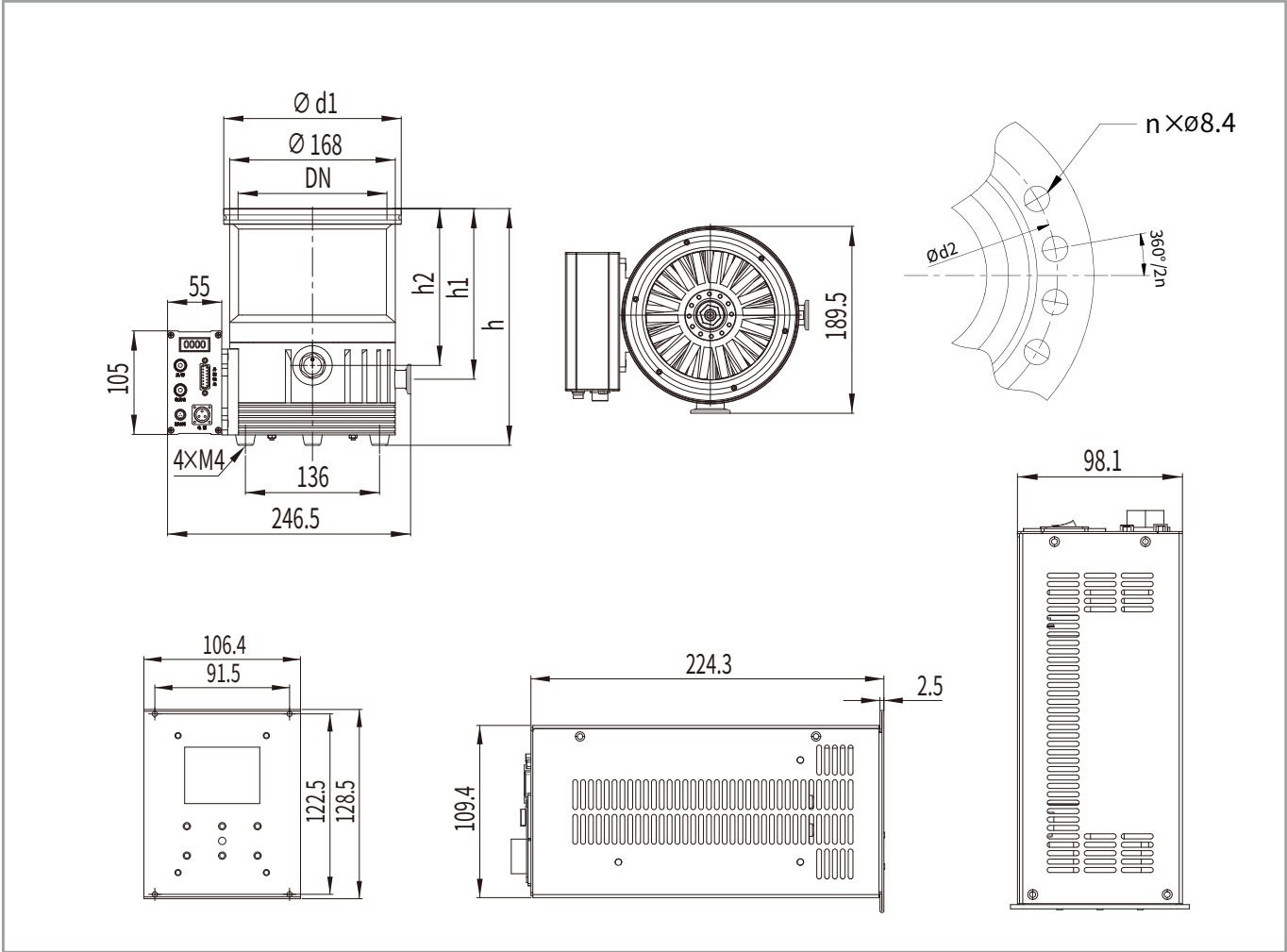


JFB-100/301(Split type)



