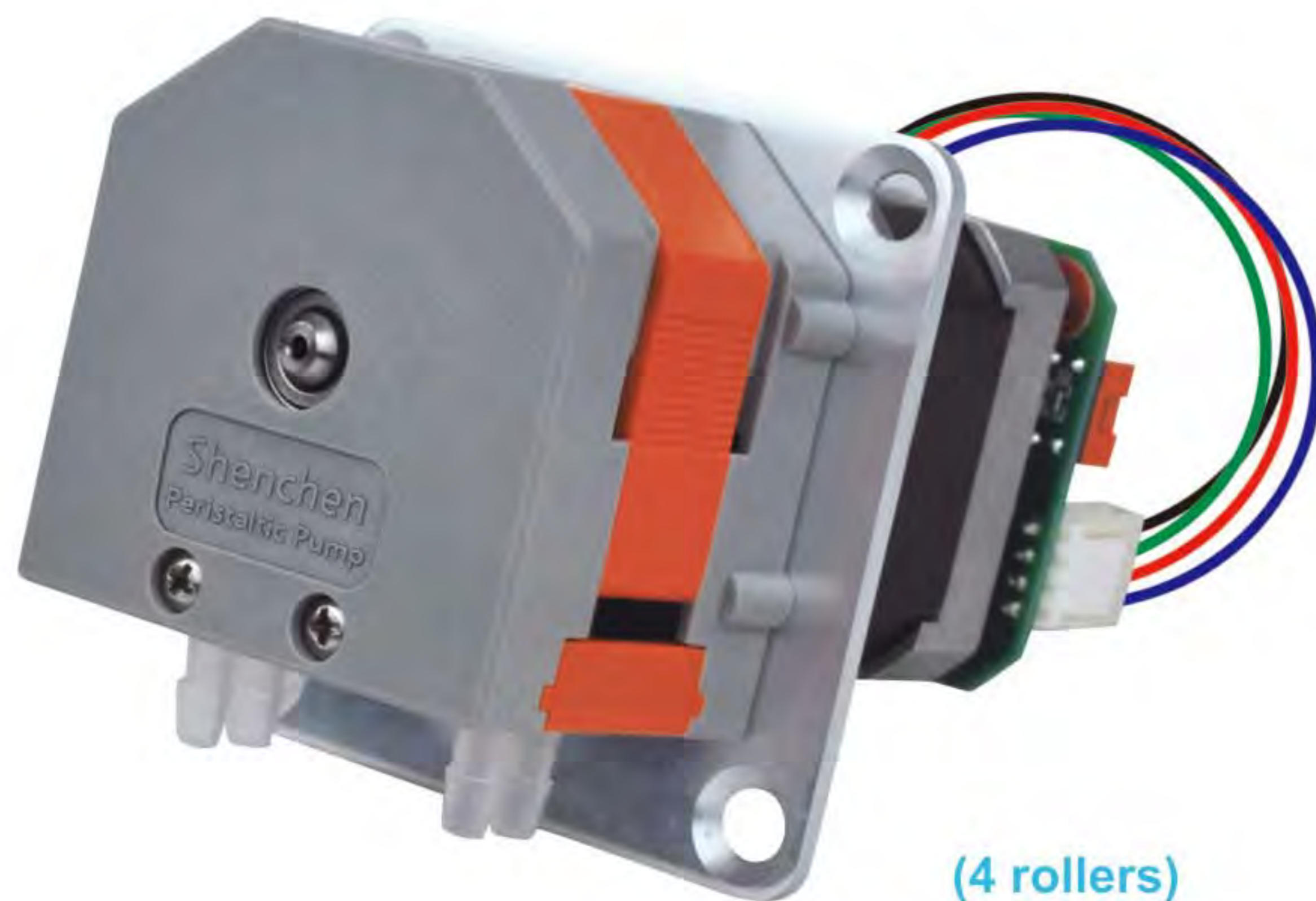
