



INJAE SCIENCE CO.

Precision Pumps



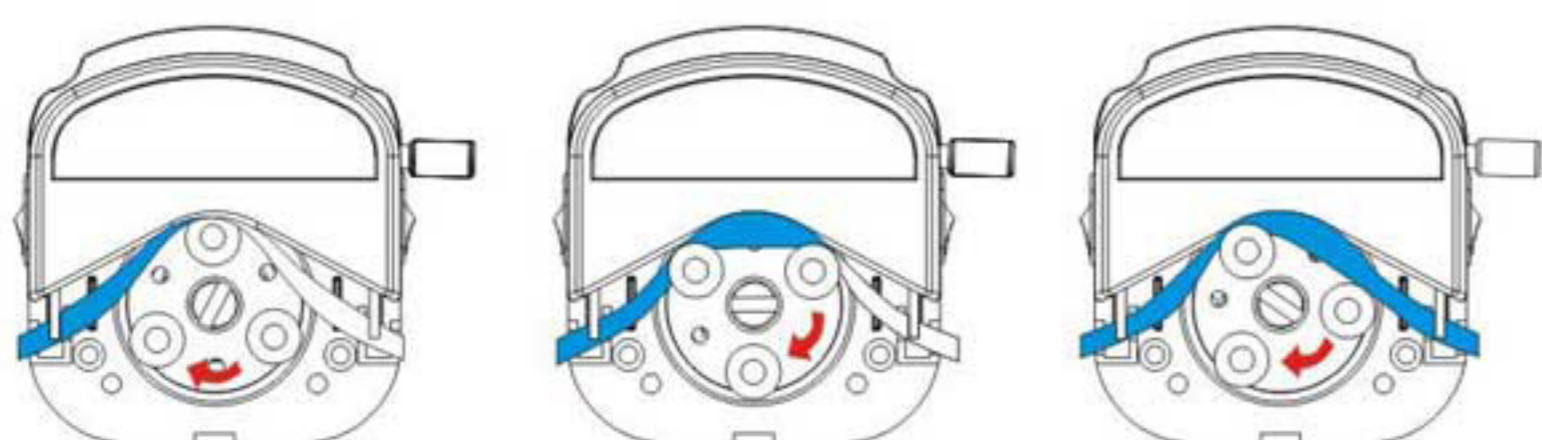
Peristaltic Pump • Syringe Pump

INJAE SCIENCE CO.

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Injae Science Co. located in Korea is a high-tech enterprise, specialized in R&D, manufacturing and sales of fluid precision transfer equipment. We have professional research engineers, application engineers, sales and service team. We always commit ourselves to provide high quality products. Base on the rich experience and mature technology, we continuously keep lead position in fluid transfer equipment field. Our products are widely used in research laboratory, bio-pharmaceuticals, food & beverage, fine chemistry, water treatment and environment protection, etc. In future, Shenchen will innovate and develop more advance techniques and perfect pumps. We promise to provide high performance-price ratio peristaltic pump and OEM fluid transfer system for all the customers.

Peristaltic Pump Working Principle



Peristaltic Pump Features

Non-contamination, easy to clean,
low-shear, low-maintenance

Guide of Type Selection

1. Confirm the flow rates

- 1) Pump Head: Different pump heads determine different flow rates.
- 2) Tubing sizes: After confirming the pump head, choose the tubing sizes or model no. according to flow rates.
- 3) Rotation speed of the drive: After confirming the pump head and tubing, choose the drive model no. according to rotating speed in the working flow rates.

2. Fluid characters

Fluid character is a pivotal factor. If fluid has chemical corrosion, the users need to choose tubing of corrosion-resistant. If fluid has high viscous or granules and floccules, the users need to choose better elastic tubing with thick wall.

3. Working conditions

In the working, if fluid transfer direction bears pressure, the users need to choose thick wall tubing. The ability of tubing pressure-bearing restricts pump bearing capacity. Flow rates may reduce under the condition of bearing pressure comparing with non-pressure work. In the pressure-bearing condition, it must increase rotating speed for ensuring working flow rates. Please pay attention to the rotating speed when choose the drive.



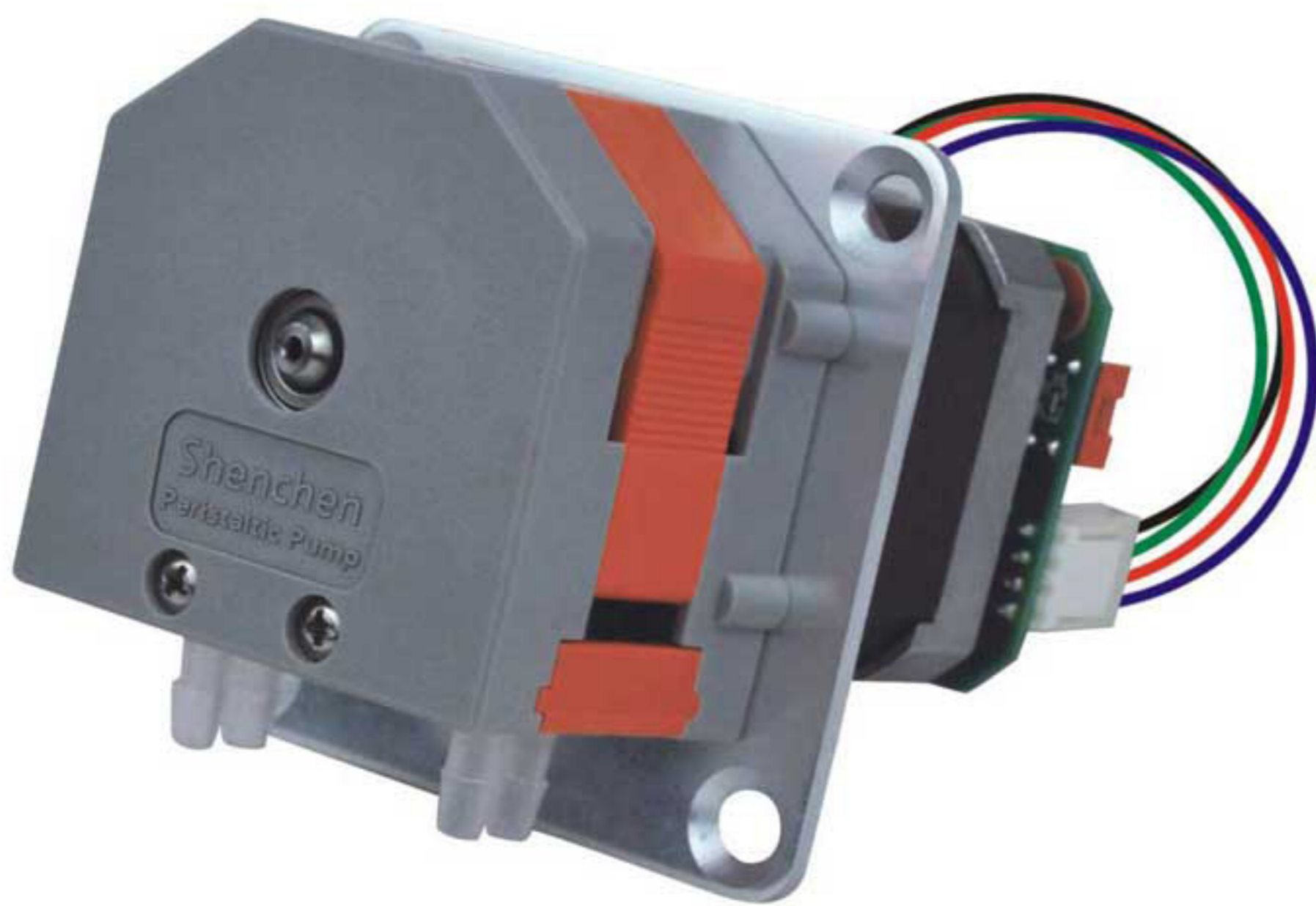


Catalog

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Compact Peristaltic Pump



Product Introduction

Minipump series products which adopt compact and embedded designs 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 0.024-190 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.

Typical Application

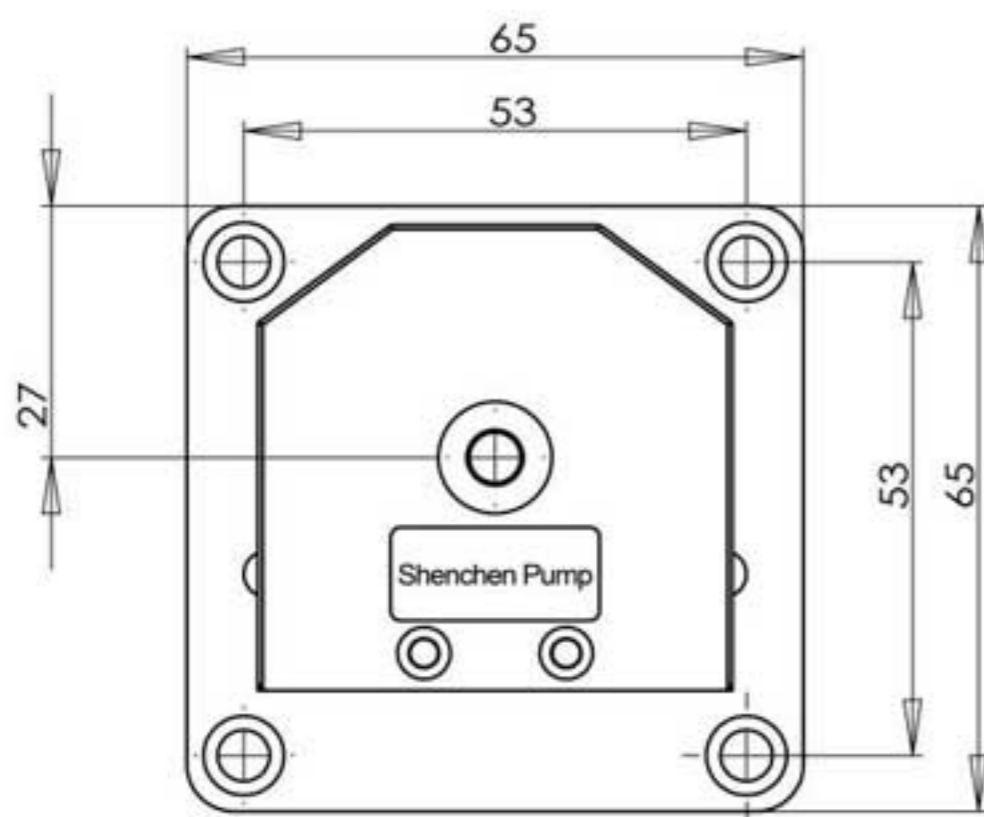
- Discharge condensate water in the flue gases survey meter
- Support biochemistry analytical instruments

Model Number

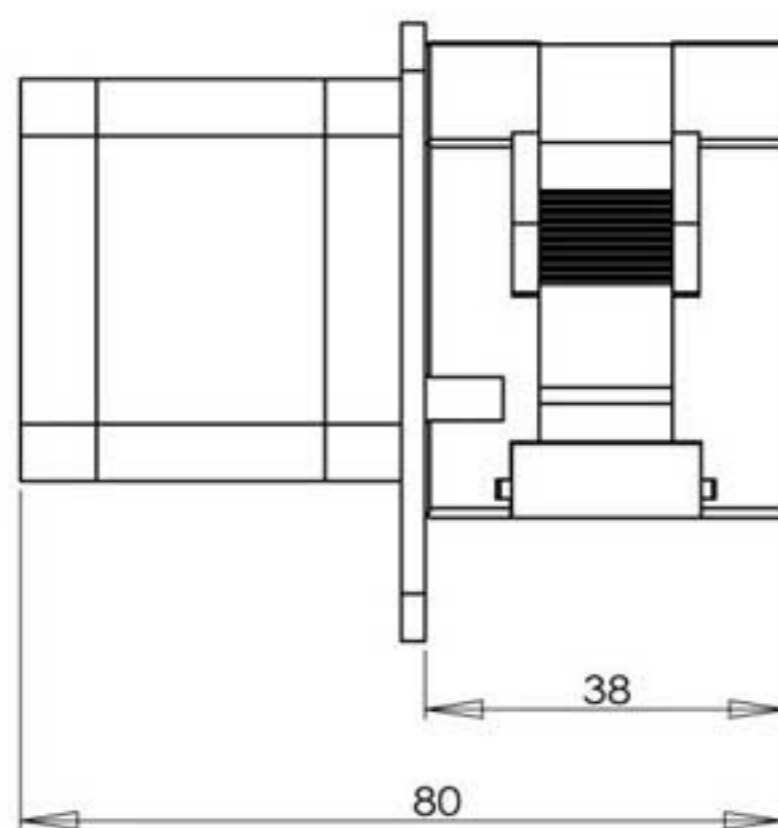
- Minipump 01 (Single channel)
- Minipump 02 (Dual channel)

Installation Sizes Drawing

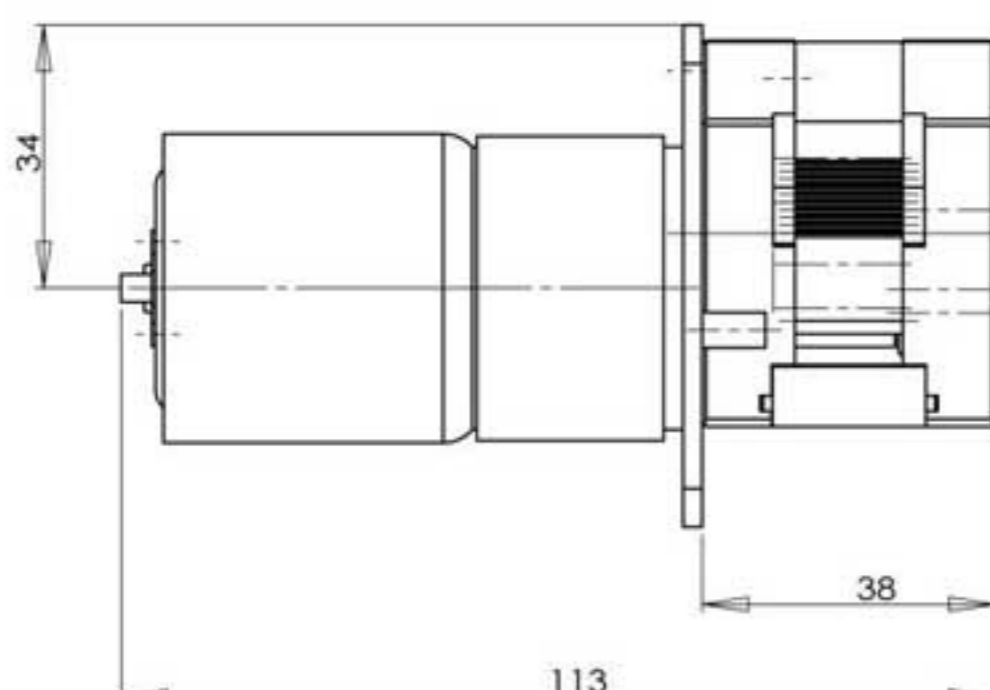
(Unit: mm)



Front



Side



Side

Features

- POM material housing and rollers. 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.

Note: For satisfying customers' appearance requests, we supply several colors as above types.



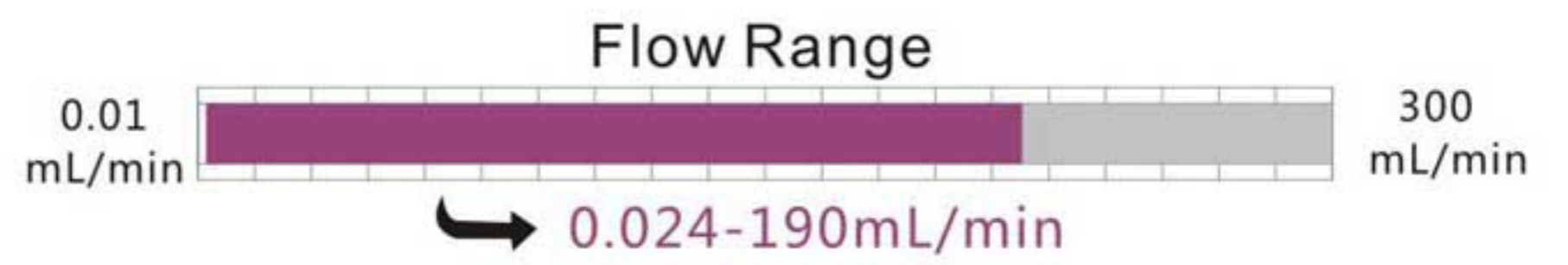
MiniPump VS. TH Pump

1. TH series peristaltic pump widely used in analytical instrument, environmental protection equipment and bio-fermenter. But it also exposed many problems, for example: the working circular arc will crack during working, roller abrasion fast, the middle of the roller will be sunken after a period; the tubing can not be stable fixed, it will be easy to move; the motor spindle appears circle phenomenon after working a period; the liquid interrupt or backflow during transferring. These problems will bring troubles.

2. MiniPump have improved the above problems, it is more easy to load tubing, the tubing come with connector, do not move; long life rollers with good abrasion resistance, the middle of the roller will not be sunken after long time and high speed running. The pump use stepper motor drive, piggyback drive circuit, compact structure, set up the speed freely; mounting plate dimension can be same with the TH series pump, can be exchanged with it.



TH Pump



Model Number

- SP-Minipump (Stepper motor drive)
- DC-Minipump (DC motor drive)

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.

Technical Specifications

Motor Type	Display	Speed control	Power supply
Stepper motor	LED display speed	Digital rotary encoder adjusts speed	24V DC
Brushless DC motor	No		12V/24V DC
DC motor			

External control		Power consumption	Drive dimension
Stepper motor	0-5V/0-10V/4-20mA RS485 communication	<15W	136×114×108mm
DC motor	0-5V/0-10V/4-20mA	<10W	

Rotation speed (rpm)	Flow rates (mL/min) and tubing (1 mm wall thickness, dual channel)			
	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)	Flow rates (mL/min) and tubing (1.6 mm wall thickness, single channel)			
	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

Minipump

Multichannel Pump Head

Product Introduction

MC series new generation multichannel pump head with unique cam structure, make it more easy to operate. It is designed for small flow rates and multichannel transfer. Comparing with traditional DG pump head, it has particular cam design for micro adjustment occlusion, and also for opening the cartridge from the top. 304 stainless steel rollers assembly include two structures of 6 rollers and 10 rollers. Install silicone tubing and TYGON series imported tubing. It is widely used in supporting analytical instruments.

Model Number

- MC1 • MC2 • MC3 • MC4
- MC5 • MC6 • MC8 • MC10
- MC12

Typical Application

- Support blood sugar analytical device
- Support ammonian analytical instrument

To open the cartridge from upside will be more convenient.

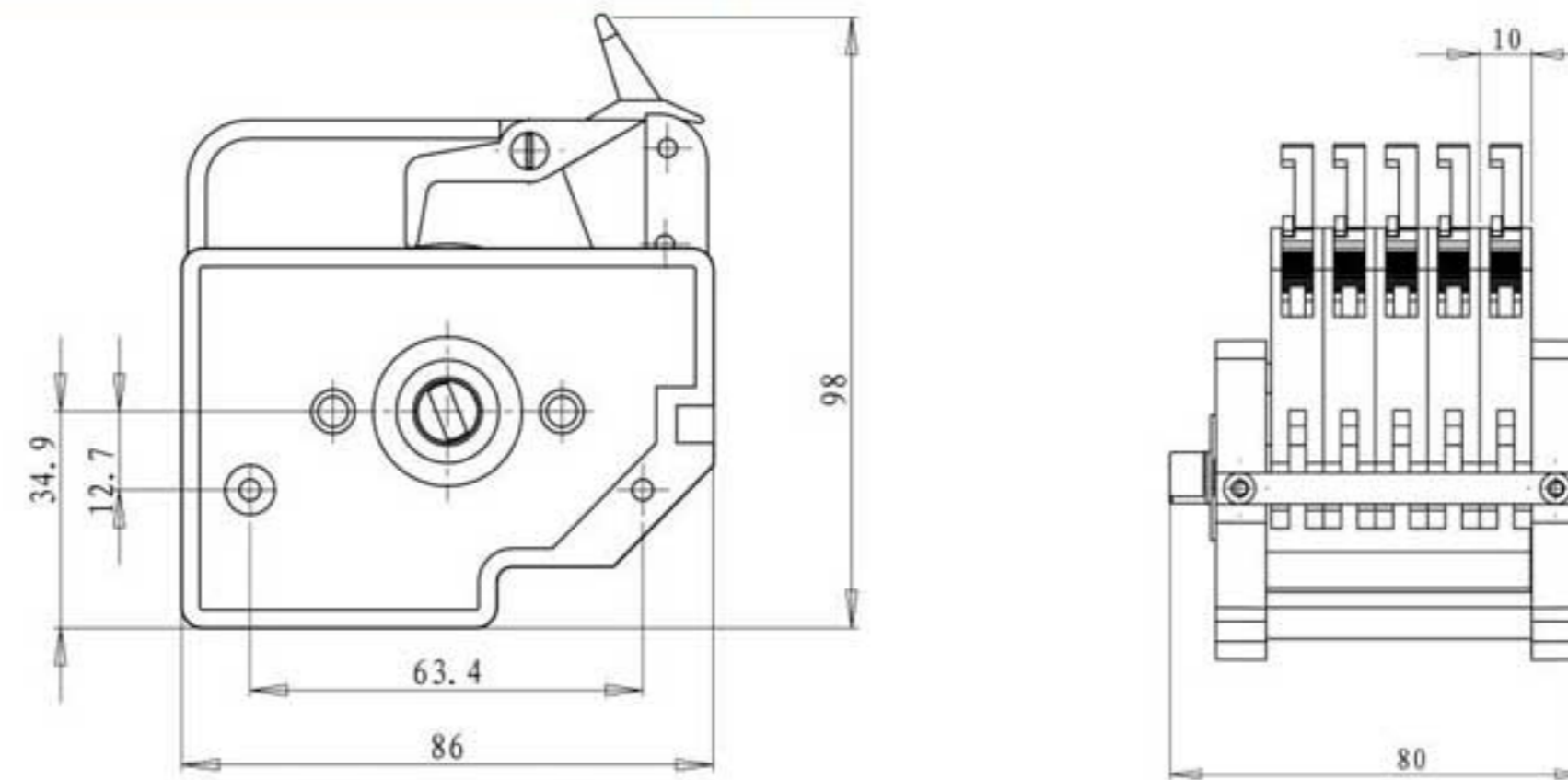


Closed design



Installation Sizes Drawing

(Unit: mm)

