



Highlights

Applications

- Portable Instruments
- Laboratory
- Medical equipment
- Analytical instruments

8K hours
lifetime test



PERFORMANCE DATA

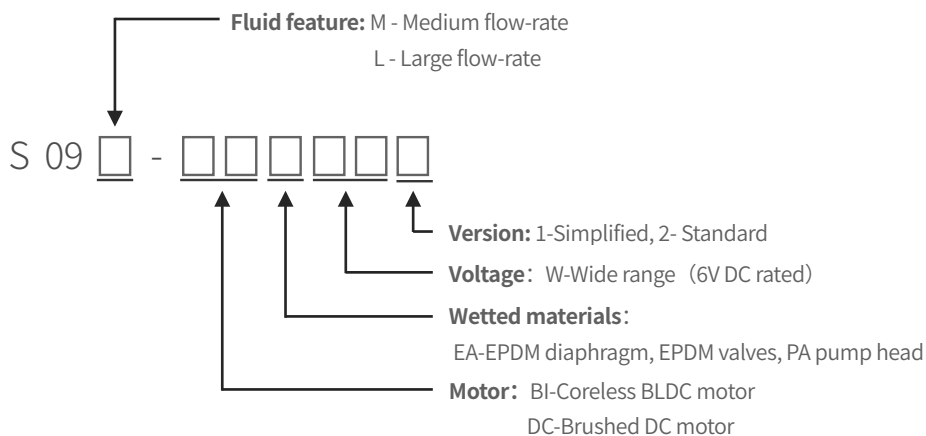
Model	Voltage (V DC)	As Liquid Pump				As Gas Pump		
		Max. Load Current (A)	Free Flow Rate (mL/min)	Max. Pressure (kPa)	Suction Height (mH2O)	Max. Gas Flow rate (mL/min)	Max. Vacuum (-kPa)	Max. Pressure (kPa)
S09M-BIWEA2	6V(3~6V DC)	0.25	400	80	2	450	19	28
S09S-DCWEA1	6V(1~6V DC)	0.20	350	40	1	250	10	15
	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	S09M	S09S	
Pump Head	PA6	PA6	
Diaphragm	EPDM	EPDM	
Valves	EPDM	EPDM	
Motor	Coreless BLDC	Brushed DC	
Connector Options			
	Hose connector for 2*4mm hose		

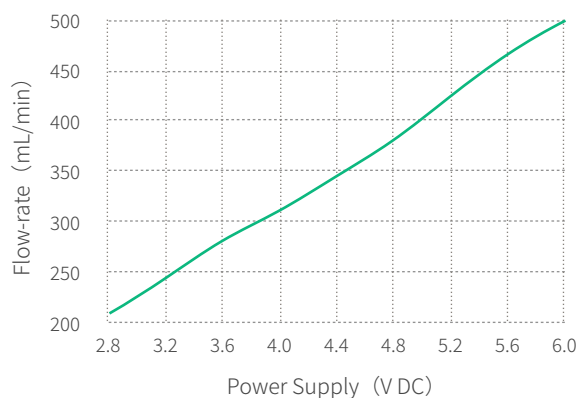
RELIABILITY DATA			
Models	D09S	D09M	
Versions	Simplified Equipped with DC motor	Standard Equipped with BI Coreless motor	
Fully Loaded Lifetime （hrs）	3000*	6000*	
Unloaded Pumping Lifetime （hrs）	5000*	8000*	
Motor Lifetime （hrs）	6000	10000	
Test conditions	In a clean and non-corrosive laboratory, at 5V power supply, the pump is fully loaded (pumping water at the highest rated pressure) or unloaded (continuous pumping water), and runs continuously around the clock; ambient temperature: 5℃～33℃, relative humidity: 50%-85%, fluctuates with the climate. *Represents design life target, actual product life is being tested		
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 liquid medium is 5℃～50℃ and gaseous media is 0℃～50℃ , the transferring gas cannot contain solid particles or oil mist. It is not allowed to pump oily liquid and high viscosity liquid.		
Wetted materials	EPDM, PA as default, a wide range of corrosion-resistant materials are available. tolerance to alcohol, acid, alkali, etc. (except strong acid, concentrated acid, lipids, benzene, gasoline, etc.)		