JFD-IISplit controller

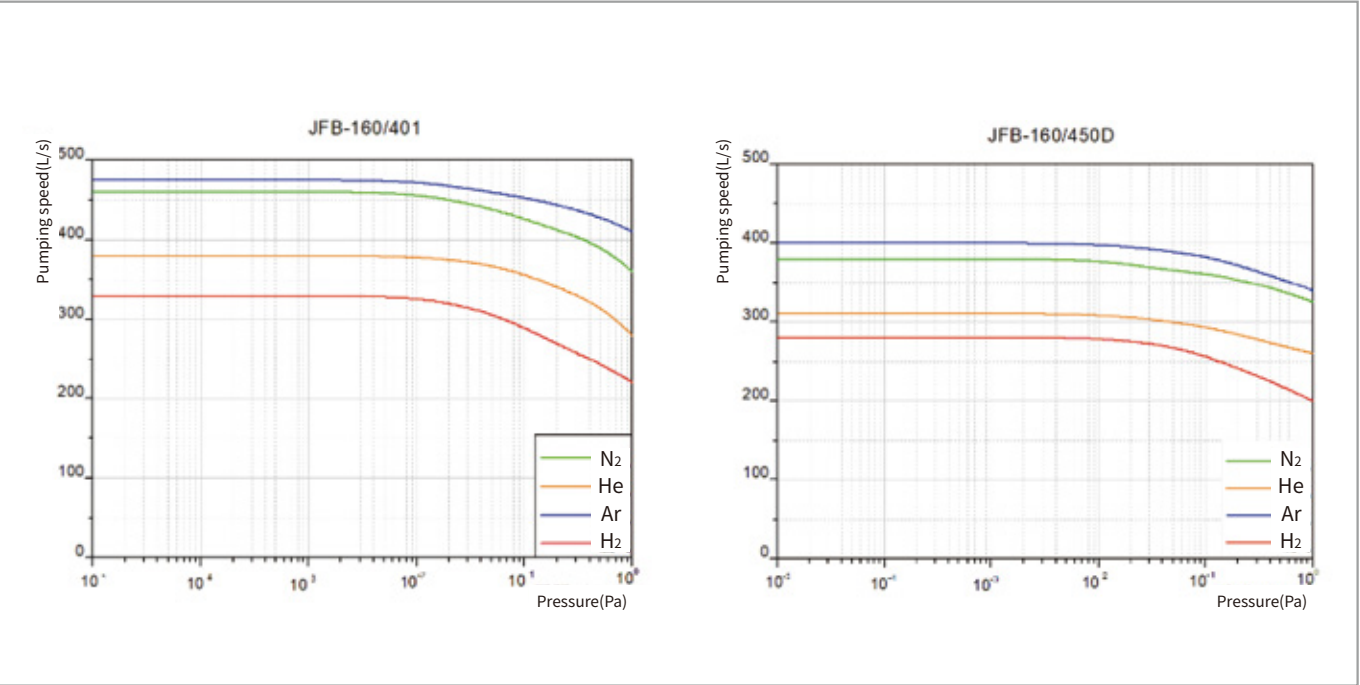
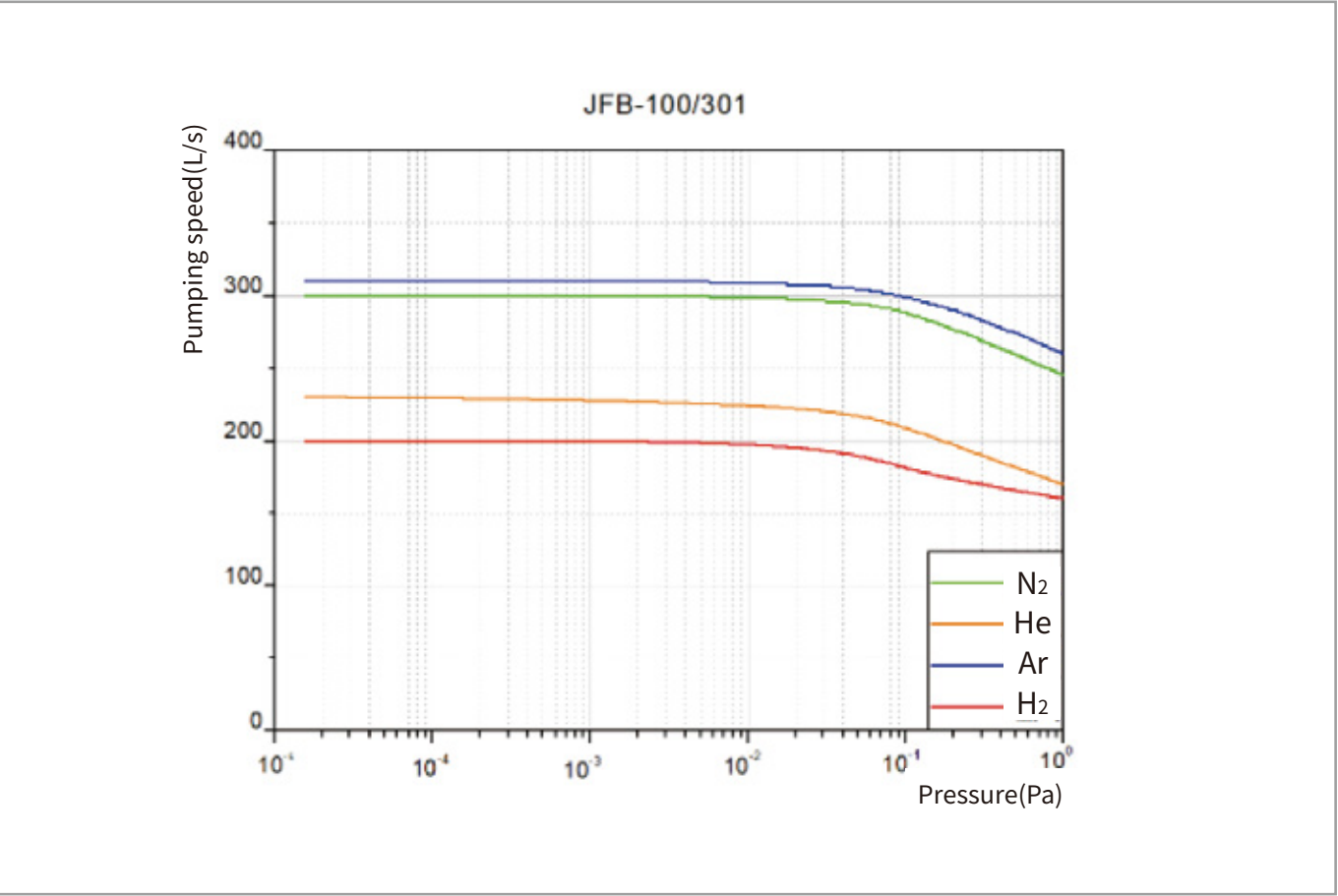
Overall Dimensions:



Dimension Comparison Table

Model	DN	d1	h	h1	h2	d2	n
JFB-100/301	LF100	130	260	192.5	178.5	—	—
	CF100	152	279	211.5	191	130.3	16
JFB-160/401	LF160	180	240	173	159	—	—
	CF160	202	239	172	158	181	20
JFB-160/450D	LF160	180	240	173	159	—	—
	CF160	202	239	172	158	181	20

Pumping Speed Curve:



Performance Indicators:

Model	JFB-100/301		JFB-160/401		JFB-160/450D (customization)	
● Vacuum Parameters						
Pumping Rate	N2	He	N2	He	N2	He
	300 L/s	230 L/s	460 L/s	380 L/s	380 L/s	310 L/s
Ultimate Pressure	< 5×10 ⁻⁶ Pa(LF); < 5×10 ⁻⁷ Pa(CF);				< 8×10 ⁻⁶ Pa(LF); < 8×10 ⁻⁷ Pa(CF);	
Compression Ratio	>1×10 ¹⁰	>5×10 ³	>1×10 ¹⁰	>5×10 ³	>1×10 ⁸	>1×10 ³
Maximum Continuous Inlet Pressure	10 Pa	2 Pa	10 Pa	2 Pa	20 Pa	5 Pa
Maximum Continuous Outlet Pressure	300 Pa	200 Pa	300 Pa	200 Pa	20 Pa	10 Pa
Critical Outlet Pressure	1000 Pa	500 Pa	1000 Pa	500 Pa	50 Pa	20 Pa

● Physical Parameters			
Inlet flange		DN100 ISO-K(LF)或CF	DN160 ISO-K(LF) or CF
Outlet Flange		DN25 ISO-KF, KF40 Optional	
Purge Port		DN16 ISO-KF	
Weight	9.6 kg(ISO-K)		10 kg(ISO-K)
	10 kg(CF)		11 kg(CF)
Vibration		≤0.05 μm	
Noise		≤50 dB (Standard Air Cooling)	
Bearing		Grease-lubricated ceramic ball bearing	
Installation Angle		Any Angle	
Magnetic field of the working environment		≤ 3 mT (Maximum 10 mT, customization is required)	
Ambient Temperature	Air cooling	0-35℃	
	Water cooling	0-40℃ (Water cooling is required when the flange is baked or there are working conditions such as external airborne gases, etc.)	
Cooling Water Parameters		Water temperature: 15-25℃;Pressure: 0.15MPa;PH value: 6-8, clear, free of grease;Flow rate: ≥1L/min;	
Recommended Pre-stage Pump		2~6 L/s	3~8 L/s

● Electrical Parameters		
Adapted Controller	JFB-II ; JFD-II	
Rated Rotational Speed	805Hz (48300rpm)	600Hz (36000rpm)
Idling Speed	560Hz	420Hz
Acceleration Time	≤5min	
Driving voltage	48VDC±2%(JFB-II); 220VAC (JFD-II)	
Power consumption without load	~30W	
Communication mode	RS485 (Modbus RTU agreement)	

