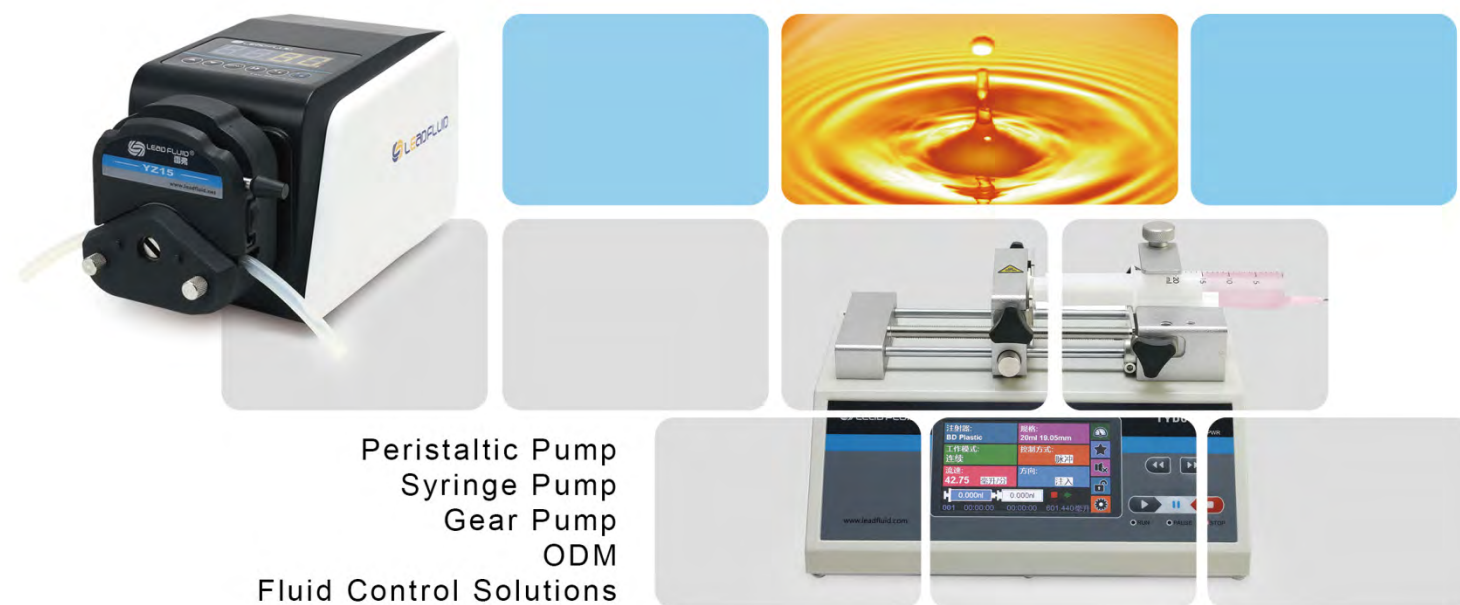


INTELLIGENT CLOUD PUMP



Lead Fluid Technology Co.,Ltd.

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Lead Fluid Technology Co.,Ltd.



Lead Fluid Technology Co.,Ltd. was established in October 1999. It is a high-tech joint-stock company, mainly engaged in Peristaltic Pump, Syringe Pump, Gear Pump and ODM pumps and related precision control of fluid research and development, production and sales. We undertake all types of intelligent flow control System design, transformation, debugging and technical advice. Lead Fluid Peristaltic Pump products won the support of Hebei innovation fund in 2012 year. At the end of 2014, the new Peristaltic Pump had successfully passed quality acceptance by the Hebei innovation fund project. In september, 2015, Lead Fluid successfully obtained the high-tech enterprises appellation authorized by Hebei province.

