S23 Micro Diaphragm Liquid Pump



Datasheet

Highlights						Appli	cations
 Can be used to tra Driven by high-end Dry running, main Long service life u 	d BLDC motor tenance free nder max load		 Industrial-gr Multiple self Compact siz Self-priming 	-protection e	ty 10K H lifetime t	• La • Me • An hours	inting boratory edical equipment alytical instruments
		ļ	As Gas Pump		As Liqui	id Pump	
Model	Voltage (V DC)	Max. Load Current (mA)	Max. Average Flow rate (L/min)	Max. Vacuum (-kPa)	Max. Load Current (mA)	Free Flow Rate (L/min)	
Material Option A	Diaphragm:EP	DM Valves:EP[OM Pump He	ad: Fiber rein	forced PA6		
S23L	12	≤170	≥0.95	≥15	≤250	≥0.4	
Material Option B	Diaphragm:FK	M Valves:FKM	Pump Head:	Fiber reinford	ced PA6		
S23L	12	≤170	≥0.7	≥15	≤250	≥0.45	

Note: The input voltage requires $12V\pm10\%$

PERFORMANCE DATA						
Model	Configuration	Max. Suction Height (mWg)	Flow Rate@ Max. Suction Height	Max. Pressure Heigh (mWg)	Flow Rate@ Max. Pressure Height	
S23L-2_J-0000	EPDM+BLDC type A	1.4	250	1.2	200	
S23L-2_J-0020	EPDM+BLDC type B	1.4	135	1.2	180	
S23L-2_J-1020	FKM+BLDC type B	1.5	250	1.3	300	

CONFIGRATION O	CONFIGRATION OPTIONS		
Material Options			
Pump Head	Fiber reinforced PA6		
Diaphragm	EPDM	FKM	
Valves	EPDM	FKM	
Motor	BLDC Type A	BLDC Type B	

Models	S23L				
Versions	Simplified	Premium			
Fully Loaded Lifetime(hrs)	2500	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 $0^{\circ}C \sim 50^{\circ}C$, 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.)				



S23 DIMENSIONS



S23 MODEL KEY



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	Contraction of the second	Eliminate and reduce pulsation, make gas output smooth and stable, this accessor 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 deman
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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