



Highlights

- Suitable for Li-ion battery power supply
- Compact size and powerful output
- Low electromagnetic interference
- Excellent corrosion resistance
- Long service life under max load
- Low temperature operation
- Industrial-grade reliability
- Good air tightness
- Driven by BLDC motor
- Compact size

Applications

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

8K hours
lifetime test



PERFORMANCE DATA

Model	Voltage (V DC)	Max. Load Current (mA)	Max. Peak Flow rate (L/min)	Max. Average Flow rate (L/min)	Max. Vacuum (-kPa)	Max. Pressure (kPa)	Weight (g)
Configuration	Motor: Standard BLDC Diaphragm:EPDM Valves:EPDM Pump Head: PA6						
D15L-BL2	12	≤90	≥1.8	≥1.2	≥40	≥40	≈45
D15L-BL5	5	≤220	≥1.8	≥1.2	≥40	≥40	≈45
Configuration	Motor: Type A BLDC Diaphragm:EPDM Valves:EPDM Pump Head: PA6						
D15L-BA2	12	≤150	≥3.0	≥1.6	≥40	≥40	≈43
Configuration	Motor: Coreless DC Diaphragm:EPDM Valves:EPDM Pump Head: PA6						
D15M-DIW	4 (2~5V)	≤200	≥2.2	≥1.1	≥26	≥28	≈39
Configuration	Motor: Brush DC Diaphragm:EPDM Valves:EPDM Pump Head: PA6						
D15L-DC2	12	≤60	≥1.4	≥0.8	≥35	≥35	≈63
D15L-DC5	5	≤150	≥1.4	≥0.8	≥35	≥35	≈64
This parameter is a preliminary calibration parameter before the official release of the product, and may be further revised with subsequent product releases, and is for evaluation and reference only							

CONFIGURATION OPTIONS

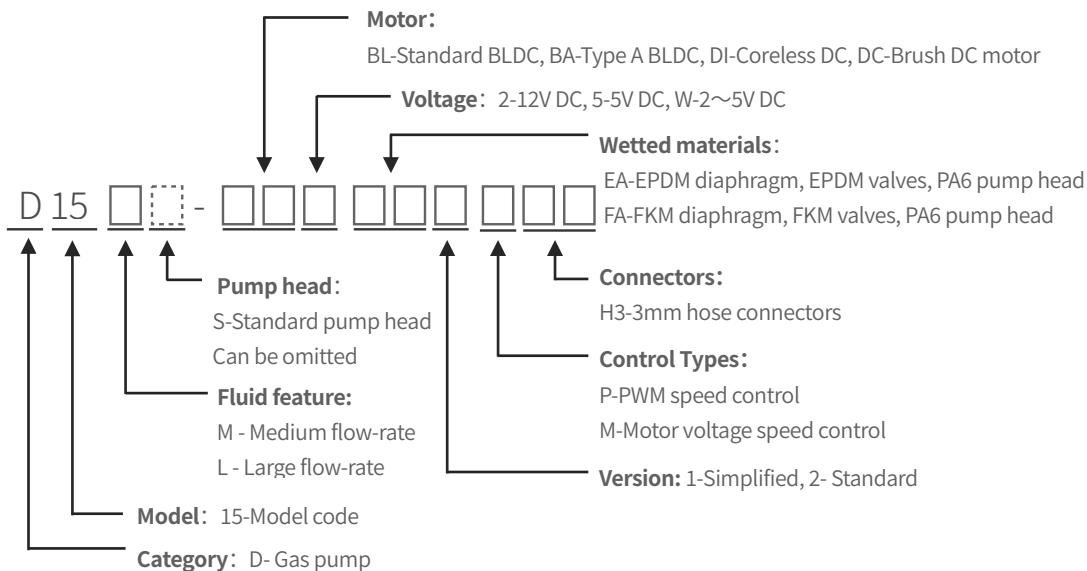
Material Options

Pump Head	Fiber reinforced PA6			
Diaphragm	EPDM	FKM		
Valves	EPDM	FKM		
Motor	BL:Standard BLDC	BA:Type A BLDC	DI:Coreless DC	DC:Brush DC

