

EVP FB Series Molecular Pump



Introduction:

[FB series molecular pump](#) can obtain clean and ultra-high vacuum pressure without cold trap and oil baffle. EVP can provide three types of molecular pump with distinguished structure as, hybrid molecular pump, turbo molecular pump, and grease lubricated hybrid molecular pump.

Advantage:

For Hybrid Molecular Pump

- 1) High pumping speed and compression ration.
- 2) Being no critical and with no memory effect to pumped gas.
- 3) With clean and high (ultra-high) vacuum without cooling trap and oil flap.

For Turbo Molecular Pump(FB-3600 model)

- 1) High intensity for vane
- 2) Light rotor
- 3) Short start-up time
- 4) Low mechanical consumption
- 5) Long lifetime

For Grease Lubricated Hybrid Molecular Pump

- 1) High stability
- 2) Easy to achieve high vacuum with oil free
- 3) Same advantage with turbo molecular pump

Application:

It can be widely used in variant vacuum technology field like photovoltaic, lighting, aerospace, semi-conductor, energy, military, laser, home electrics, material, automobile, etc.

FB series Hybrid molecular pump & turbo molecular pump

Model		unit	FB-600		FB-1200		FB-1600		FB-3600
High vacuum flange		mm	150CF	160ISO-K	200CF	200ISO-K	250CF	250ISO-K	400 ISO-K
Fore pipe flange		mm	40 KF		40 KF		50 KF		100 ISO-K
Pumping speed		L/s	600		1200		1600		3600
Compression ration	N ²		>10 ⁹		>10 ⁹		>10 ⁹		>10 ⁸
	H ²		>8×10 ³		>1×10 ⁴		>1×10 ⁴		>5×10 ²
Ultimate pressure		Torr	<8×10 ⁻⁸	<5×10 ⁻⁷	<8×10 ⁻⁸	<5×10 ⁻⁷	<8×10 ⁻⁸	<5×10 ⁻⁷	<2×10 ⁻⁶
Rotary Speed		rpm	24000		24000		24000		13500
Vibration value		μm	≤0.1		≤0.1		≤0.15		≤0.15
Start-up time		min	<4.5		<5		<6		<11
Fore pump speed		L/s	4-8		8-15		15		30-70
Cooling method		/	Air / water		Air / water		Air / water		water
Ambient temperature(Air)		°C	≤20		≤20		≤20		/
Cooling water	temperature	°C	≤35		≤35		≤35		≤25
	consumption	L/min	1-2		1-2		1-2		2
Bake-up temperature		°C	<120		<120		<120		<120
Heater	Power	Kw	<250		<300		<350		/
	Input voltage	V	AC220		AC220		AC220		/
Mounting position		/	Vertical ±5°		Vertical ±5°		Vertical ±5°		Vertical±5°
Weight		Kg	25		29		31		100

FB series grease lubricated (hybrid) molecular pump

Model		unit	FB-300		FB-650		FB-1300		FB-1800	
High vacuum flange		mm	100CF	100ISO	150CF	160ISO-K	200CF	200ISO-K	250CF	250ISO-K
Fore pipe flange		mm	25KF		40 KF		40 KF		50 KF	
Pumping speed		L/s	300		650		1300		1800	
Compression ration		N ²	>10 ⁸		>10 ⁹		>10 ⁹		>10 ⁹	
		H ²	>1×10 ³		>8×10 ³		>1×10 ⁴		>1×10 ⁴	
Ultimate pressure		Torr	>3×10 ⁻⁷	>2×10 ⁻⁶	<8×10 ⁻⁸	<5×10 ⁻⁷	<8×10 ⁻⁸	<5×10 ⁻⁸	<8×10 ⁻⁸	<5×10 ⁻⁸
Rotary Speed		rpm	30000		24000		24000		24000	
Bearing		/	Grease lubricated ceramic bearing							
Vibration value		μm	/		≤0.1		≤0.1		≤0.1	
Start-up time		min	<4		<5		<5		<5	
Fore pump speed		L/s	2		4-8		8-15		8-15	
Cooling		/	Air		Water		Water/air		Water/air	
Cooling water	temperature	°C	/		≤20		≤20		≤20	
	Consumption	L/min	/		1		1		1	
Mounting position		/	Any		Any		Any		Any	
Weight		Kg	11		22		27		35	