Order Number:

Model	Accessory	Integrated pump		Separate pump	
		LF	CF	LF	CF
JFB-100/301	Standard product pump	A3123	A3124	A3123-F	A3124-F
	Purge Valve Assembly	A3123-A	A3124-A	A3123-FA	A3124-FA
	Water cooling assembly	A3123-B	A3124-B	A3123-FB	A3124-FB
	Purge valve assembly, water cooling assembly	A3123-C	A3124-C	A3123-FC	A3124-FC
	Separate controller (JFD-II)	—		A3267	

JFB-160/401	Standard product pump	A3127	A3128	A3127-F	A3128-F
	Purge Valve Assembly	A3127-A	A3128-A	A3127-FA	A3128-FA
	Water cooling assembly	A3127-B	A3128-B	A3127-FB	A3128-FB
	Purge valve assembly, water cooling assembly	A3127-C	A3128-C	A3127-FC	A3128-FC
	Separate controller (JFD-II)	—		A3267	

JFB-160/450D	Standard product pump	A3129	A3130	A3129-F	A3130-F
	Purge Valve Assembly	A3129-A	A3130-A	A3129-FA	A3130-FA
	Water cooling assembly	A3129-B	A3130-B	A3129-FB	A3130-FB
	Purge valve assembly, water cooling assembly	A3129-C	A3130-C	A3129-FC	A3130-FC
	Separate controller (JFD-II)	—		A3267	

JFB-160/701 Grease-lubricated Molecular Pump



JFB-160/701(LF)

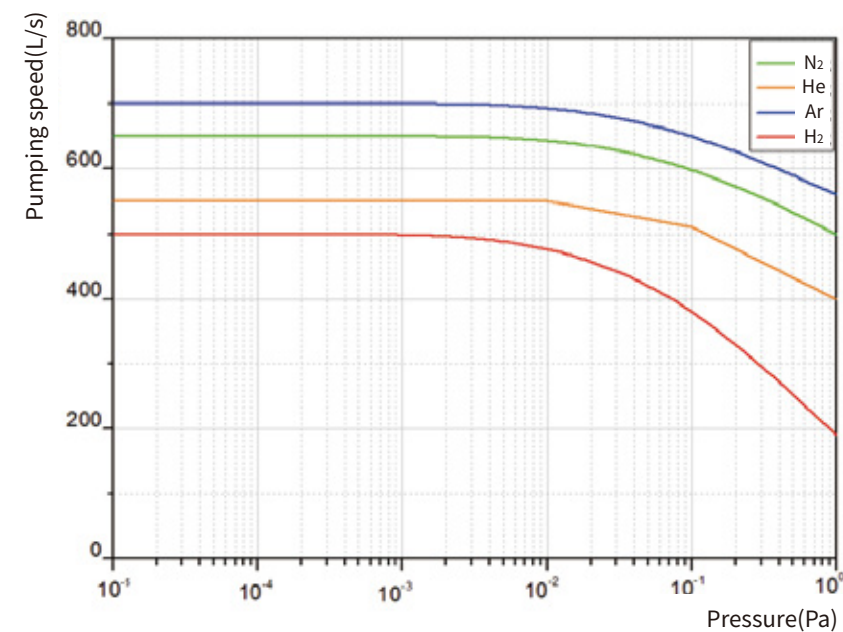


JFB-160/701(LF)(Split type)

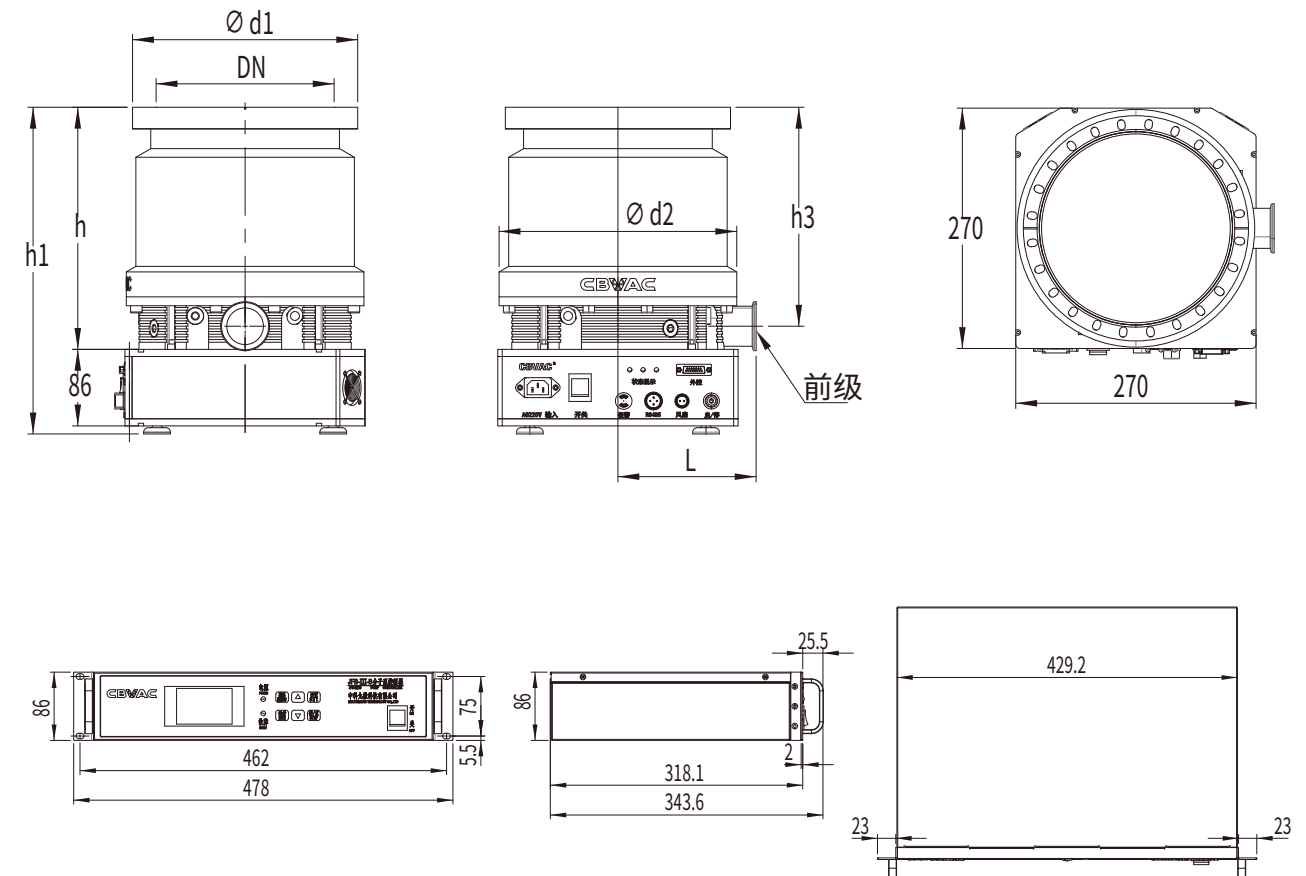


JFB-III-B Split controller

Pumping Speed Curve:



Overall Dimensions:



Dimension Comparison Table

Model	DN	d1	d2	h	h1	h3	L
JFB-160/701	160LF	180	218.5	241.8	336.8	201.8	124.8
	160CF	202	218.5	268.8	359.8	224.8	124.8

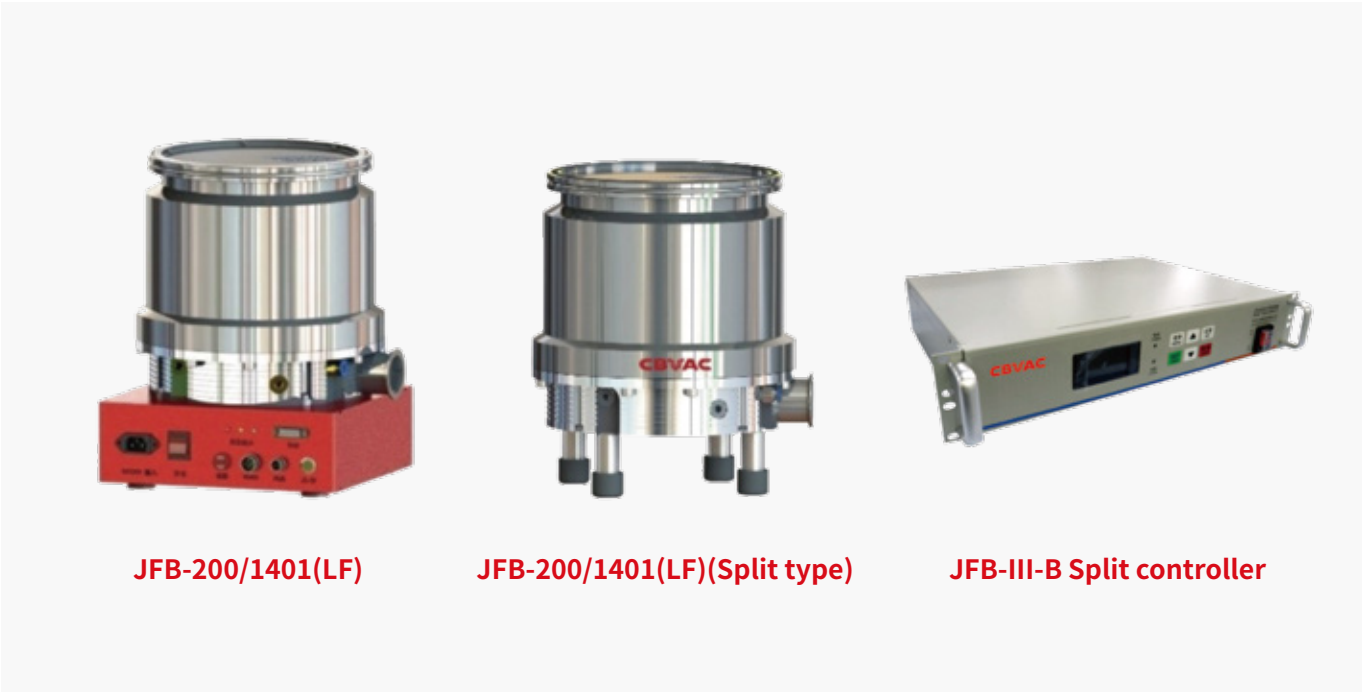
Performance Indicators:

Model		JFB-160/701	
● Vacuum Parameters			
Ultimate Pressure	< 5×10 ⁻⁶ Pa(LF); < 5×10 ⁻⁷ Pa(CF);		
Pumping Rate	N2	He	
	650 L/s	550 L/s	
Compression Ratio	>1×10 ¹¹	>1×10 ⁴	
Maximum Continuous Inlet Pressure	2 Pa	1 Pa	
Maximum Continuous Outlet Pressure	300 Pa	200 Pa	
Critical outlet pressure	1000 Pa	500 Pa	
● Physical Parameters			
Inlet flange	DN160 ISO-K(LF) or CF		
Outlet Flange	DN25ISO-KF, KF40 Optional		
Purge Port	DN16 ISO-KF		
Weight	4~10 L/s		
Vibration	20 kg ISO -K(LF)		
	23 kg(CF)		
Noise	≤0.05 μm		
Bearing	≤60 dB		
Installation Angle	Grease-lubricated ceramic ball bearing		
Cooling Method	Any Angle		
The magnetic field of the working environment		≤ 3 mT (The maximum is 10 mT, customization is required.)	
Ambient Temperature	Air cooling	5-35°C	
	Water cooling	5-40°C	
Cooling Water Parameters		Water temperature: 15-25°C;Pressure: 0.15MPa;Flow rate: ≥1.5L/min;	
● Electrical Parameters			
Model of the integrated controller	JFB-III (containJFB-III-A)		
Model of the separate controller	JFB-III-B (2U)		
Remote control	It can achieve ultra-long-distance control (For specific details, please consult our company's engineers.)		
Communication mode	RS485		
Power supply voltage	220VAC±10%		
Power supply frequency	50/60Hz		
Maximum input power	1000W		
Power consumption without load	~65W		
Start/stop control mode	The controller can be started and stopped by pressing the buttons on the controller / started and stopped by the RS485 controller / started and stopped by the DB15.		
Protection function	Overcurrent, overvoltage, undervoltage and overheat protection for the controller, as well as overcurrent, overload and overheat protection for the molecular pump, etc.		
Rated rotational speed	36000 r/min±0.1%		
Idle rotational speed	25200 r/min±0.1%		
Normal operating current parameters	≤1A		

