

Peristaltic Pump Head



RZ1030-4

- Easy replace tubing
- ABS housing
- OEM support
- Compact structure, 4 rollers moderate pulsation
- Designed with flexible block, self-adapt to different tube sizes
- Mainly used for small flow liquid transferring and metering



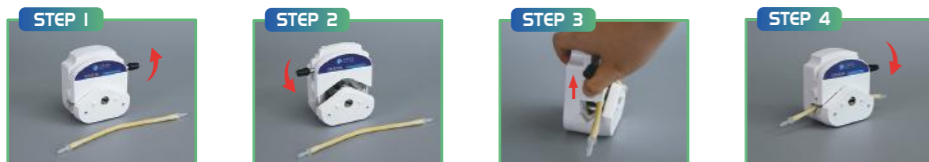
SN15/SN25

- 304 SST 3/6 rollers, PC housing, easy inspection
- Pump head stackable
- Each tube size match with specific model to ensure high stability
- Standard component in liquid handling system
- OEM Support

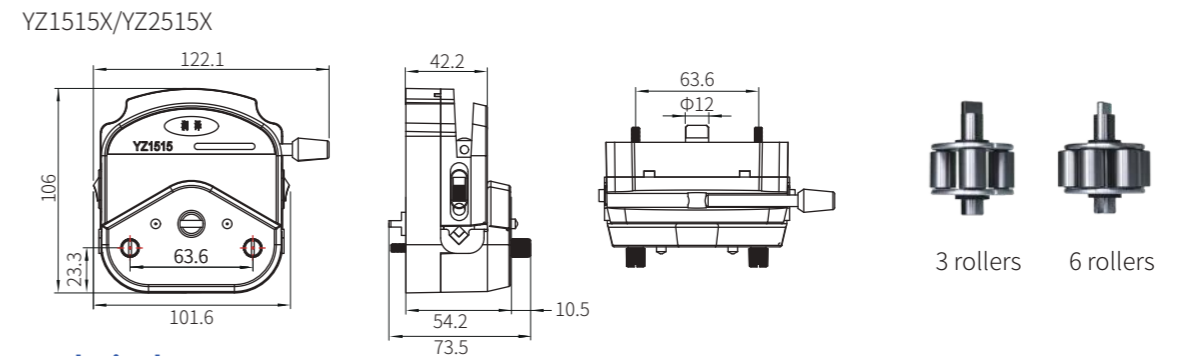
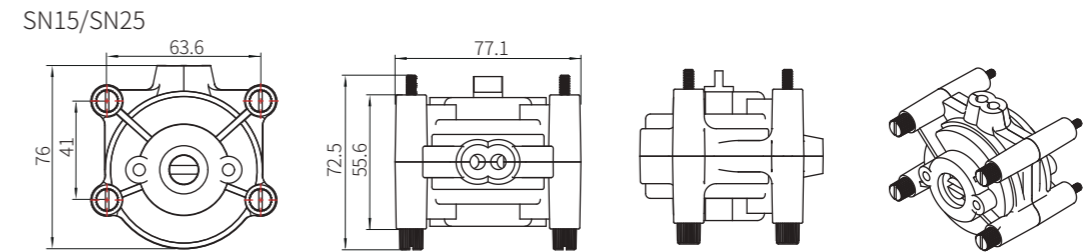
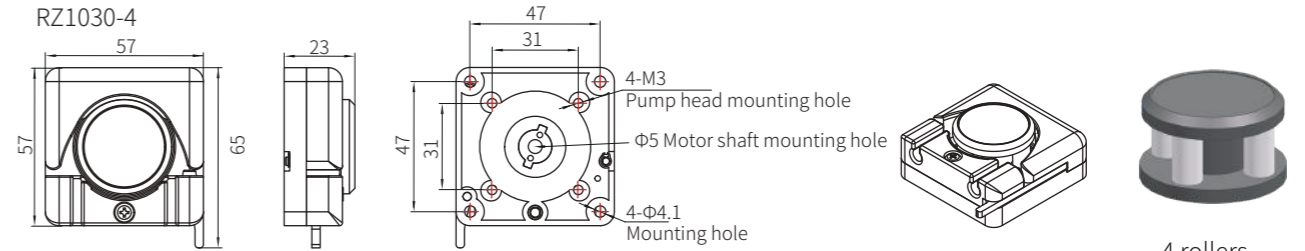


YZ1515X/YZ2515X

- 304 SST 3/6 rollers, ABS engineering housing
- Pump head stackable
- Easy replace tubing, different tube sizes compatible
- Standard component in liquid handling system
- OEM Support



Dimension (unit: mm)