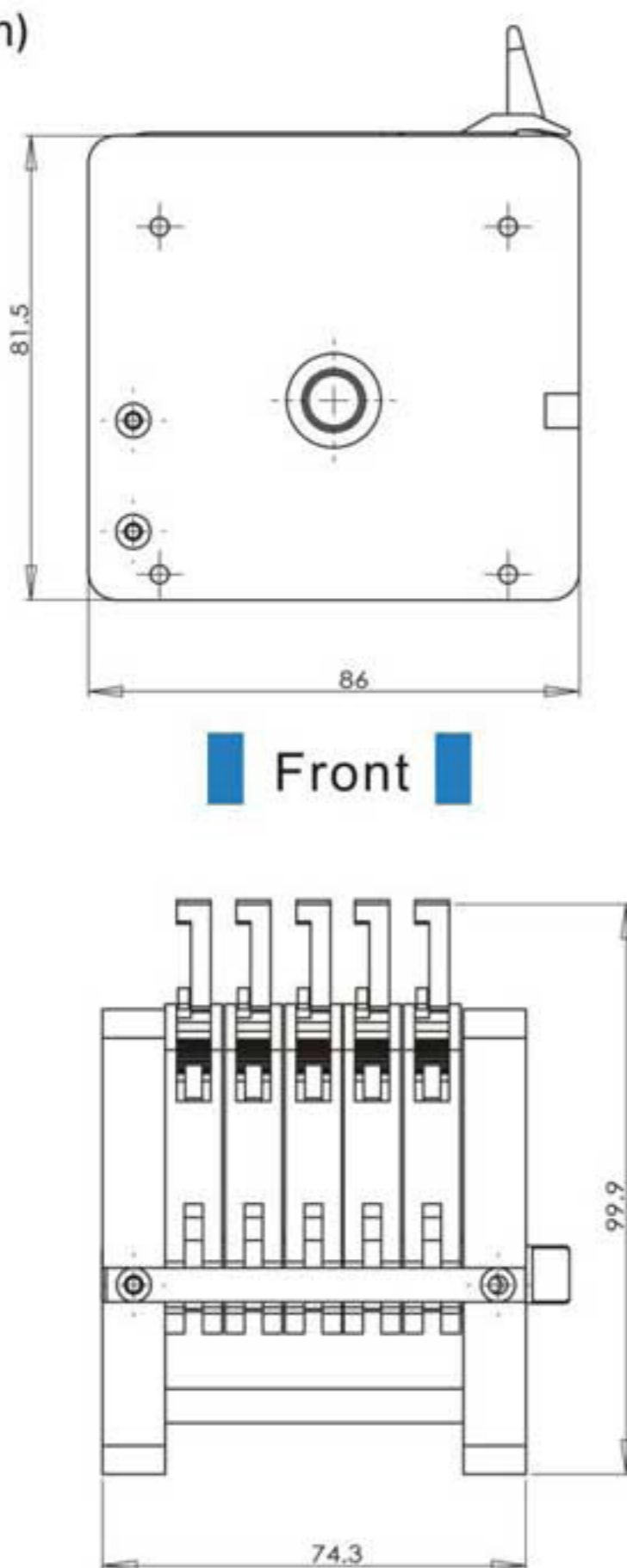


Front

Side

Installation Sizes Drawing

(Unit: mm)



Front

Side

Features and Superiority of MC Pump Head Comparing with DG Pump Head



Cam structure of MC pump head



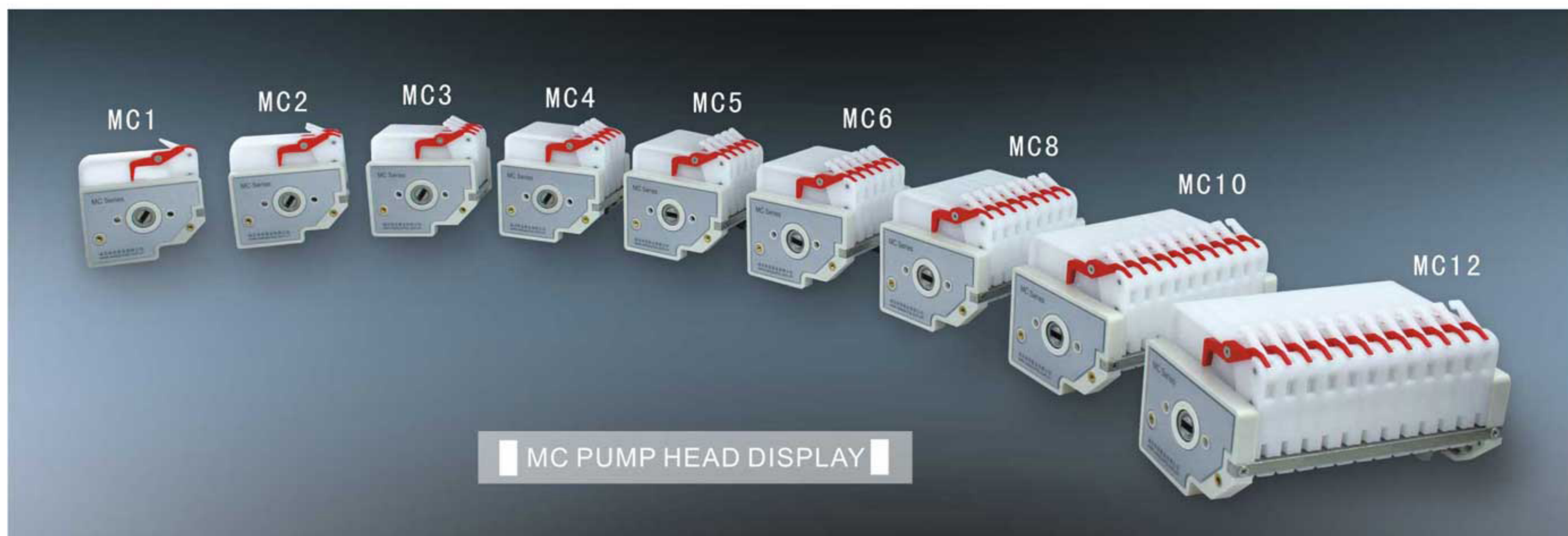
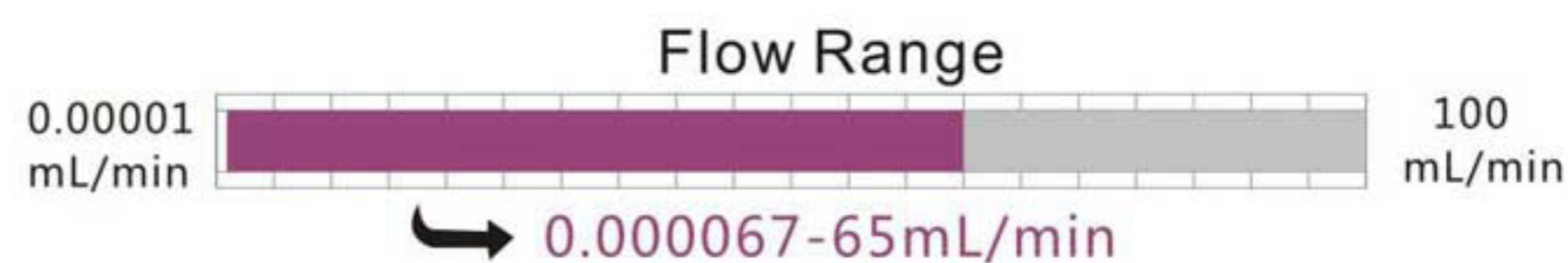
Ratchet structure of DG pump head

1. The traditional DG pump head with ratchet for adjusting occlusion. It can not return once overpressure, and must loosen the cartridge to adjust again. MC pump head with the unique cam structure can be adjusted freely. The teeth of cam are smaller than the teeth on the ratchet to make the adjusting resolution more accurate.
2. DG pump head need to open the cartridge from the below hardly. It is difficult and inconvenient to operate because of the compact room on other mounted device. The cam structure of MC pump head can make customers take off the cartridge lightly from the top. It is easy to operate.



DG Series

Note: Increasing or reducing one channel, the pump head size need to increase or reduce the thickness of one cartridge.



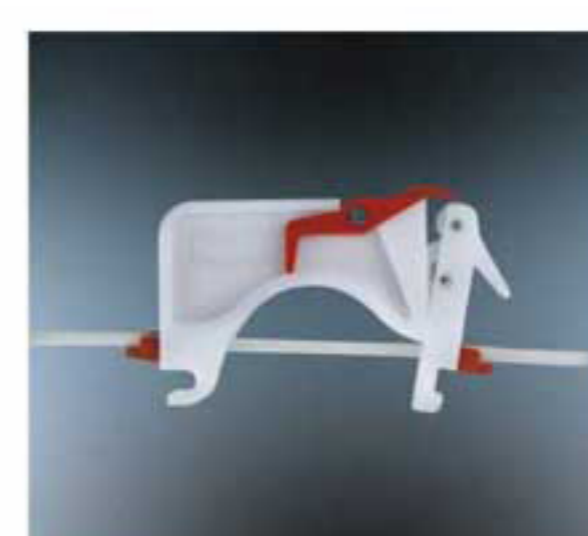
Tubing Installation Procedure



A. Turn the spanner clockwise to take it off from the lever.



B. After that, the cartridge can be taken out lightly.



C. Install the tubing and confirm the working position between two adjacent clamps.



D. Embed the cartridge and press it lightly to reach the working position.



E. Turn the spanner counter-clockwise to make it reach the lever.

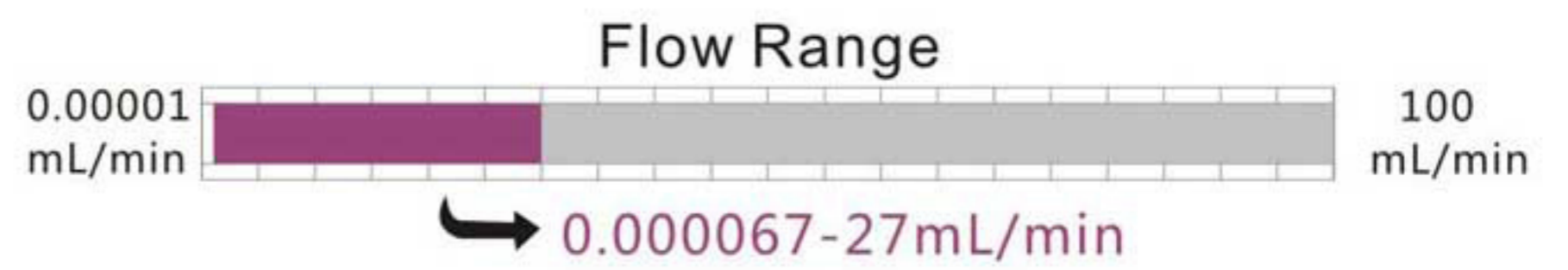


F. Multichannel pump heads and tubing drawing

Technical Specifications

Pump head	MC1	MC2	MC3	MC4	MC5	MC6	MC8	MC10	MC12
Channel number	1	2	3	4	5	6	8	10	12
Tubing			1 × 1	2 × 1	2.4 × 0.8		2.79 × 0.9		3 × 1
ID (mm)			1	2	2.4		2.79		3
Wall thickness(mm)			1	1	0.8		0.9		1
Cartridge material	POM/PVDF								
Rollers number and material	10 rollers, 304/316 stainless steel material								
Flow rates of pump head with 10 rollers (mL/min)	0.1~50rpm	0.0046~2.27	0.016~7.64	0.021~10.50	0.024~12.33	0.032~16.22			
	50~100rpm	2.27~4.69	7.64~16.11	10.50~21.65	12.33~22.60	16.22~32.00			
	100~150rpm	4.69~7.03	16.11~23.07	21.65~31.26	22.60~36.62	32.00~49.07			
Rollers number and material	6 rollers, 304/316 stainless steel material								
Flow rates of pump head with 6 rollers (mL/min)	0.1~50rpm	0.0053~2.60	0.02~10.07	0.027~12.72	0.037~18.50	0.043~22.21			
	50~100rpm	2.60~5.25	10.07~20.41	12.72~26.97	18.50~37.00	22.21~42.17			
	100~150rpm	5.25~8.13	20.41~33.08	26.97~44.62	37.00~55.50	42.17~65.00			
Tubing maximum pressure (Mpa)	Continuous	0.1							
	Intermittent	0.1							

Multichannel Pump Head



Product Introduction

The first generation multichannel pump head is used for multichannel transfer micro liquid. Occlusion can be adjusted. Widely use in supporting analytical instruments.

Features

- Accept 0.13mm-3.17mm ID tubing.
- Easy to change and fix the tubing. Occlusion can be adjusted slightly by ratchet wheel.
- Offer 1,2,4,6,8,12 channels for selection.
Non-standard products can be customized according to customer's requirements.
- 304 stainless steel rollers assembly. Provide two roller structures: 6 rollers and 10 rollers.



Model Number

- DG-1 • DG-2 • DG-4 • DG-6
- DG-8 • DG-12

Typical Application

- Widely use in the analytical instruments and laboratories

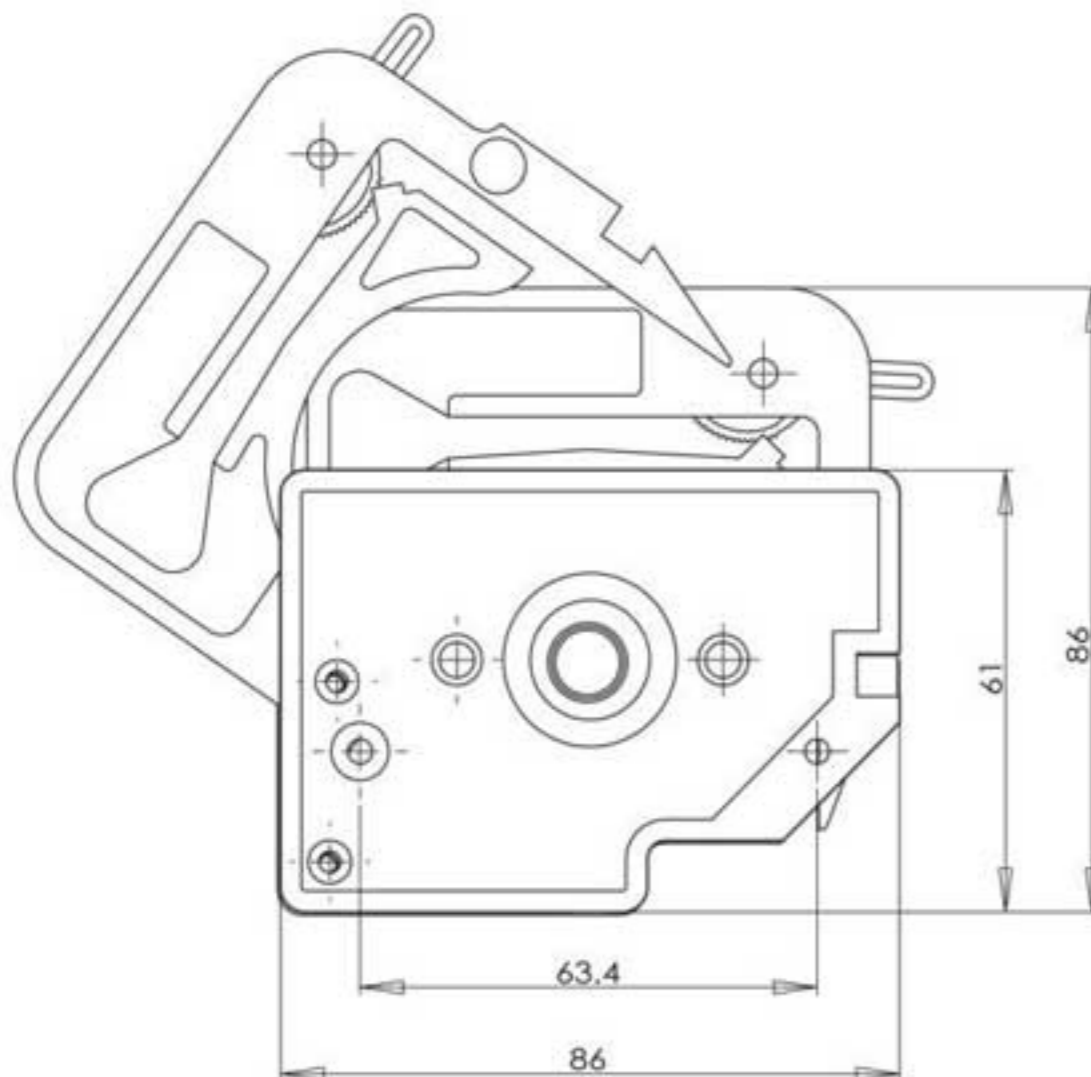
Installation Procedure



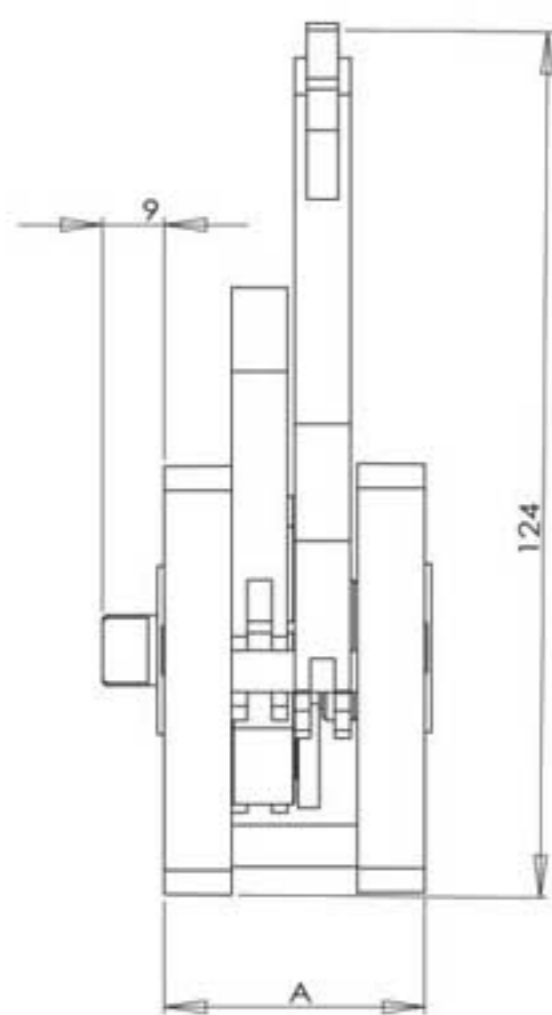
DG-4, DG-6, DG-8, DG-12 use unique spanner to open the cartridge

Installation Sizes Drawing

(Unit: mm)



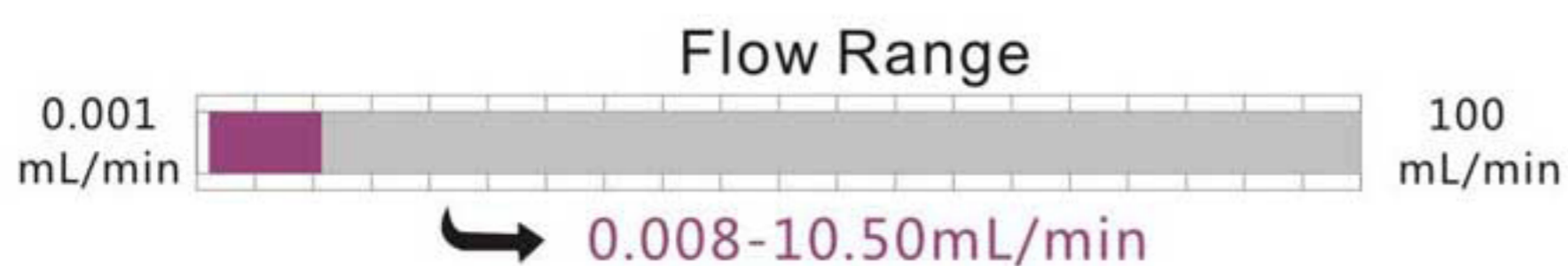
Front



Side

Technical Specifications

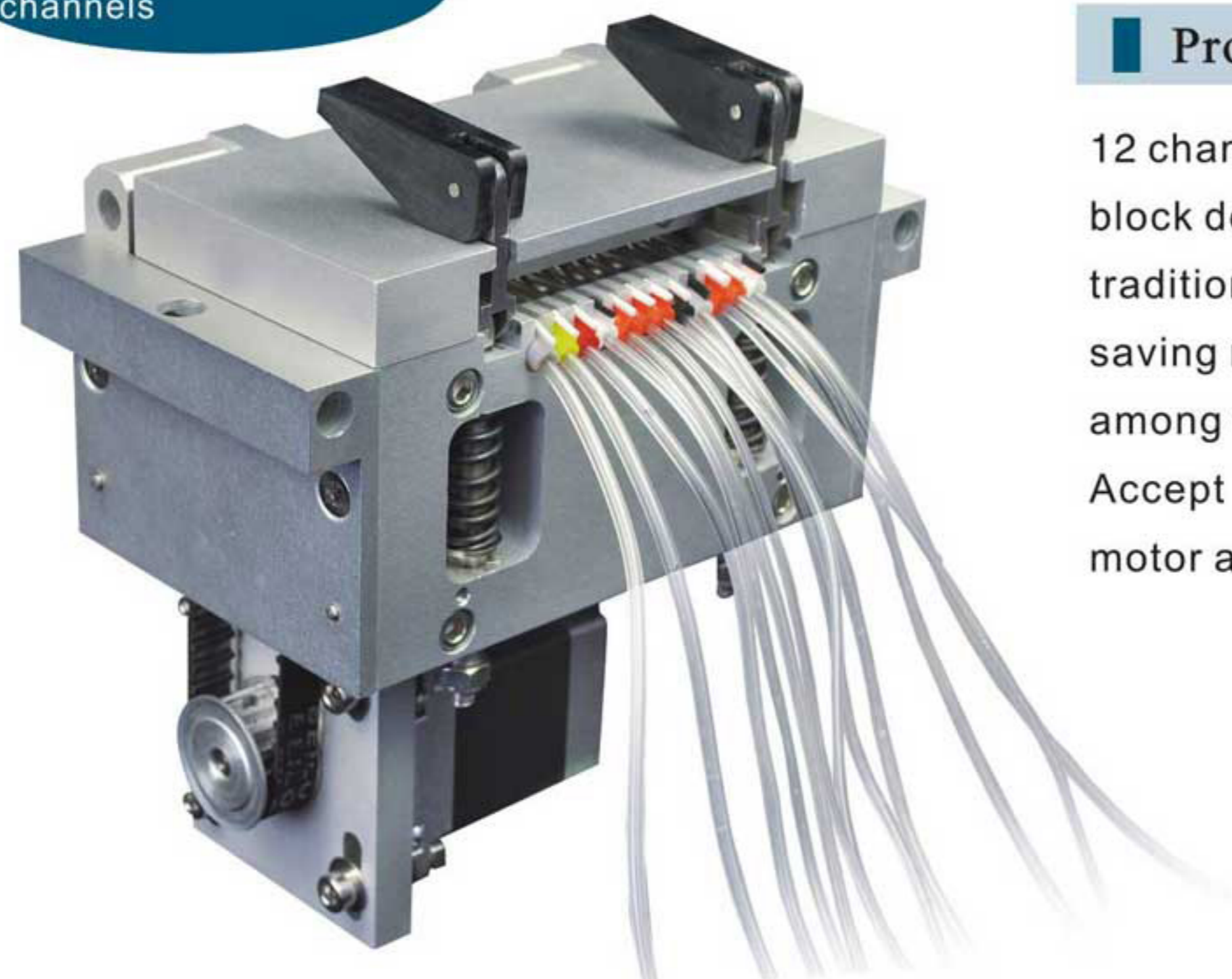
Pump head	DG-1	DG-2	DG-4	DG-6	DG-8	DG-12	
Channel number	1	2	4	6	8	12	
Tubing	Inside Diameter: 0.13-3.17mm, wall thickness: 0.5-1mm						
Flow rates	6 rollers	0.025-50mL/min(per channel)					
	10 rollers	0.02-33mL/min (per channel)					
Cartridge material	POM						
Rollers material	304 stainless steel						
Weight (kg)	6 rollers	0.21	0.27	0.40	0.54	0.67	0.95
	10 rollers	0.20	0.26	0.39	0.51	0.63	0.88



Multichannel Peristaltic Pump

MT12 SERIES

Higher accuracy between channels

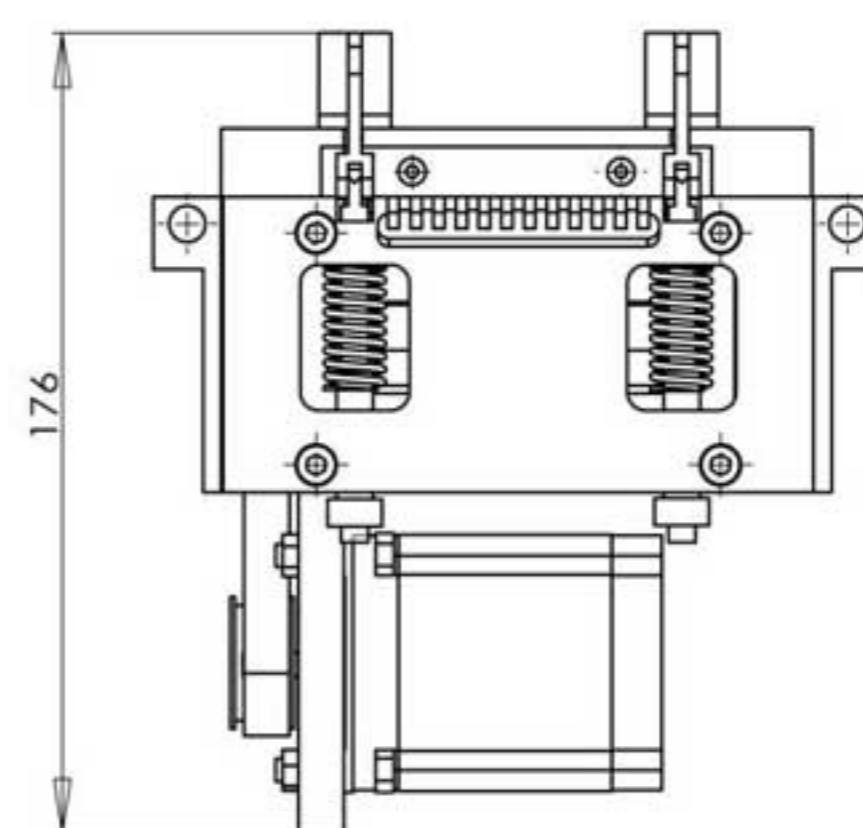


Product Introduction

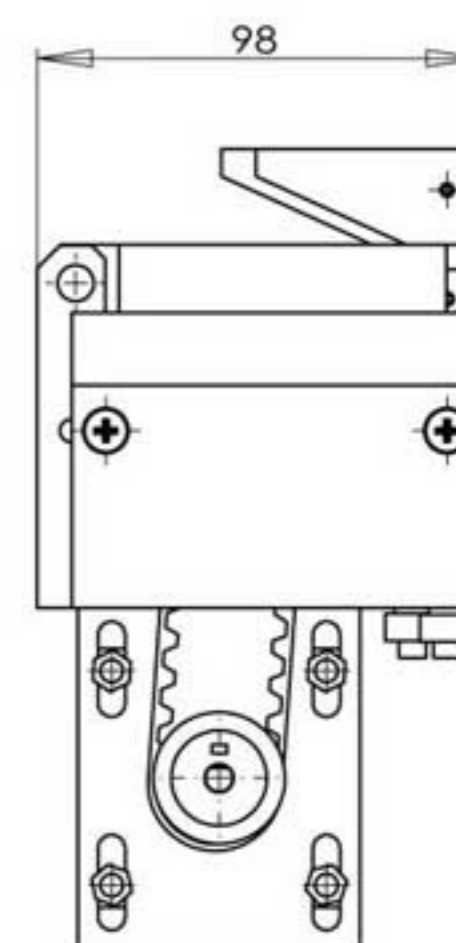
12 channels peristaltic pump with the unique complete compression block design, solves the big error problem between channels from traditional multichannel pump heads. The compact structure for saving room, widely used in high precision request of flow rates among channels, such as chemistry analytical instruments, etc. Accept many kinds of motors drive, such as stepper motor, DC motor and AC motor.

