

D08 Flow Control

Micro Vacuum Pump & Compressor



Datasheet



Highlights

- Options for BLDC and BDC motor
- Long service life under max load
- Low electromagnetic interference
- Modular hose connector options
- High vacuum and pressure
- Very compact size
- Industrial-grade reliability
- Good air tightness
- Multiple self-protection
- Compact size

Applications

- Gas sampling
- Medical equipment
- Analytical instruments
- Portable device

12K_{hours}
lifetime test



PERFORMANCE DATA

Model	Voltage (V DC)	Max. Load Current (mA)	Max. Peak Flow rate (mL/min)	Max. Average Flow rate (mL/min)	Max. Vacuum (-kPa)	Max. Pressure (kPa)	
Material Option A	Diaphragm:EPDM	Valves:EPDM	Pump Head: Aluminum alloy	Motor: BLDC			
D08L1-23-0600	12V	≤78	≥210	≥175	≥46	≥80	
Material Option B	Diaphragm:EPDM	Valves:EPDM	Pump Head: Aluminum alloy	Motor: BDC			
D08L1-53-0610	5V	≤190	≥103	≥89	≥45	≥83	

CONFIGURATION OPTIONS

Material Options

Pump Head	LY12 aluminum alloy	
Diaphragm	EPDM	
Valves	EPDM	
Motor	BLDC	BDC gear motor