Focus on the core technology, pursue of excellence in quality. Based on honest, cohesion and innovation, set up an industry Sixteen example. year's aggressive development, became one industry leaders. Lead Fluid Technology Co.,Ltd., endeavor to become industry leaders, to supply innovative delicate pumps for the flow transmission.



certificate of patent



CE certification



ISO9001 certification



RoHS & Reach certification



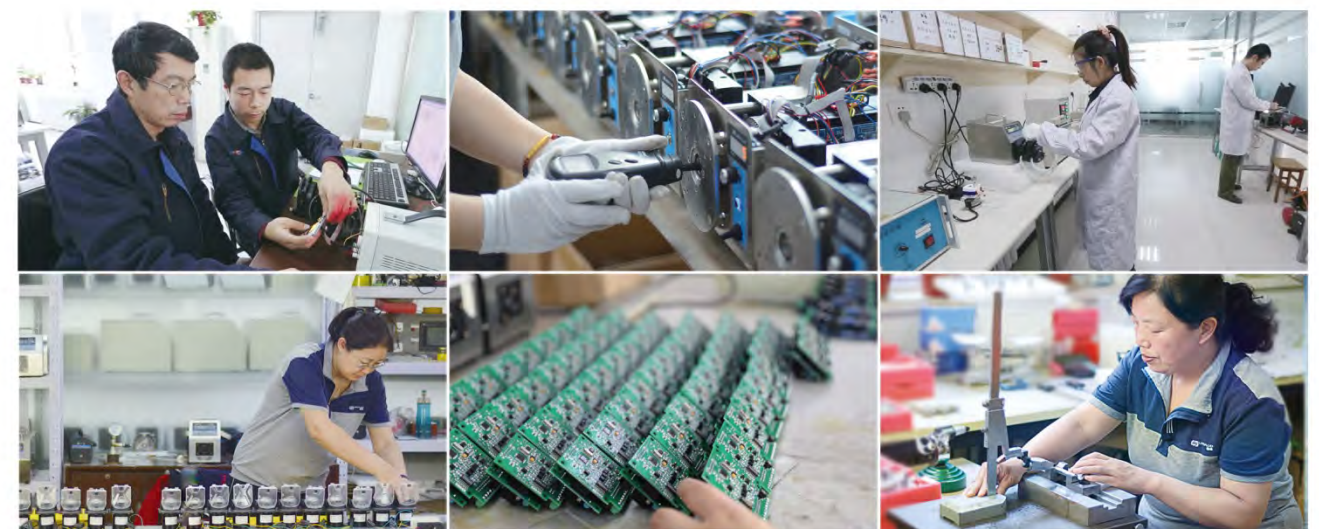
Quality Control Process



Do well in every pump

1. Each new product has passed strict type test.
2. Each product, from incoming materials, semi-finished products to finished products, has undergone strict inspection and aging.
3. Traceability of the whole process of each product.

Strictly Control Every Process



Our customers come from all over the world



Typical Customers



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TYD Series Laboratory Syringe Pump

Lead Fluid TYD series syringe pump adopts integrated table model design, 4.3-inch HD LCD touch screen display and operation, can assembly 1 to 10 plastic syringes or gas tight syringe, size range of syringe 10ul-140 ml, flow range 0.037 nL/min-173.718 mL/min. Use excellent control system and precision mechanical structure, linear travel accuracy $\pm 0.35\%$, multiple working modes are available, powerful function. It is very suitable for high precision micro-transmission of various fluids in scientific research and experiment. Drive screw fixation using high strength aviation bearing, compared with traditional copper sleeve bearing, the service life of the screw has been significantly improved, and the accuracy is higher. Strong Anti-EMI performance, continuous and stable operation under high voltage electrostatic field. RS485 communication, compatibility MODBUS protocol, automation control system can be composed of computer, PLC, single chip computer etc. multiple host computers.