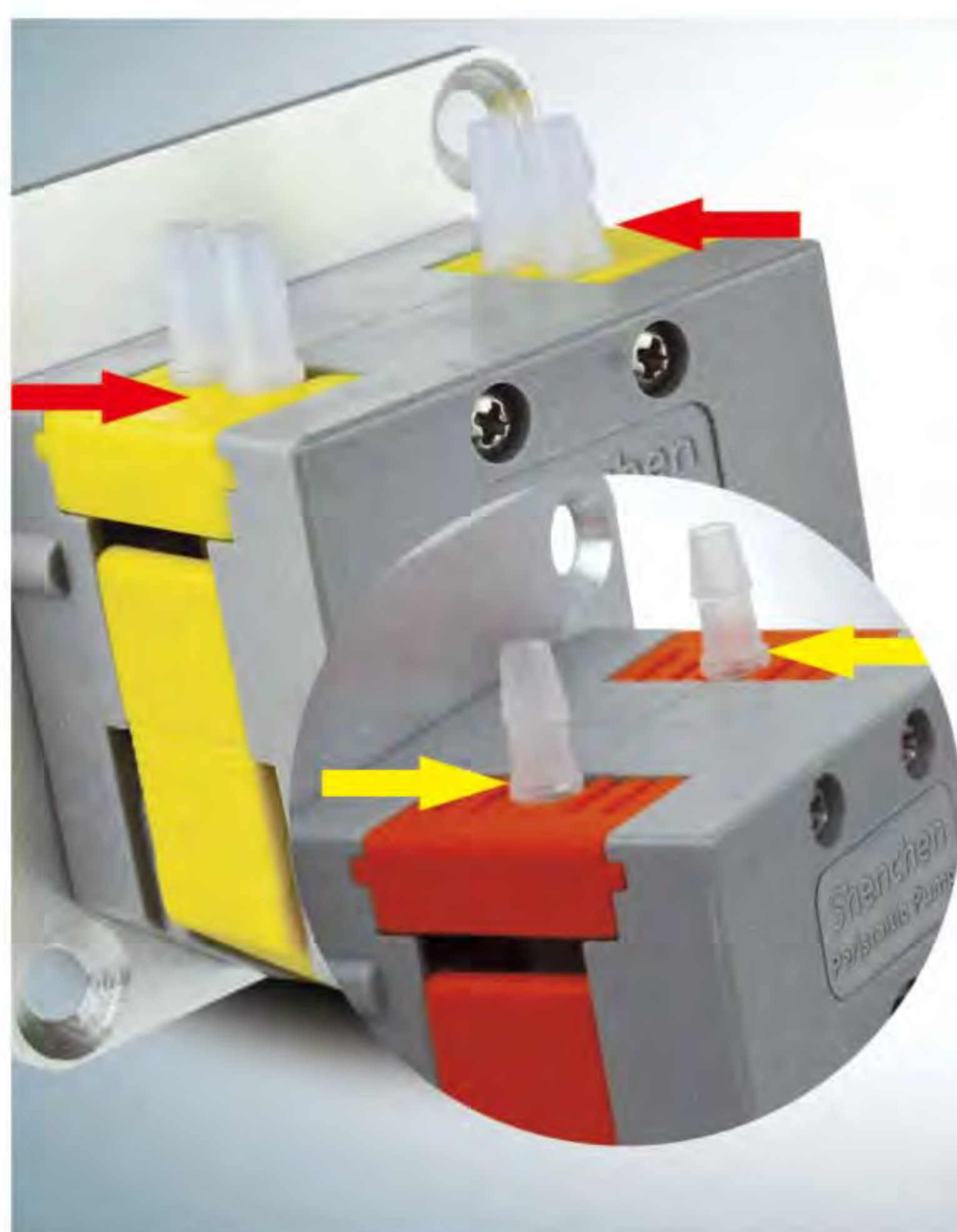