Technical Parameter

Model No.	Housing	Roller	Roller Numbers	Net Weight	Tubing Size	Max. Flow Rate	Working Environment
RZ1030-4	ABS	POM	4	56g	ID 0.64~3.0mm WT 0.8~1.0mm	170ml/min	Temp. 0~40°C Humidity <80%

Model No.	Housing	Roller	Roller Numbers	Net Weight	Tubing Size	Max. Flow Rate	Working Environment
SN15-3	PC	304 SST	3	302g	14# 16# 25# 17#	1725ml/min(500rpm)	Temp. 0~40°C
SN15-6			6	355g	14# 16#	343ml/min(500rpm)	
SN25-3			3	302g	15#	790ml/min(400rpm)	Humidity <80%
SN25-6			6	355g	15#	420ml/min(400rpm)	

Model No.	Color	Material	Roller Numbers	Net Weight	Tubing Size	Max. Flow Rate	Working Environment
YZ1515X-3B	white	ABS Housing	3	383g	14# 16# 25# 17# 18#	1862ml/min(500rpm)	Temp. 0~40°C Humidity <80%
YZ1515X-3H	black						
YZ1515X-6B	white		6	435g	14# 16#	323ml/min(500rpm)	
YZ1515X-6H	black						
YZ2515X-3B	white	304 SST Roller	3	383g	15# 24#	1425ml/min(500rpm)	
YZ2515X-3H	black						
YZ2515X-6B	white		6	435g	15#	440ml/min(500rpm)	
YZ2515X-6H	black						

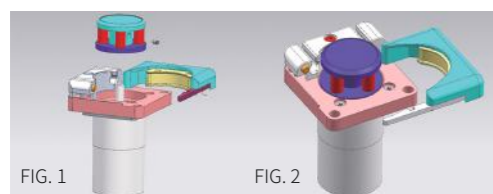
ZL12(24)-RZ1030-4

DC Motor Peristaltic Pump



- Compact size compact structure, low power consumption
- Easy replace tubing, various standard tube sizes
- 12V or 24V DC motor equipped, easy control
- OEM support
- Widely used in medical, environmental, industrial analyzers

Roller Mounting Steps

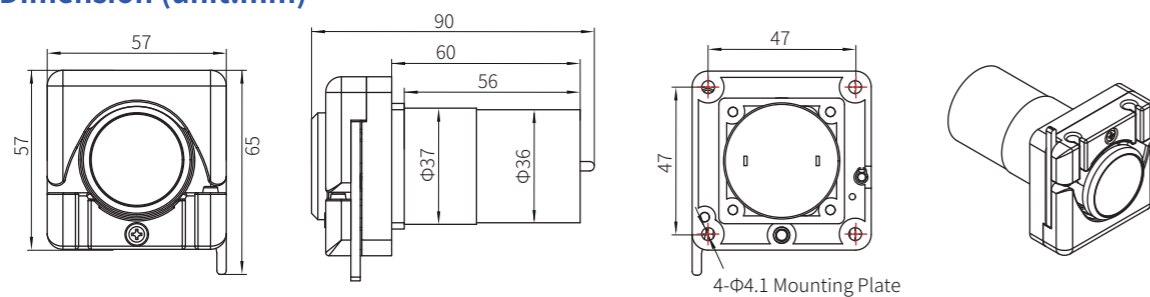


Install the roller parts (purple part) vertically downwards as shown in Figure 1 Flat installation to make sure purple part share the same plane with the pink part.

As shown in Figure 2, the roller is perfectly installed.

Note : Refer to page P37 for pump tube installation [RZ1030-4]

Dimension (unit:mm)



Technical Parameter

Model No.	Motor Type	Input Voltage	Rated Current	Power	Speed	Net Weight	Working Environment	Max.DB
ZL12-RZ1030-4	DC motor	12V	0.04~0.2A	15W	100/200/300 rpm	429g	Temp. 0~40°C Humidity <80%	70dB
ZL24-RZ1030-4		24V				427g		

Flow Rate Table(300 rpm for this test)

Tubing	Rubber tube														Silicone tube		
	ID*WT(mm)	0.64*0.8	0.76*0.8	0.89*0.8	1.02*0.8	1.14*0.8	1.30*0.8	1.42*0.8	1.52*0.8	1.65*0.8	1.85*0.8	2.06*0.8	2.29*0.8	2.54*0.8	2.79*0.8	1*1	2*1
ZL12-RZ1030-4 (ml/min)	6	9	10	13	14	22	28	31	37	46	55	58	95	105	15	47	122
ZL24-RZ1030-4 (ml/min)	10	13	16	22	24	32	36	41	46	54	67	96	112	125	23	86	140

Note: Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc. The date for reference only.