The Parameters

Model	TYD01-01 (Single Channel)	TYD02-01 (Single Channel)	TYD03-01	TYD02-04	TYD02-10
The Parameters	TYD01-02 (Dual channel)	TYD02-02 (Dual channel)			
Work mode	infuse, withdraw, infuse/withdraw, withdraw/infuse, continuous mode				
Channel number	1, 2	1, 2	1	4	10
Stroke of pump	110mm	140mm	110mm	140mm	
Pusher advance per microstep	0.156 $\mu\text{m}/\mu\text{step}$	0.156 $\mu\text{m}/\mu\text{step}$	0.03125 $\mu\text{m}/\mu\text{step}$	0.156 $\mu\text{m}/\mu\text{step}$	
Linear speed	1 $\mu\text{m}/\text{min} \sim 150\text{mm}/\text{min}$	1 $\mu\text{m}/\text{min} \sim 150\text{mm}/\text{min}$	0.2 $\mu\text{m}/\text{min} \sim 30\text{mm}/\text{min}$	1 $\mu\text{m}/\text{min} \sim 150\text{mm}/\text{min}$	
Linear resolution	1 $\mu\text{m}/\text{min}$	1 $\mu\text{m}/\text{min}$	0.2 $\mu\text{m}/\text{min}$	1 $\mu\text{m}/\text{min}$	
Linear travel accuracy	error $\pm 0.35\%$ ($>30\%$ of pump stroke)				
Maximum rated linear force	$>16\text{kgf}$	$>20\text{kgf}$	$>16\text{kgf}$	$>20\text{kgf}$	
Thrust regulation	1 ~ 100% arbitrary adjustable				
Syringe size	10 $\mu\text{L} \sim 60\text{mL}$	10 $\mu\text{L} \sim 140\text{mL}$	10 $\mu\text{L} \sim 60\text{mL}$	10 $\mu\text{L} \sim 10\text{mL}$	
Syringe selection	built-in main manufacturers, the main model syringe to choose; Can use custom syringe, direct input syringe size and diameter				
Flow calibration	through the calibration procedure to obtain more accurate fluid volume				
Display	4.3-inch color LCD with screen display and transfusion volume, residual fluid volume, flow, operation direction, syringe specification, etc.				
Operation mode	Animation display operation status				
Power-off memory	storing the running parameters automatically				
Other features	pause and stop, the sound tip, the lock parameters, fast forward and retreat quickly, display brightness adjustment				
State signal output	1 road start-stop status, 1 road direction status				
Control signal input	1 road startup status, 1 road directional signal				
Communication interface	RS485, MODBUS Protocol				
Dimension (LxWxH)	245x195x133mm	290x205x141mm	245x195x133mm	290x280x175mm	
Weight	3.2kg	4.4kg	3.2kg	4.8kg	5.2kg
Power supply	AC100V ~ 240V 50/60Hz				
Working temperature	5 ~ 40°C				
Relative humidity	$<80\%$				

Selection of Reference

Syringe size	Syringe ID (mm)	TYD01-01 TYD01-02	TYD02-01 TYD02-02	TYD03-01	TYD02-04 TYD02-10
		Flow range (nL/min-mL/min)			
10 μL	0.485	0.184 ~ 0.027	0.184 ~ 0.027	0.037 ~ 0.005	0.184 ~ 0.027
25 μL	0.729	0.417 ~ 0.626	0.417 ~ 0.626	0.083 ~ 0.125	0.417 ~ 0.626
50 μL	1.03	0.833 ~ 0.125	0.833 ~ 0.125	0.166 ~ 0.025	0.833 ~ 0.125
100 μL	1.457	1.667 ~ 0.250	1.667 ~ 0.250	0.333 ~ 0.050	1.667 ~ 0.250
250 μL	2.304	4.169 ~ 0.625	4.169 ~ 0.625	0.833 ~ 0.125	4.169 ~ 0.625
500 μL	3.256	8.326 ~ 1.248	8.326 ~ 1.248	1.665 ~ 0.249	8.326 ~ 1.248
1ml	4.699	17.342 ~ 2.601	17.342 ~ 2.601	3.468 ~ 0.520	17.342 ~ 2.601
5ml	11.989	112.890 ~ 16.933	112.890 ~ 16.933	22.578 ~ 3.386	112.890 ~ 16.933
10ml	14.427	163.469 ~ 24.520	163.469 ~ 24.520	32.694 ~ 4.904	163.469 ~ 24.520
20ml	19.05	285.027 ~ 42.754	285.027 ~ 42.754	57.004 ~ 8.550	—
30ml	21.59	366.090 ~ 54.913	366.090 ~ 54.913	73.219 ~ 10.982	—
60ml	26.594	555.459 ~ 83.318	555.459 ~ 83.318	111.093 ~ 16.663	—
100mL	35.7	—	1000.982 ~ 150.147	—	—
140mL	38.4	—	1158.117 ~ 173.718	—	—