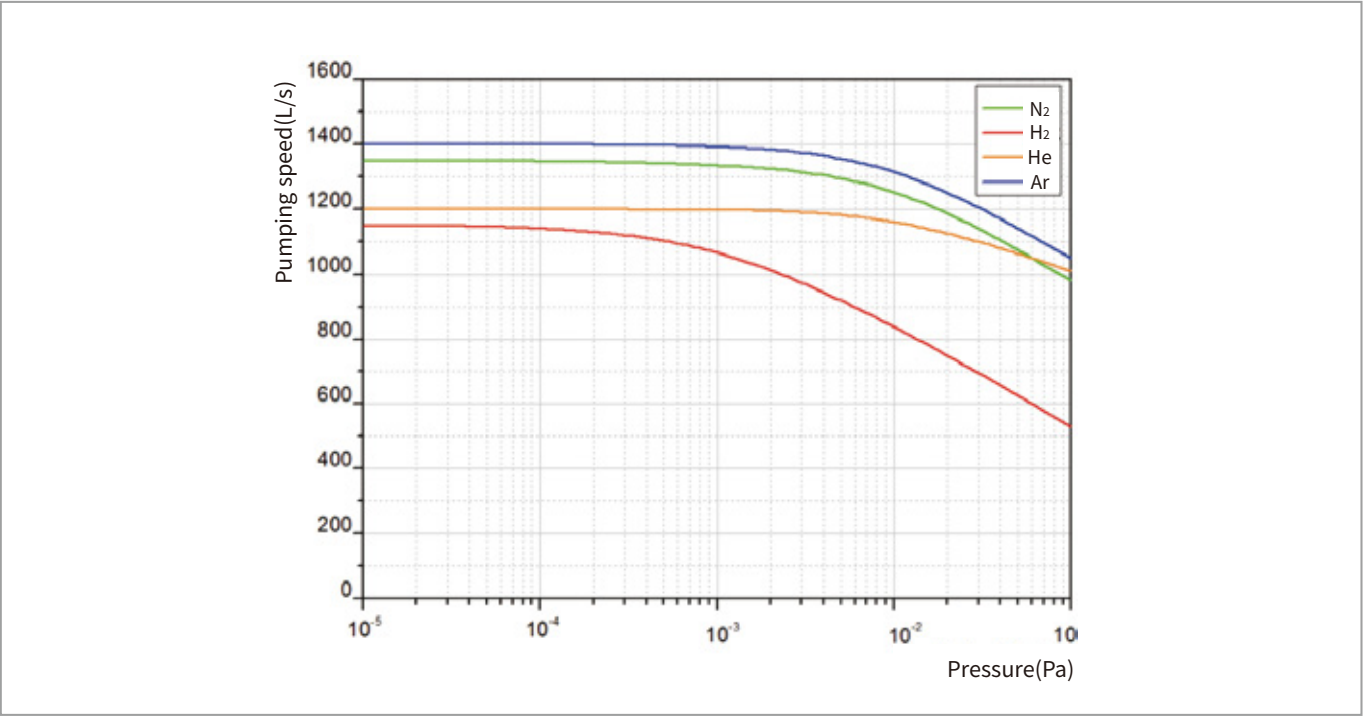
Order Number:

Accessory	Integrated pump		Separate pump	
	LF	CF	LF	CF
Standard product pump	A3139	A3140	A3139-F	A3140-F
Purge Valve Assembly	A3139-A	A3140-A	A3139-FA	A3140-FA
Water cooling assembly	A3139-B	A3140-B	A3139-FB	A3140-FB
Purge valve assembly, water cooling assembly	A3139-C	A3140-C	A3139-FC	A3140-FC
Separate controller (2U)	-		A3264	

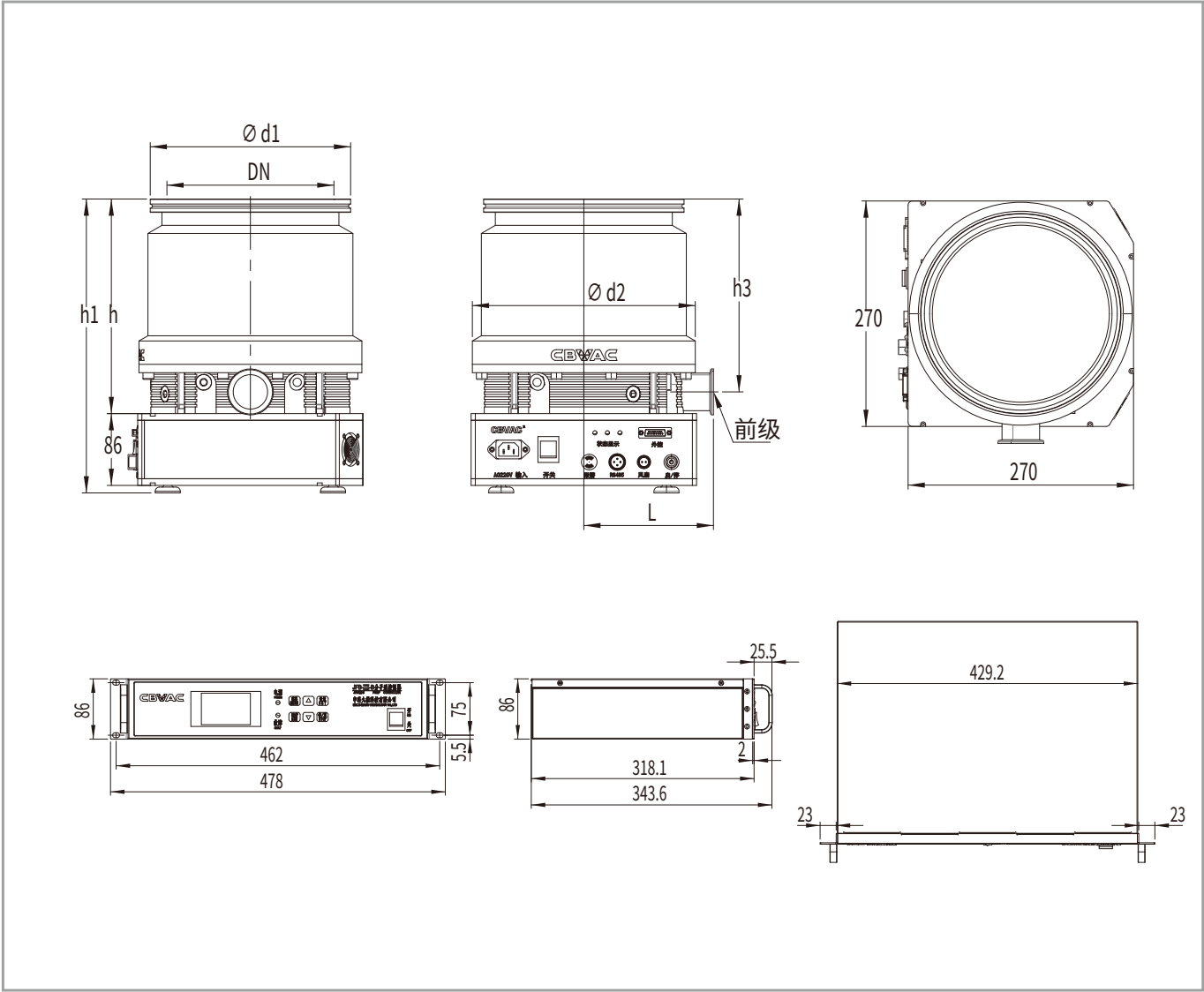
JFB-200/1401 Grease-lubricated Molecular Pump



Pumping Speed Curve:



Overall Dimensions:



Dimension Comparison Table

Model	DN	d1	d2	h	h1	h3	L
JFB-200/1401	200LF	240	267	257.5	352.5	231.5	155.1
	200CF	253	267	274.5	369.5	248.5	155.1

Performance Indicators:

Model		JFB-200/1401	
● Vacuum Parameters			
Ultimate Pressure		< 5×10 ⁻⁶ Pa(LF); < 5×10 ⁻⁷ Pa(CF);	
Pumping Rate	N2		He
	1350 L/s		1200 L/s
Compression Ratio		>1×10 ¹¹	>1×10 ⁴
Maximum Continuous Inlet Pressure		2 Pa	1 Pa
Maximum Continuous Outlet Pressure		300 Pa	200 Pa
Critical outlet pressure		1000 Pa	500 Pa
● Physical Parameters			
Inlet flange		DN200 ISO-K(LF) or CF	
Outlet Flange		DN40 ISO-KF, KF50 Optional	
Purge Port		DN16 ISO-KF	
It is recommended to use the backing pump.		8~16 L/s	
Weight	30 kg ISO -K(LF)		
	34 kg(CF)		
Vibration		≤0.05 μm	
Noise		≤60 dB	
Bearing		Grease-lubricated ceramic ball bearing	
Installation Angle		Any Angle	
The magnetic field of the working environment		≤ 3 mT (The maximum is 10 mT, customization is required.)	
Ambient Temperature	Air cooling	5-35℃	
	Water cooling	5-40℃	
Cooling Water Parameters		Water temperature: 15-25℃;Pressure: 0.15MPa;Flow rate: ≥1.5L/min;	
● Electrical Parameters			
Model of the integrated controller		JFB-III (containJFB-III-A)	
Model of the separate controller		JFB-III-B (2U)	
Remote control		It can achieve ultra-long-distance control (For specific details, please consult our company's engineers.)	
Communication mode		RS485	
Power supply voltage		220VAC±10%	
Power supply frequency		50/60Hz	
Maximum input power		1000W	
Power consumption without load		~70W	
Start/stop control mode		The controller can be started and stopped by pressing the buttons on the controller / started and stopped by the RS485 controller / started and stopped by the DB15.	
Protection function		Overcurrent, overvoltage, undervoltage and overheat protection for the controller, as well as overcurrent, overload and overheat protection for the molecular pump, etc.	
Rated rotational speed		30000 r/min±0.1%	
Idle rotational speed		21000 r/min±0.1%	
Normal operating current parameters		≤1 A	

Order Number:

Accessory	Integrated pump		Separate pump	
	LF	CF	LF	CF
Standard product pump	A3135	A3136	A3135-F	A3136-F
Purge Valve Assembly	A3135-A	A3136-A	A3135-FA	A3136-FA
Fan assembly	A3135-B	A3136-B	A3135-FB	A3136-FB
Purge valve assembly, Fan assembly	A3135-C	A3136-C	A3135-FC	A3136-FC
Separate controller (2U)	-		A3264	

JFB-250/2201 Grease-lubricated Molecular Pump



JFB-250/2201(LF)

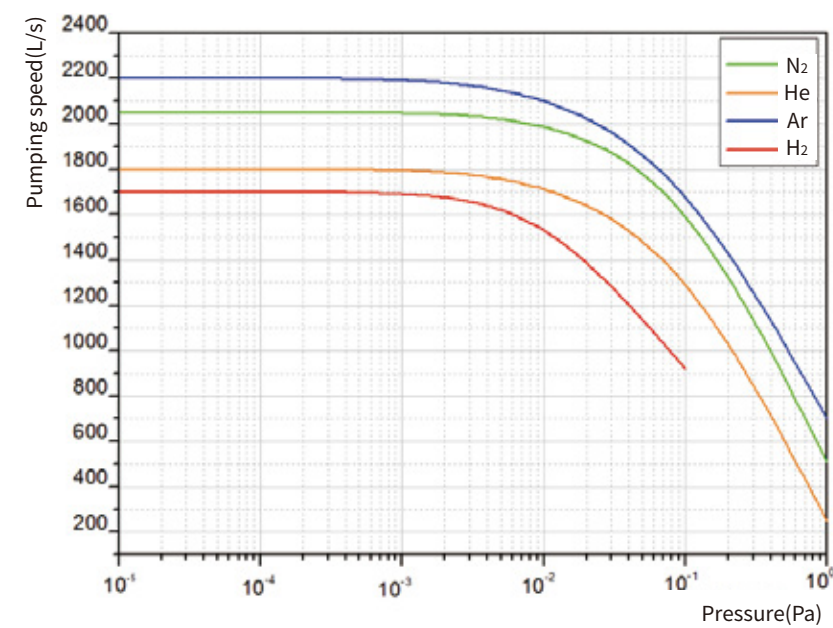


JFB-250/2201(LF)(Split type)

