

## Tubing Installation Procedure



A. Turn the knob anticlockwise 180°, open the upper block.



B. Put the tube between rollers and upper block, tighten up the tubing lightly.



C. Turn the knob clockwise 180°, put the upper block back to original position, fasten the tube.

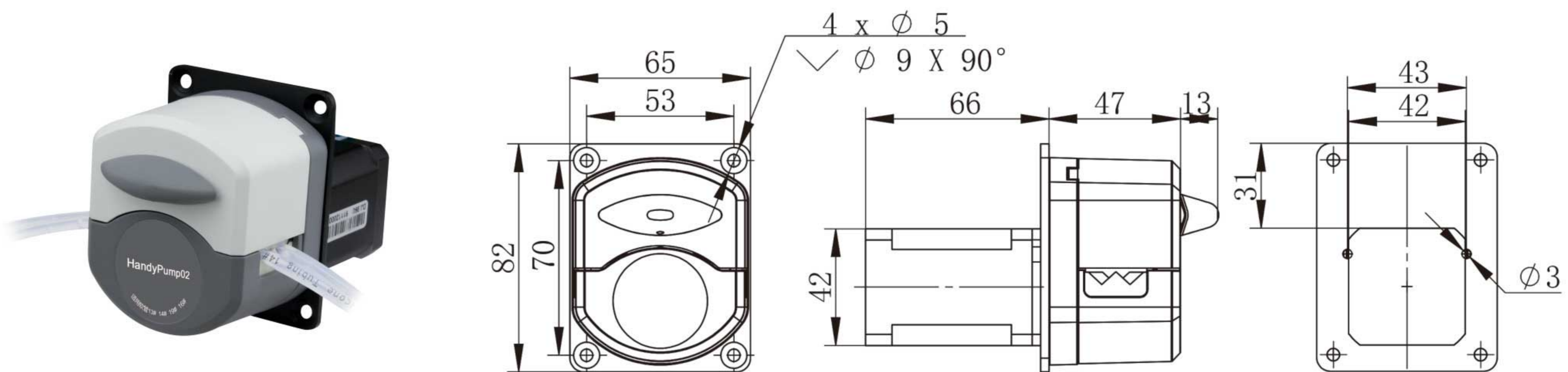
Pump Head	Channel number	Tubing	ID×Wall thickness(mm)	mL / r	Speed(rpm)	Flow Rate(mL/min)	Weight(kg)
HandyPump01	Single channel	13 <sup>#</sup>	0.8 × 1.6	0.033	0.1~300	0.0033~10.03	0.224
		14 <sup>#</sup>	1.6 × 1.6	0.187		0.0187~56.09	
		19 <sup>#</sup>	2.4 × 1.6	0.371		0.0371~111.17	
		16 <sup>#</sup>	3.1 × 1.6	0.636		0.0636~190.76	
		25 <sup>#</sup>	4.8 × 1.6	1.219		0.1219~365.69	
HandyPump02	Dual channel	13 <sup>#</sup>	0.8 × 1.6	0.033	0.1~300	0.0033~10.03	0.224
		14 <sup>#</sup>	1.6 × 1.6	0.187		0.0187~56.09	
		19 <sup>#</sup>	2.4 × 1.6	0.371		0.0371~111.17	
		16 <sup>#</sup>	3.1 × 1.6	0.636		0.0636~190.76	

## OEM Product

### Easy Load Pump Head Series HandyPump01 HandyPump02

OEM-HYB001(42-60 stepper motor)

Dimension Drawing(Unit: mm)