## Compact Pump Head

### MiniPump Series



(4 rollers)



#### Connection type installation hose

Standard fast plug ,  
convenient for  
external connection  
with different  
materials of the  
tube, **flexible  
application , cost  
saving.**

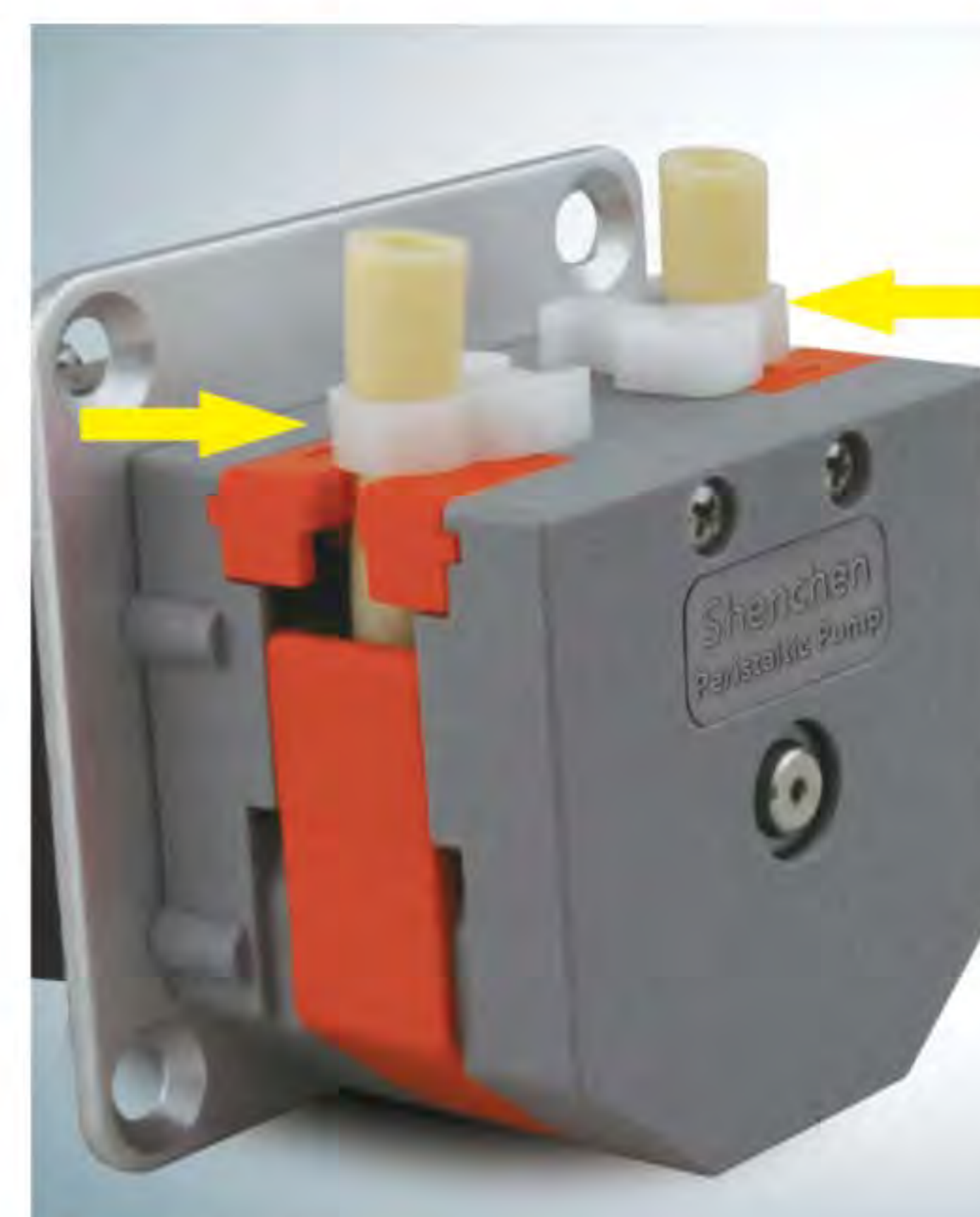
### Product Introduction

Minipump series products which adopt compact and embedded design are more suitable for supporting a variety of instruments and equipments. Single and dual channel are optional. It accepts 8 kinds of tubing. Flow rates are 0.0024-190 mL/min. PharMed BPT long-life tubing from French Saint-Gobain is installed in internal part of pump head. Applicable motors for Minipump are stepper motor, DC motor, AC motor and other modes to drive with wide applications.



Soft tube  
connect to  
hard tube

Supporting conversion connector (soft  
tube transfer hard tube), connect directly  
with a variety of hard tubes.



#### Install hose without connector

1. Adopt special  
hygienic grade  
tube, The whole  
tube is installed.
2. No connection  
simplifies design  
to **prevent leakage  
and pollution risk.**

### Features

- | Attractive appearance, compact structure.
- | Easy to operate and economical cost.
- | Accept many kinds of motors to drive.
- | Supply several colors of appearance, ideal for supporting analytical instruments.

### Typical Application

- | Discharge condensate water in the flue gases survey meter.
- | Support biochemistry analytical instruments.