BJ-RZ1030

42 Stepper Motor Peristaltic Pump

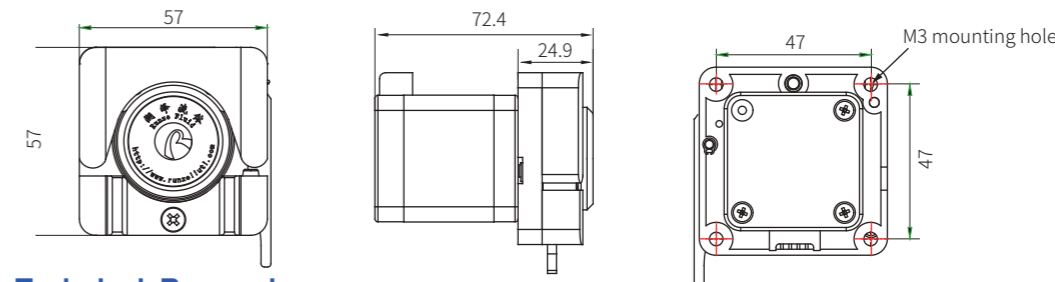
- Delicate compact structure, low power consumption
- Imported 42 stepper motor, low noise, high stability, long service life, accuracy ensured
- Mainly used for medical instruments and various types of small flow liquid transfer analysis instruments
- OEM Support

①	BJ-RZ1030B	4	4 Rollers
②	BJ-RZ1030-4	8	8 Rollers

Installation Steps of Pump Hose



Dimension (unit: mm)



Technical Parameters

Model No.	Motor Type	Motor Type	Speed	Net Weight	Working Environment	Max.DB
BJ-RZ1030-4	42 step motor	1.1A	≤400rpm	424g	Temp. 0~40°C Humidity <80%	70dB
BJ-RZ1030B				432g		

42 stepper motor				Motor wire	
Max. power	9.2W	Resistance	3.8Ω±0.38	Port	Wire color
Step angle	1.8°	Inductance	5.2mH REF	A+	Orange
Phase	2	Insulation	100m Ω MIN	A-	Blue
Phase volt	4.6V	Temp.	80°C MAX	B+	Red
Phase current	1.1A	Insulation grade	B	B-	Yellow

Max.Flow Rate Table

Model No.	WT(mm)		0.8														1.0		
	ID (mm)		0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	1.0	2.0	3.0
BJ-RZ1030B	4 Rollers	ml/min	12	15	18	25	32	38	47	50	56	70	87	94	113	128	24	74	183
	8 Rollers		9	14	17	21	27	32	38	42	43	55	61	71	77	81	17	57	114
BJ-RZ1030-4	4 Rollers	ml/min	12.5	17.3	22	28.2	33.4	42.5	51.9	59.4	72.2	89	101.9	112.6	137.6	146.9	26.1	105	170

Note: Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc.

RZ-01

42 Stepper Motor Peristaltic Pump



- ◆ PPS rollers, excellent structural performance,
- ◆ 4 rollers moderate pulse,
- ◆ PC housing, easy inspection
- ◆ waterproof, dustproof, easy to clean, no dead space
- ◆ OEM support

RZ-01 - 1.6 - 4

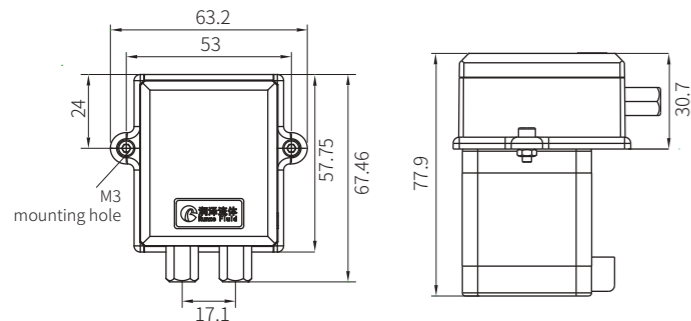
Model No. wall thickness of rubber tube 4 rollers

①	0.8	Tube WT: 0.8mm
①	1.6	Tube WT: 1.6mm

Installation Steps of Pump Hose



Dimension (unit: mm)



Tubing

hose connection:
Barb-to-Female Adapters
+Barb-to-Male Adapters



rigid tube connection:
Barb-to-Female Adapters
+Flangeless Fittings



Technical Parameters

Model No.	Motor Type	Motor Type	Speed	Net Weight	Working Environment	Max.DB
RZ-01	NMB 42 step motor	1.1A	≤400rpm	432g	Temp. 0~40°C Humidity <80%	70dB

Note 1: Please refer to page P40 [42 stepper motor parameters] and [motor wire phase table] for detailed motor parameters

Note 2: Motor wire & color: A+/Orange; A-/Blue; B+/Red; B-/Yellow

WT(mm)	0.8														1.6			
ID (mm)	0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	0.8	1.6	2.4	3.2
Max. Flow Rate ml/min	12	13	16	22	28	34	42	44	47	60	65	88	90	96	14	48	94	152

Note: Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc.