### OEM-HYB001 Technical Specifications

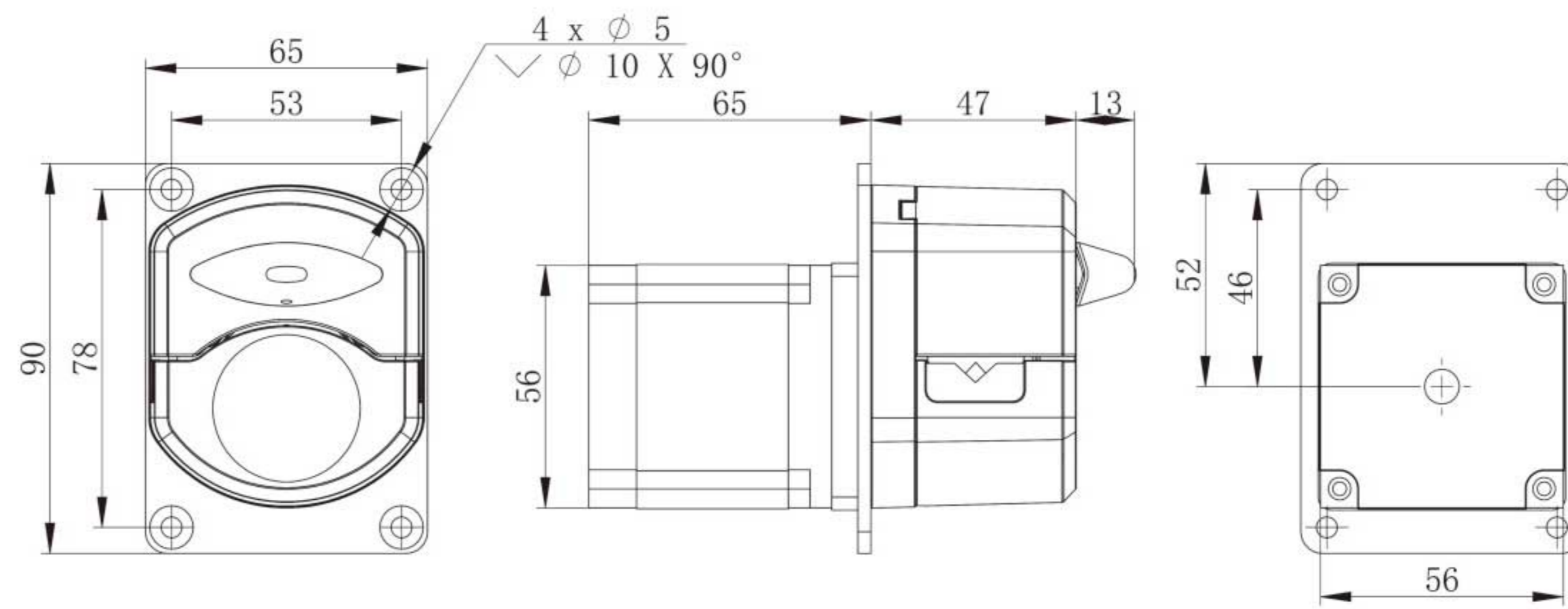
Speed range	0.1-300rpm	Motor step angle	1.8°
Flow rate range	0.0033-365.69mL/min	Motor phase voltage	3.6V
Motor type	42 stepper motor	Motor phase current	1.7A
Motor phase number	2	Working environment	0-40°C, 80%RH



### OEM-HYB101(57stepper motor)



Dimension Drawing(Unit: mm)