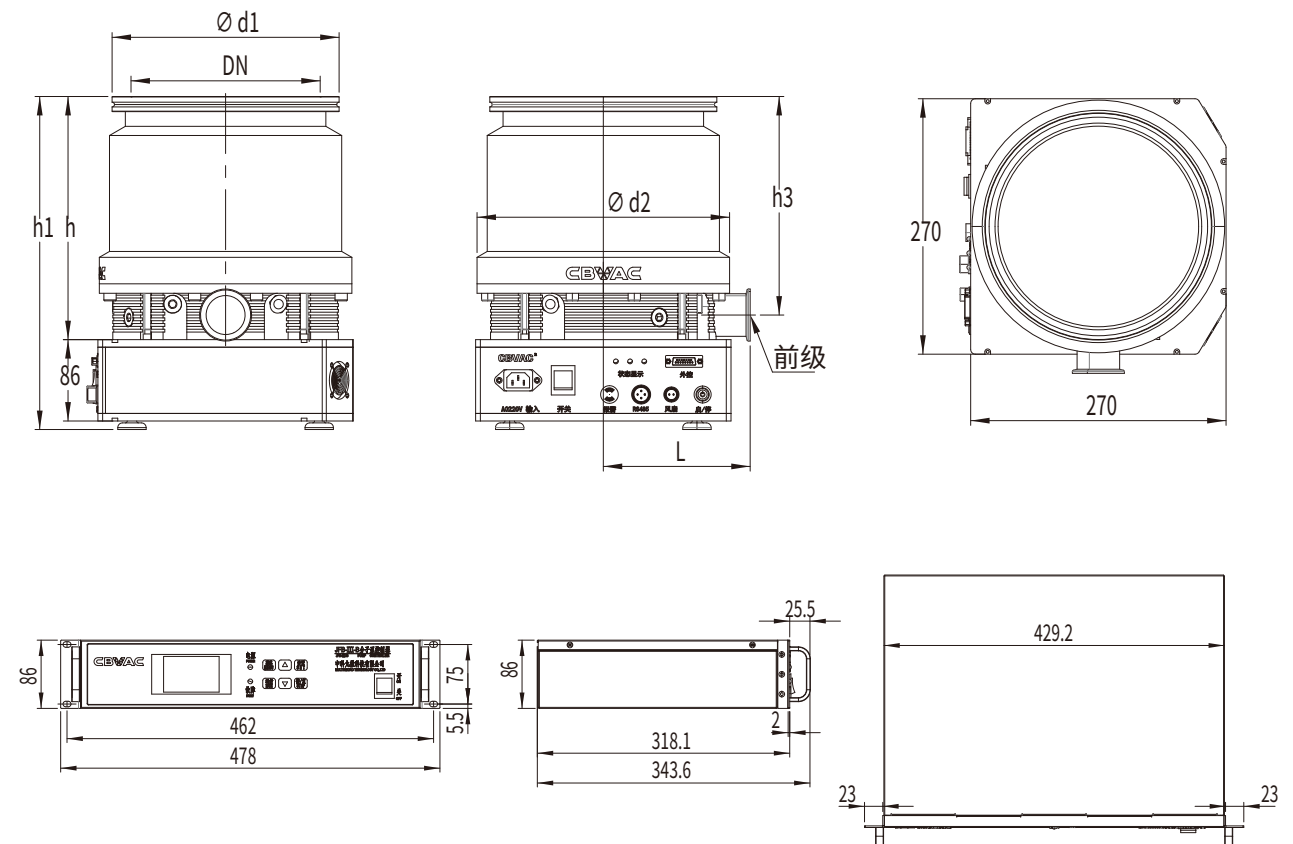


JFB-III-B Split controller

Pumping Speed Curve:



Overall Dimensions:



Dimension Comparison Table

Model	DN	d1	d2	h	h1	h3	L
JFB-250/2201	250LF	290	296	229.8	324.8	203.8	165.3
	250CF	305	296	259.8	354.8	233.8	165.3

Performance Indicators:

Model	JFB-250/2201	
● Vacuum Parameters		
Ultimate Pressure	< 5 × 10 ⁻⁶ Pa(LF); < 5 × 10 ⁻⁷ Pa(CF);	
Pumping Rate	N2	He
	2050 L/s	1800 L/s
Compression Ratio	>1 × 10 ¹⁰	>1 × 10 ⁴
Maximum Continuous Inlet Pressure	2 Pa	1 Pa
Maximum Continuous Outlet Pressure	200 Pa	100 Pa
Critical outlet pressure	500 Pa	200 Pa

● Physical Parameters		
Inlet flange	DN250 ISO-K(LF) or CF	
Outlet Flange	DN40 ISO-KF, KF50 Optional	
Purge Port	DN16 ISO-KF	
It is recommended to use the backing pump.	16~24 L/s	
Vibration	40 kg ISO -K(LF)	
	45 kg(CF)	
Noise	≤0.05 μm	
Bearing	≤60 dB	
Installation Angle	Grease-lubricated ceramic ball bearing	
Cooling Method	Any Angle	
The magnetic field of the working environment	≤ 3 mT (The maximum is 10 mT, customization is required.)	
Ambient Temperature	Air cooling	5-35°C
	Water cooling	5-40°C
Cooling Water Parameters	Water temperature: 15-25°C;Pressure: 0.15MPa;Flow rate: ≥1.5L/min;	

● Electrical Parameters	
Model of the integrated controller	JFB-III (containJFB-III-A)
Model of the separate controller	JFB-III-B (2U)
Remote control	It can achieve ultra-long-distance control (For specific details, please consult our company's engineers.)
Communication mode	RS485
Power supply voltage	220VAC±10%
Power supply frequency	50/60Hz
Maximum input power	1000W
Power consumption without load	~75W
Start/stop control mode	The controller can be started and stopped by pressing the buttons on the controller / started and stopped by the RS485 controller / started and stopped by the DB15.
Protection function	Overcurrent, overvoltage, undervoltage and overheat protection for the controller, as well as overcurrent, overload and overheat protection for the molecular pump, etc.
Rated rotational speed	24000 r/min±0.1%
Idle rotational speed	16800 r/min±0.1%
Normal operating current parameters	≤1 A

Order Number:

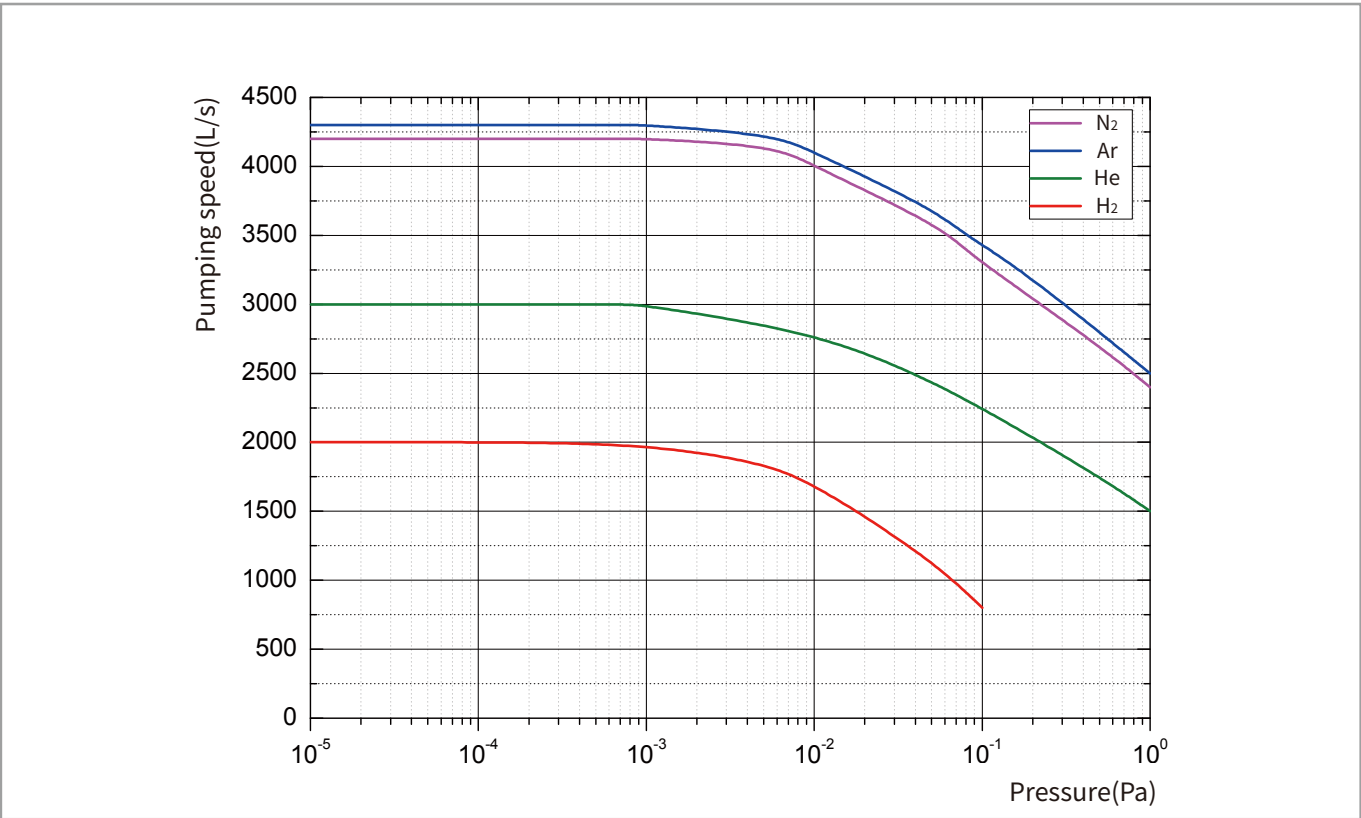
Accessory	Integrated pump		Separate pump	
	LF	CF	LF	CF
Standard product pump	A3141	A3142	A3141-F	A3142-F
Purge Valve Assembly	A3141-A	A3142-A	A3141-FA	A3142-FA
Water cooling assembly	A3141-B	A3142-B	A3141-FB	A3142-FB
Purge valve assembly, Fan assembly	A3141-C	A3142-C	A3141-FC	A3142-FC
Separate controller (2U)	-		A3264	