RZ-02

42 Stepper Motor Peristaltic Pump



- ◆ PPS rollers, excellent structural performance
- ◆ 6 rollers: low pulsation, steady outflow / 3 rollers: large flow rate
- ◆ Housing material PPS+ synthetic fibre, high temperature and corrosion resistant
- ◆ Spring mounting clips for easy disassembly and installation of the pump tube
- ◆ Imported 42 stepper motor for low noise, high stability, long service life, and accuracy
- ◆ Mainly used for medical instruments and various small flow liquid transfer analysis instruments

RZ-02 - 1.6 - 6 - L

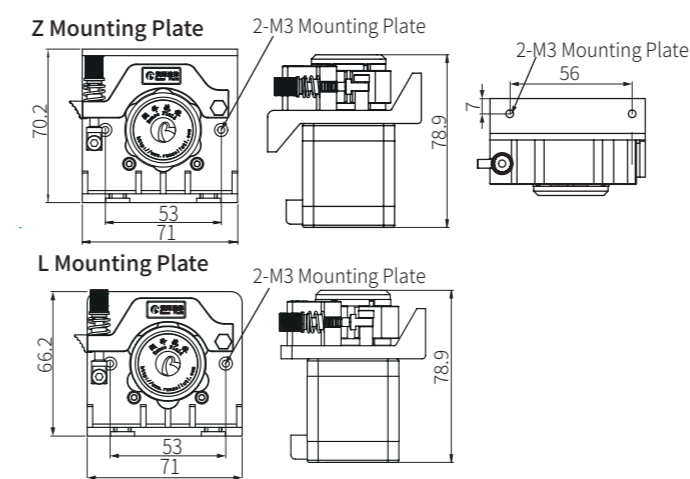
Model No. Rubber Tube WT Rollers Mounting Plate

①	0.8	Tube WT: 0.8mm	②	3	3 Rollers	③	L	L Mounting Plate
①	1.6	Tube WT: 1.6mm	②	6	6 Rollers	③	Z	Z Mounting Plate

Installation Steps of Pump Hose

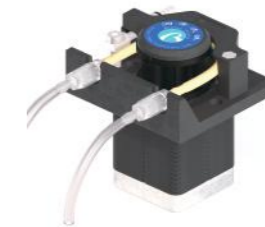


Dimension (unit: mm)



Tubing

hose connection:
Barb-to-Female Adapters
+Barb-to-Male Adapters



rigid tube connection:
Barb-to-Female Adapters
+Flangeless Fittings



Technical Parameters

Model No.	Motor Type	Motor Type	Speed	Net Weight	Working Environment	Max.DB
RZ-02	42 step motor	1.1A	≤400rpm	472g	Temp. 0~40°C Humidity <80%	70dB

Note 1: Please refer to page P39[42 stepper motor parameters] and [motor wire phase table] for detailed motor parameters

Note 2: Motor wire & color: A+/Orange; A-/Blue; B+/Red; B-/Yellow

Max.Flow Rate Table

	WT(mm)	0.8														1.6			
	ID (mm)	0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	0.8	1.6	2.4	3.2
3 rollers	ml/min	16	18	27	30	37	47	59	64	71	94	104	126	153	161	23	57	112	236
6 rollers	ml/min	13	16	21	26	31	39	45	48	55	61	82	86	105	114	19	51	105	183

Note: Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc.

BJ30 Series Peristaltic Pump

57 Stepper Motor Peristaltic Pump



- Pump head optional, replaceable and stackable
- Easy replace tubing, various standard tube sizes
- Equipped with Japan imported 57 NMB stepper motor , high accuracy and stability, long service life, low noise
- OEM support
- Widely used in medical, environmental, industrial analyzer