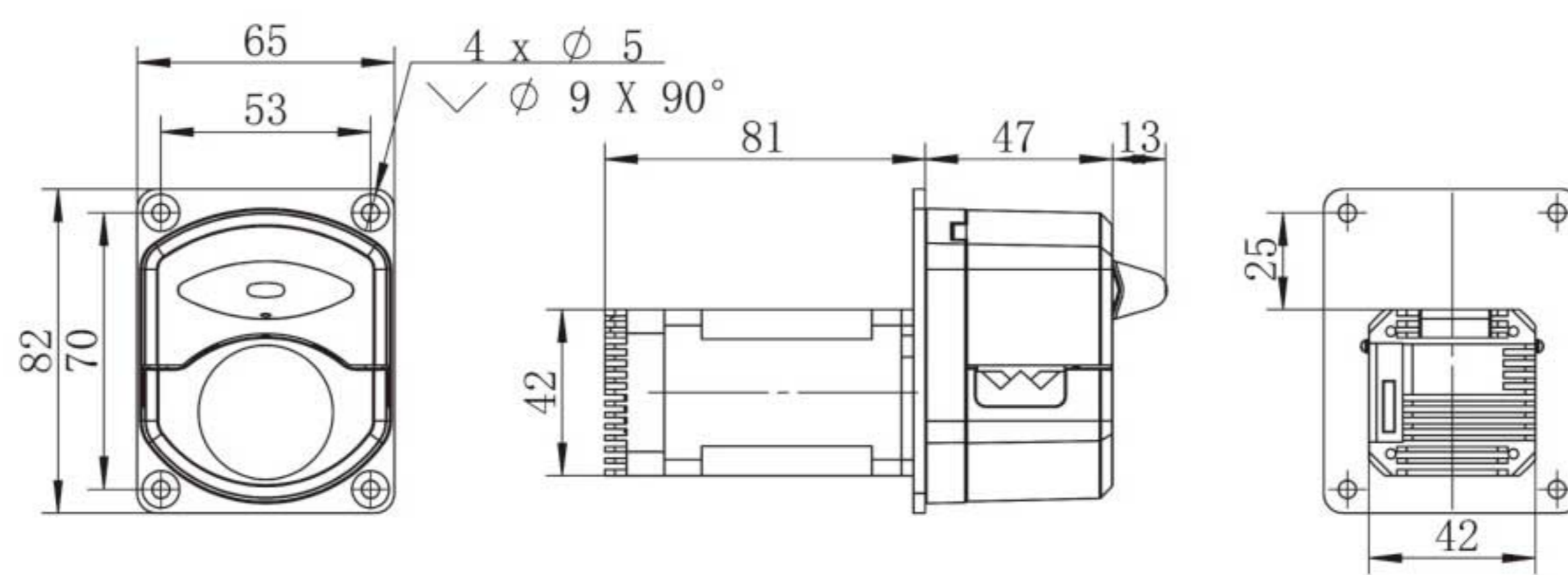
### OEM-HYB101 Technical Specifications

Speed range	0.1-300rpm	Motor step angle	1.8°
Flow rate range	0.0033-365.69mL/min	Motor phase voltage	3.3V
Motor type	57stepper motor	Motor phase current	3.0A
Motor phase number	2	Working environment	0-40°C, 80%RH

### OEM-HYB006(stepper motor)



Dimension Drawing(Unit: mm)