Installation Sizes Drawing

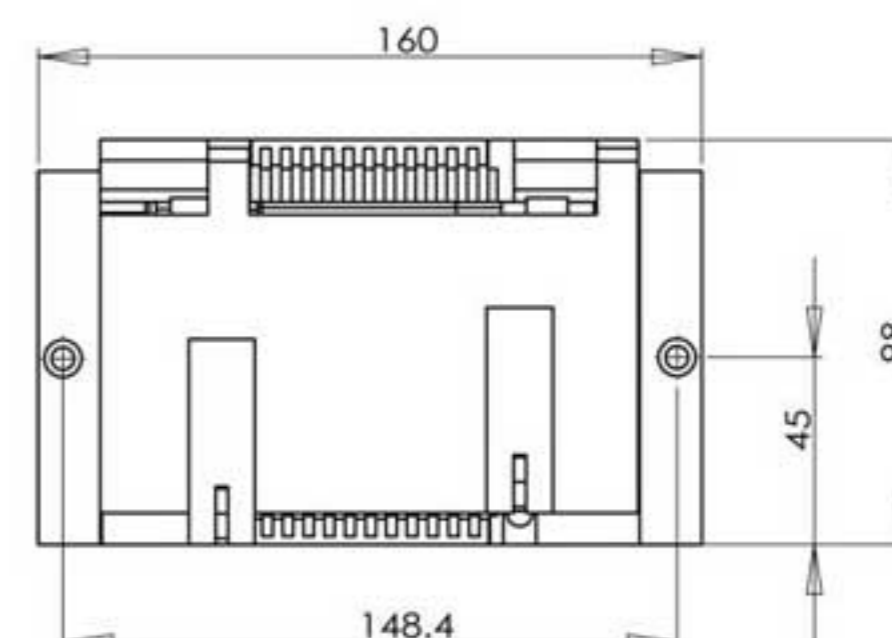
(Unit: mm)



Front



Side



Top

Model Number

- MT12

Typical Application

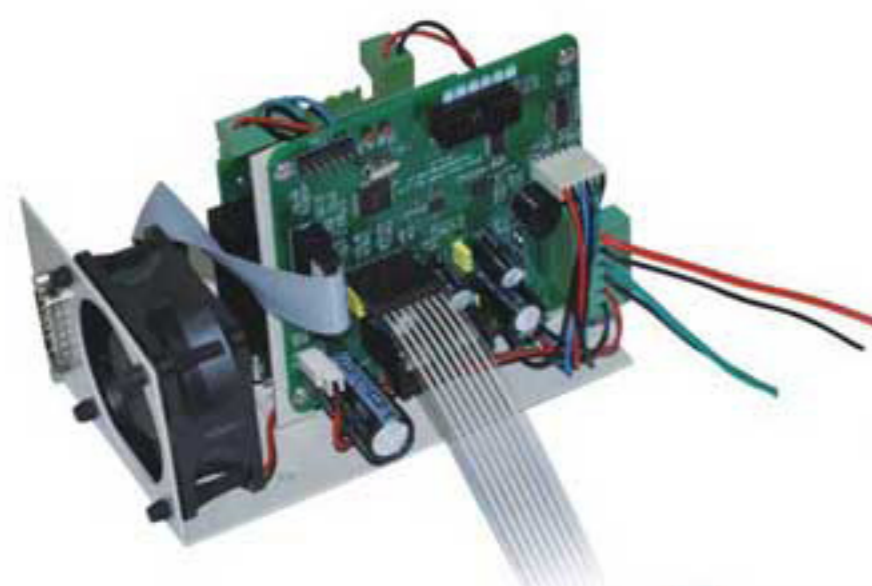
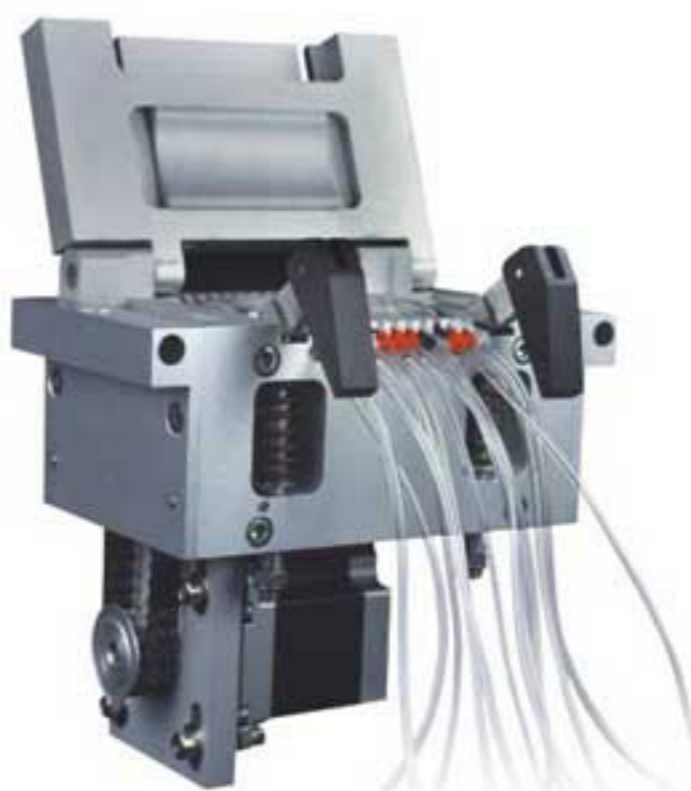
- Support the chemistry analytical instruments

Features

MT12 peristaltic pump is designed specially for increasing the precision among channels. The main body is made from aluminum alloy material. One compression block can press and fix 12 tubes at the same time to improve the transfer consistency and increase the transfer precision between channels.



The opening state drawing of compression block



The drive is installed inside of analytical device, communicate with the device through RS232 to control the peristaltic pump.

Embedded drive circuit

Technical Specifications

Model No.	Housing material	Rollers material	Channel number	Rollers number	Speed (rpm)	Tubing and flow rates per channel (mL/min)				Tubing maximum pressure (Mpa)	
						0.51 × 0.9	1.02 × 0.86	2.06 × 0.86	2.54 × 0.86	Intermittent	Continuous
MT12	Aluminum alloy	304/316 stainless steel	12 channels	10 rollers	0-50	0~0.84	0~2.5	0~7.5	0~10.5	0.2	0.15

YZ Series Pump Head

Product Introduction

Change the tubing easily and rapidly; Automatic tubing retention; Accept 9 sizes tubing to meet different flow rates requests. Two kinds of material housing for customers' selection. PSF (polysulphone material): white, exquisite appearance, good rigidity, high precision, usually be used in research laboratory and supporting analytical device. PPS (polyphenylene sulfide material): black, resist organic solvent corrosion, high precision and rigidity, suitable for industry or other bad working conditions. Rollers assembly with 304 stainless steel material resists corrosion with long lifetime.



PSF



PPS

Model Number

- YZ1515x
- YZ2515x

Typical Application

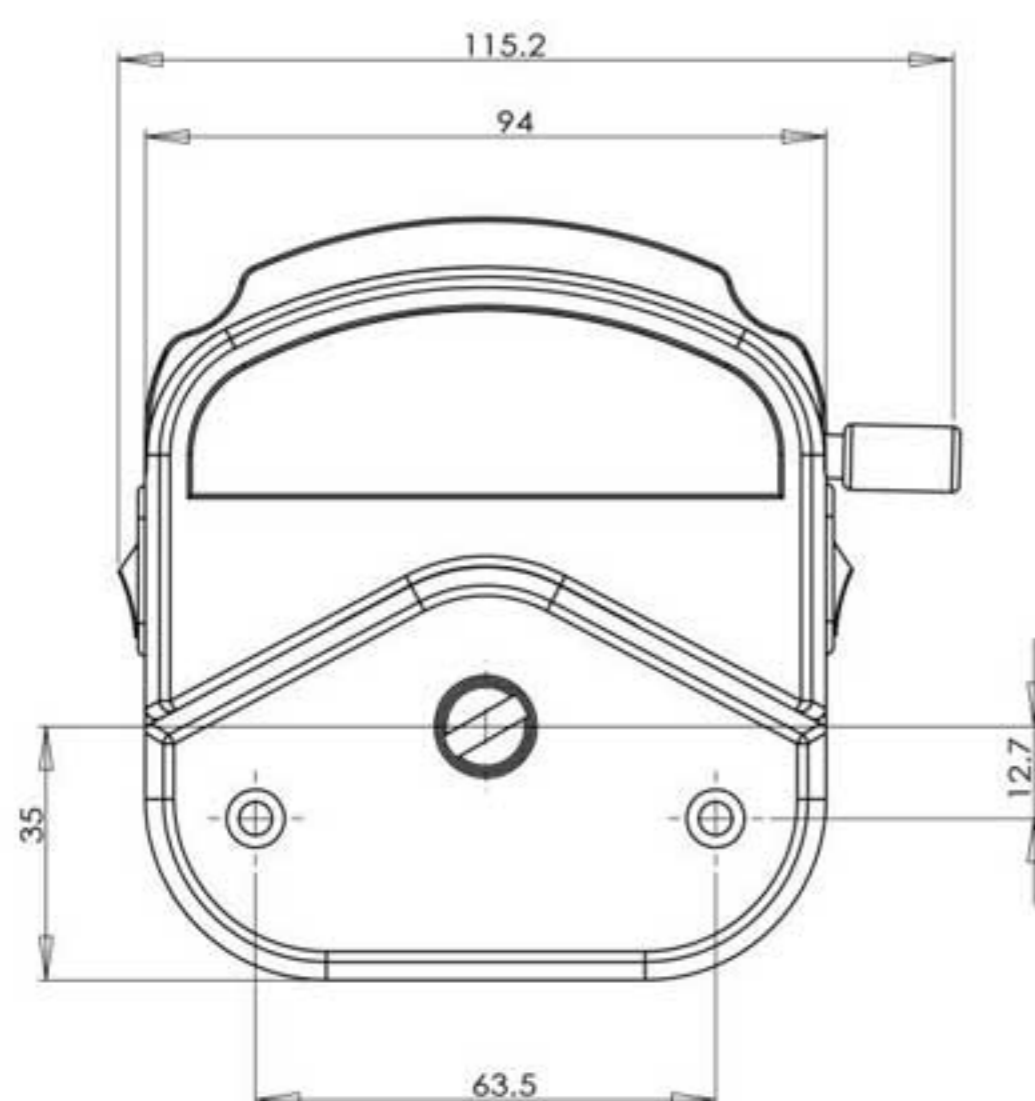
- Support COD on-line monitor.
- Support anorectal therapeutic instrument.
- Support biofermentation cylinder.

Features

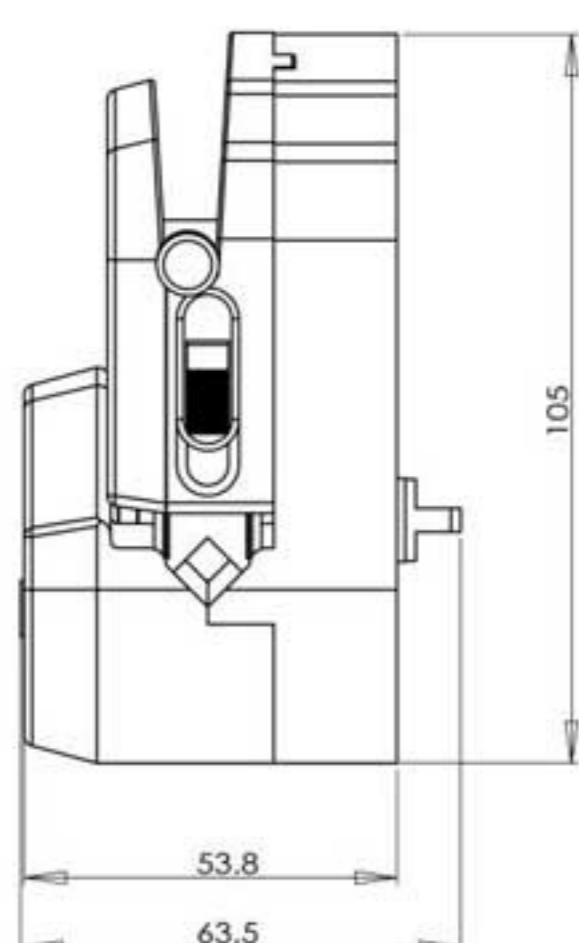
- The housing material of white pump head---PSF or PSU (polysulphone) PSF material pump head has white and good appearance. It resists high temperature, has long-term usage from -100°C to 150°C, perfect ageing-resistant performance in the high temperature. PSF pump head can resist corrosion of most inorganic acid, base and salt, but cannot resist organic solvent corrosion. If transfer organic solvent, please choose the PPS pump head.
- The housing material of black pump head---PPS (polyphenylene sulfide) PPS material has high molding precision and perfect rigidity. The pump head can achieve long-term running heavily and transfer fluid with high accuracy. Resist high temperature of 200°C and corrosion especially in the strong chemical corrosion resistance, such as organic solvent, etc.
- Rollers material---304 stainless steel Resist corrosion; Not easy to rust; High sanitary grade and low repair rate. All save the cost for customers.

Installation Sizes Drawing

(Unit: mm)



Front



Side



3 rollers

6 rollers

- Suitable for 9 different sizes tubing to ensure the same transfer precision- 5%~1% in different flow ranges.



Tubing Installation Procedure



A. Move lever to the left according with arrow direction, to open the pump head.



B. Install the correct size tubing.

C. Rotate the lever to the right according with arrow direction, to close the pump head.



D. Working status: Replace the compression block and fix the tubing, then ready for working.



Superposing several pump heads can increase the flow rates.



YZ Series pump head has wide application, and is usually used together with many kinds of analytical instruments. According to the different technical requests, it can adopt different motors to drive, such as stepper motor, DC motor, synchronous motor, AC gear motor, etc. Stack up several pump heads can increase the flow rates.

YZ35 Pump Head Introduction

YZ35 Pump head, aluminium alloy housing material, and stainless steel rollers, achieves high precision transferring liquid. Adaptive lock tube structure makes you easy to load the tube.

Features

- Aluminium alloy housing pump head.
- 304 stainless steel rollers.
- Large flow rates design, Max. 12L/min.



Technical Specifications

Pump head	Tubing	mL / r	Flow rates (mL/min) (1-600rpm)	Wall thickness (mm)	Tubing Max. pressure(Mpa)		Material /weight (kg)	
					Intermittent	Continuous	PSF	PPS
YZ1515x	13 [#]	0.07	0.07~42	1.6mm	0.17	0.27	0.40 (3 rollers)	0.46 (3 rollers)
	14 [#]	0.27	0.27~162					
	19 [#]	0.42	0.42~252					
	16 [#]	0.82	0.82~492		0.24	0.14	0.44 (6 rollers)	0.50 (6 rollers)
	25 [#]	1.7	1.7~1020					
	17 [#]	2.9	2.9~1740					
YZ2515x	18 [#]	3.8	3.8~2280	2.4mm	0.17	0.27		
	15 [#]	1.7	1.7~1020					
YZ35	24 [#]	2.9	2.9~1740	3.3mm	3.5	3.0	Aluminum alloy	
	73 [#]	12.3	12.3~7400				4.36	
	82 [#]	20	20~12000					

YZ SERIES

Fast Load Pump Head

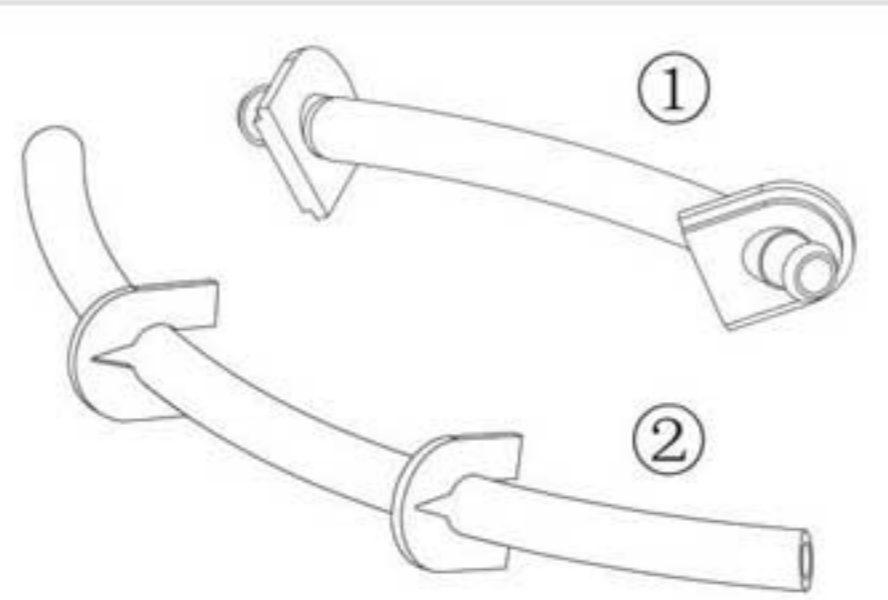
DZ25 SERIES



Product Introduction

Easy operation, change tube rapidly. The house material is aluminium alloy or PPS (polyphenyl thioether). 304 stainless steel rollers. DZ 25 pump head use 2.4mm wall thickness tube, the flow rate range is 3-6000 mL/min. This pump head is suitable for high viscosity liquid which include granule and floc. It also suitable for high pressure request. New cartridge structure design, can use the special connector, connect low cost tubing outside the pump head to save cost; also can use flexible tube card, meet hygiene requirement.

- ① Connector
The tubing length is 130mm between both connectors.
- ② Cartridge
DZ25-6L: the tubing length is 135mm between both cartridges.
DZ25-3L: the tubing length is 95mm between both cartridges.



Installation Procedure



1. Lift both side levers, take off the upper block.



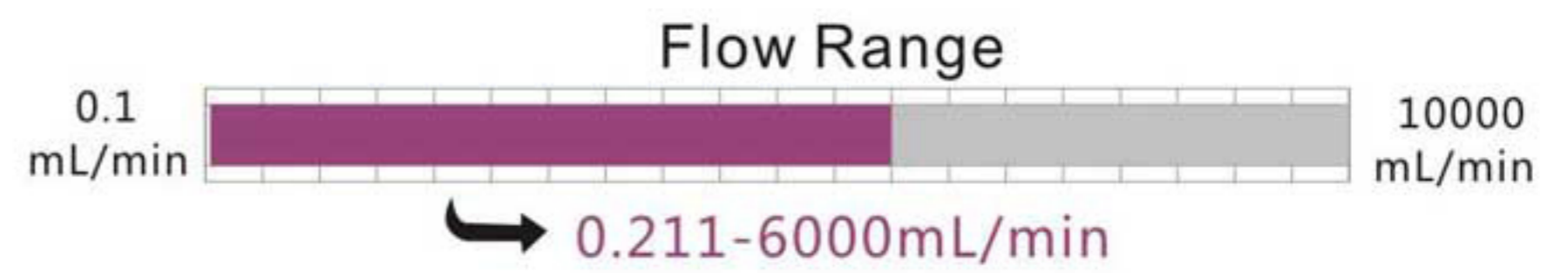
2. Put the tubing with cartridge or connector into pump housing.



