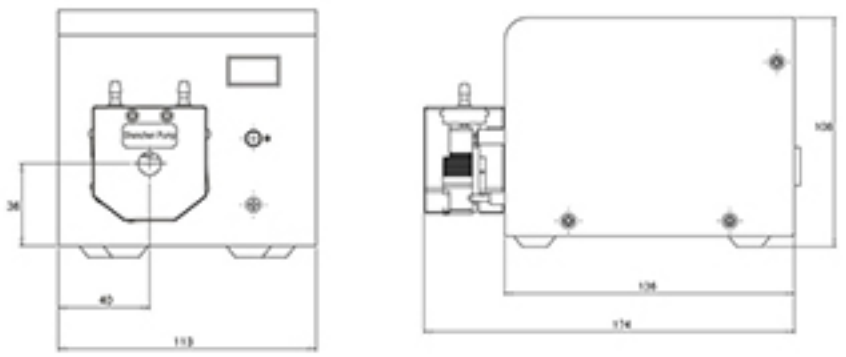
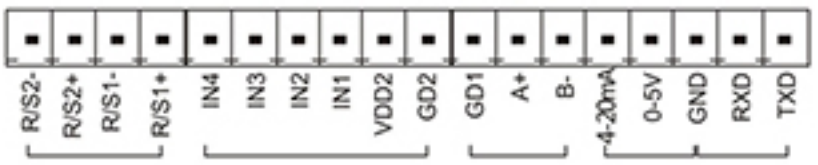
Compact Peristaltic Pump

SP–MiniPump

Installation Sizes Drawing (Unit: mm)



External Control Schematic Diagram



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.

Model Number

- SP–MiniPump01
- SP–MiniPump02

Technical Specifications

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

EM-MiniPump and SP-MiniPump speed/flow rates reference

Rotation speed (rpm)	Dual channel Flow rates (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 rates (mL/min) and tubing (1.6 mm wall thickness)			
	13# Tubing ID 0.8 mm	14# Tubing ID 1.6 mm	16# Tubing ID 3.1 mm	25# Tubing ID 4.8 mm
5	0.12	0.56	1.97	3.26
10	0.26	1.15	3.90	6.41
15	0.39	1.74	5.80	9.52
25	0.66	2.88	9.59	15.74
40	1.08	4.59	15.29	25.15
50	1.34	5.69	18.96	31.14
75	2.00	8.54	28.36	46.55
100	2.73	11.37	37.66	61.98
200	5.46	22.76	76.02	124.14
250	6.81	28.40	95.08	153.63
300	8.28	33.88	114.31	190.00