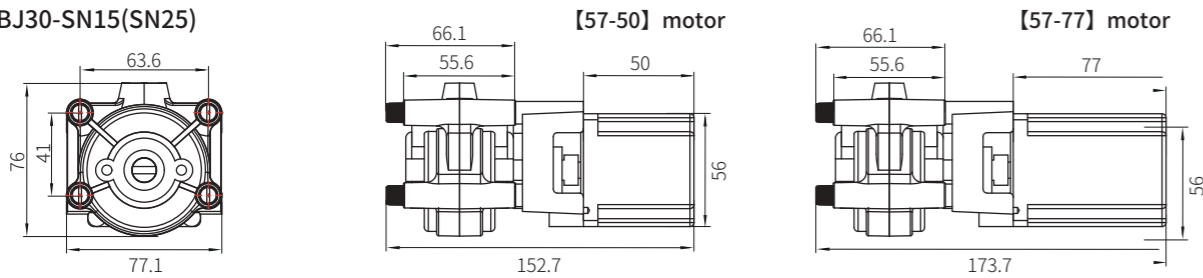
Pump Head



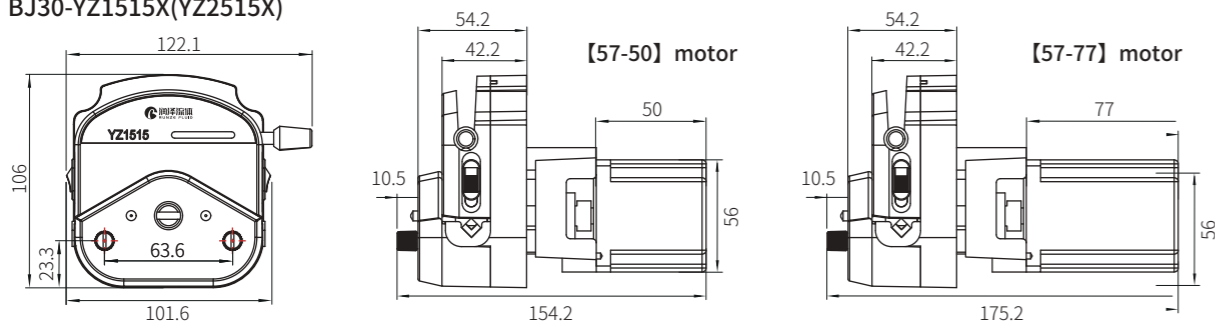
Note : Refer to page P37 for pump tube installation[SN15]and[YZ1515X/YZ2515X]

Dimension (unit: mm)

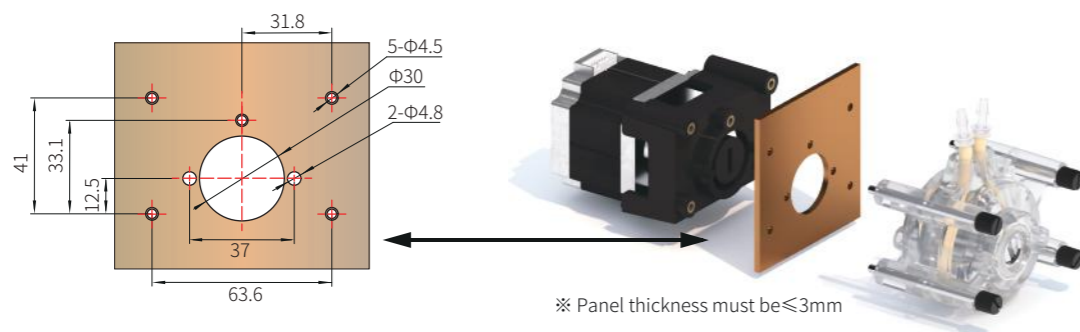
BJ30-SN15(SN25)



BJ30-YZ1515X(YZ2515X)



Installation Diagram: Panel Mounting Hole Dimension (Unit: mm)



Technical Parameter

Model No.	Motor Type	Motor Type	Speed	Net Weight	Working Environment	Max.DB
BJ30	NMB 57 step motor	1.5A 【57-50】 2.3A 【57-77】	≤400rpm	671g 【57-50】 1148g 【57-77】	Temp. 0~40°C Humidity <80%	70dB

【57-50】 motor				【57-77】 motor				Motor Wire		
Max. power	12W	Resistance	1.15Ω±0.17	Max. power	18.8W	Resistance	1.7Ω±0.17	Port	57-50 motor	57-77 motor
Step angle	1.8°	Inductance	1.85mH REF	Step angle	1.8°	Inductance	7mH REF	A+	Red	Orange
Phase	2	Insulation	100m Ω MIN	Phase	2	Insulation	100m Ω MIN	A-	Yellow	Blue
Phase volt	2.6V	Temp.	80°C MAX	Phase volt	4.0V	Temp.	80°C MAX	B+	Blue	Red
Phase current	2.3A	Insulation grade	B	Phase current	2.35A	Insulation grade	B	B-	Orange	Yellow

Flow Rate Table (14# 16# - 57 small motor; 15# 17# 18# 24# 25# 57 big motor)

Model No.	Pump head	Color	Rollers	Max. Flow Rate ml/min					
				14#	16#	25#	17#	15#	24#
BJ30	SN15-3	semi-opaque	3	68 (300rpm)	270 (300rpm)	573 (300rpm)	997 (300rpm)	—	—
	SN15-6		6	56 (300rpm)	192 (300rpm)	—	—	—	—
	SN25-3		3	—	—	—	—	517 (300rpm)	—
	YZ1515X-3B	white	3	117 (400rpm)	389 (400rpm)	752 (400rpm)	1249 (400rpm)	—	—
	YZ1515X-3H	black		—	—	—	—	—	—
	YZ1515X-6B	white	6	76 (400rpm)	244 (400rpm)	—	—	—	—
	YZ1515X-6H	black		—	—	—	—	—	—
	YZ2515X-3B	white	3	—	—	—	—	783 (400rpm)	1295 (400rpm)
	YZ2515X-3H	black		—	—	—	—	—	—

Note: Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc. The date for reference only.