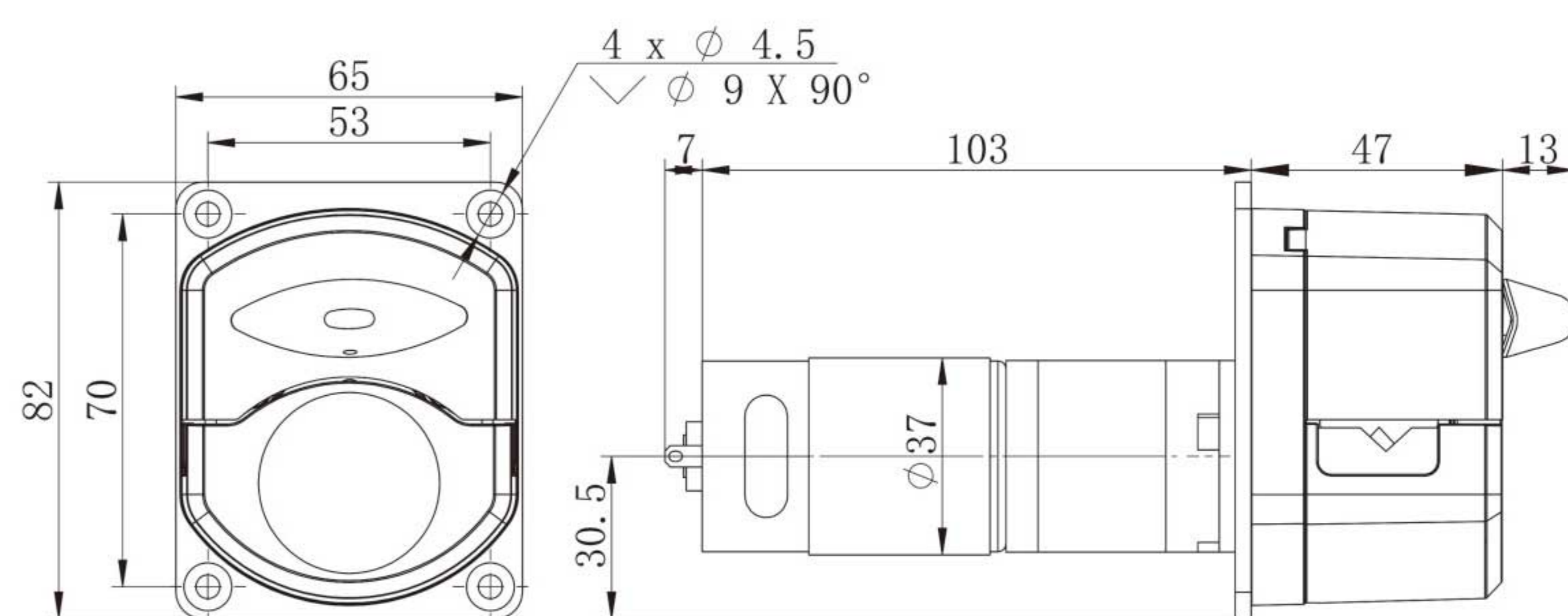
Model No.	OEM-HYB003/004/005
Speed range	0.1-300 rpm
Flow rate range	0.0033-365.69mL/min
Outer control	Passive switch signal control start/stop and direction
Speed control	OEM-HYB003: External potentiometer speed control 4-20mA OEM-HYB004: External potentiometer speed control 0-5V OEM-HYB005: External potentiometer speed control 0-10V
Motor type	42 stepper motor
Power supply	DC 24V, ≥48W
Working environment	0-40°C, 80%RH

OEM-HYB006/007 Technical Specifications		OEM-HYB009 Technical Specifications		OEM-HYB010 Technical Specifications	
Speed range	0.1-300 rpm	Speed range	0.1-300 rpm	Speed range	0.1-300 rpm
Flow rate range	0.0033-365.69mL/min	Flow rate range	0.0024-190mL/min	Flow rate range	0.0024-190mL/min
Speed control	External input pulse frequency speed control	Speed control	Preset speed or serial port control	Speed control	Adjust speed by internal potentiometer
Subdivision settings	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128	Subdivision settings	1/16	Subdivision settings	1/16
Motor type	42 stepper motor	Motor type	42 stepper motor	Motor type	42 stepper motor
Power supply	DC 24V, ≥48W	Power supply	DC 24V, ≥48W	Power supply	DC 24V, ≥48W
Working environment	0-40°C, 80%RH	Working environment	0-40°C, 80%RH	Working environment	0-40°C, 80%RH

### OEM-HYZ Series(DC planetary gear motor)



Dimension Drawing(Unit: mm)



### OEM-Z series Technical Specifications

Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
OEM-HYZ001	37 DC planetary gear motor	DC24V/4A	30	100	≤ ±10%	0-40°C, 80%RH
OEM-HYZ002				200		
OEM-HYZ003				300		
OEM-HYZ101	37 DC planetary gear motor	DC12V/5A		100		
OEM-HYZ102				200		
OEM-HYZ103				300		