## Tubing Installation Procedure

A. Make the two tubing  
clamps align the slide  
way of pump head two  
sides.



B. Ensure that the tubing  
is in the middle of rollers,  
and push the clamps into  
the pump head.



C. Make the compression  
block align the upper slide  
way of pump head.



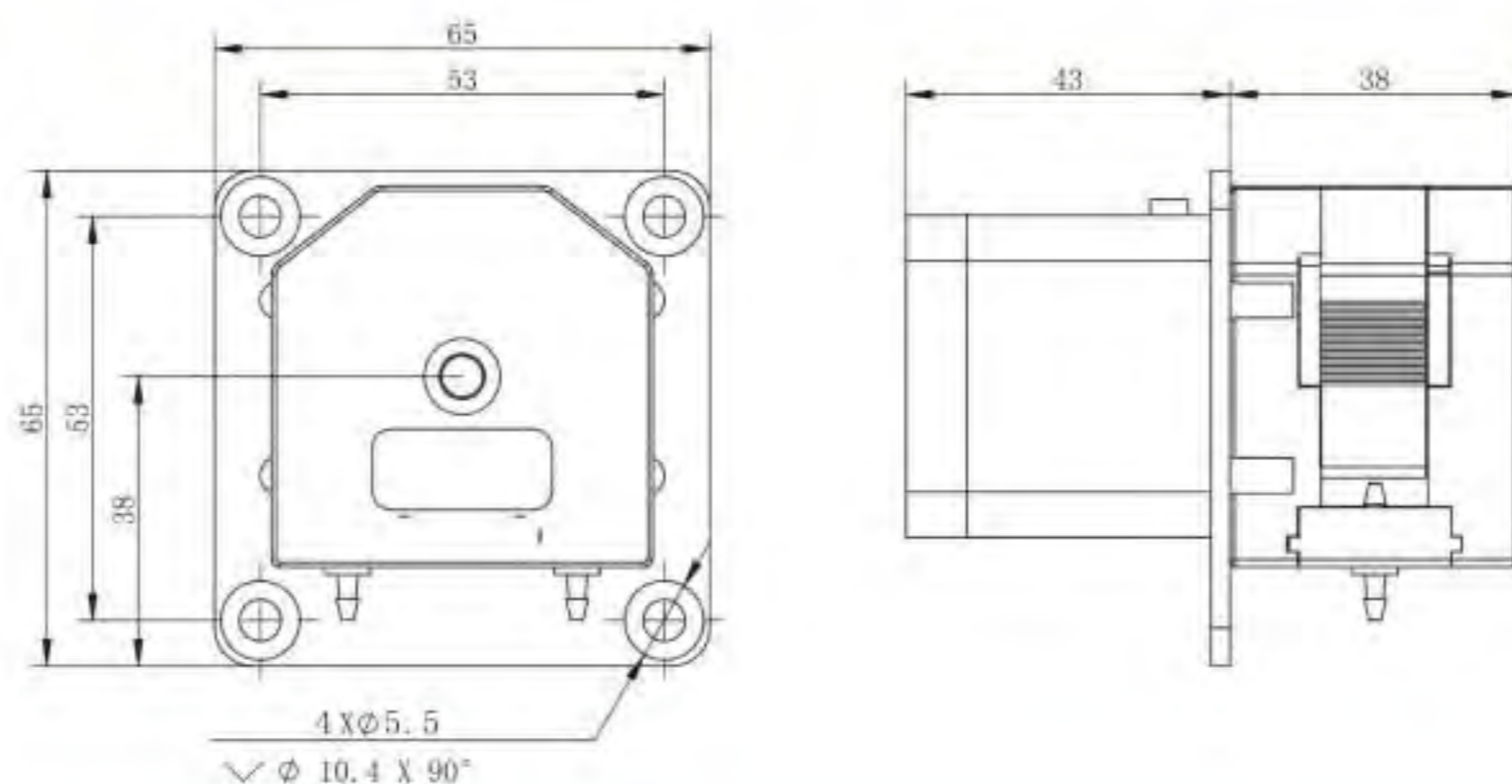
D. Press the compression  
block into the pump head,  
and ensure it fixed.



**OEM-B01**



Dimension Drawing(Unit: mm)