LM40 Series Peristaltic Pump

Box-type Peristaltic Pump



- The minimum speed can reach 0.1 rpm
- Motor subdivision adaptive, with high-performance processor and motor drive to control stepper motor
- The speed can be adjusted through the keypad or rotary encoder
- LED displays the CW/CCW rotation, foot switch status, motor running status, and the status of external control interface, etc., the display is intuitive, the operation is convenient, and the content is simple
- Support various control modes: keypad control mode, RS485 communication control mode, external control mode (optional multiple signal conversion modules), passive contact state output.

LM40A Pump Head

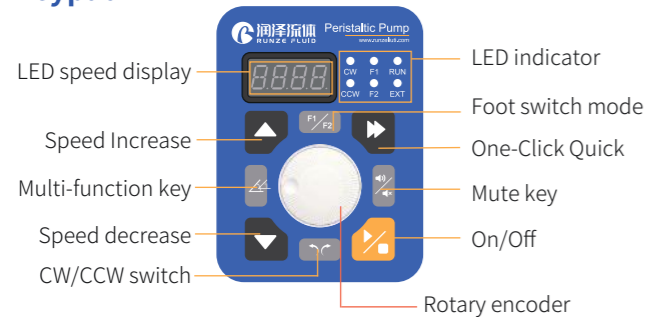


LM40B Pump Head



Note : Refer to page P37 for pump tube installation[SN15] and [YZ1515X/YZ2515X] and [RZ1030-4],RZ-01 refer to page P41, RZ-02 refer to page P42

Keypad

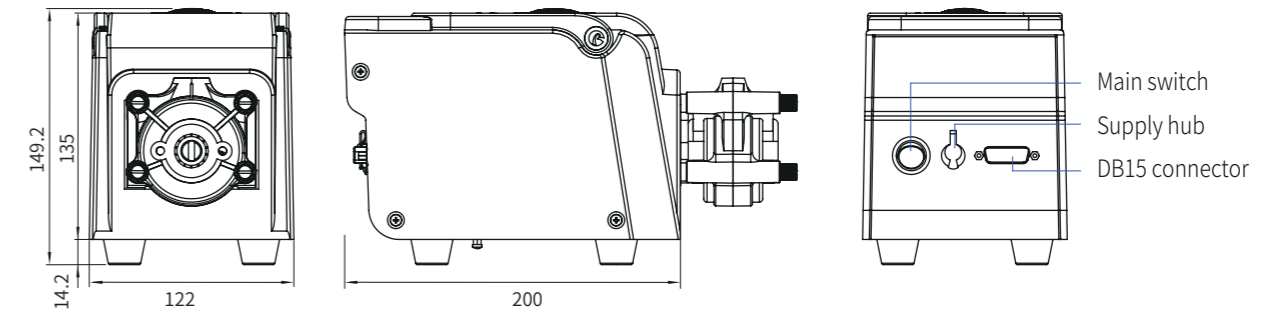


Technical Parameter

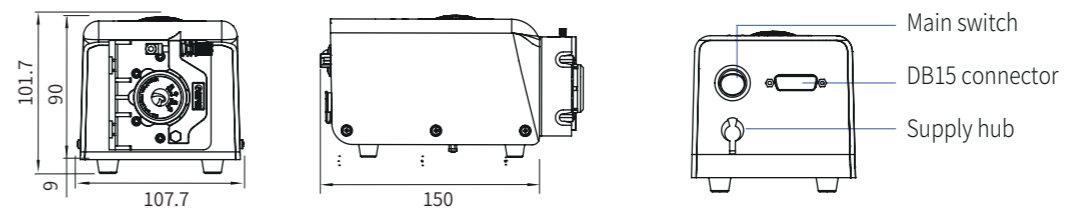
Model No.	LM40A	LM40B
Speed range	0.1rpm~300/400rpm (the Max. Speed varies from pump head or pump tubing configuration)	
Speed resolution	±0.1rpm	
Flow rate range	0.027~1295ml/min	0.03~183ml/min
Foot pedal input interface	Foot switch control start and stop (Keypad control mode only)	
Input interface for external control signal of regulating speed	Support switching multiple control inputs (External control mode only)	
Input interface for external control veer signal	Support veer switching control inputs (External control mode/ Foot switch mode only)	
Input interface for external control start signal	Support start/stop switching control inputs (External control mode only)	
Communication Control	RS485(Communication control mode only)	
Power Supply	DC24V± 10%	
Power	35W	20W
Operating temperature	0°C ~ 40 °C	
Operating humidity	< 80% relative humidity, non-condensing	
Net weight	1.64kg (without pump head)	0.09kg (without pump head)
IP Grade	IP31	

