

# S15 Flow Control

## Micro Diaphragm Liquid Pump



### Datasheet



### Highlights

- Suitable for Li-ion battery power supply
- Built-in working condition indicator
- Dry running, maintenance free
- 3.2-6V wide voltage power supply
- Long service life under max load
- Driven by BLDC motor
- Industrial-grade reliability
- Multiple self-protection
- Compact size
- Self-priming

### Applications

- Laboratory
- Medical equipment
- Analytical instruments
- Printing

10K<sub>hours</sub>  
lifetime test



### PERFORMANCE DATA

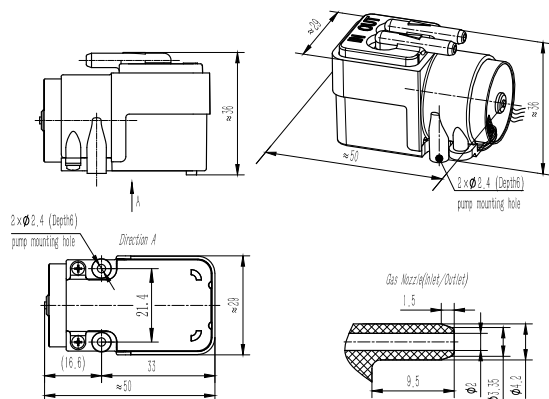
Model	Voltage (V DC)	As Gas Pump			As Liquid Pump		
		Max. Average Flow rate (L/min)	Max. Vacuum (-kPa)	Max. Load Current (mA)	Free Flow Rate (mL/min)	Max. Load Current (mA)	
Material Option A	Diaphragm:EPDM	Valves:EPDM	Pump Head: Fiber reinforced PA6				
S15S	5	≥0.2	≥14	≤280	≥20	≤350	
S15M	12	≥0.2	≥15	≤100	≥210	≤150	
Material Option B	Diaphragm:FKM	Valves:FKM	Pump Head: Fiber reinforced nylon				

PERFORMANCE DATA				
Model	Max. Suction Height (mWg)	Flow Rate@ Max. Suction Height	Max. Pressure Heigh (mWg)	Flow Rate@ Max. Pressure Height
S15S	1.8m	15mL/min	4m	5mL/min
S15M	1.8m	90mL/min	4m	30mL/min

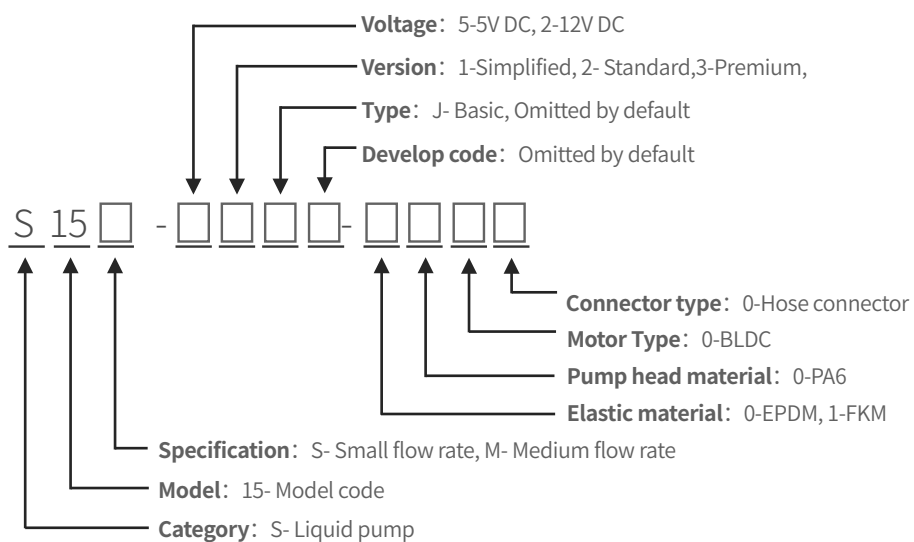
CONFIGURATION OPTIONS	
Material Options	
Pump Head	Fiber reinforced PA6
Diaphragm	EPDM
Valves	EPDM
Motor	BLDC

RELIABILITY DATA				
Models	S15S S15M			
Versions	Simplified	Standard	Premium	
Fully Loaded Lifetime (hrs)	3500	6000	10000	
Unloaded Lifetime (hrs)	8000	12000	18000	
Motor Lifetime (hrs)	10000	15000	20000	
Test conditions	In a clean and non-corrosive laboratory, the pump is fully loaded (continuous pumping water) 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 environmen			
Medium	Permissible temperature of the liquid medium is 5°C~50°C and gaseous media is 0°C~50°C , 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, fiber reinforced nylon, tolerance to alcohol, acid, alkali, etc. (except strong acid, concentrated acid, lipids, benzene, gasoline, etc.)			

## S15 DIMENSIONS



## S15 MODEL KEY



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



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