3. Install the upper block, put down the levers to lock the block.

Technical Specifications

Model No.	Housing Material	Cartridge/ Connector material	Tubing		Flow rates (mL/min) (1-600rpm)	Weight (kg)
			Tubing sizes	ID x Wall(mm)		
DZ25-6L	Aluminum alloy/ PPS	PP	15 [#]	4.8×2.4	0.3~1800	1.86
			24 [#]	6.4×2.4	0.55~3300	
			35 [#]	7.9×2.4	0.8~4800	
			36 [#]	9.6×2.4	1~6000	
DZ25-3L	Aluminum alloy/ PPS	PP	15 [#]	4.8×2.4	0.211~1264	1.16
			24 [#]	6.4×2.4	0.385~2310	
			35 [#]	7.9×2.4	0.508~3050	
			36 [#]	9.6×2.4	0.6~3600	

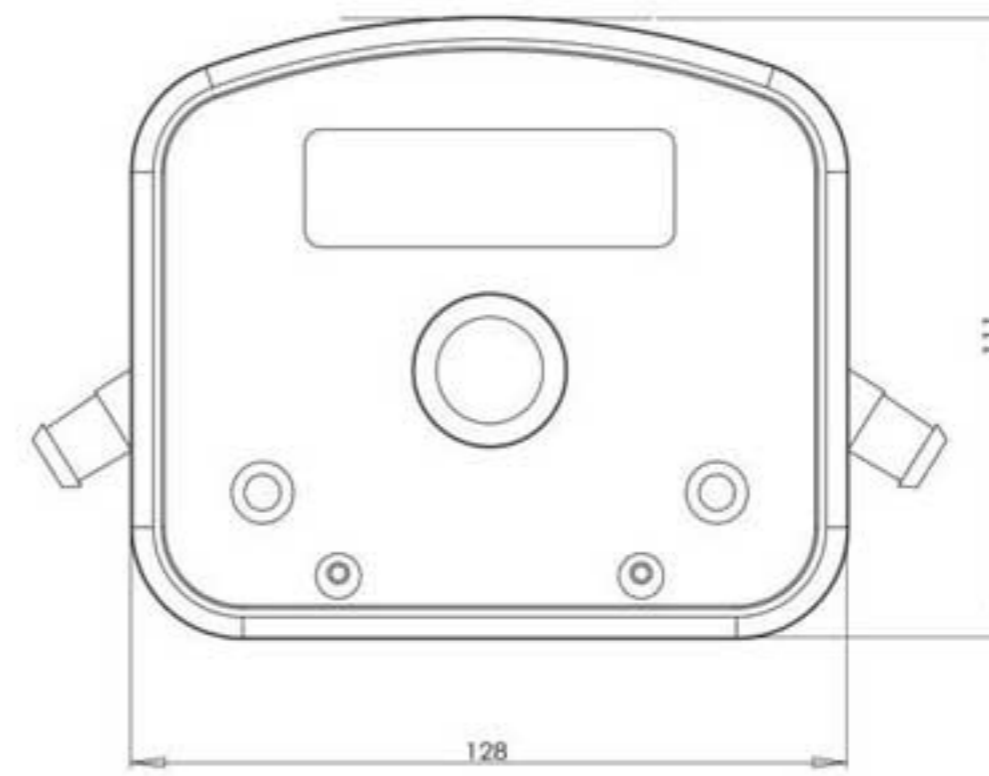


Model Number

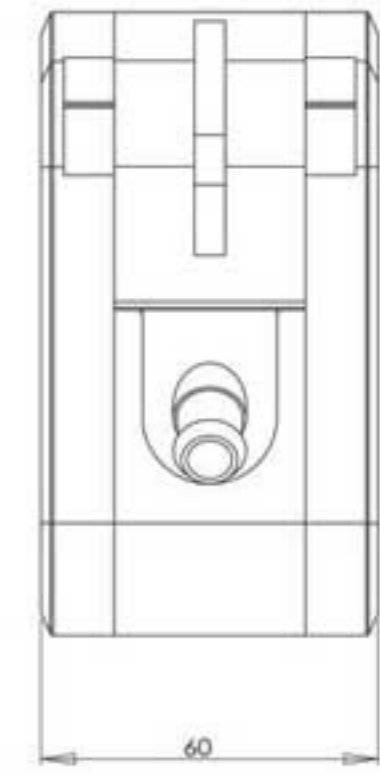
- DZ25-3L • DZ25-6L

Installation Sizes Drawing

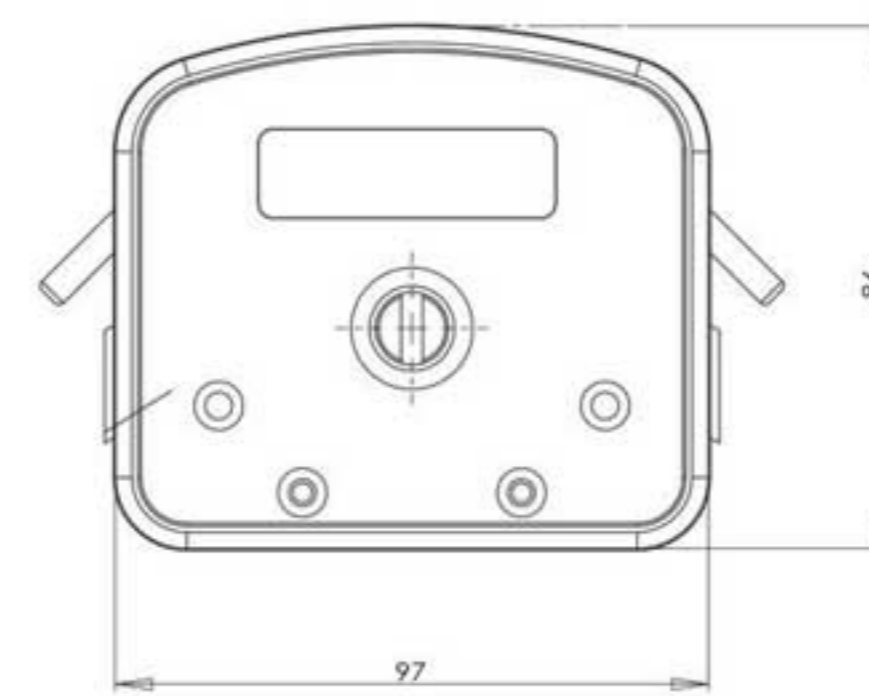
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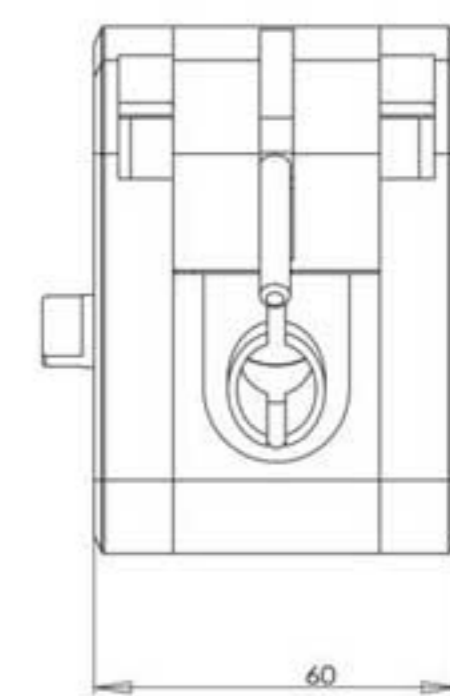
DZ25-6L Front view



DZ25-6L Side-view



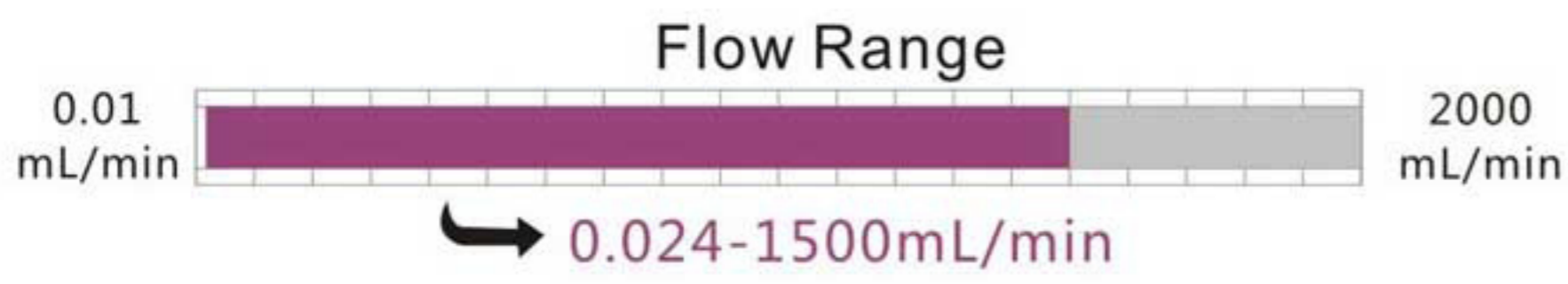
DZ25-3L Front view



DZ25-3L Side-view

Features

- Cartridges and base body is separated. It is convenient to change the tubing.
- New cartridge structure design, can use both the special connector and the flexible tube card.
- Wide flow rate range, accept 15#, 24#, 35# and 36# tubing.
- Pump head is stackable.

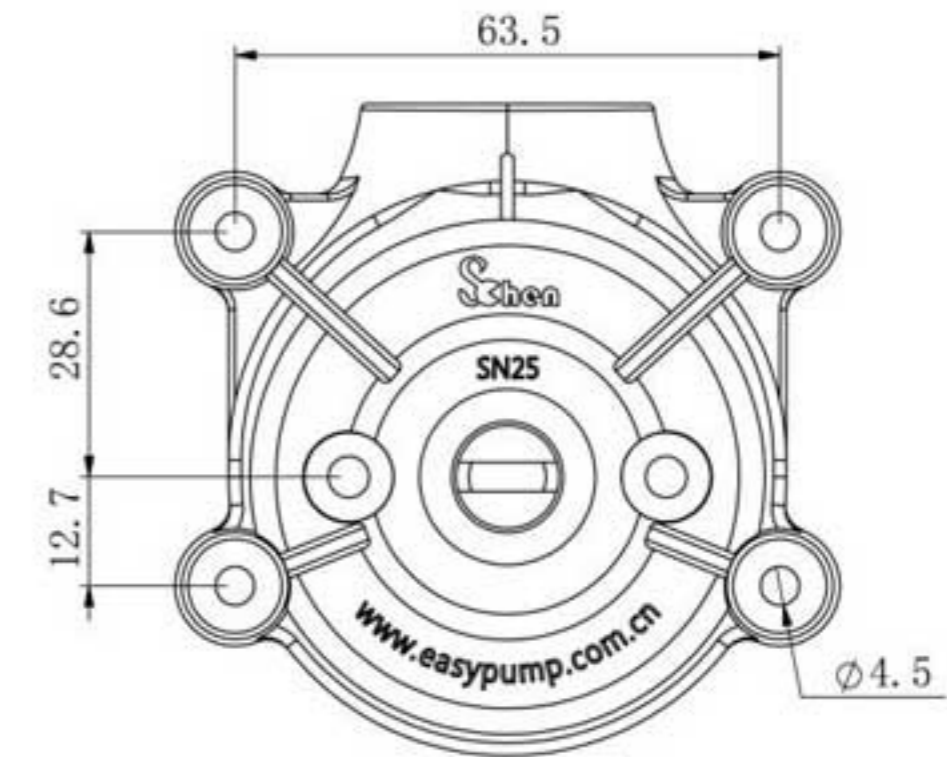


Standard Pump Head

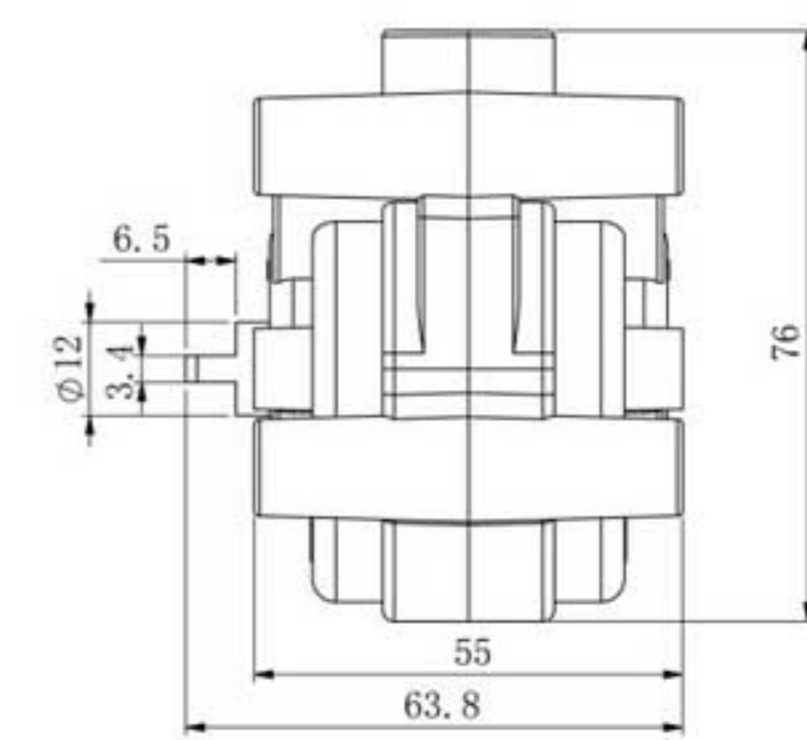


Installation Sizes Drawing

(Unit: mm)



Front view



Side-view

SN25 SERIES

Product Introduction

Standard pump head with compact structure, exquisite appearance, fixed occlusion and stable running. It is used in supporting many kinds of instruments. The crystal and frosted material bodies are available for customers' different requirements. Stack up several pump heads can increase flow rates.

Model Number

- SN25 • SN15-14
- SN15-16

Typical Application

- Use in the ice cream machine and coffee making machine
- Support COD on-line monitor



Stepper motor drive SN25 pump head



SN15 pump head with 14# and 16# tubing



Installation Procedure



A. Disassemble the pump head, and press the tubing on the rollers.



B. Make the tubing go around the rollers one cycle, and merge it on the exit.



C. Tighten the tubing aptly, and load the other half pump head body.

Technical Specifications

Model No.	Housing material	Rollers material	Tubing		Flow rates (mL/min) (1-600rpm)	Weight (kg)
			Tubing sizes	ID × Wall(mm)		
SN25	PC	304 stainless steel	24 [#]	6.4 × 2.4	0.25~1500	0.20
SN15-14			14 [#]	1.6 × 1.6	0.024~144	
SN15-16			16 [#]	3.1 × 1.6	0.088~528	

OEM/Private Label/Custom Design

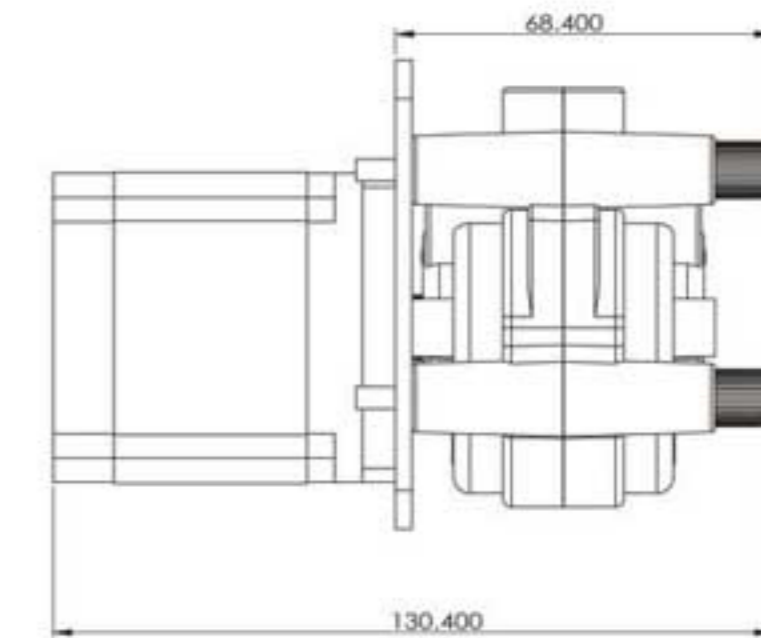
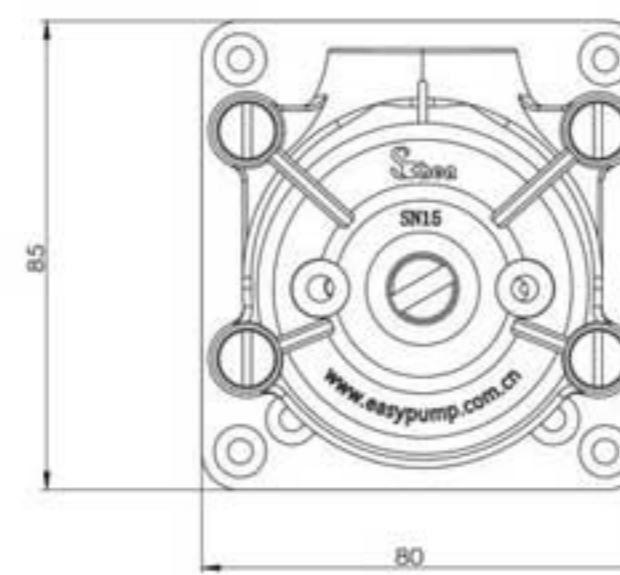
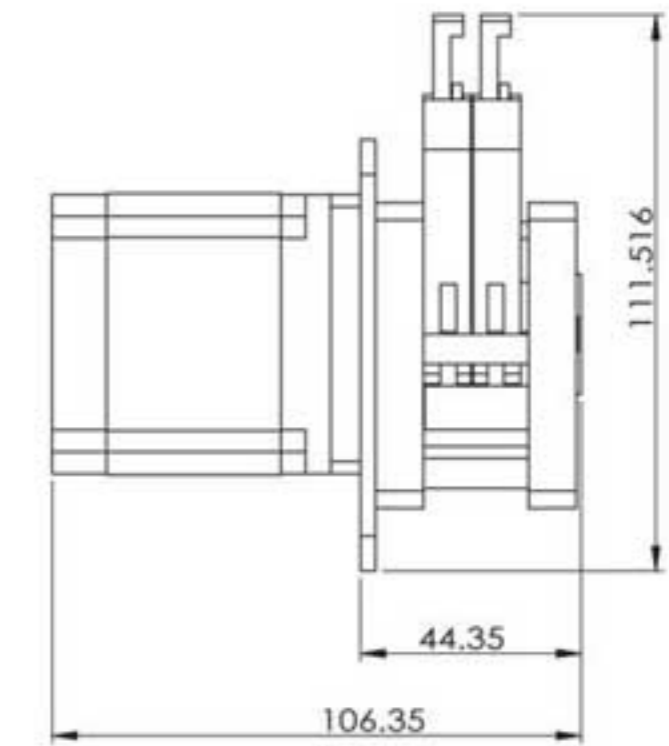
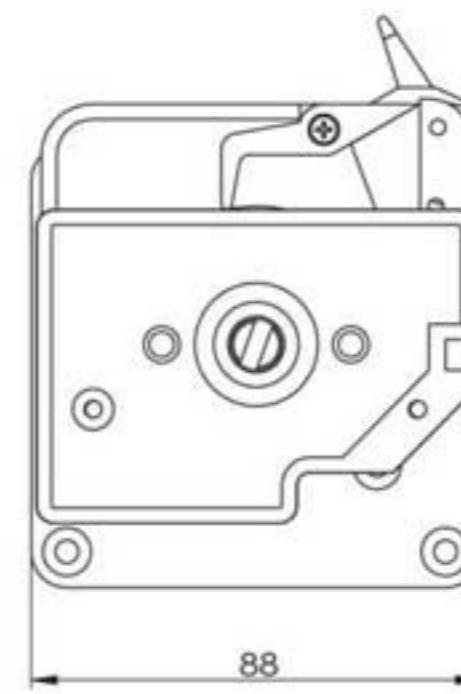
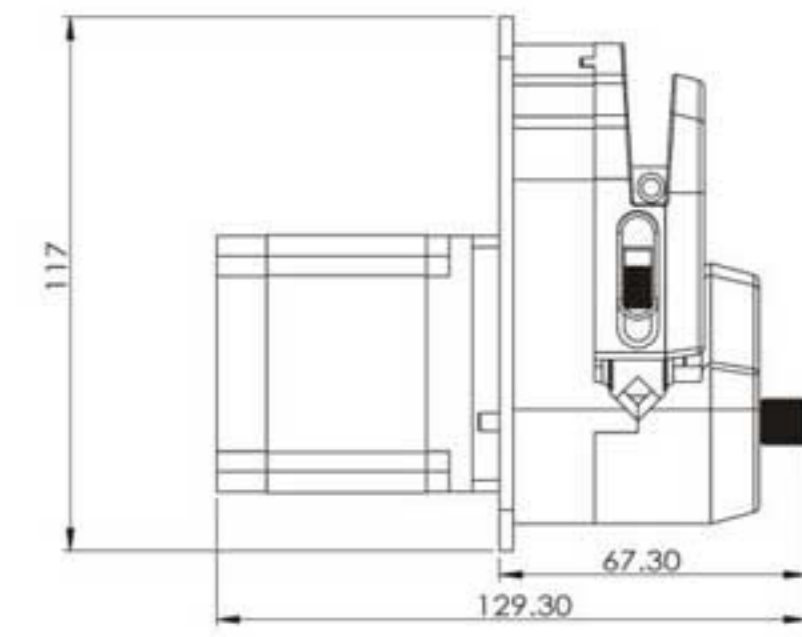
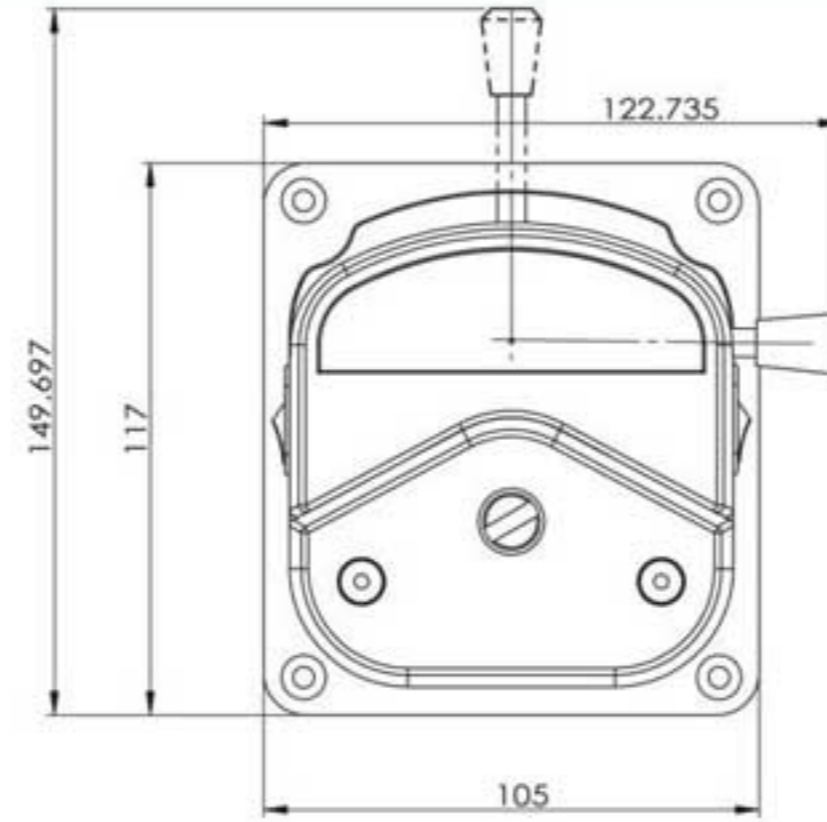
We define OEM customers as manufacturers who can use our products in whole or component form, as a component, assembly, or accessory to their primary products. At Shenzhen, we strive to provide quality products to the scientific, technical, and industrial marketplace. As a service to our customers, we offer custom design, private label, and OEM discounts. Take advantage of our outstanding mechanical and electronic expertise—let us custom-design a product to meet your specific application needs.