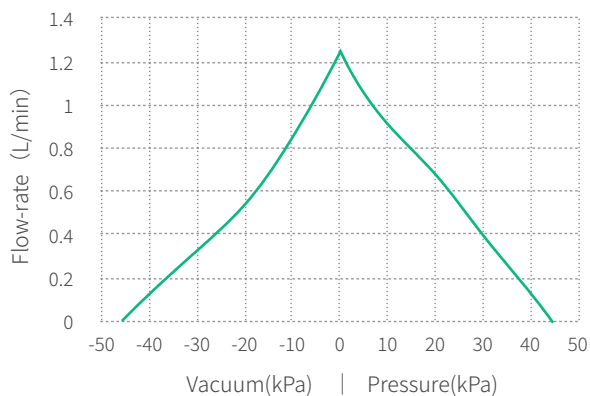
RELIABILITY DATA

Models Versions	D15		
	Simplified with DC Motor	Standard with BL/BA Motor	Standard with DI Motor
Fully Loaded Lifetime (hrs)	2500	8000*	4000*
Unloaded Lifetime (hrs)	3000	12000*	5000*
Motor Lifetime (hrs)	3000	15000*	8000*
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°C~33 °C, relative humidity: 50%-85%, fluctuates with the climate.		
Working Condition			
Operating temperature	Permissible ambient temperature is 0°C~50°C, it is not suitable to be exposed to the sun, and it should work in a clean and ventilated environment The low ambient temperature models can be started and operated at -20°C~0°C The low ambient temperature models with heater can be started and operated at -30°C~0°C		
Medium	Permissible temperature of the medium is 5°C~50°C, 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.)		