Dimension (unit: mm)

LM40A



LM40B



Flow Rate Table

Model No.	Pump head	Color	Rollers	Max. Flow Rate (ml/min)							
				14#	16#	25#	17#	15#	24#		
LM40A	SN15-3	semi-opaque	3	68 (300rpm)	270 (300rpm)	573 (300rpm)	997 (300rpm)	—	—	—	—
	YZ1515X-3B	white	3	117 (400rpm)	389 (400rpm)	752 (400rpm)	1249 (400rpm)	—	—	—	—
	YZ1515X-3H	black									
	YZ1515X-6B	white	6	76 (400rpm)	244 (400rpm)	—	—	—	—	—	—
	YZ1515X-6H	black									
	YZ2515X-3B	white	3	—	—	—	—	—	783 (400rpm)	1295 (400rpm)	—
YZ2515X-3H	black										

Model No.	Pump head	Rollers	Max. Flow Rate (ml/min)																			
			WT (mm)																			
			0.8									1.0										
				ID (mm)	0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	1.0	2.0	3.0	
LM40B	RZ1030/1030B	4	Max. Flow Rate ml/min	12	15	18	25	32	38	47	50	56	70	87	94	113	128	24	74	183		
		8	Max. Flow Rate ml/min	9	14	17	21	27	32	38	42	43	55	61	71	77	81	17	57	114		
	Pump head	Rollers	WT (mm)																			
			0.8									1.6										
				ID (mm)	0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	0.8	1.6	2.4	3.2
RZ-01	4	Max. Flow Rate ml/min	12	13	16	22	28	34	42	44	47	60	65	88	90	96	14	48	94	152		
		Max. Flow Rate ml/min	16	18	27	30	37	47	59	64	71	94	104	126	153	161	23	57	112	236		
RZ-02	3	Max. Flow Rate ml/min	16	18	27	30	37	47	59	64	71	94	104	126	153	161	23	57	112	236		
		6	Max. Flow Rate ml/min	13	16	21	26	31	39	45	48	55	61	82	86	105	114	19	51	105	183	

Note:
 1. (300rpm)(400rpm) is the maximum speed under specific pump head and tube size.
 2. Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc, The date for reference only.

LM60 Series Peristaltic Pump

Box-type Peristaltic Pump



- Metering mode: continuous, booking, rationing, calibration
- Foot pedal (switch) control support
- Preset dispensing volume, interval time, cycle times
- Speed resolution 0.1rpm and flow rate calibration lead to high accuracy dispensing volume
- LCD display screen and membrane buttons works together to control speed, flow rate, volume and time
- Mainly used for bottle fillings in laboratory and production line

LM60A Pump Head



SN15

YZ1515X/YZ2515X

LM60B Pump Head



RZ1030-4

RZ1030B

RZ-01

RZ-02

Note : Refer to page P37 for pump tube installation[SN15] and [YZ1515X/YZ2515X] and [RZ1030-4],RZ-01 refer to page P41, RZ-02 refer to page P42

Working Mode

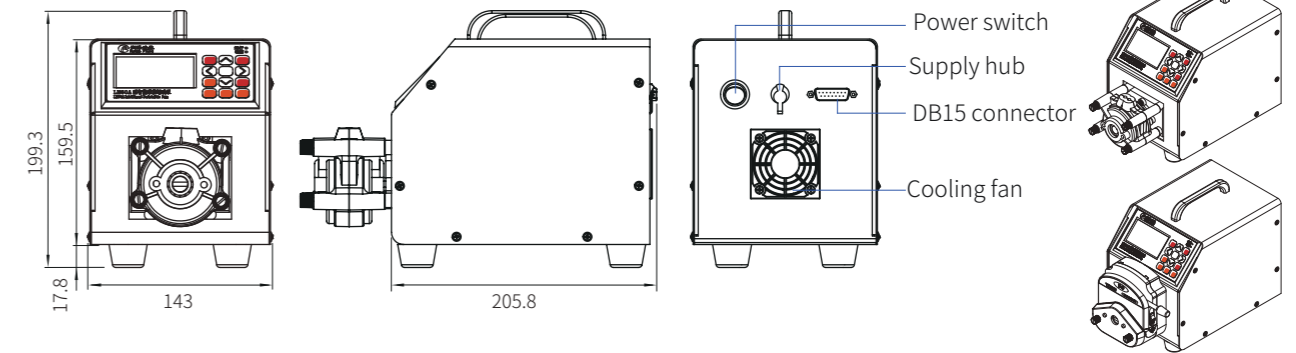
- 1. Calibration Mode** - For ensure accuracy of dispensing volume and flow rate before starting any other working mode or when pump/tubing get replaced
- 2. Continuous Mode** - For continuous liquid transfer with no specific requirements
- 3. Rationing Mode** - Realize one-off liquid dispensing in specific volume within specific period of time under specific speed
- 4. Reservation Mode** - Realize liquid dispensing in specific volume at N times under specific speed

