



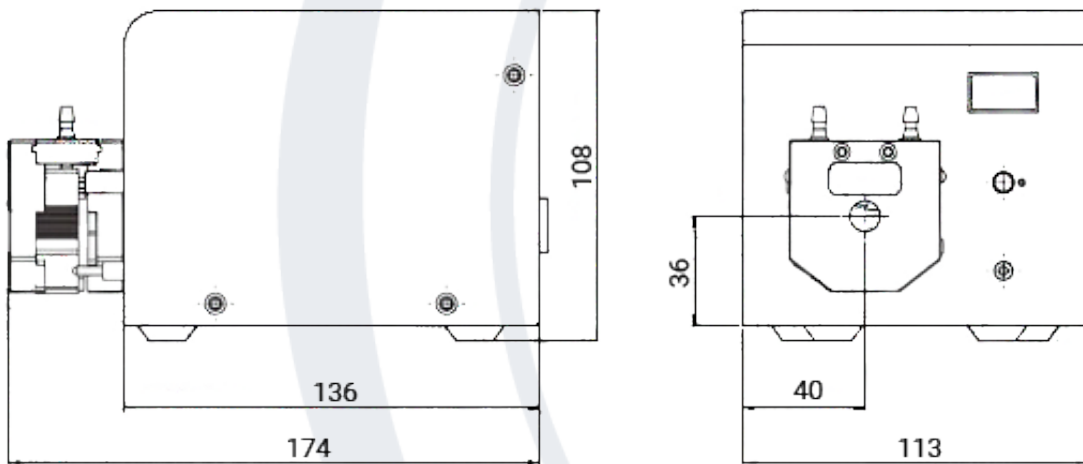
Product Introduction

- 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

HF-SP-MiniPump01, HF-SP-MiniPump02

Dimensiones (unidad: mm)



Dimension Drawing (Unit: mm)



HF-SP-MiniPump

- Technical Specifications

Flow rate range	0,0024190 ml/min	Communication inerface	RS485 support MODBUS protocol (RUT mode)
Speed range	0,1~300 rpm, reversible	Power supply	24V/1A DC power
Speed resolution	0,1 rpm	Drive dimension	174x113x108mm (LxWxH)
Speed control	Digital knob control speed	Weight	1,64 kg
Motor type	Stepper motor	Power consumption	<15W
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

- HF-SP-MiniPump Speed/Flow Rate Reference

Rotation Speed (rpm)	Dual Channel Flow Rate (ml/min) and Tubing 1mm 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 1.6mm wall thickness				
	13# Tubing ID 0.8mm	114# Tubing ID 1.6mm	19# Tubing ID 2.4mm	16# Tubing ID 3.1mm	25# Tubing ID 4.8mm
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	18,93	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