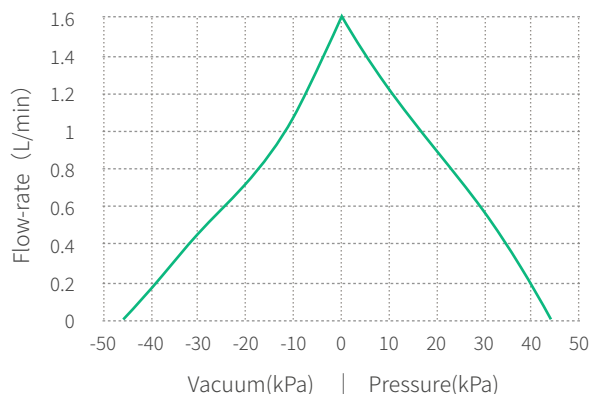
D15 MODEL KEY



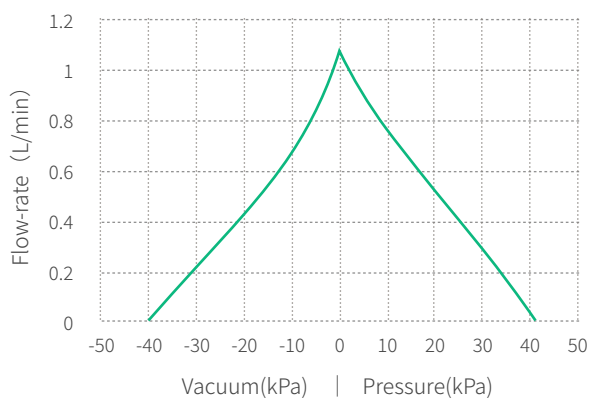
D15L WITH BL MOTOR FLOW-PRESSURE CURVE



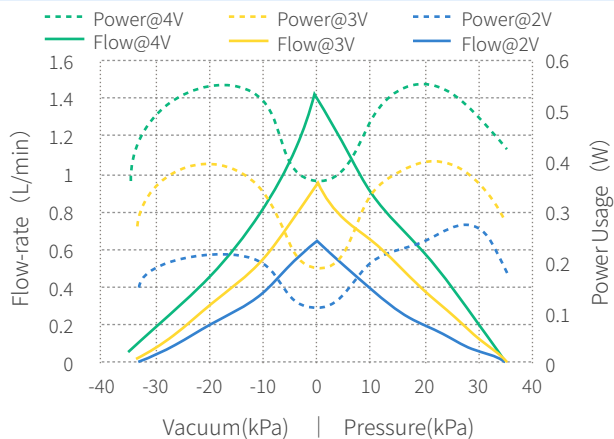
D15L WITH BA MOTOR FLOW-PRESSURE CURVE



D15L WITH DC MOTOR FLOW-PRESSURE CURVE

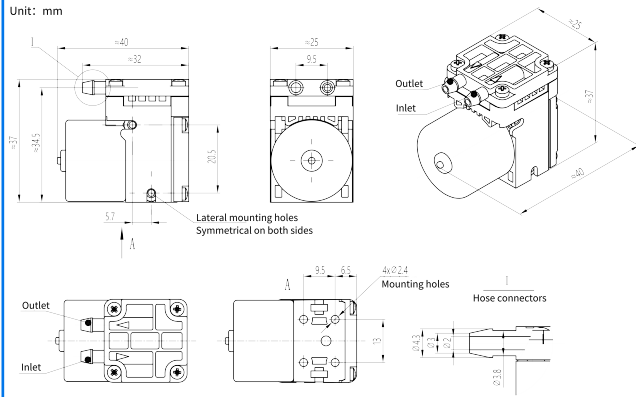


D15L WITH DI MOTOR FLOW-PRESSURE-POWER CURVE



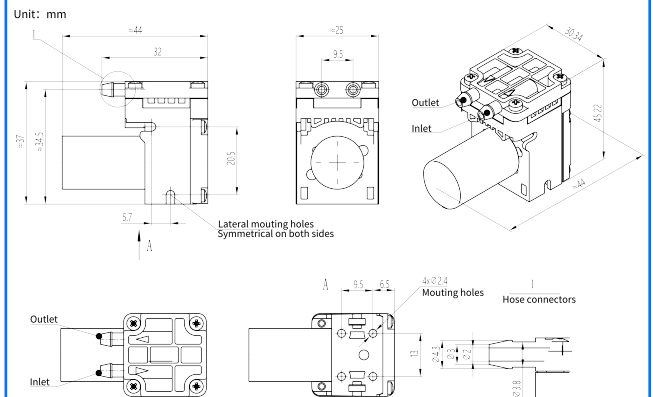
D15 WITH BL/BA BLDC MOTOR DIMENSIONS

Unit: mm



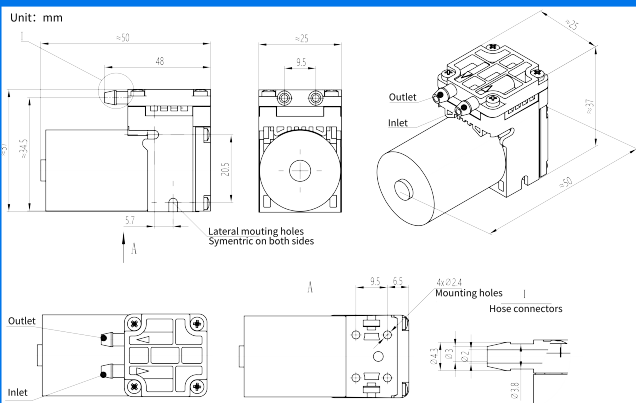
D15 WITH DI CORELESS MOTOR DIMENSIONS

Unit: mm



D15 WITH DC MOTOR DIMENSIONS

Unit: mm



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 pump*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 comes with the pump*1
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



To be a driving force in innovation of human fluid technology

Create value for customers by offering high quality fluid solutions

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