Compact Type OEM Product



(Unit: mm)

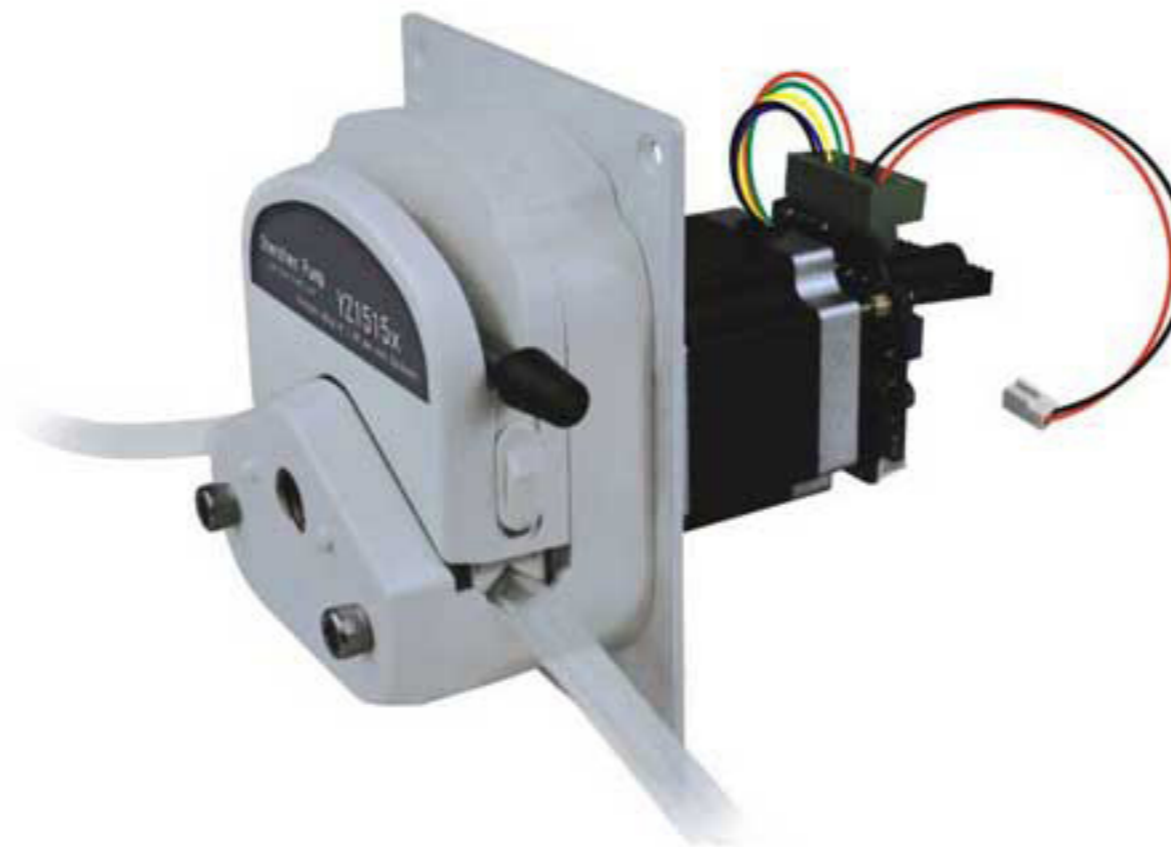
Installation Sizes Drawing



Integrated control



MiniPump compact design, can install hard and soft tube adapter. Stepper motor drive and drive circuit, can pre-set motor speed or receive pulse signal to adjust the speed.



The integrated controller for 57 stepper motor, compact design, convenient install, save space.

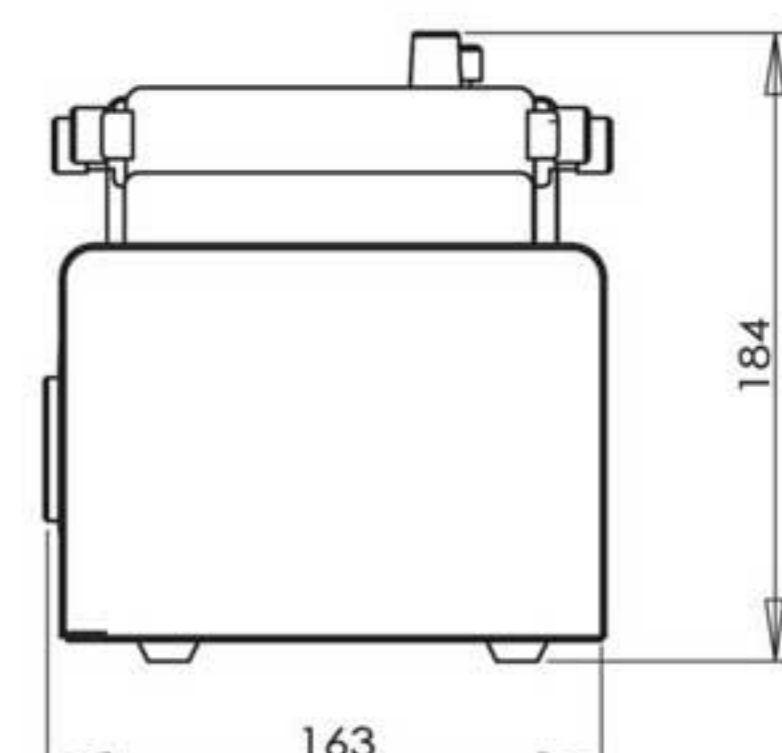
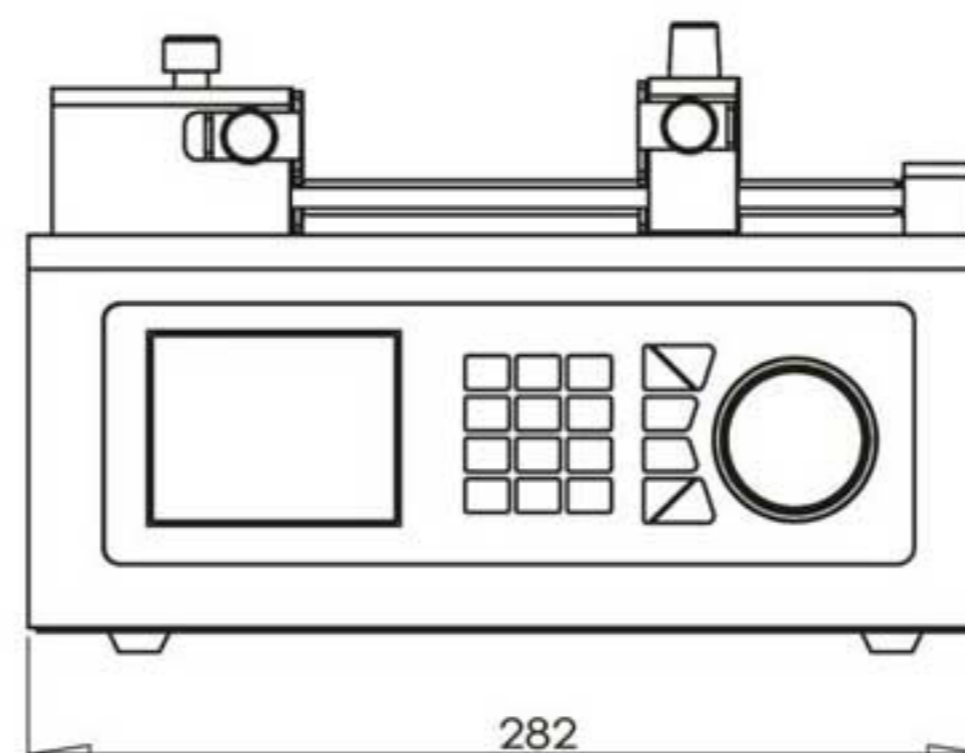
Controller Technical Specification:

Supply voltage input: 24V	
Logic voltage input: 5V	
Excitation setting	1, 1/2, 1/4, 1/8, 1/16 1/32, 1/64, 1/128
Speed control	Can use pulse signal control speed or serial port pre-set speed, also can use digital knob to adjust the speed.
Other ports	The motor controller can connect keyboard and LCD screen.

Syringe Pump OEM



(Unit: mm)



OEM Product

①



②



Shenchen Controller can be main control unit installed in equipments, meet different requests. Color touch screen, high speed and large capacity industrial grade microprocessor, embedded operating system, flexible GUI control interface. It can control multi-channel stepper motor or servo motor system.

③



MiniPump compact design, L-shape board, stepper motor drive.

④



The feature of this pump is easy to load tubing, lift the upper block then you can install tubing. Adaptive tubing pressure gap, load tiny tubing, special for micro flow rate transferring liquid.

⑤



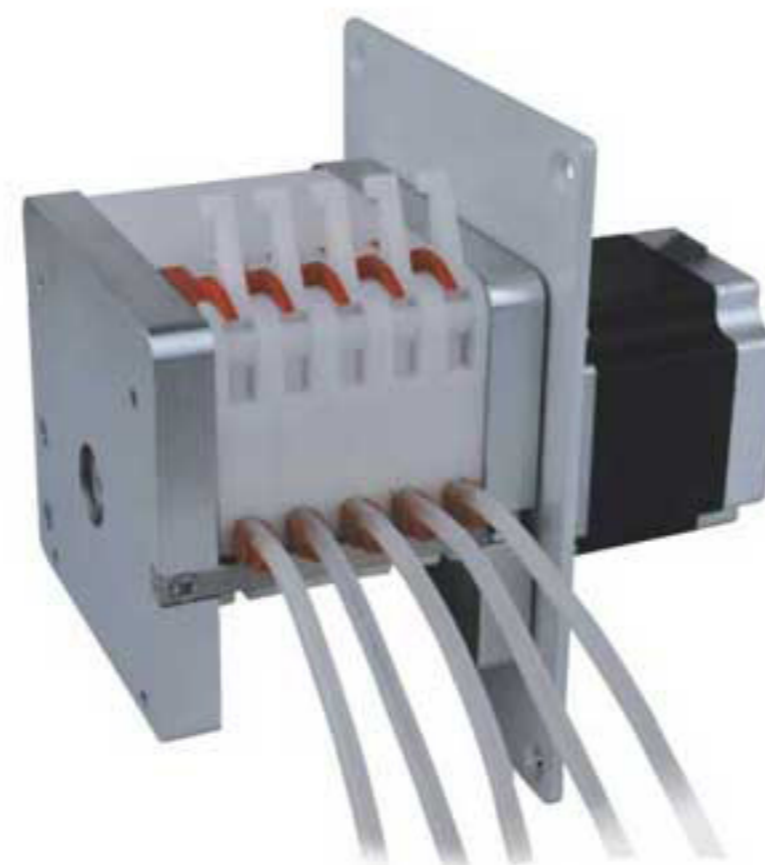
Anti-corrosion design, stainless steel connection board, PPS housing material, 304/316 stainless steel roller, strong stiffness, resist corrosion.

⑥



57 stepper motor drive MC pump head, embedded design, shock absorption mechanism, L shape metal connection board, can be installed through the front screw, also can be installed through the bottom screw.

⑦



57 stepper motor drive MC pump head, embedded design

⑧



DC motor drive SN25 pump head

⑨



Stepper motor drive YZ1515x pump head, embedded design, shock absorption mechanism. Split type controller and driver, can install inside user's device. Display screen and keyboard can extend to user's interface, also can external control it through RS232/RS485.

⑩



AC motor drive YZ1515x pump head

Flow Rate Peristaltic Pump (Intelligent Type)

Product Introduction

4.3 inch color touch screen control; dynamic display working status; flow data, setted parameters and system settings displayed in the same screen. Intelligent calibration and online micro adjusting function; three measurement mode: fixed volume measurement, fixed time and volume, timer start and stop. It can load different pump head. It is the ideal choice for laboratory, industrial production and equipment supporting.

The pump can load different pump head:

YZ1515x, YZ2515x easy load pump head,
MC series multichannel pump head (MC1~MC12),
DG series multichannel pump head (DG-1~DG-12),
SN series standard pump head (SN15, SN25),
DZ25-3L fast load pump head.

Model Number

● V1 ● V3 ● V6

Typical Application

● Laboratory application
● Industrial equipment supporting



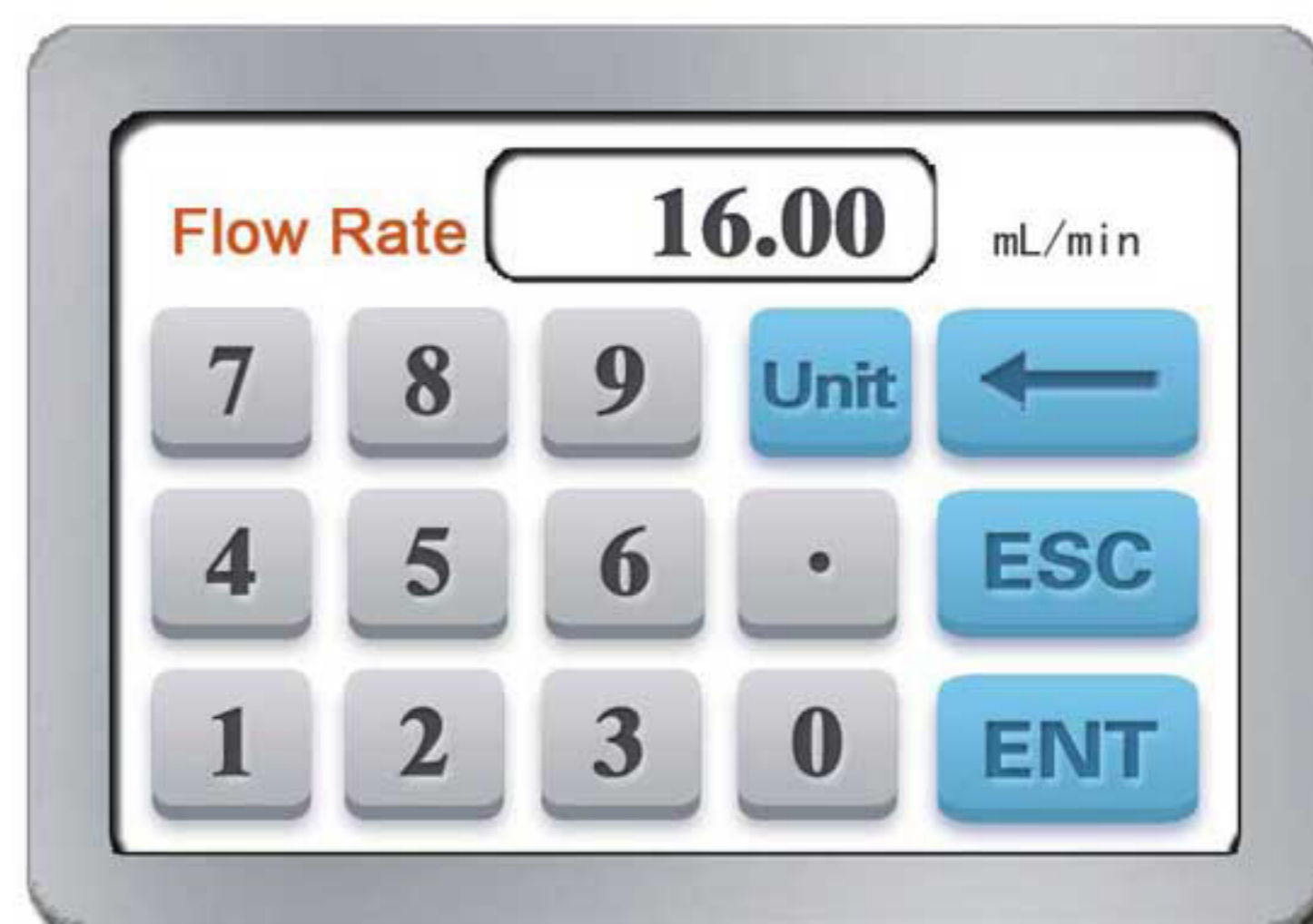
Features

- 4.3 inch color touch screen control, dynamic display working status, the flow volume and motor speed display in the same screen.
- Intelligent calibration function, it can calibrate the flow rate and dispensing volume, ensure the flow accuracy, suitable for high accuracy transferring liquid.
- On-line micro adjusting function, it can adjust the flow rate during production progress, to avoid the filling errors because of tubing fatigue and elasticity decreased.
- Accurate angle control technology, reach high precision dispensing and measurement.

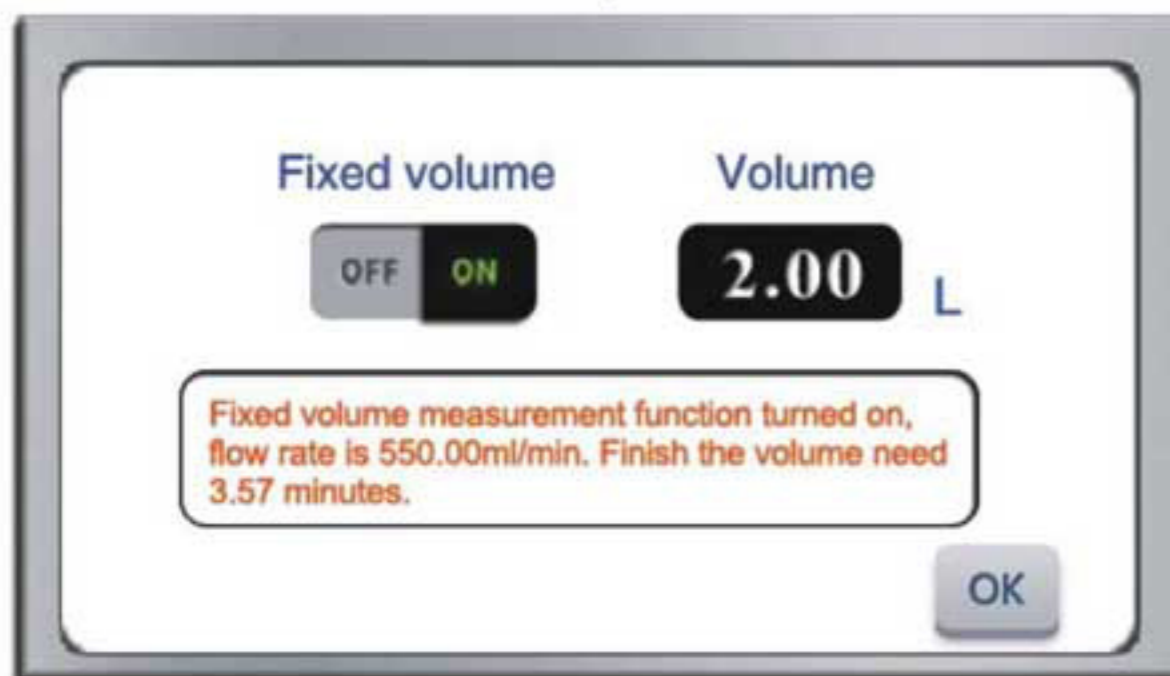
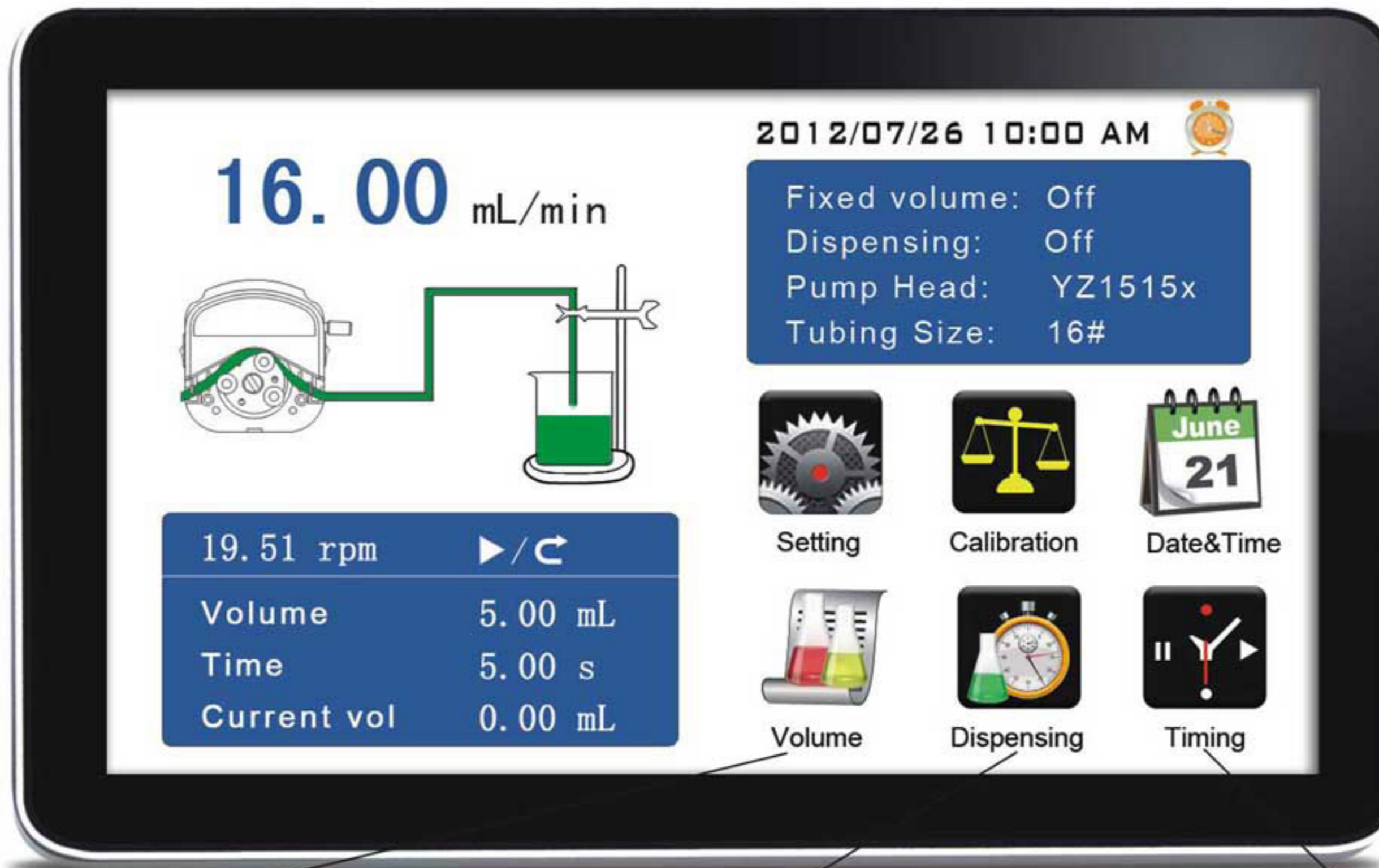
Touch screen control
dynamic display



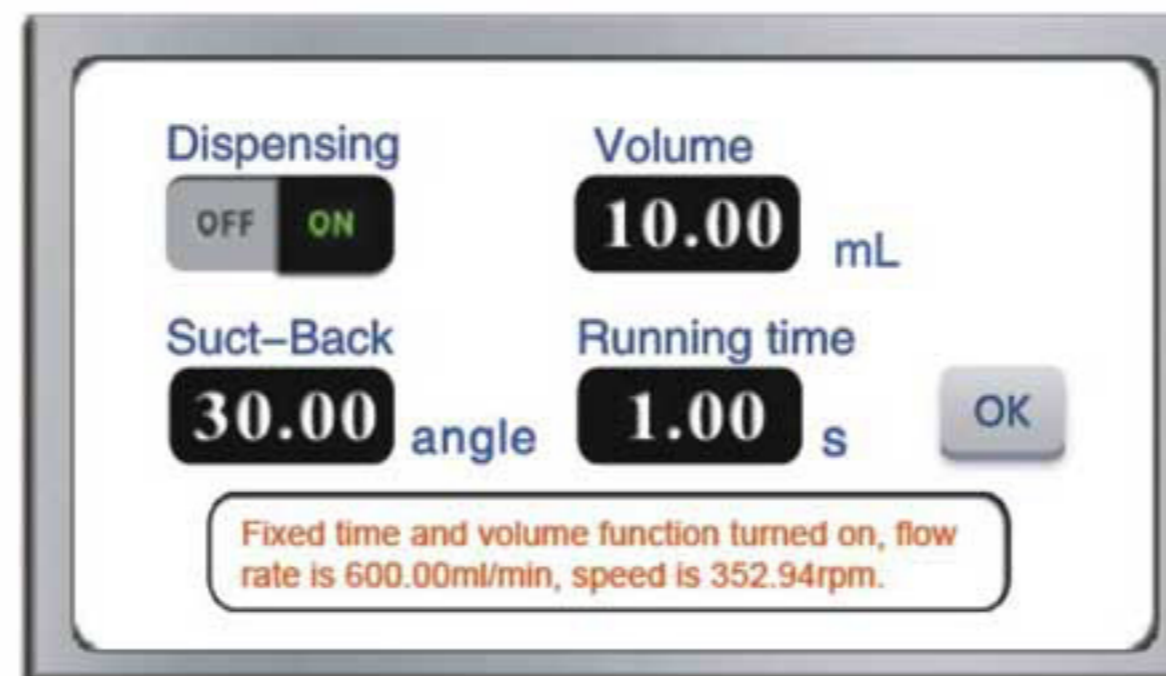
- Fixed volume measurement function: After turn on this function, the peristaltic pump will measure the liquid volume automatically, it will stop automatically after the volume reaches the set value. During this process, the volume can be changed. It is suitable for laboratory liquid dosing and chemical reaction process.
- Fixed time and volume function: After turn on this function, the peristaltic pump will transfer fixed volume within set time. It is suitable for liquid dispensing in laboratory and industrial production.
- Timer start and stop function: Can set the pump start and stop time freely, reach automation control.
- Load-shedding memory function, store the running parameters in time, safe and reliable.
- Fast fluid-filled function, can wash the tubing and also fill fluid in the tubing.
- High torque and low power loss, it can load several pump heads or multichannel pump head, meet different application requests.
- External control start and stop, convenient for equipment supporting.
- 304 stainless steel housing, resist corrosion, no rust.
- High performance-price ratio.
- Not suitable for outdoor application.