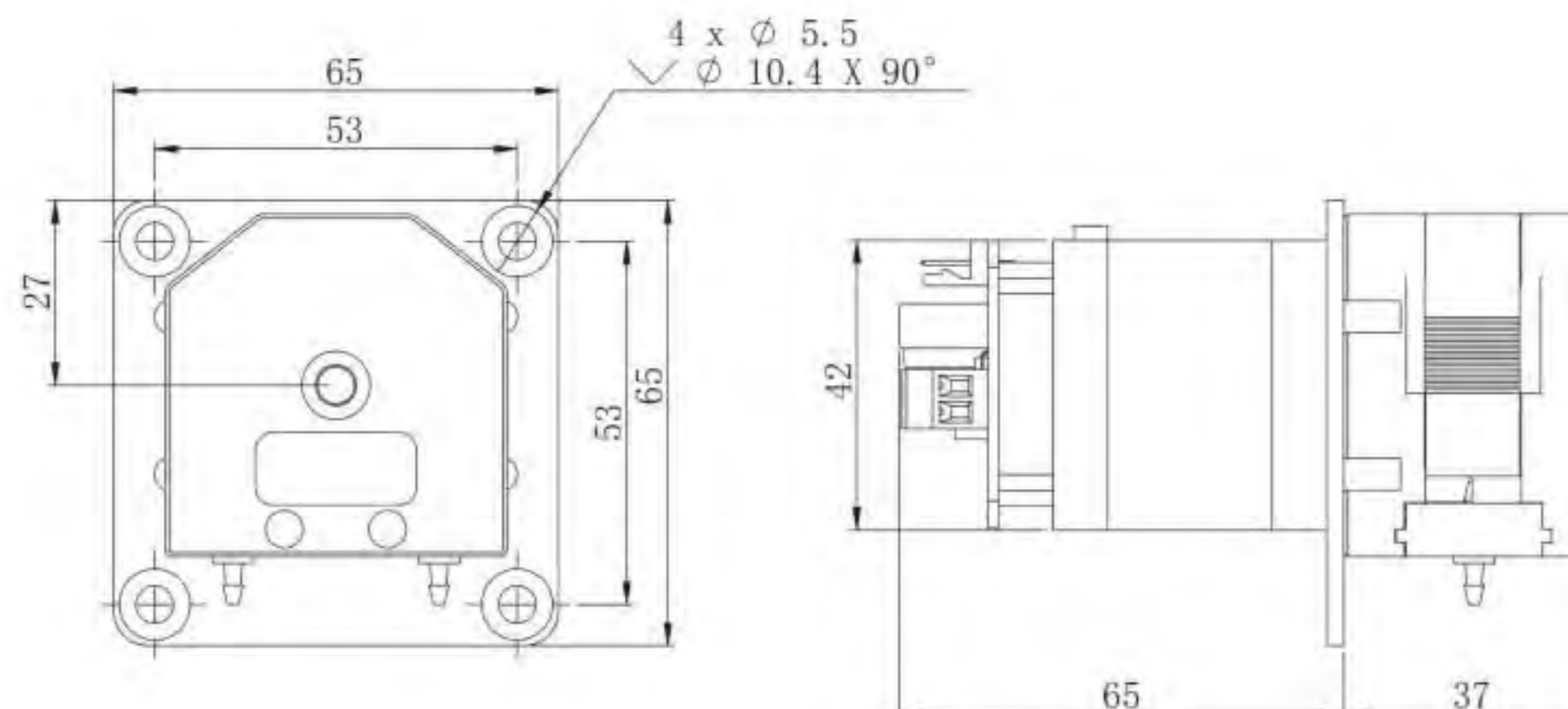
**OEM-B01 Technical Specifications**

Speed range	0.1-300 rpm
Flow rate range	190mL/min
Motor type	42 stepper motor
Motor phase number	2
Motor step angle	1.8°
Motor phase voltage	2.2V
Motor phase current	1.0A
Working environment	0-40°C, 80%RH

**OEM-B02, OEM-B039/OEM-B040, OEM-B022**



Dimension Drawing(Unit: mm)