Technical Parameter

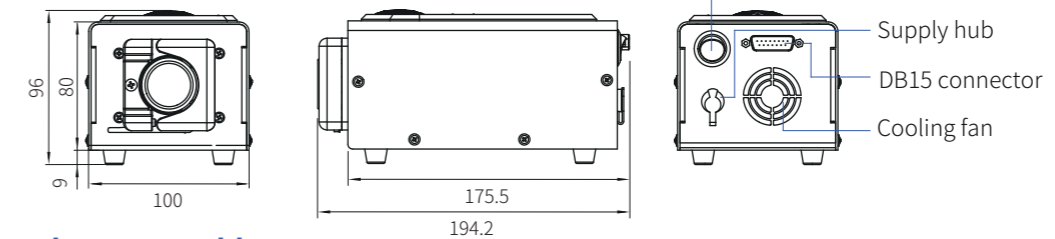
Model No.	LM60A	LM60B
Speed range	0.1rpm~300/400rpm(Maximum speed vary from different pump heads,tube type and tube sizes)	
Speed resolution	±0.1rpm	
Working mode	Continuous mode, Rationing mode, Booking mode, Calibration mode	
Pedal signal port	Foot pedal switch control start and stop (only keyboard control mode)	
Speed signal port	Foot pedal switch control start and stop (only keyboard control mode)	
Direction signal port	Support steering switch control input (external control mode only)	
ON/OFF signal port	Support ON/OFF switch control input (external control mode only)	
Communication port	RS232/RS485 (only in communication control mode)	
Rotary coding port	—	can rotate to change editing position and content (only LM60B)
Power supply	DC24V±10%	
Power	30W	20W
Operating temperature	0°C ~ 40°C	
Operating humidity	<80% relative humidity, non-condensing	
Protection level	IP31	
Net weight	3.5kg (without pump head)	1.45kg(without pump head)

Dimension (unit: mm)

LM60A



LM60B



Flow Rate Table

Model No.	Pump head	Color	Rollers	Max. Flow Rate (ml/min)					
				14#	16#	25#	17#	15#	24#
LM60A	SN15-3	semi-opaque	3	68 (300rpm)	270 (300rpm)	573 (300rpm)	997 (300rpm)	—	—
	YZ1515X-3B	white	3	117 (400rpm)	389 (400rpm)	752 (400rpm)	1249 (400rpm)	—	—
	YZ1515X-3H	black							
	YZ1515X-6B	white	6	76 (400rpm)	244 (400rpm)	—	—	—	—
	YZ1515X-6H	black							
	YZ2515X-3B	white	3	—	—	—	—	783 (400rpm)	1295 (400rpm)
YZ2515X-3H	black								

Model No.	Pump head	Rollers	Max. Flow Rate (ml/min)																					
			WT (mm)																					
			0.8									1.0												
			ID (mm)			0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	1.0	2.0	3.0		
LM60B	RZ1030/1030B	4	Max. Flow Rate ml/min	12	15	18	25	32	38	47	50	56	70	87	94	113	128	24	74	183				
	RZ1030B	8	Max. Flow Rate ml/min	9	14	17	21	27	32	38	42	43	55	61	71	77	81	17	57	114				
LM60B	Pump head	Rollers	WT (mm)																					
			0.8									1.6												
				ID (mm)			0.64	0.76	0.89	1.02	1.14	1.30	1.42	1.52	1.65	1.85	2.06	2.29	2.54	2.79	0.8	1.6	2.4	3.2
	RZ-01	4	Max. Flow Rate ml/min	12	13	16	22	28	34	42	44	47	60	65	88	90	96	14	48	94	152			
RZ-02	3	Max. Flow Rate ml/min	16	18	27	30	37	47	59	64	71	94	104	126	153	161	23	57	112	236				
			6	Max. Flow Rate ml/min	13	16	21	26	31	39	45	48	55	61	82	86	105	114	19	51	105	183		

Note:

1. (300rpm)(400rpm) is the maximum speed under specific pump head and tube size.
2. Test under room temperature 20°C and no external pressure (water), flow rate may vary from different media, condition, pressure, humidity, temperature etc. The date for reference only.