

Compact Peristaltic Pump

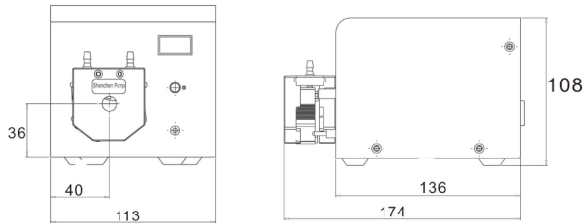
SP-MiniPump



Features

- 304 stainless steel housing, resisting corrosion, space-saved.
- OLED screen, display the current motor speed and working status.
- Digital knob control speed, toggle switch control direction and start/stop.
- Various external control functions, support RS485 standard MODBUS protocol.

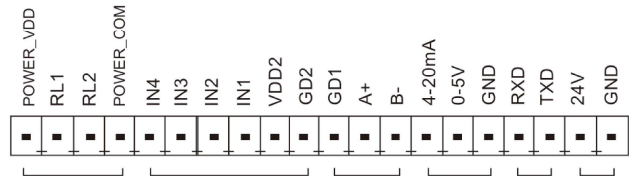
Dimension Drawing (Unit: mm)



Model Number

SP-MiniPump01, SP-MiniPump02

External Control Schematic Diagram



Technical Specifications

Flow rate range	0.0024~190 mL/min	Communication interface	RS485 support MODBUS protocol (RTU mode)
Speed range	0.1~300 rpm, reversible.	Power supply	24V/1A DC power
Speed resolution	0.1rpm	Drive dimension	136×113×108 mm (L×W×H)
Speed control	Digital knob control speed	Weight	1.64 kg
Motor type	Stepper motor	Power consumption	< 15 W
Display	OLED display	Condition temperature	0-40°C
External control	Start/stop control (switch signal)	Relative humidity	< 80%
	0-5V, 4-20mA(standard), 0-10V (optional)	IP rate	IP31

SP-MiniPump Speed/Flow Rate Reference

Rotation Speed (rpm)	Dual Channel Flow Rate (mL/min) and Tubing (1 mm wall thickness)				
	ID 1 mm	ID 2 mm	ID 2.5 mm	ID 3 mm	
5	0.25	0.90	1.28	1.78	
10	0.49	1.84	2.59	3.52	
15	0.74	2.76	3.85	5.30	
25	1.25	4.57	6.43	8.80	
40	2.00	7.31	10.25	14.02	
50	2.52	9.14	12.78	17.47	
75	3.76	13.64	19.04	26.12	
100	5.03	18.17	25.42	35.34	
200	10.12	36.45	51.27	71.44	
250	12.63	45.75	64.34	88.35	
300	15.01	54.63	76.84	108.39	

Rotation Speed (rpm)	Single Channel Flow Rate (mL/min) and Tubing (1.6 mm wall thickness)				
	13° Tubing ID 0.8 mm	14° Tubing ID 1.6 mm	19° Tubing ID 2.4 mm	16° Tubing ID 3.1 mm	25° Tubing ID 4.8 mm
5	0.12	0.56	1.26	1.97	3.26
10	0.26	1.15	2.53	3.90	6.41
15	0.39	1.74	3.80	5.80	9.52
25	0.66	2.88	6.31	9.59	15.74
40	1.08	4.59	10.11	15.29	25.15
50	1.34	5.69	12.62	18.96	31.14
75	2.00	8.54	18.93	28.36	46.55
100	2.73	11.37	25.27	37.66	61.98
200	5.46	22.76	50.82	76.02	124.14
250	6.81	28.40	65.39	95.08	153.63
300	8.28	33.88	77.23	114.31	190.00