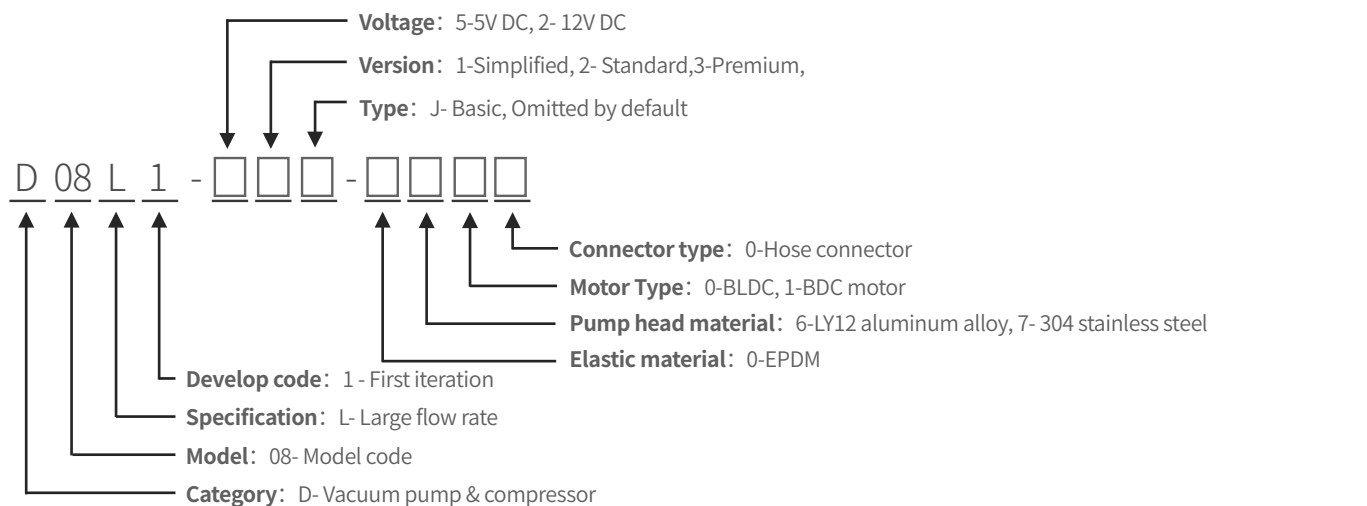
Connector Options

Default copper hose connector/ 304 stainless steel hose connector /

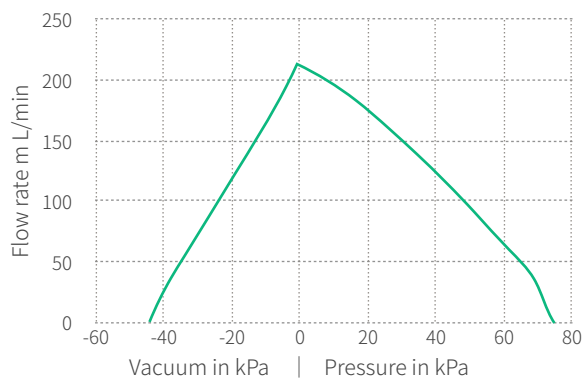
RELIABILITY DATA

Models	D08L equipped with BLDC motor		
Versions	Premium	Standard	Simplified
Fully Loaded Lifetime (hrs)	12000 (Estimated)	/	/
Unloaded Lifetime (hrs)	18000	/	/
Motor Lifetime (hrs)	20000	/	/
Test conditions	In a clean and non-corrosive laboratory, the pump is fully loaded (the outlet is blocked, the inlet is directly connected to the atmosphere) or unloaded (the inlet and outlet are directly connected to the atmosphere), and runs continuously around the clock; ambient temperature: 5℃~33 ℃, relative humidity: 50%-85%, fluctuates with the climate.		
Models	D08L equipped with BDC gear motor		
Versions	Premium	Standard	Simplified
Start and stop times	13000	/	/
Test conditions	The inlet and outlet are directly connected to the atmosphere, the pump works under normal pressure, turn on for 2 minutes, stop for 1 minute, and continuous 24-hour cycle operation in the above-mentioned conditions.		
Working Condition			
Operating temperature	Permissible ambient temperature is 0℃~50℃, it is not suitable to be exposed to the sun, and it should work in a clean and ventilated environmen		
Medium	Permissible temperature of the medium is 5℃~50℃, the transferring gas is allowed to be rich in water vapor, but cannot contain solid particles		
Wetted materials	EPDM, fiber reinforced nylon, tolerance to alcohol, acid, alkali, etc. (except strong acid, concentrated acid, lipids, benzene, gasoline, etc.)		

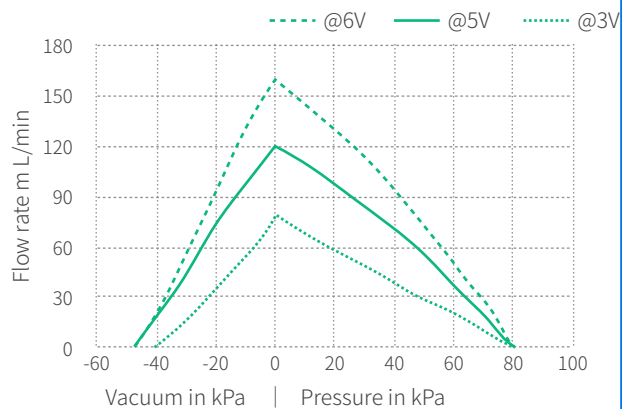
D08 MODEL KEY



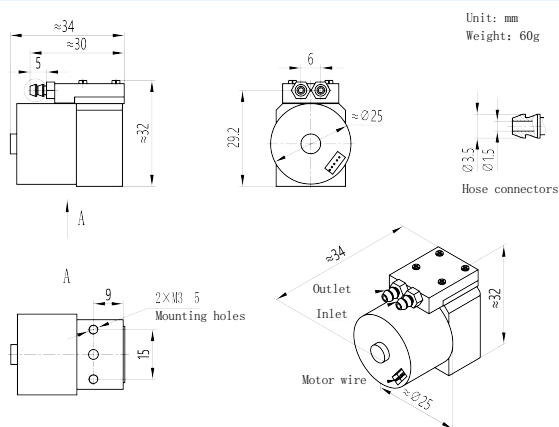
D08L1 EQUIPPED WITH BLDC FLOW CURVE



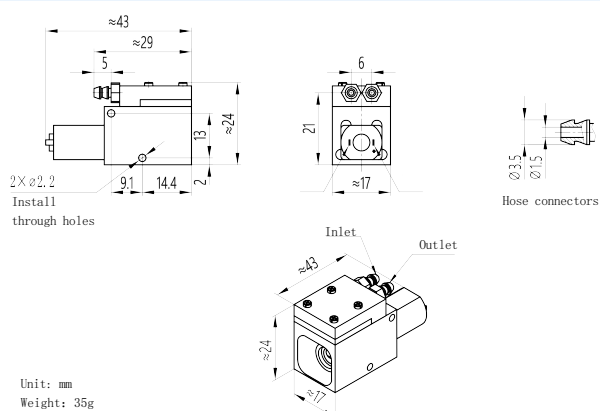
D08L1 EQUIPPED WITH BDC FLOW CURVE



D08L1 EQUIPPED WITH BLDC DIMENSIONS



D08L1 EQUIPPED WITH BDC DIMENSIONS



ACCESSORIES		
Descriptions	Illustration	Function
Shock-isolation mounting feet		Reduce the impact of vibration on the equipment during the operation of the pump. This accessory comes with the some models of pumps*4
Filter		The 80-mesh filter protect both pumps and other upstream instrumentation and hydraulic circuits against particulate, crystals and fibers . It is recommended to replace it regularly. This accessory can be purchased on demand
Check valve		Enhance the cut-off capability of the gas circuit system to ensure one-way gas flow. This accessory can be purchased on demand
Flow stabilizer		Eliminate and reduce pulsation, make gas output smooth and stable, this accessory can be purchased on demand
Manual control valve		It can be used to manually adjust the gas flow rate, pressure and vacuum. This accessory can be purchased on demand
DC power adapter		220V AC to DC switching power supply, this accessory can be purchased on demand
Silencer		It is used to eliminate and reduce the airflow noise caused by pumping operation, this accessory can be purchased on demand



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