SKU List	
Model	Description
S09M-BIWEA2	Medium flow, equipped with wide voltage coreless brushless DC motor, quality version is standard
S09S-DCWEA1	Small flow, equipped with wide voltage DC brush motor, the quality version is simplified
	For more other configurations, materials and quality options, please contact us

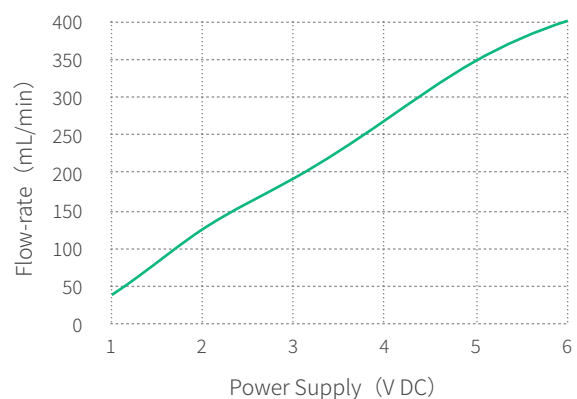
S09 MODEL KEY



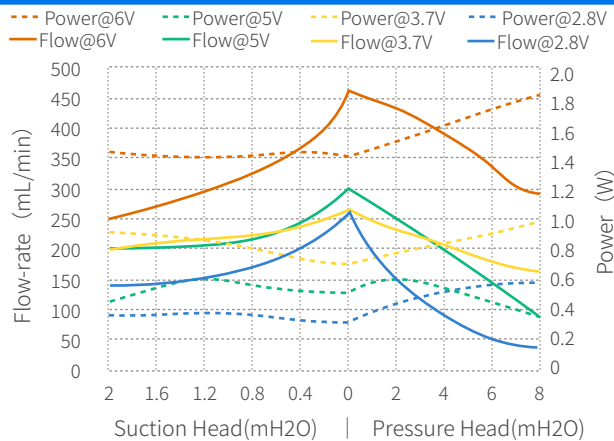
S09M WITH BI CORELESS BLDC MOTOR FLOW CURVES