JFB-400/4201 Composite Molecular Pump



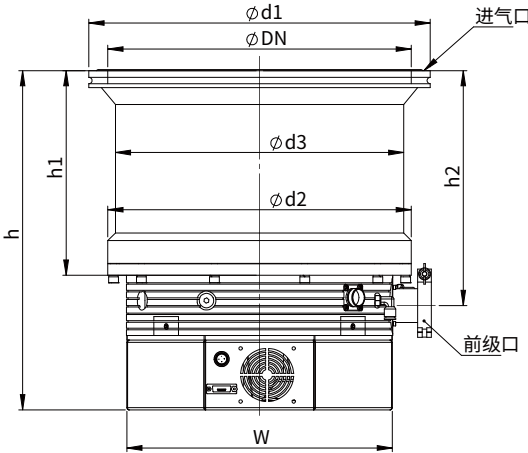
JFB-400/4201(Integrated type) JFB-400/4201(Split type) JFB-VI Split controller

Pumping Speed Curve:



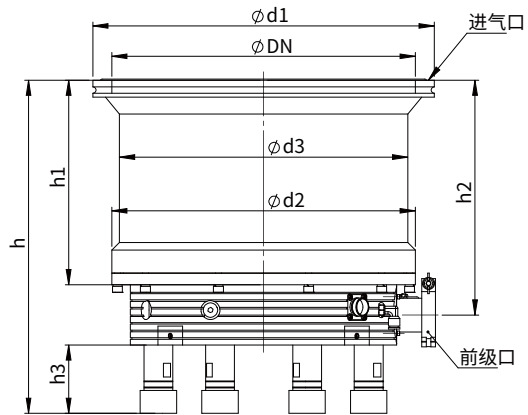
Overall Dimensions:

JFB-400/4201(Integrated pump)



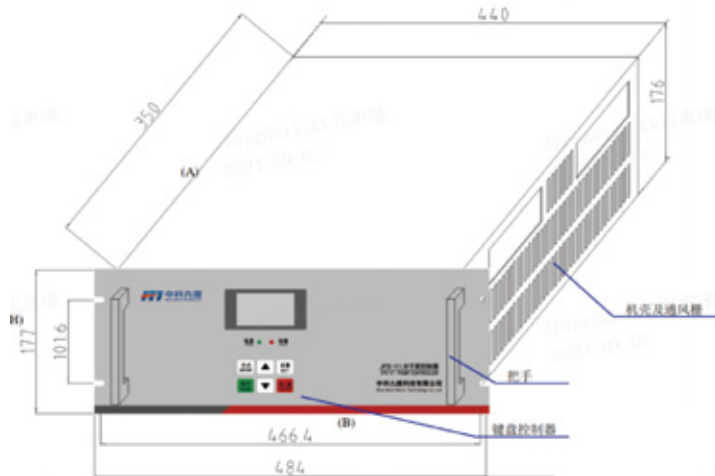
Model	JFB-400/4201
DN	LF400
Ød1	450
Ød2	400
Ød3	380
h	447
h1	269.5
h2	309.5
w	350

JFB-400/4201(Separate pump)



Model	JFB-400/4201
DN	LF400
Ød1	450
Ød2	400
Ød3	380
h	439
h1	269.5
h2	309.5
h3	90

JFB-VI Separate controller



Performance Indicators:

Model	JFB-400/4201	
● Vacuum Parameters		
Ultimate Pressure	<2×10 ⁻⁶ (LF)	
Pumping Rate	N2	He
	4200 L/s	3000 L/s
Compression Ratio	10 ⁸	10 ⁴
Maximum Continuous Inlet Pressure	10 Pa	1.5 Pa
Maximum Continuous Outlet Pressure	300 Pa	200 Pa
Critical outlet pressure	560 Pa	280 Pa

● Physical Parameters		
Inlet flange	DN400 ISO-K(LF)	
Outlet Flange	KF40	
Purge Port	KF16	
It is recommended to use the backing pump.	30~70	
Vibration	~95Kg (Integrated type)	
	~90Kg (Separate type)	
Noise	≤0.25 μm	
Bearing	≤60 dB	
Installation Angle	Precision ceramic bearing	
Cooling Method	Vertical, ±5°	
The magnetic field of the working environment	Radial direction: ≤ 3mT; Axial direction: ≤ 5mT	
Ambient Temperature	5~40°C(Water cooling)	
Cooling Water Parameters	Water temperature: ≤ 20°C; Flow rate: ≥ 3L/min; Pressure: 0.15 Mpa; Interface pipe diameter: 10mm	

● Electrical Parameters		
Form of the controller	Separate type	Integrated type
Model of the controller	JFB-VI(4U Separate type)	JFB-VI-B
Appearance dimensions	440 mm (length) * 350 mm (width) * 177 mm (height)	Regular octagon, with a side length of 350 mm and a height of 90 mm.
Communication mode	RS485	RS485
Power supply voltage	220V AC±10%	220V AC±10%
Power supply frequency	50/60(±5%)	50/60(±5%)
Maximum power	1500W	2200W
Start/stop control mode	Start and stop controlled by the controller buttons / Start and stop controlled by RS485 / Start and stop controlled by external DB15.	
Protection function	Overcurrent, overvoltage, undervoltage and overheat protection for the controller, overcurrent, overload and overheat protection for the molecular pump, as well as protection against external interference.	
Rated rotational speed	18000rpm (300Hz)	
Normal operating current	5.4A	4.5A
Maximum starting current	≤10A	≤12A
Acceleration time	~20min	~20 min
Shutdown time	~30 min	~25 min
Environmental conditions	There should be no corrosive gases and obvious dust particles; Ambient temperature: -10°C to 50°C; Ambient humidity: ≤ 90%; Vibration intensity: ≤ 0.5g	

Order Number:

Accessory	Separate pump	Integrated pump
Standard product pump	A3185	A3187
Purge Valve Assembly	A3185-A	A3187-A
Separate controller (4U)	A3265	