

Oil-Sealed Rotary Vacuum Pumps

GHD Series GHD-031

Features

- Wide range voltage motor and correspond to CE, cTUVus.
- Magnet coupling for no oil leakage from shaft seal and realized longer lifetime.
- Integrated check valve below the inlet port for backflow prevention.

Applications

- Helium leak detector.
- Analytical equipment. (GC/MS, ICP/MS, LC/MS)
- Laboratory experiment.



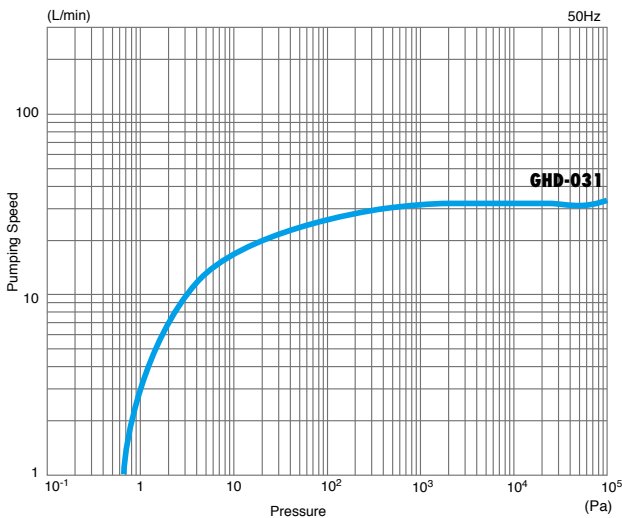
GHD-031

Specifications

Model		GHD-031	
	Unit	50Hz	60Hz
Actual pumping speed	L/min	30	36
Ultimate pressure*	Pa	0.67	
Motor		Single phase, 100 – 120V, 100W, 2P, Capacitor run	
Full load current	A	2.0 (100 – 120V)	1.8 (100 – 120V)
Oil capacity	mL	370	
Recommended oil		R-2	
Weight	kg	9.3	
Inlet port diameter	mm	KF-16	
Ambient temperature	°C	7 – 40	
Overall dimensions	mm	120(W) × 288.5(L) × 163(H)	

* : Ultimate pressure is measured by Pirani gauge.
(In case of macleod gauge, the rate is one digit smaller than this rate.)

Pumping speed curve



Corresponding voltage and Certificate

Model	Voltage	Applicable Volt	CE Marked	TUV Marked	cTUVus Marked
GHD-031	Single phase, 100–120V	Standard	●	●	●
	Single phase, 200–240V	●	●	●	●

* Further details can be referred to our website. Outside drawing appears in Page 34.

Mechanical Booster Pump

MBS Series MBS-052

Features

- Lower power consumption.
- No oil leakage by adoption of magnet coupling.
- Compact size and light weight.
- Pumping can be started from atmospheric pressure.
- Setting of a driver circuit is necessary in 100V system and 200V system.

Applications

- Ideal main pump to support pumping speed of backing pump.



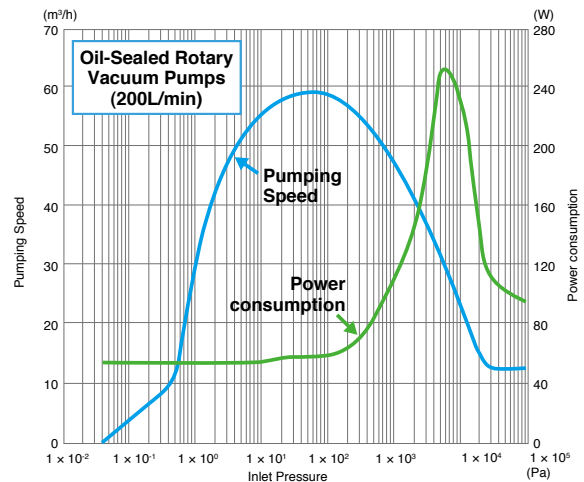
MBS-052

Specifications

Model		Unit	MBS-052
Actual pumping speed*1	m ³ /h		50
Ultimate pressure*2	Pa		4.0 × 10 ⁻²
Motor			DC Brushless motor, 200W
Power supply			Single phase, 100 – 120V / 200 – 240V (50/60Hz)
Motor speed	r/min		3500
Current	A		1.2 (100V)/0.8 (200V) (At ultimate pressure) 4.33 (100V)/2.54 (200V) (At maximum load)
Power consumption	W		50 (At ultimate pressure) 250 (At maximum load)
Oil capacity	mL		50
Recommended oil			SMR-200
Weight	kg		11.0
Inlet pipe diameter			JIS VG-40
Outlet pipe diameter			JIS VF-40
Backing pump			Oil rotary vacuum pump 130 – 200L/min
Ambient temperature	°C		0 – 40
Overall dimensions	mm		167(W) × 410(L) × 130(H)

* 1 : Pumping speed varies depends on pumping speed of backing pump.
* 2 : Measured by ionization vacuum gauge.
Ultimate pressure varies depends on ultimate pressure of backing pump.

Pumping speed curve



* : Significantly increases pumping speed in a pressure range where pumping speed of backing pump often drops.

Corresponding voltage and Certificate

Model	Voltage	Applicable Volt	CE Marked	TUV Marked	cTUVus Marked
MBS-052	Single phase, 100–120V	Standard	●	●	—
	Single phase, 200–240V	Standard	●	●	—