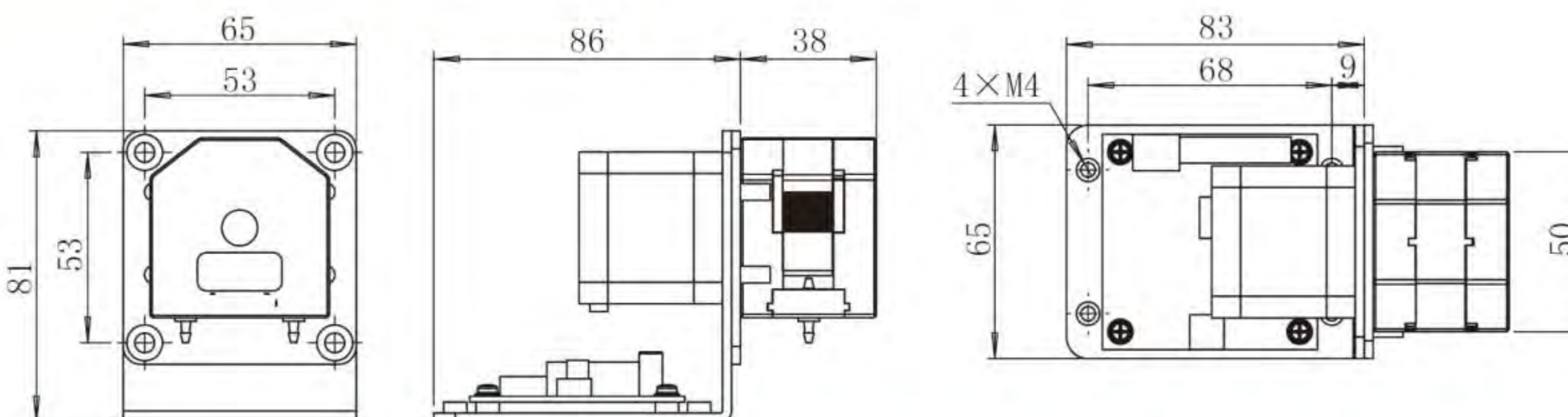


OEM-B02 Technical Specifications		OEM-B039/B040 Technical Specifications		OEM-B022 Technical Specifications	
Speed range	0.1-300 rpm	Speed range	0.1-300 rpm	Speed range	0.1-300 rpm
Flow rate range	0.0024-190mL/min	Flow rate range	0.0024-190mL/min	Flow rate range	0.0024-190mL/min
Speed control	Preset speed or serial port control	Speed control	External input pulse frequency speed control	Speed control	Adjust speed by internal potentiometer
Subdivision settings	1/16	Subdivision settings	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128	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-B013**



Dimension Drawing(Unit: mm)

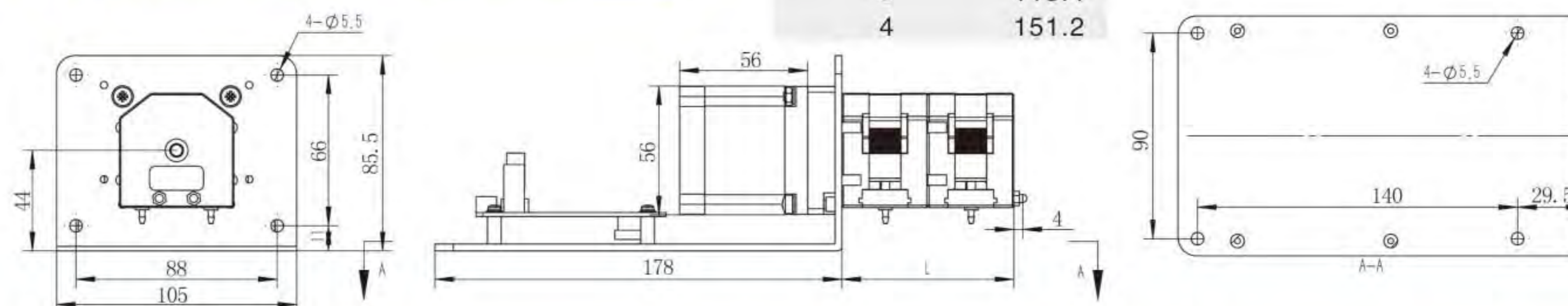


OEM-B013 Technical Specifications			
Speed range	0.1-300rpm	Address setting	1-32
Flow rate range	0.0024-190mL/min	Motor type	42 stepper motor
Speed control	Communication control	Power supply	DC 24V, ≥48W
Communication interface	RS232,RS485 interface modbus protocol, control start/stop, direction and speed	Working environment	0-40°C, 80%RH

**OEM-B136, OEM-B137**



Dimension Drawing(Unit: mm)