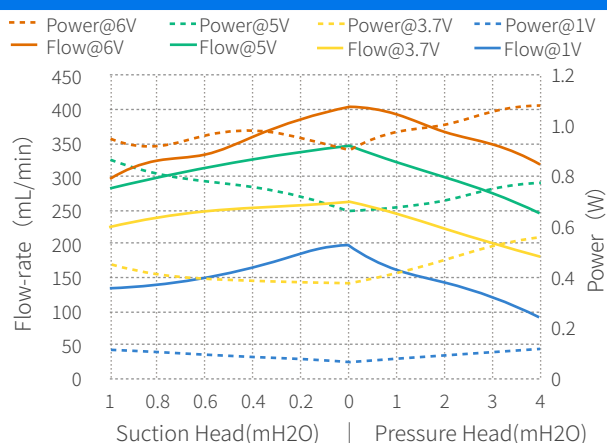
S09S WITH BRUSHED DC MOTOR FLOW CURVES



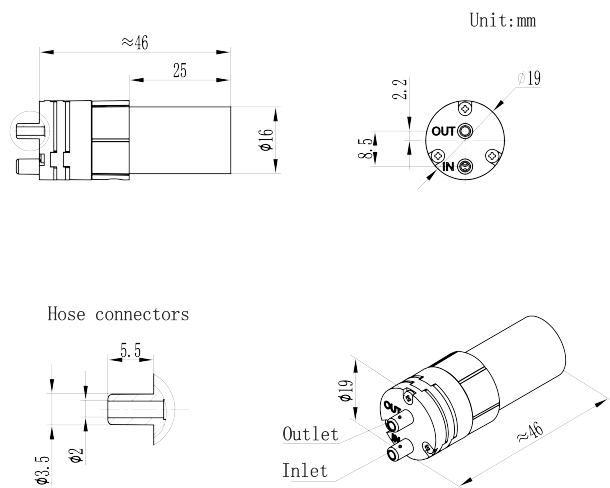
S09M WITH BI CORELESS BLDC MOTOR FLOW-PRESSURE-POWER CURVES



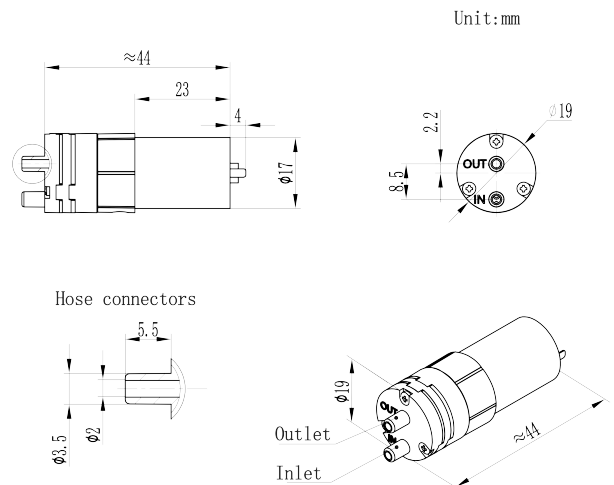
S09S WITH BRUSHED DC MOTOR FLOW-PRESSURE-POWER CURVES



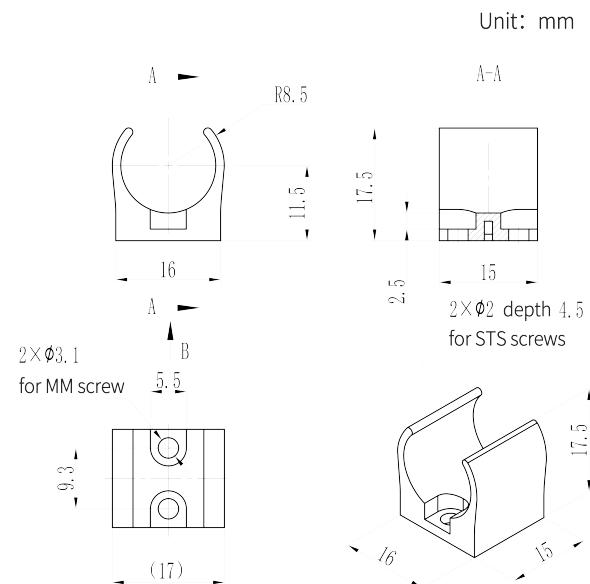
S09M WITH BLDC MOTOR DIMENSIONS



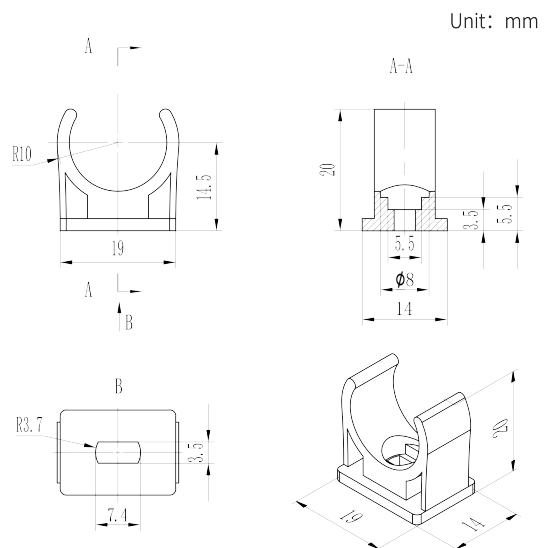
S09S WITH DC MOTOR DIMENSIONS









S09M INSTALLATION BRACKET DIMENSIONS



S09S INSTALLATION BRACKET DIMENSIONS



ACCESSORIES		
Descriptions	Illustration	Function
Mounting bracket		After the micro pump is snapped into the bracket, the pump can be installed using screws. This accessory is available for purchase on demand.
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
Back pressure relief valve		Back pressure safety valve, when the back pressure exceeds the safety range, it will open to relieve the pressure to protect the the liquid system and the pump from overpressure damage . This accessory is available for purchase 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



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