V Series Flow Setting Interface



Fixed Volume Measurement Setting Interface



Fixed Time and Volume Setting Interface



Timer Start and Stop Setting Interface

Peristaltic Pump

Technical Specifications

Flow Rate Peristaltic Pump	Pump head & Flow rates (mL/min)								
	YZ1515x	YZ2515x	MC1~MC12 (10)	MC1~MC12 (6)	DZ25-3L	SN25	SN15-14	SN15-16	
Drive & speed(rpm)	13", 14", 19", 16" 25", 17", 18"	15", 24"	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm		15", 24" 35", 36"	24"	14"	16"	
V1	0.1-150rpm	0.007~570	0.017~435	0.000067-32(suggest working rotating speed ≤150rpm)	0.00008-45(suggest working rotating speed ≤150rpm)	0.21 ~ 900	0.25 ~ 375	0.024 ~ 36	0.088 ~ 132
V3	0.1-350rpm	0.007~1330	0.017~1015			0.21 ~ 2100	0.25 ~ 875	0.024 ~ 84	0.088 ~ 308
V6	0.1-600rpm	0.007~2280	0.017~1740			0.21 ~ 3600	0.25 ~ 1500	0.024 ~ 144	0.088 ~ 528

Speed range	V1: 0.1-150rpm	Power supply	AC 220V ± 10%, 50Hz/60Hz (standard)
	V3: 0.1-350rpm		AC 110V ± 10%, 50Hz/60Hz (optional)
	V6: 0.1-600rpm		Power consumption
Speed resolution	0.01rpm	Operating condition	Temperature 0 to 40 °C; Relative humidity < 80%
Flow rate resolution	0.01	Drive dimensions (L × W × H)	213 × 152 × 235mm
Operation mode	Touch screen and membrane keypad	Protection rating	IP31
External control	Start/stop and CW/CCW:TTL level	Weight	5.02kg
	Speed control: 0-5V/0-10V/4-20mA		
	RS485 serial communication, standard MODBUS protocol		

Dispensing Peristaltic Pump (Intelligent Type)

Product Introduction

F Series intelligent dispensing peristaltic pump, usually used in laboratory and small scale industry, dispensing culture medium, diagnostic reagent and cosmetics. 4.3 inch color touch-screen control, Chinese and English version, graphical interfaces, dynamic display filling status, filling parametric and system settings display in the same screen. The filling system suitable for pollution-free, high-precision liquid filling. The filling precision is 0.5%-1%.

The pump can load different pump head:

- YZ1515x, YZ2515x easy load pump head,
- MC series multichannel pump head (MC1~MC12),
- DG series multichannel pump head (DG-1~DG-12),
- SN series standard pump head (SN15, SN25),
- DZ25-3L fast load pump head.

Touch screen control
dynamic display



Typical Application

- Widely used in medicine, chemical agent dispensing, such as dispense squirt cut, oral liquid and diagnostic reagent.
- Dispensing cosmetics, such as lip gloss and perfume.

Model Number

- F1 • F3 • F6

- The online calibration and online micro adjusting function, more convenient to calibrate or micro adjust the filling unit during the production progress. It can avoid the filling errors because of tubing fatigue and elasticity decreased.
- The filling system can store 60 commonly used filing modes, save users setting time, and improve working efficiency.
- Back suction angle setting avoid liquid drop off when the pump stop working.
- External control start and stop function, make it can be unified controlled by the host computer when working in filing line.
- Fast filling liquid function, not only can wash the tubing, but also can fill liquid in the tubing.
- 304 stainless steel housing, resist corrosion, no rust, conform to GMP sanitary request.

Features

- Accurate angle control technology, high precision filling.
- Color touch-screen control, friendly interface, dynamic display filling state, also display the filling parameter and system settings.
- Intelligent calibration function, it will calibrate the filling volume before production to ensure the filling accuracy, help you to improve the working efficiency.

F6 Filling Volume Reference Parameter (Media is water)

Controller	Pump Head	Tubing	Filling Volume (mL)	Filling Time (s)	Accuracy (±%)	Output (pcs/min)	Motor Speed (rpm)
F6	YZ1515x YZ2515x	13#	0.1	0.5	± 5ul	60	204.083
		13#	0.3	0.7	1.5	42	426.251
		13#	0.5	1	0.8	30	516.081
		13#	1	2	0.5	15	517.152
		14#	2	1	1	30	446.724
		14#	3	1.5	0.8	20	446.479
		19#	5	1.2	1	25	454.919
		16#	7	1	0.5	30	457.705
		25#/15#	10	1	1	30	303.426
		25#/15#	15	1	0.8	30	461.273
		25#/15#	20	1.2	0.5	25	518.945
		17#/24#	30	1.2	0.8	25	462.725
		17#/24#	50	2	0.5	15	461.595
		18#	80	2.5	0.5	12	427.274
		18#	100	3	0.5	10	446.583
	DZ25-3L	35#	150	4	0.5	8	447.940
		36#	100	4	0.5	8	481.802



Technical Specifications

Dispensing volume range	0.1-9999.99mL	Emptying Speed	400rpm
Dispensing time range	0.5-9999.99s	External control	Switch signal control missing bottle stop filling, start filling, stop filling, emptying and change direction.
Interval time range	0.5-9999.99s	Power consumption	<50W
Dispensing volume resolution	0.01mL	Working condition	Temperature 0 to 40 °C; Relative humidity < 80%
Dispensing time resolution	0.01s	Drive dimension (L×W×H)	213 × 152 × 235mm
Copy number range	1-9999, 0 represent unlimited.	Drive weight	5.02kg
Speed range	1.0~600rpm		
Back suction angle	0~360°	Protection level	IP31

Dispensing Peristaltic Pump	Pump head & Flow rates (mL/min)								
	YZ1515x	YZ2515x	MC1~MC12 (10)	MC1~MC12 (6)	DZ25-3L	SN25	SN15-14	SN15-16	
Tubing	13 [#] , 14 [#] , 19 [#] , 16 [#] 25 [#] , 17 [#] , 18 [#]	15 [#] , 24 [#]	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm		15 [#] , 24 [#] 35 [#] , 36 [#]	24 [#]	14 [#]	16 [#]	
Drive & speed(rpm)									
F1 BT100FJ	1-150rpm	0.07~570	0.17~435	0.00067-32(suggest working rotating speed ≤ 150rpm)	0.0008-45(suggest working rotating speed ≤ 150rpm)	2.11 ~ 900	2.5~375	0.24 ~ 36	0.88 ~ 132
F3 BT300FJ	1-350rpm	0.07~1330	0.17~1015			2.11 ~ 2100	2.5~875	0.24 ~ 84	0.88 ~ 308
F6 BT600FJ	1-600rpm	0.07~2280	0.17~1740			2.11 ~ 3600	2.5~1500	0.24 ~ 144	0.88 ~ 528

Dispensing Peristaltic Pump (Economic Type)

Product Introduction

F series high precision dispensing peristaltic pump, it can preset the dispensing time, interval time and copy numbers. Widely used in filling machine and laboratory dispensing chemical agent. With the excellent practicability and high price ratio, the pump has won good reputation from customers.

Economical and practical



Technical Specifications

Rotation speed	1.0~600rpm, CW/CCW	Power supply	AC 220V ± 10%, 50Hz/60Hz (standard)
Speed resolution	0.1rpm		AC 110V ± 10%, 50Hz/60Hz (optional)
Speed control	Digital rotary encoder adjusts speed	Power consumption	<50W
Display	3-digit LED displays current rotating speed and dispensing frequency	Operating condition	Temperature 0 to 40 °C; Relative humidity < 80%
Copy number	1~999 times	Drive dimensions (L×W×H)	BT100FJ:234 × 144 × 140mm
Dispensing time	0.1-999 sec		BT300FJ, BT600FJ:254 × 184 × 145mm
Pause time	0.1-999 sec	Drive weight	4.68kg
External control	Start/stop control, CW/CCW control, speed control (0-5V/0-10V/4-20mA)	Protection rating	IP31

Filing System (Split Type)

Touch screen control
dynamic display



Product Introduction

CF series split type intelligent filling system, consist with one controller and several filling units. You can add or decrease filling units according with different requests, and also finish same filling request in different position. One controller can control 16 filling units. 4.3 inch color touch screen, Chinese and English version, graphical interfaces, dynamic display working status, filling parametric and system settings display in the same screen. It is suitable for pollution-free, high-precision liquid filling. Accuracy is 0.5%-1%.

The pump can load different pump head:

YZ1515x, YZ2515x easy load pump head,
MC series multichannel pump head (MC1~MC12),
DG series multichannel pump head (DG-1~DG-12),
SN series standard pump head (SN15, SN25),
DZ25-3L fast load pump head.

Model Number

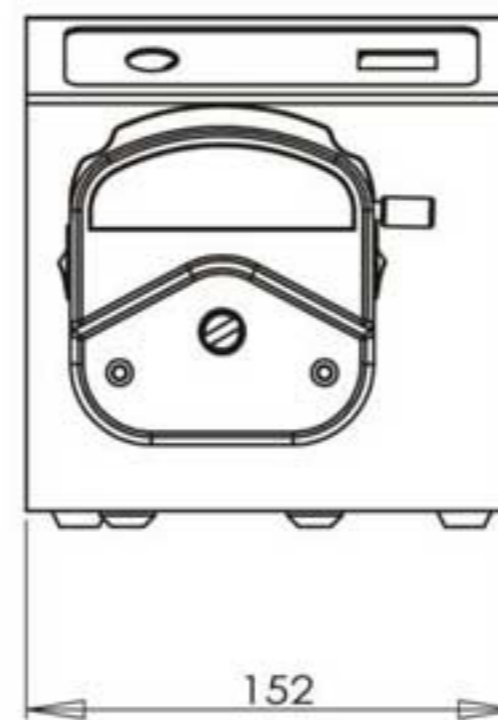
- CF100
- CF300
- CF600

Features

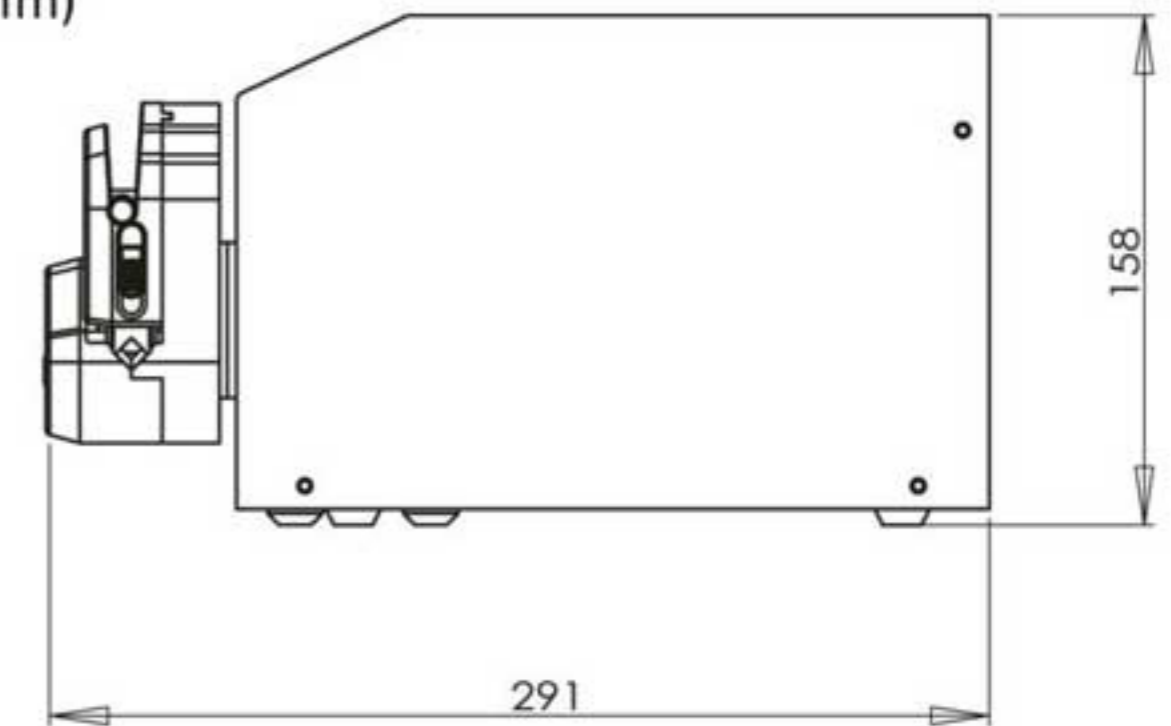
- Split design, saving space, convenient to install.
- Add or decrease filling units freely.
- You can check the working status of the filling units from controller.
- The filling unit with LCD screen display address number and working status.
- Each filling units accept stop filling signal when bottle absent.
- One controller can control 1-16 filling units.

Dimension

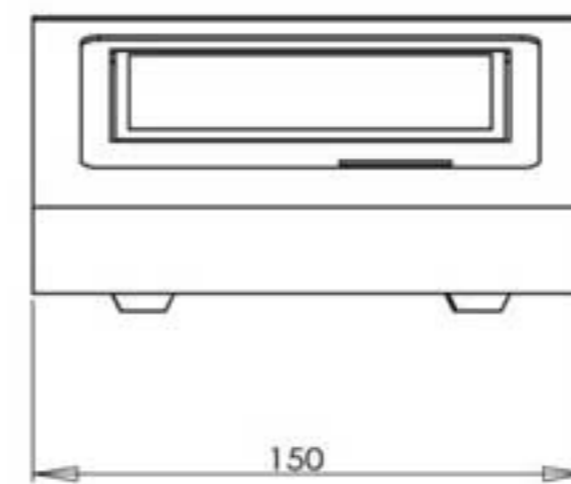
(Unit: mm)



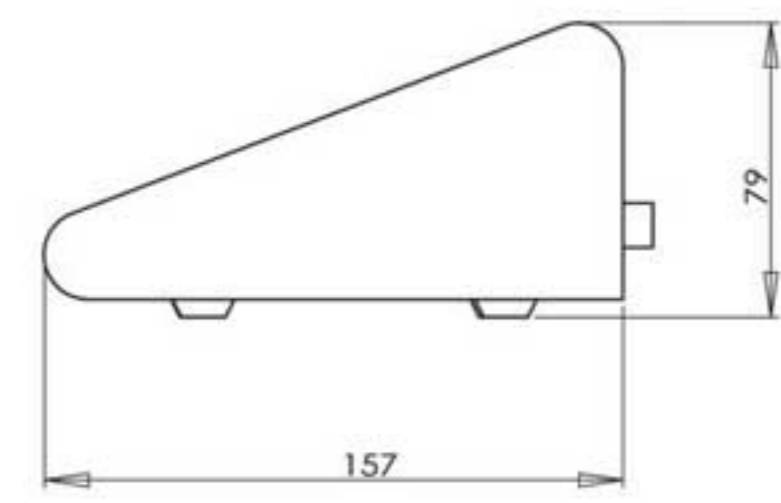
Front



Side



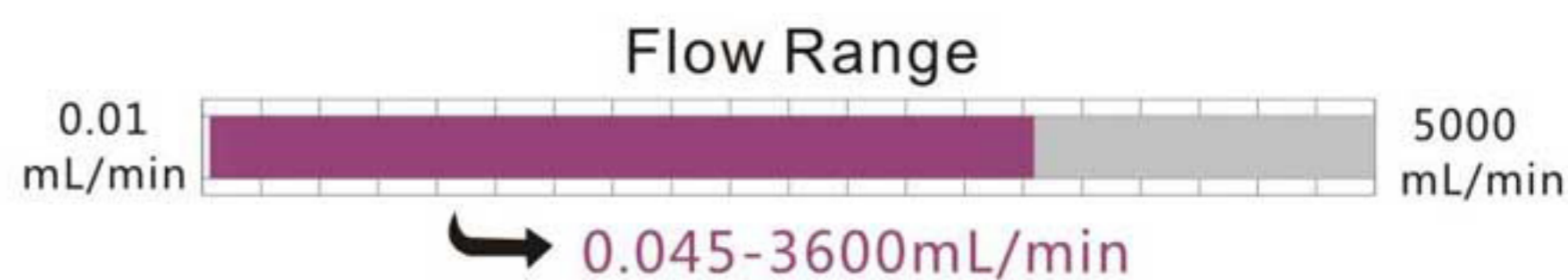
Front of Controller



Side of Controller



Filling System (Integrated Type)



Product Introduction

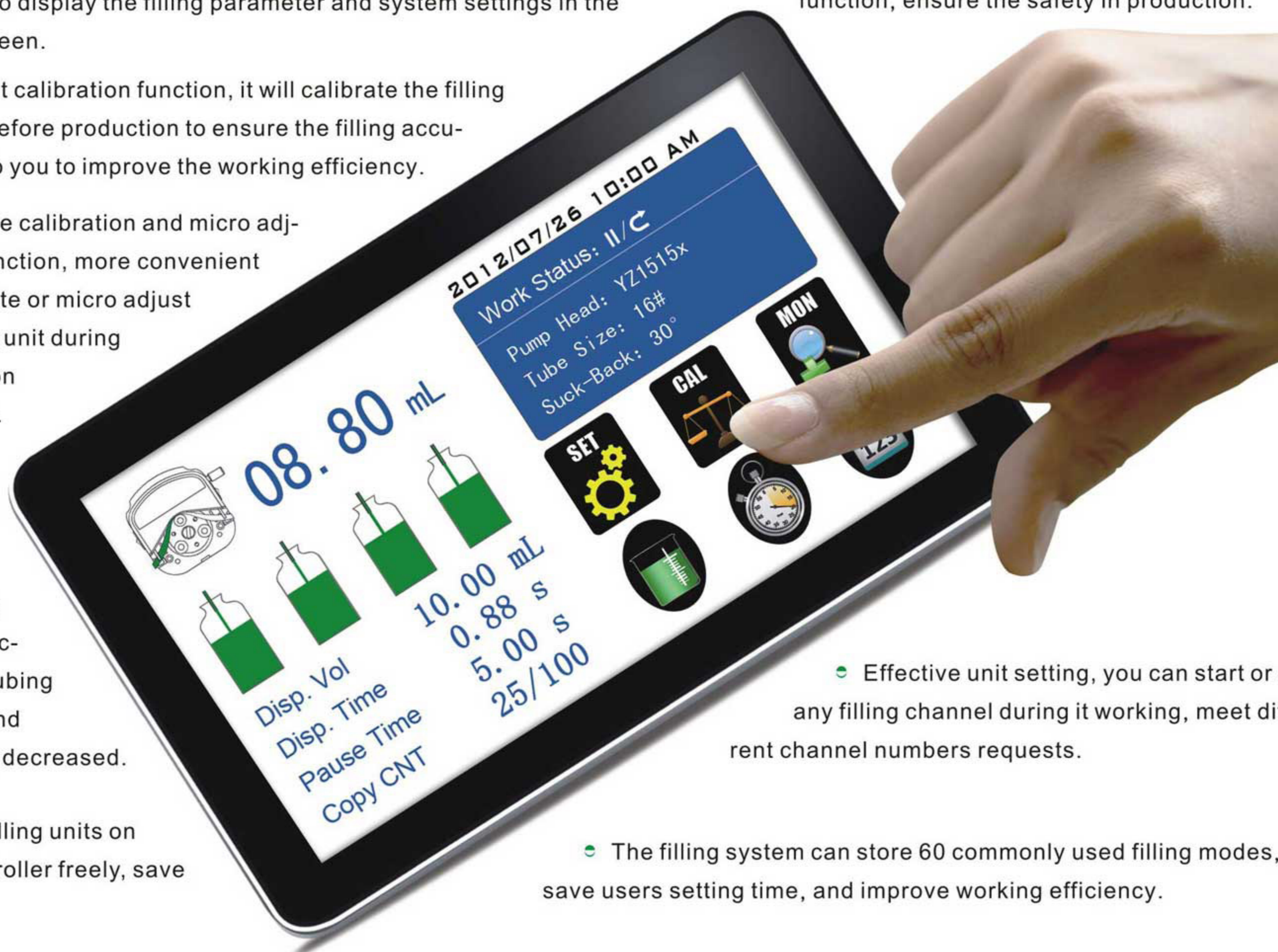
DF600 integrated type filling system is consist with controller and integrated filling units, each group have 4 filling units. One controller can control 4 group, total 16 filling units. 4.3 inch color touch screen, graphical interface, dynamic display working status, filling parameter and system settings display in the same screen. The filling system suitable for pollution-free, high-precision liquid filling. Accuracy is 0.5%-1%.

Product Function and Features

- Accurate angle control technology, high precision filling.
- Color touch-screen control, friendly interface, dynamic display filling state, also display the filling parameter and system settings in the same screen.
- Intelligent calibration function, it will calibrate the filling volume before production to ensure the filling accuracy, help you to improve the working efficiency.
- The online calibration and micro adjusting function, more convenient to calibrate or micro adjust the filling unit during production progress.

It can avoid the filling errors because of tubing fatigue and elasticity decreased.

- Extend filling units on one controller freely, save cost.



- Effective unit setting, you can start or stop any filling channel during it working, meet different channel numbers requests.

- The filling system can store 60 commonly used filling modes, save users setting time, and improve working efficiency.