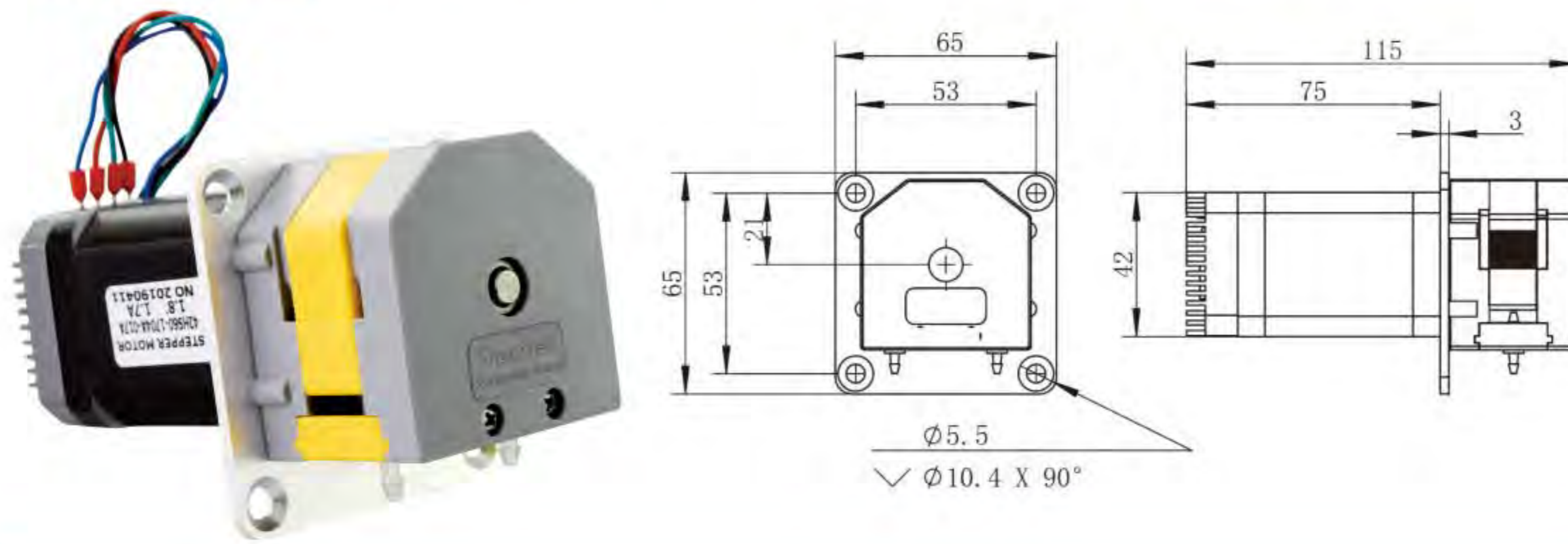
Pump Head NO.	L
2	75.6
3	113.4
4	151.2

OEM-B136 Technical Specifications		OEM-B137 Technical Specifications	
Speed range	0.1-300 rpm	Speed range	0.1-300 rpm
Flow rate range	0.0024-190mL/min	Flow rate range	0.0024-190mL/min
Speed control	Preset speed and manual control	Speed control	Pulse frequency speed control
Control mode	External passive signal level (normally closed or open) mode; control the start/stop of direction	Logic input voltage	5V, 12V, 24V(default 5V)
Display(optional)	0.96" OLED screen	Multiple segments	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Motor type	57 stepper motor	Motor type	57 stepper motor
Power supply	DC 24V, ≥150W	Power supply	DC 24V, ≥150W
Working environment	0-40°C, 80%RH	Working environment	0-40°C, 80%RH



**OEM-B047 OEM-B048  
OEM-B049**

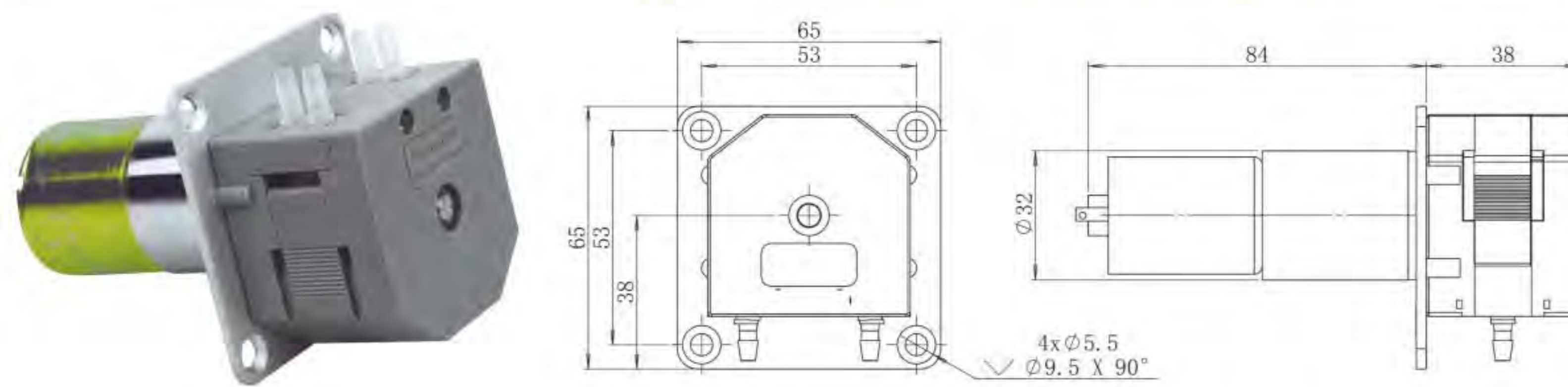
**Dimension Drawing(Unit: mm)**



Model No.	OEM-B047/OEM-B048/OEM-B049
Speed range	0.1-300 rpm
Flow rate range	0.0024-190mL/min
Outer control	Passive switch signal control start/stop and direction
Speed control	OEM-B047: External potentiometer speed control 0-5V OEM-B045: External potentiometer speed control 0-10V OEM-B046: External potentiometer speed control 4-20mA
Motor type	42 stepper motor
Power supply	DC 24V, ≥48W
Working environment	0-40°C, 80%RH