TYD01-02



TYD02-01



TYD02-02



TYD03-01

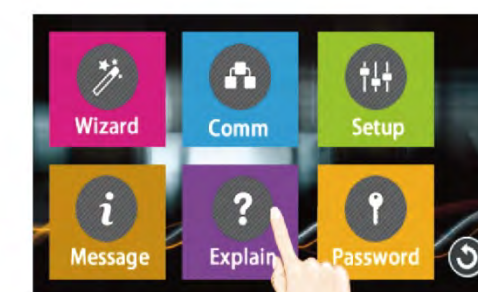
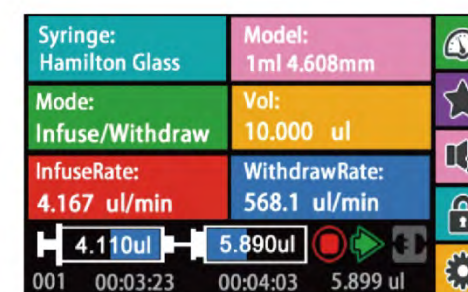


TYD02-04

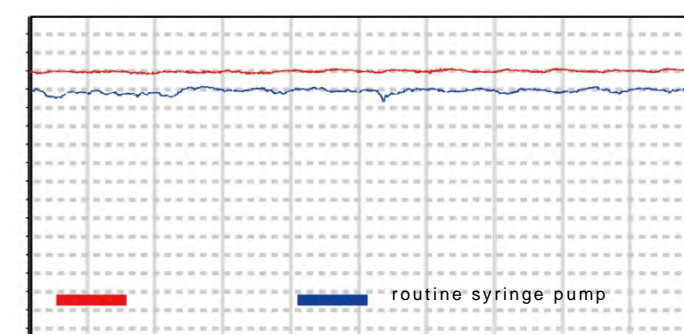


TYD02-10

Display Panel and Operation Keypads



Flow stationarity curve



Typical application

- ☆ Continuous infusion of microfluidic chips
- ☆ High precision syringe of pharmaceutical solution in animals
- ☆ Continuous infusion without pulse with micro-flow
- ☆ Injection of drugs into the brain of rats
- ☆ Dropping reagent in microreactor
- ☆ High precision ratio of liquid
- ☆ Control of polymer flow rate by high voltage electrospinning
- ☆ Capillary sample injection of chromatograph
- ☆ Automatic sampling by mass spectrometer
- ☆ Volume control of micro-droplets
- ☆ Accurate transmission of micro strongly corrosive fluids



Basic Laboratory Syringe Pump TYB01-01

Lead Fluid TYB01-01 syringe pump can assembly a 10ul-60ml plastic syringe or gas tight syringe, flow range 0.184nl/min-66.654ml/min, flow accuracy $\leq \pm 1\%$, integrated desk type design, compact size, powerful function, it can meet many applications, such as timing and quantification, circulating operation and high precision continuous infusion.

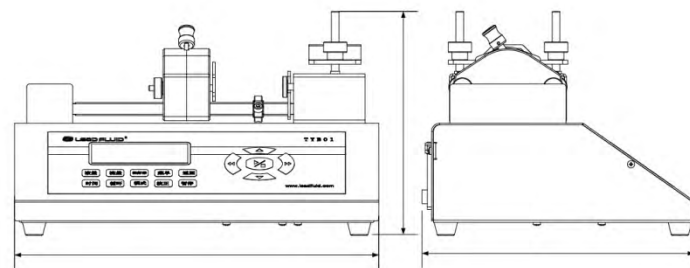
The keys control the common functions, a quick setting of operating parameters, convenient and quick, strong Anti-EMI performance, continuous and stable operation under high voltage electrostatic field. RS485 communication, compatibility MODBUS protocol, automation control system can be composed of computer, PLC, single chip computer etc. multiple host computers.