Model Number

- DF100 • DF300 • DF600

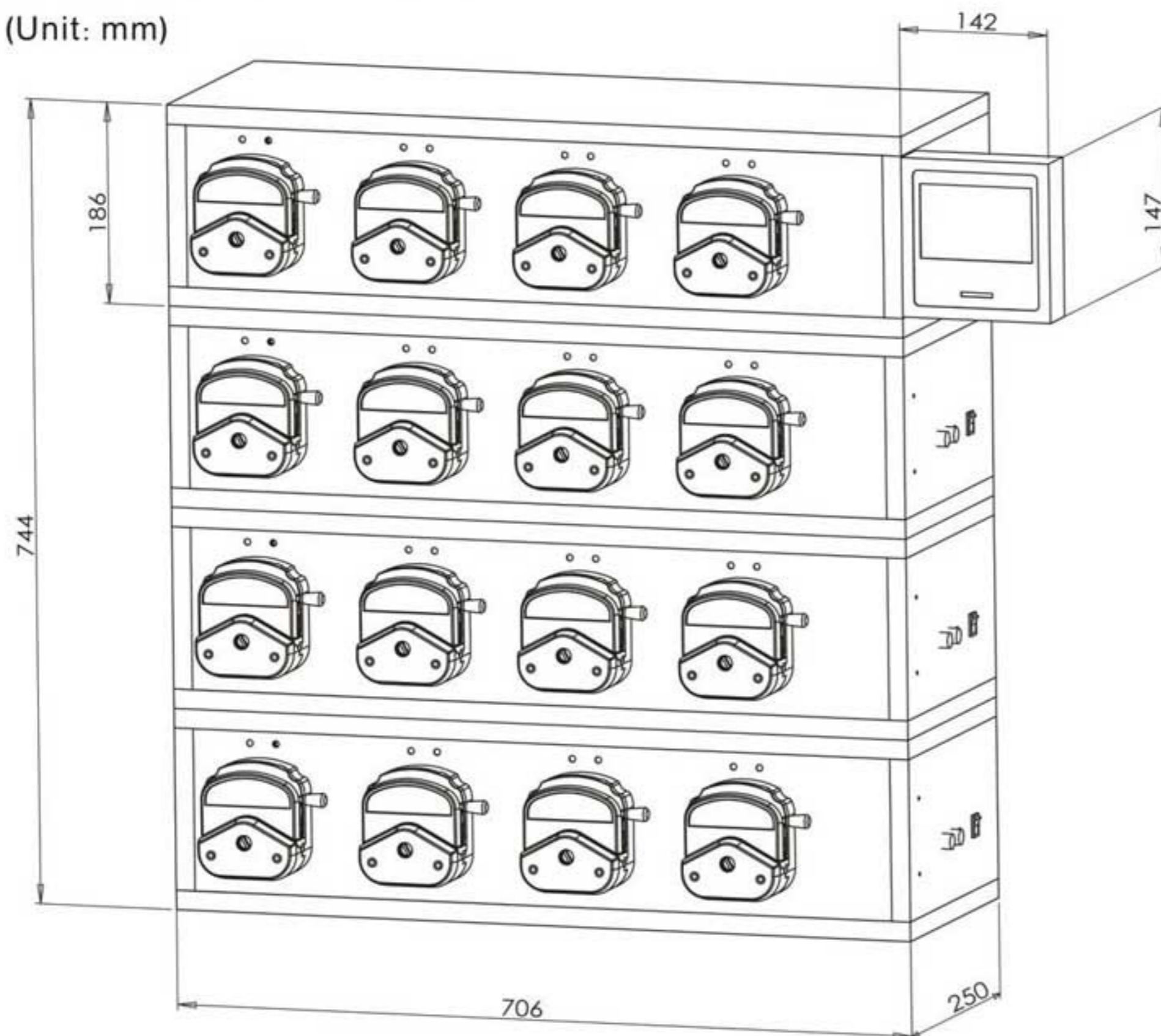
Typical Application

- Medicine and health care product filling, diagnostic reagents dispensing
- Food and beverage filling
- Cosmetics filling

Filling System

Filling System (Integrated Type)

(Unit: mm)



■ Dimension ■

- Back suction angle setting avoid liquid drop off when the pump stop working.
- External control start and stop function, make it can be unified controlled by the host computer when working in filling line.
- Each filling units accept stop filling signal when bottle absent, reach single channel stop filling with bottle absent.
- Fast filling liquid function, not only can wash the tubing, but also can fill liquid in the tubing.
- Separate controller and filling units, can install the controller where is convenient to operate.
- 304 stainless steel housing, resist corrosion, no rust, conform to GMP sanitary request.

■ Filling Volume Reference Parameter (Media is water) ■

Controller	Pump Head	Tubing	Filling Volume (mL)	Filling Time (s)	Accuracy (±%)	Output (pcs/min)	Motor Speed (rpm)
DF600 CF600	YZ1515x YZ2515x	13#	0.1	0.5	± 5ul	60	204.083
		13#	0.3	0.7	1.5	42	426.251
		13#	0.5	1	0.8	30	516.081
		13#	1	2	0.5	15	517.152
		14#	2	1	1	30	446.724
		14#	3	1.5	0.8	20	446.479
		19#	5	1.2	1	25	454.919
		16#	7	1	0.5	30	457.705
		25#/15#	10	1	1	30	303.426
		25#/15#	15	1	0.8	30	461.273
		25#/15#	20	1.2	0.5	25	518.945
		17#/24#	30	1.2	0.8	25	462.725
		17#/24#	50	2	0.5	15	461.595
		18#	80	2.5	0.5	12	427.274
	18#	100	3	0.5	10	446.583	
	DZ25-3L	35#	150	4	0.5	8	447.940
		36#	100	4	0.5	8	481.802

■ Technical Specifications ■

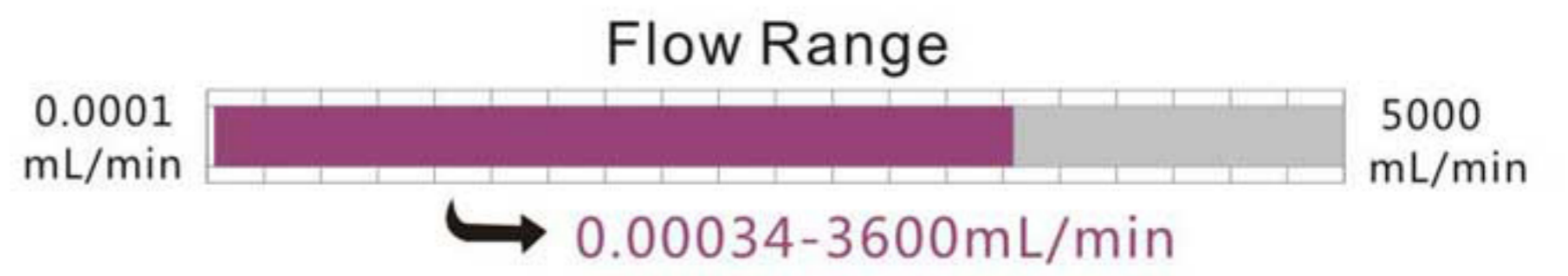
Filling volume range	0.1-9999.99mL	Back suction angle	0~360°
Filling time range	0.5-9999.99s	Emptying Speed	400rpm
Interval time range	0.5-9999.99s	External control	The switch signal control missing bottles stop filling, start filling, stop filling, emptying and CW/CCW.
Filling volume resolution	0.01mL		
Filling time resolution	0.01s	Working condition	Temperature 0 to 40 °C; Relative humidity < 80%
Copy number range	1-9999, 0 represent infinite.	Drive weight	21.8kg
Speed range	1.0-600rpm	Protection level	IP31



Tubing	Filling Volume	Filling Time	Actual Filling Volume (mL)										Filling Accuracy	
13#	0.1mL	0.5s	0.1000	0.1017	0.1004	0.1000	0.1006	0.0986	0.1015	0.0988	0.1006	0.0991	-2.500%	1.700%
			0.0996	0.0975	0.0976	0.1006	0.0995	0.1015	0.0988	0.0991	0.0996	0.0993		
13#	0.3mL	0.7s	0.3000	0.2979	0.3013	0.2985	0.3020	0.3030	0.3023	0.2993	0.2993	0.2974	-0.867%	1.033%
			0.3010	0.3030	0.2992	0.2979	0.3004	0.3019	0.3012	0.2978	0.3031	0.3022		
13#	0.5mL	1s	0.5008	0.5034	0.4998	0.5020	0.5007	0.5038	0.5021	0.5023	0.5010	0.4995	-0.100%	0.760%
			0.5003	0.5008	0.5003	0.5011	0.5002	0.5037	0.5025	0.5005	0.5010	0.5000		
13#	1mL	2s	1.0004	1.0000	0.9990	1.0011	1.0035	1.0014	1.0014	1.0014	0.9999	1.0015	-0.370%	0.490%
			1.0013	1.0013	1.0029	1.0049	1.0016	1.0019	1.0048	0.9963	1.0038	1.0040		
14#	2mL	1s	2.0030	2.0030	2.0125	1.9861	2.0116	1.9987	1.9984	2.0143	1.9973	2.0110	-0.695%	0.765%
			2.0033	2.0153	1.9875	2.0100	2.0092	2.0024	2.0103	1.9915	2.0045	2.0133		
14#	3mL	1.5s	3.0147	2.9861	3.0125	2.9897	3.0037	2.9905	3.0063	2.9850	3.0038	2.9917	-0.500%	0.493%
			3.0088	3.0000	3.0019	3.0138	2.9896	3.0148	2.9921	3.0128	2.9905	3.0059		
19#	5mL	1.2s	4.9933	5.0069	4.9914	4.9540	5.0068	4.9957	4.9950	5.0029	4.9963	4.9571	-0.920%	0.500%
			4.9838	5.0208	5.0031	4.9687	5.0237	4.9841	5.0239	5.0032	4.9584	5.0250		
16#	7mL	1s	7.0184	7.0197	7.0178	7.0120	7.0242	7.0132	7.0149	7.0213	7.0093	7.0215	-0.293%	0.346%
			6.9795	6.9834	6.9946	6.9975	6.9868	7.0133	7.0195	7.0121	7.0190	7.0125		
25#/15#	10mL	1s	9.9400	10.0300	10.0700	10.0200	10.0000	9.9800	9.9200	10.0400	10.0600	10.0400	-0.800%	0.700%
			10.0400	10.0500	10.0200	9.9700	9.9500	10.0200	10.0600	10.0400	10.0500	9.9600		
25#/15#	15mL	1s	15.0000	15.0000	15.0300	14.9900	15.0400	15.0400	15.0300	15.0700	14.9000	15.0100	-0.667%	0.467%
			14.9500	15.0300	15.0300	15.0600	15.0300	14.9900	15.0300	14.9400	15.0100	15.0000		
25#/15#	20mL	1.2s	19.9600	19.9400	20.0600	19.9900	19.9600	19.9200	19.9700	20.0400	20.0000	20.0000	-0.450%	0.500%
			19.9300	20.1000	20.0000	19.9100	20.0200	20.1000	20.0100	19.9700	19.9900	20.0900		
17#/24#	30mL	1.2s	29.9100	29.9900	30.1800	30.1000	29.9700	29.9700	30.1800	29.8100	30.1800	29.9500	-0.633%	0.600%
			29.9400	29.9200	29.9300	30.0100	30.1800	30.0500	29.9600	29.8800	30.0100	30.1800		
17#/24#	50mL	2s	50.0600	50.0400	49.9900	49.8500	50.0800	50.1100	49.9800	49.8700	49.9200	50.1200	-0.440%	0.240%
			49.9200	50.0000	49.9900	49.7800	49.8200	49.9100	50.0500	49.9300	49.8400	49.8400		
18#	80mL	2.5s	79.9700	80.2200	80.2800	80.1100	80.0000	79.9000	79.9200	80.2900	80.1300	80.0300	-0.325%	0.363%
			79.7400	79.7800	79.8000	80.0100	80.1700	79.8500	79.7600	79.8500	80.0300	80.2200		
18#	100mL	3s	99.8300	100.3500	99.9700	100.3700	100.0900	100.2600	100.0800	100.1500	100.1600	99.8900	-0.430%	0.370%
			100.0400	99.6600	100.0800	99.5700	100.0100	99.9900	99.7900	100.1400	99.7200	100.1700		
35#	150mL	4s	149.4100	150.4300	149.7600	150.0400	150.4200	149.5500	150.3200	149.7500	149.6500	150.2900	-0.480%	0.287%
			149.4200	149.9400	150.2700	149.3400	149.8600	150.2500	149.2800	150.0300	149.9200	149.4700		
36#	200mL	4s	199.4800	199.9000	199.6600	199.7200	199.8600	200.0200	199.2000	199.8800	199.8600	199.4800	-0.400%	0.300%
			199.9000	200.5400	200.6000	199.9600	199.9400	200.0200	199.9800	200.0600	199.9200	200.1800		

Filling System

Standard Peristaltic Pump



Product Introduction

Standard peristaltic pump is the first choice for laboratory applications, and also usually used together with analytical instrument. With the excellent performance-price ratio, the pump gets approval from customers.

Load various pump heads:

YZ1515x, YZ2515x Pump Head ; MC Series Multichannel Pump Head (MC1~MC12); DG Series Multichannel Pump Head (DG-1~DG-12); SN25 Standard Pump Head; DZ25-3L fast load pump head.

Working quiet



Model Number

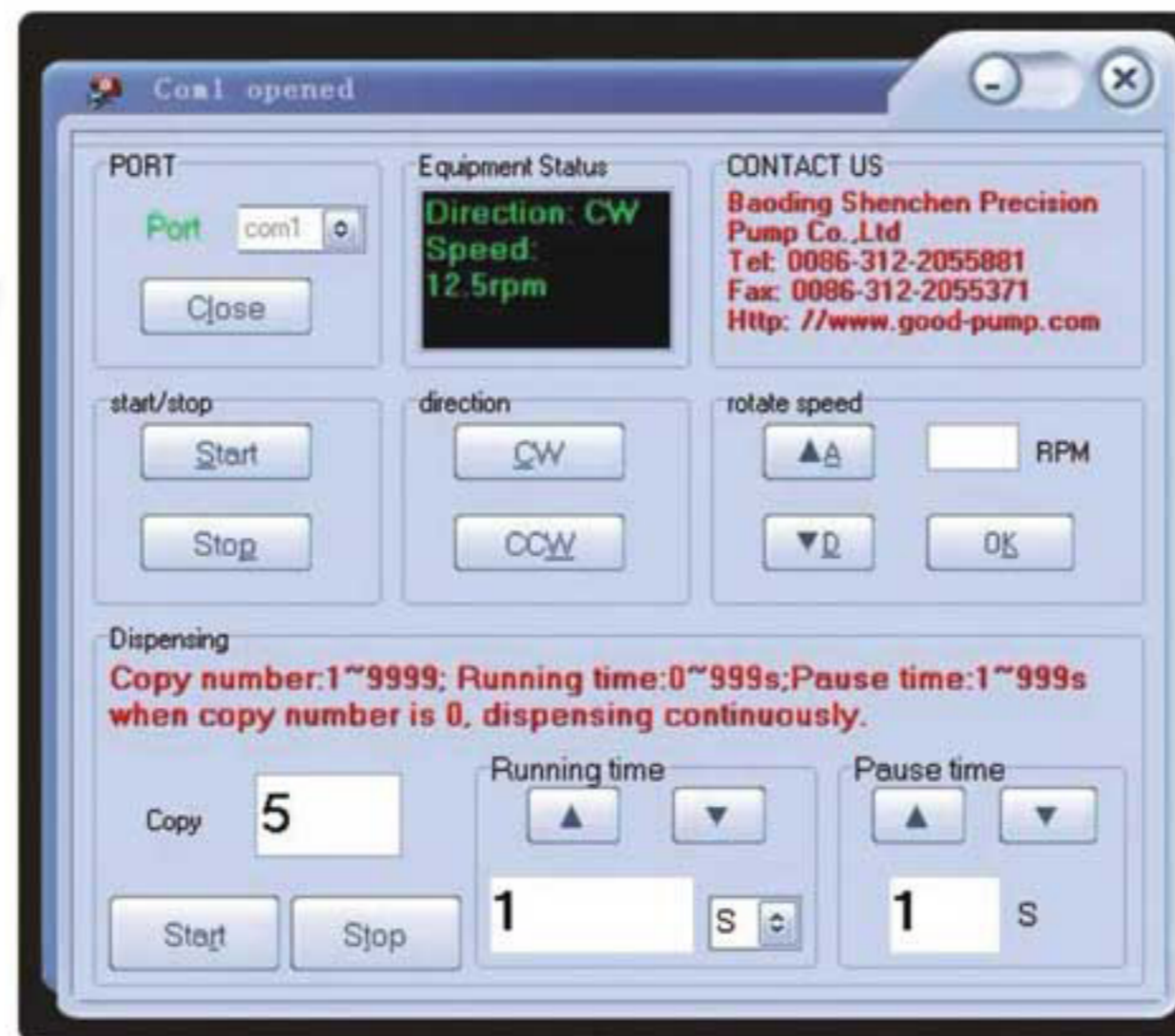
BT100N BT300N BT600N

RS232, RS485 Communication Interface:

Support Shenchen communication protocol or standard Modbus communication protocol (RTU Mode).

RS232/RS485 Debugging software:

The peristaltic pump can connect with PC through serial ports, to control start/stop, direction and speed; also can control the dispensing and filling function. According with remote control needs, it can feedback the working status in time.



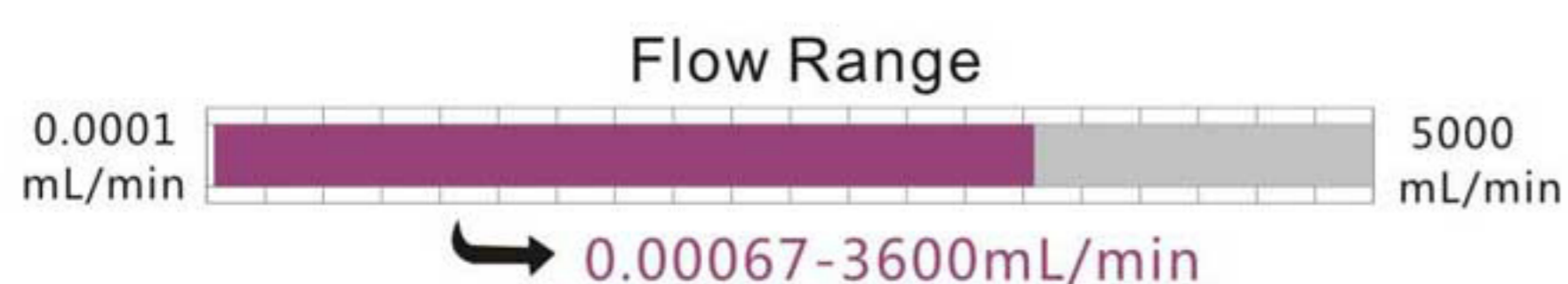
Typical Application

- Special application for the laboratory of university research institute.
- Support chromatograph and titration apparatus.
- Pilot scale and industry production.

Technical Specifications

Standard Peristaltic Pump		Pump head & Flow rates (mL/min)							
		YZ1515x	YZ2515x	MC1~MC12 (10)	MC1~MC12 (6)	DZ25-3L	SN25	SN15-14	SN15-16
Drive & speed(rpm)	Tubing	13", 14", 19", 16", 25", 17", 18"	15", 24"	Inner diameter: 0.13~3.17mm Wall thickness: 0.8~1mm		15", 24", 35", 36"	24"	14"	16"
				0.00034~32 (suggest working rotating speed ≤ 150rpm)	0.00042~45 (suggest working rotating speed ≤ 150rpm)				
BT100N	0.5~150rpm	0.035~570	0.085~435			1.05 ~ 900	0.2~375	0.12 ~ 36	0.44 ~ 132
BT300N	0.5~350rpm	0.035~1330	0.085~1015			1.05 ~ 2100	0.2~875	0.12 ~ 84	0.44 ~ 308
BT600N	0.5~600rpm	0.035~2280	0.085~1740			1.05 ~ 3600	0.2~1500	0.12 ~ 144	0.44 ~ 528
Speed resolution	Rotation direction	Speed control		Display		External control			
0.1rpm	CW/CCW	Lightly touch membrane keypad for adjusting speed or full speed		3 digit LED displays current rotating speed		Start/Stop and CW/CCW: TTL level. Speed control: 0~5V/0~10V/4~20mA. RS232, RS485 serial communication control Start/Stop, CW/CCW and speed			
Power supply		Power consumption	Operating condition	Model number		Drive dimensions (L×W×H) and Weight		Protection rating	
AC 220V ± 10%, 50Hz/60Hz(standard)		<45w	Temperature 0 to 40 °C; Relative humidity < 80%	BT100N, BT300N		180 × 130 × 190mm	4.02kg	IP31	
AC 110V ± 10%, 50Hz/60Hz(optional)				BT600N		210 × 130 × 190mm	4.94kg		

Peristaltic Pump



Simple operation



Basic Peristaltic Pump

Product Introduction

High precision, corrosion-resistant, basic transferring function, support remote control, high practical utility. Widely use in industry or supporting industrial equipment.

Load various pump heads:

- YZ1515x, YZ2515x Pump Head ;
- MC Series Multichannel Pump Head (MC1~MC12);
- DG Series Multichannel Pump Head (DG-1~DG-12);
- SN25 Standard Pump Head;
- DZ25-3L fast load pump head.

Model Number

- BT100M
- BT300M
- BT600M

Features

- Dual CPU control, separate drive and controller, quick operation, stable work and high precision transfer.
- Pulse rotary encoder switch controls speed. Easy to operate with high control precision and long-term service life. Ensure high accuracy of transfer fluid.
- The Max. key helps you to discharge the air from tubing and fill the fluid quickly.
- Load-shedding memory function, storing the running parameters automatically in time. It is very safe and reliable.

Typical Application

- Add cement grinding aids
- Support center sealing machine
- Support industrial equipment
- High torque and low power loss, can load several pump heads or multichannel pump head to meet different application requests.
- Choose free external control module: 0-5V, 0-10V and 4-20 mA. Through 3 kinds of signals to control remotely rotational speed of pump, also can control start/stop of pump by switch signal.
- RS232 communication interface can connect computer to control remotely.
- It is not suitable for outdoor application.

Technical Specifications

Basic Peristaltic Pump		Pump Head & Flow Rates (mL/min)							
		YZ1515x	YZ2515x	MC1~MC12 (10)	MC1~MC12 (6)	DZ25-3L	SN25	SN15-14	SN15-16
Tubing		13", 14", 19", 16" 25", 17", 18"	15", 24"	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm		15", 24" 35", 36"	24"	14"	16"
Drive & Speed									
BT100M	1-150rpm	0.07~570	0.17~435	0.00067-32 (suggest working rotating speed ≤ 150rpm) 0.0008-45 (suggest working rotating speed ≤ 150rpm)		2.11 ~ 900	2.5~375	0.24 ~ 36	0.88 ~ 132
BT300M	1-350rpm	0.07~1330	0.17~1015			2.11 ~ 2100	2.5~875	0.24 ~ 84	0.88 ~ 308
BT600M	1-600rpm	0.07~2280	0.17~1740			2.11 ~ 3600	2.5~1500	0.24 ~ 144	0.88 ~ 528

Speed resolution	0.1 rpm	Power supply	AC 220V ± 10%, 50Hz/60Hz (standard)
Rotation direction	CW/CCW		AC 110V ± 10%, 50Hz/60Hz (optional)
Speed control	Digital rotary encoder adjusts speed	Power consumption	<45W
Display	3-digit LED display current rotating speed	Operating condition	Temperature 0 to 40 °C, Relative humidity < 80%
External control	Start/stop and CW/CCW:TTL level	Drive dimensions (L × W × H)	BT100M: 234 × 144 × 140mm
	Speed control: 0-5V/0-10V/4-20mA		BT300M, BT600M: 254 × 184 × 145mm
	RS232 serial communication controls start/stop, CW/CCW and speed		
Drive net weight	3.98kg	Protection rating	IP31

Peristaltic Pump

Industrial Peristaltic Pump



Product Introduction

WT600-D brushless DC motor - driven industrial peristaltic pump, low vibration, maintenance-free, large output torque, high suction lift and delivery lift, can drive a variety of pump head .

WT600-DS DC brushless servo motor driven industrial peristaltic pump , precise closed-loop control , low noise , no vibration.