**OEM-MZ Series**

**Dimension Drawing(Unit: mm)**

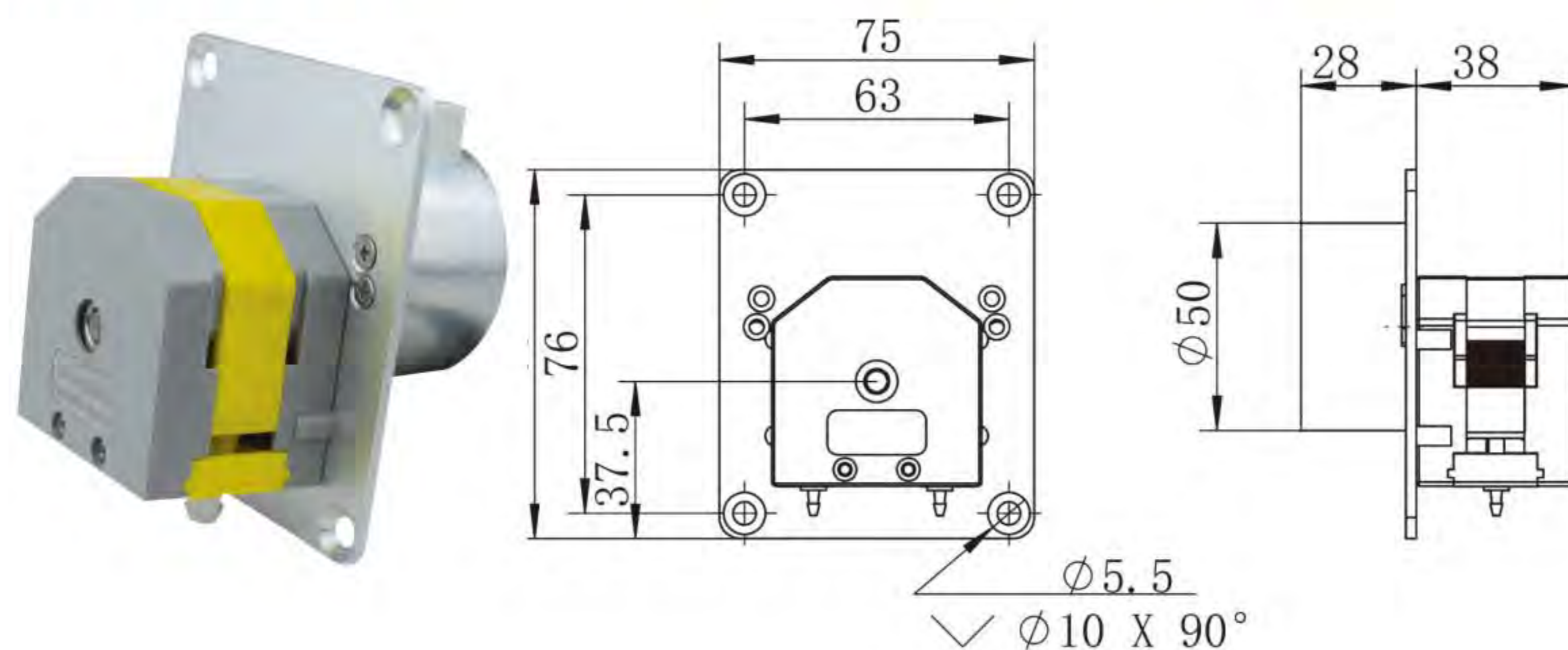


Note: OEM-MZ306 outline dimension drawing

Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Flow Rate (mL/min)
OEM-MZ001	Φ37 DC motor	DC12V/1.5A	170	≤107.67
OEM-MZ004			300	≤190.00
OEM-MZ104	Φ32 DC planetary gear motor	DC24V/1.2A	20	≤12.67
OEM-MZ107			100	≤61.98
OEM-MZ108			160	≤101.33
OEM-MZ111			300	≤190.00
OEM-MZ304	Φ32 DC planetary gear motor	DC24V/1.2A	50	≤31.14
OEM-MZ306	Φ32 DC planetary gear motor		100	≤61.98

**OEM-MJ Series**

**Dimension Drawing(Unit: mm)**



Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Direction
OEM-MJ107	AC motor	AC220V	15.5/18.6	CCW

Note: In the rotation of speed, "/" represents the rotation speed in 50/60HZ.

Motor Speed(rpm)	Dual Channel Flow Rate (mL/min) and Tubing (1 mm wall thickness)			
	ID 1mm	ID 2mm	ID 2.5mm	ID 3mm
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

Motor Speed(rpm)	Single Channel Flow Rate (mL/min) and Tubing (1.6 mm wall thickness)				
	13# ID 0.8mm	14# ID 1.6mm	19# ID 2.4mm	16# ID 3.1mm	25# 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	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