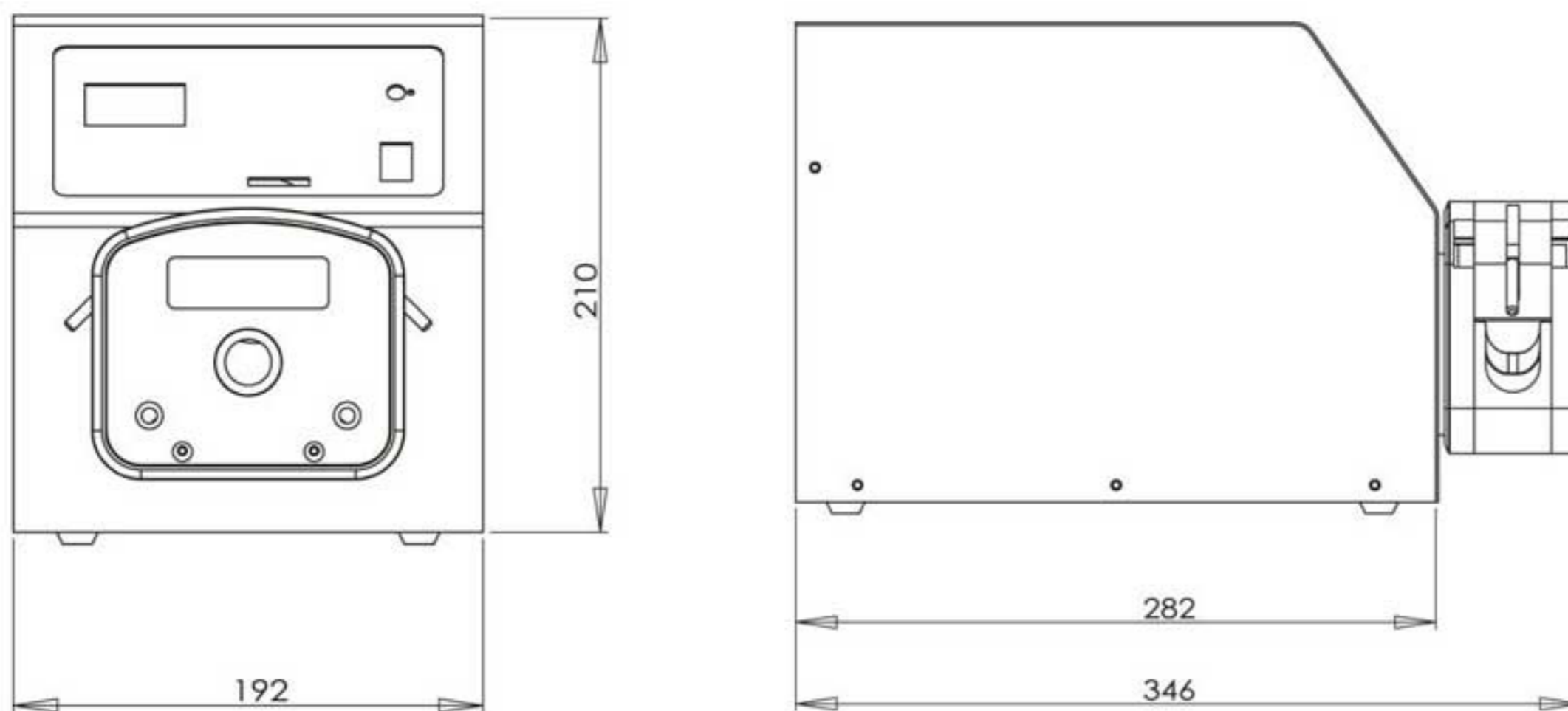
The pump can load different pump head:

DZ25-3L、DZ25-6L Fast load pump head.



Sizes Drawing

(Unit: mm)



Front

Side

Model Number

- WT600-DS
- WT600-D

Features

- Timing test function , easy to test the flow within the stipulated time .
- RS485 communication interface , standard MODBUS protocol .
- 7 kinds of external control , to meet the requirements of your external control .
- Emptying function at full speed .
- Brushless motor , maintenance-free.
- High torque , high flow rates, greater suction lift and delivery lift .

Product Composition and Flow Rates

Drive	Motor	Speed (rpm)	Pump Head	Tubing	Flow rate (mL/min)
WT600-D	Brushless DC motor	60-600rpm	DZ25-6L	15"	180~1800
				24"	330~3300
				35"	480~4800
				36"	600~6000
WT600-DS	DC brushless servo motor	1-600rpm	DZ25-6L	15"	3~1800
				24"	5.5~3300
				35"	8~4800
				36"	10~6000

Technical Specifications

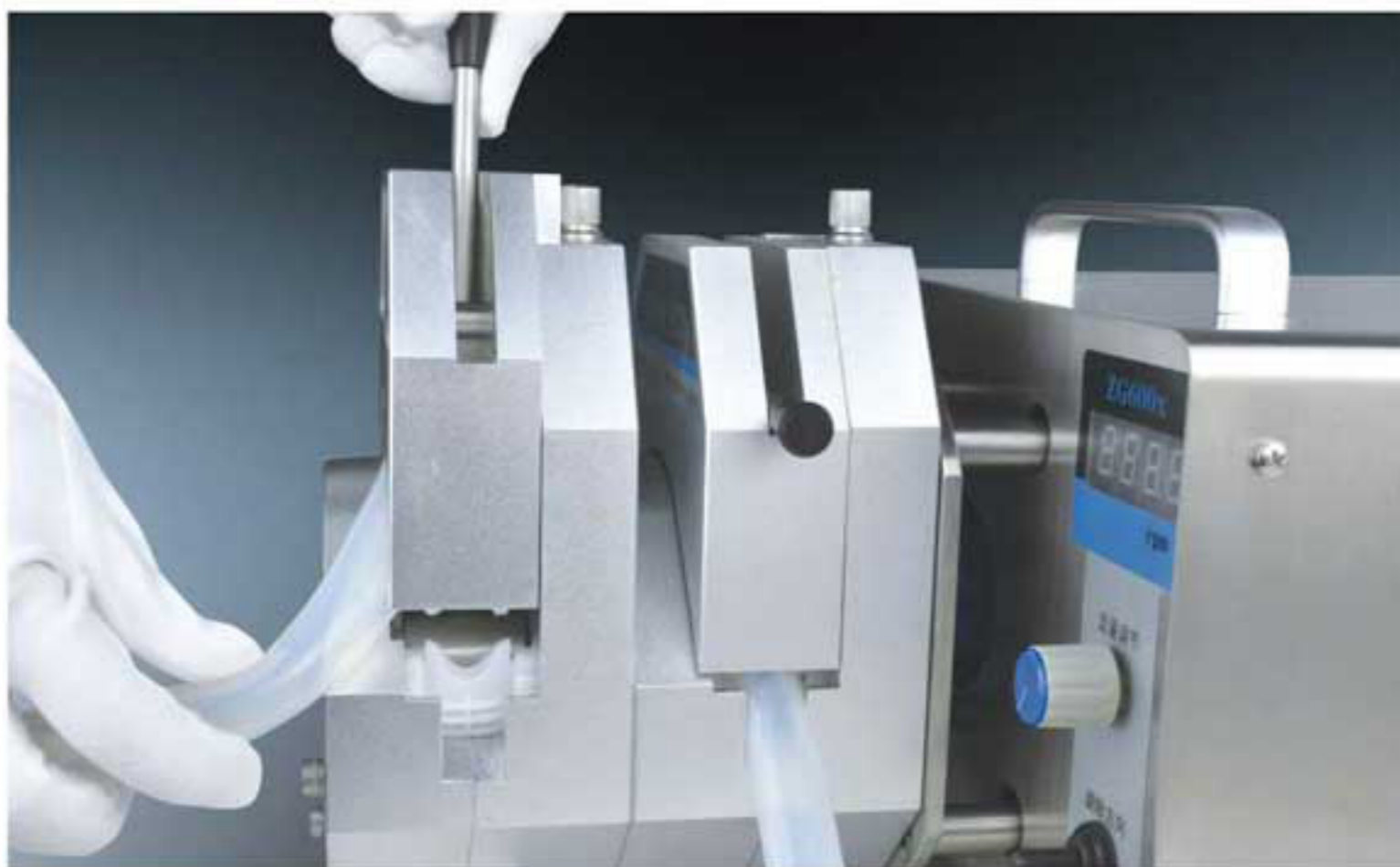
Rotation speed	1-600rpm.cw/ccw	Power supply	AC220V/110V(±10%), 50Hz/60Hz
Speed resolution	0.1 rpm when speed<100 rpm, 1 rpm when speed >100rpm	Power consumption	<120W
Speed control	Rotary encoder	Operating condition	Temperature 0 to 40 °C, Relative humidity < 80%
Display	3 digit LED displays the speed	Drive dimensions (L×W×H)	282×192×210mm
External control	Start/stop and CW/CCW:TTL level	Drive net weight	7.96kg
	Speed control: 0-5V/0-10V/4-20mA		
Communication mode	RS485 serial communication, standard MODBUS communication protocol.	Protection rating	IP31



Product Introduction

The pump transfers flow rates from 600 to 12000 mL/min. With high-power DC motor it can load double pump heads. Suitable for industrial application which need high pressure and high flow rates, such as industry fermentation, filter system, etc.

Superposing several pump heads can increase the flow rates.



Model Number

• ZG600x

Typical Application

- Mineral dosing system
- Support elements tangential flow ultrafiltration device
- Add acid based in the industrial fermentation system

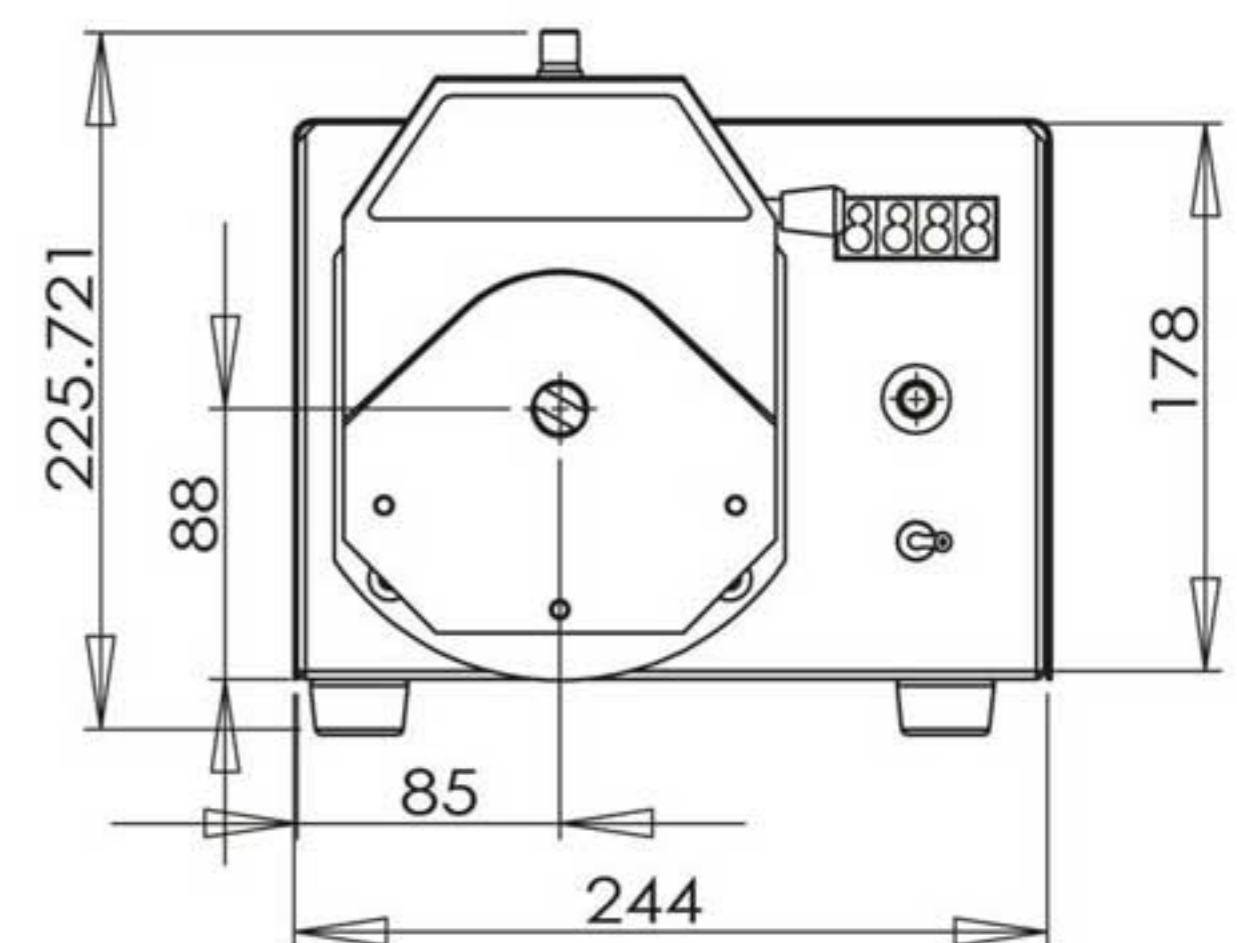
Technical Specifications

Drive	Pump head	Tubing	Flow rates (mL/min)	Weight (kg)
ZG600x	YZ35	73" 82"	600~12000	19
	2*YZ35	73" 82"	600~12000 per channel	21.1

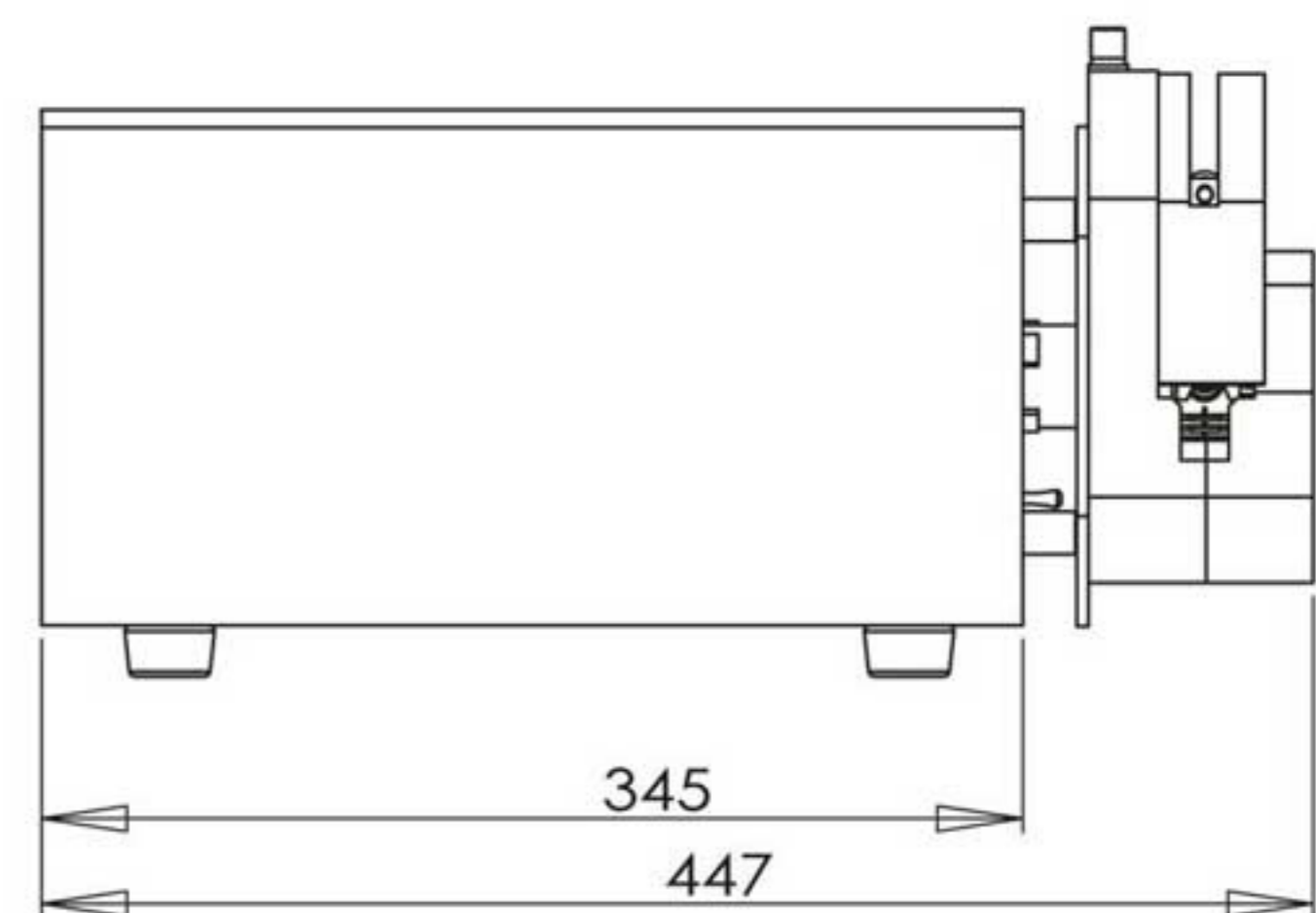
Rotation speed	60~600 rpm
Rotation direction	CW/CCW
Speed control	Knob switch controls speed
Display	4 digit LED displays the speed
Power supply	AC 220V ± 10%, 50Hz/60Hz (standard)
	AC 110 ± 10%, 50Hz/60Hz (optional)
Power consumption	<300W
Working condition	Temperature 0~40°C; Relative humidity <80%
Drive dimensions (L x W x H)	345 × 244 × 178mm
Drive weight	17kg
Housing material	304 Stainless steel (conform to GMP certification sanitary request)
Protection rating	IP31

Sizes Drawing

(Unit: mm)



Front



Side

Peristaltic Pump Tubing












■ Silicone Tubing ■

Platinum-Cured Silicone Tubing












Slightly clarity, smooth surface, low protein binding levels, fewer potential leachable .

Ideal for pharmaceutical and biotechnology use, suitable temperature range -51~238 °C.







■ Micro Flow Rates Tubing ■

Tubing sizes		0.13×0.86	0.5×0.86	0.86×0.86	1.52×0.86	2.06×0.86	2.4×0.86	2.79×0.86	3.17×0.86	1.02×0.86	2.06×0.86	3.17×0.8
Tubing cross sections (1:1)												
Wall thickness (mm)		0.86										0.8
Inside diameter (mm)		0.13	0.5	0.86	1.52	2.06	2.4	2.79	3.17	1.02	2.06	3.17
Maximum pressure (Mpa)	Continuous	0.1										
	Intermittent	0.1										

■ Basic Flow Rates Tubing ■

Tubing sizes		13 [#]	14 [#]	19 [#]	16 [#]	25 [#]	17 [#]	18 [#]	15 [#]	24 [#]	35 [#]	36 [#]	
Tubing cross sections (1:1)													
Wall thickness	mm	1.6						2.4					
	inch	1/16						3/32					
Inside diameter	mm	0.8	1.6	2.4	3.2	4.8	6.4	7.9	4.8	6.4	7.9	9.6	
	inch	1/32	1/16	3/32	1/8	3/16	1/4	5/16	3/16	1/4	5/16	3/8	
Maximum pressure (Mpa)	Continuous	0.17			0.14	0.1	0.07	0.17			0.14		
	Intermittent	0.27			0.24	0.14	0.1	0.27			0.24		

■ Industrial Tubing ■

Tubing sizes		73 [#]	82 [#]	86 [#]	90 [#]	88 [#]	92 [#]	
Tubing cross sections (1:1)								
Wall thickness	mm	3.3		6.3		4.8		
	inch	1/8		1/4		3/16		
Inside diameter	mm	9.6	12.7	9.5	19	12.7	25.4	
	inch	3/8	1/2	3/8	3/4	1/2	1	
Maximum pressure (Mpa)	Continuous	0.2	0.2	0.25				
	Intermittent	0.27	0.27	0.3				

Peristaltic Pump Tubing

Import Tubing

SAINT-GOBAIN Tubing

Tygon, PharMed BPT, Fluran, Norprene, etc.



Tygon 3350 platinum-cured sanitary silicone tubing is the ideal choice for biotechnology and pharmaceutical use. Tygon sanitary silicone tubing has the features of hydrophobic surface improving fluid flow, ultra-smooth inner bore reducing the risk of particle entrapment during sensitive fluid transfer, biocompatibility reaching IS10993 standard, and meets USP Class, VI, FDA and NSD criteria.

Norprene Chemical Tubing owns excellent chemical resistance and long service life. Its inert ultra-smooth plasticizer-free bore resists the absorption and adsorption of aqueous fluids. The inner liner of Norprene Chemical Tubing significantly increases the chemical resistance and allows for a broader range of usability. The tubing is virtually unaffected by acids, bases, salts, ketones and alcohols allowing its use in a wide range of chemical applications.



F-5500-A tubing has excellent resistance to corrosive chemicals, oils, fuels, solvents and most mineral acids. It provides continuous service at temperatures up to 400° F (204°C). Its opaque black color helps protecting light sensitive fluids.

PharMed sanitary peristaltic pump tubing has the characteristics of long lifetime, resistance of wearing, high temperature, corrosion and ageing, and wide chemical compatibility with opaque, yellow, innocuous, and odorless. It is less permeable to oxygen, carbon dioxide, nitrogen, etc than silicone tubing. It meets FDA, 3-A and NSF criteria.



Tygon R-3603 tubing resists virtually all inorganic chemicals in laboratory use. Flexible, crystal-clear, long-lasting and crack-resistant, Tygon tubing is less permeable than rubber tubing. The glassy-smooth inner bore helps preventing buildup so that cleaning is facilitated. Autoclavable. Remain flexible at -45° F (-43°C). Ideal for condensers, incubators, desiccators, gas lines, drain lines and peristaltic pump.

Flexible, yellow and translucent, F-4040-A tubing handles most petrochemicals. The tubing resists the swelling and hardening caused by hydrocarbon-based fluids. This significantly reduces the risk of failure due to cracking and leakage. It resists ozone and ultraviolet. Ideal for transfer oil, gasoline, kerosene, heating oils, cutting compounds and glycol-based coolants.



Syringe Pump

Product Introduction

Dual channel syringe pump with infusion/withdrawal mode, stainless steel body, and large-screen chromatic LCD is easy to operate. It can install and fix different types of injectors or syringes in the same time, and is suitable for transferring micro flow rates with high precision (non-medical).

Model Number

- SPLab01 (Single channel)
- SPLab02 (Dual channel)

Features

- Chromatic LCD display: Friendly human-computer interface; Large-screen LCD displays each technical parameter in real time.
- Syringe selection: It can be selected in the manufacturer table or input the inner diameter of the syringe barrel directly.
- Two measurement ways for option:
 - Infusion flow volume -- Infusion speed rate
 - Infusion flow volume -- Infusion time
- Display the infusion flow volume in real time, and it has calibration function.
- Users can check and change the parameters during infusing, it comes with power-down memory function.
- Working mode: 6 working modes--- Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous, additional mode (infusion/withdrawal, then exclude bubble). The parameter of each working mode saved separately.
- Protection function: The pump will stall and give an alarm when the drive structure of the pump is blocked.
- External control interface: Switch signal control start/stop.



Technical Specifications

Syringe	Inside diameter(mm)	Flow rates (μ L/min-mL/min)	Linear rate (μ m/min-mm/min)
50 μ L	1.03	0.004-0.110	5-132
1mL	4.61	0.083-2.203	
2.5mL	7.28	0.208-5.492	
5mL	10.30	0.417-10.993	
10mL	14.57	0.834-21.997	
25mL	23.03	2.083-54.958	
50mL	32.57	4.166-109.921	
60mL	32.57	4.166-108.310	

Channel number	Working mode	Syringe size	Infusion volume per microstep	Flow rates	Accuracy
2	Infusion/ withdrawal	10 μ L-140mL	0.026 μ l (10mL syringe)	0.831nL/min-152.9mL/min	$\leq \pm 0.5\%$
Max.linear force	Advance per microstep	Min. step rate	Max. step rate	Min. linear rate	Max. linear rate
8.5kgf	0.078 μ m	0.0351ms/Mirco step	0.937sec/Mirco step	5 μ m/min	132mm/min
Operating mode	Display mode	Power supply	Operating condition	Dimension (L x W x H)	Weight
Rotary encoded switch and membrane keypad	TFT-LCD	AC220V $\pm 10\%$ (standard)	Temperature 0-40 $^{\circ}$ C Relative humidity <80%	282 x 210 x 132(mm)	4.84kg
		AC110V $\pm 10\%$ (optional)		282 x 250 x 151(mm)	5.6kg



INJAE SCIENCE CO.

www.pump114.co.kr



INJAE SCIENCE CO.

Add: 2 Floor, 228-10 Myung-Ildong, GangDong
Gu, Seoul, South Korea.

Tel: 0082-2-22753623

Fax: 0082-2-22753624

Web: www.pump114.com

Email: hk315@naver.com