Display Interface & Mask Display



Function and Feature

- 128*32 LCD, Chinese and English language, visual display of status
- LF-LCD-OS software system
- 15 function buttons, quick setting of parameters.
- Storage five sets of operational parameters, convenient and fast call
- Loss of step alarm function, protect syringes from damage.
- Linear force adjustable
- Flow calibration function.
- External control signal controls Start and Stop, Direction, Physical isolation of external control signals
- Self-retaining syringe clamping mechanism, easy installation syringe
- RS485 communication, MODBUS protocol, support for communication parameter settings, convenient connection with various control devices
- Special protection design, can working in general humid, dust environment
- Super anti-interference characteristics, wide voltage design, Suitable for complex power supply environment



Syringe Size and Flow Rate Reference

Syringe Size	Syringe ID (mm)	Flow Range (nL/min~mL/min)
10ul	0.485	0.184-0.021
25ul	0.729	0.417-0.05
50ul	1.03	0.833-0.099
100ul	1.457	1.667-0.2
250ul	2.304	4.169-0.5
500ul	3.256	8.326-0.999
1ml	4.699	17.342-2.001
5ml	11.989	112.890-13.546
10ml	14.427	163.469-19.616
20ml	19.05	285.027-34.201
30ml	21.59	366.090-43.93
60ml	26.594	555.459-66.654

The Parameters

- Syringe size: 10ul ~ 60mL
- Work mode: infusion, withdraw
- Channel number: 1
- Maximum stroke of pump: 110mm
- Pusher advance per microstep: 0.156um/ustep
- Linear speed: 1um/min ~ 120mm/min
- Linear travel accuracy: $\pm 1\%$ (Single stroke > 30%)
- Linear force: > 16kg, force adjustable
- Operation mode: Mask button
- Display mode: 132*32LCD display
- Power-off memory: storing the running parameters automatically
- External Control: External control signal controls Start and Stop, Direction, 5-24V wide range start-stop and directional state signal output.
- Communication interface: RS485, MODBUS protocol
- Power supply: AC 100-240V, 50/60Hz
- Power consumption: < 20W
- Working environment: environment temperature 5-40°C, relative humidity < 80%
- IP grade: IP31
- Dimension: (L*W*H) 280mm*210mm*173mm



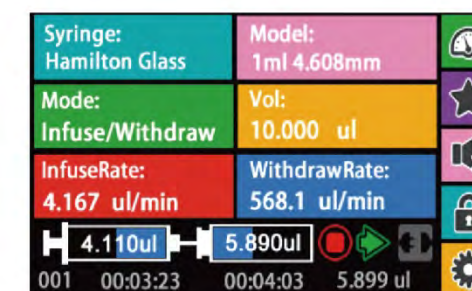
Two-Way Push-Pull Syringe Pump TSD01-01

TSD01-01 is a small flow, high precision, can be continuous transmission liquid syringe pump. Durable mechanical transmission design, long life and good reliability. Screw fixation using special high precision aviation bearing alternatives to traditional copper, longer service life and high precision. High resolution color LCD, touch screen is convenient fast set parameters, multiple light clear confirmed its working state. And support for multiple syringe to choose, to meet the requirements of different experimental flow and high precision control, and protection agencies and alarm mechanism. Support injection extraction and so on five kinds of working mode. Built-in RS-485 communication, support the MODBUS protocol, full metal shell, wide range power input, adapt to various occasions

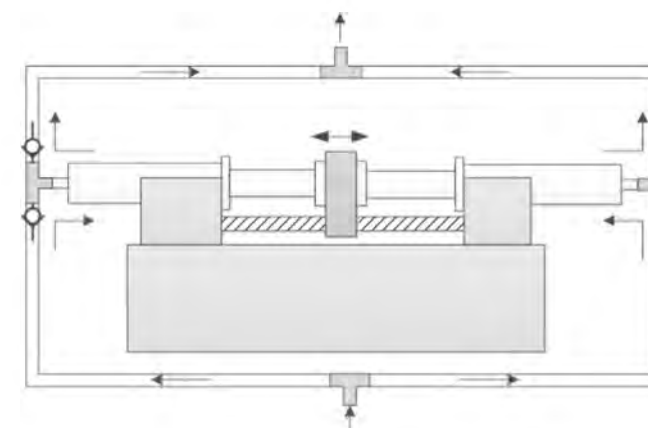
Function and Features:

- It can assemble two syringe, through several tube-line connection, realize continuous transmission liquid
- A variety of working mode choice
- Color touch screen, LCD display, convenient and quick operation
- LF-Touch-OS software system
- Support screen lock, key mute operation
- With lights, buttons, clearly working state
- Support a variety of standard syringe, customize syringe
- High precision control
- Syringe protection and traffic jam alarm
- RS485 communication, support the MODBUS protocol
- External signal control start-stop and direction
- A wide range of power input
- Full metal shell

Display Interface



Principle Diagram



Syringe Size and Flow Rate Reference

Syringe Size	Syringe ID (mm)	Flow Range (nL/min~mL/min)
10ul	0.485	0.184-0.027
25ul	0.729	0.417-0.626
50ul	1.03	0.833-0.125
100ul	1.457	1.667-0.250
250ul	2.304	4.169-0.625
500ul	3.256	8.326-1.248
1ml	4.699	17.342-2.601
5ml	11.989	112.890-16.993
10ml	14.427	163.469-24.520
20ml	19.05	285.027-42.754
30ml	21.59	366.090-54.913
60ml	26.594	555.459-83.318

The Parameters

- Syringe size: 10ul-60mL
- Work mode: infuse, withdraw, infuse/withdraw, withdraw/infuse, continuous mode
- Display: 4.3 inch color LCD, 480*272 resolution, color 65k
- Operation mode: touch screen + button
- Linear travel accuracy: error $\leq \pm 0.35\%$ ($\geq 30\%$ of pump stroke)
- Linear force: > 20kgf, linear force adjustable
- Pusher advance per microstep: 0.15625um/ustep
- Fastest moving speed: 150mm/min
- Slowly moving speed: 1um/min
- External 24V signal input control start-stop
- Work state signal output
- Power supply: AC100-240V, 50/60Hz
- Environment: temperature 5-40°C, relative humidity < 80%
- Dimension (L*W*H): 290x205x141mm

Split
Design

Controller



Execution Unit



TFD Series Split Style Syringe Pump

Function and Features :

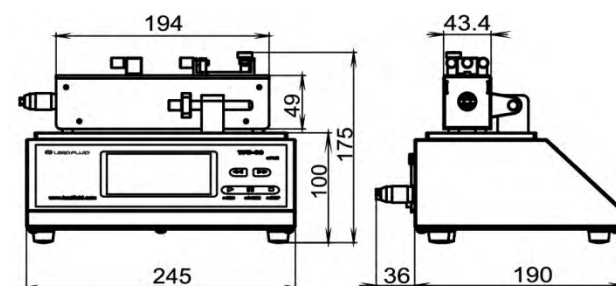
- LF-Touch-OS software system, stable and reliable running, powerful function
- 4.3 inch color LCD touch screen operation, image of the animation and icon is displayed, and colorful interface, the commonly used function keys, make the device more easy to use
- A variety of working mode choice
- Controller and execution unit split design, easy to installation and fixation
- Support screen lock, key mute operation
- With lights, buttons, clearly working state
- Support a variety of standard syringe, customize syringe
- High precision control
- RS485 communication, support the MODBUS protocol
- External signal control start-stop and direction
- A wide range of power input

TFD01-01 Split Style Syringe Pump

Suitable for syringe size 5ul-1ml, Linear speed 0.635um/min-95.25mm/min

Syringe Size	Syringe ID (mm)	Min.Flow Rate (nL/min)	Max. Flow Rate (mL/min)
5μl	0.343	0.058	0.009
10μl	0.485	0.117	0.017
25μl	0.728	0.264	0.039
50μl	1.03	0.529	0.079
100μl	1.457	1.058	0.158
250μl	2.303	2.645	0.396
500μl	3.257	5.290	0.793
1000μl	4.606	10.580	1.587

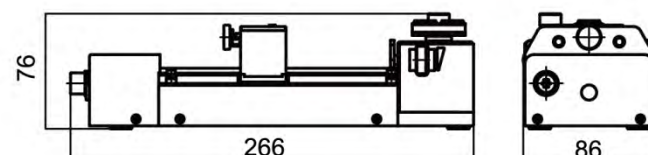
Dimension (TFD01-01)



TFD02-01 Syringe Size and Flow Rate Reference

Syringe Size	Syringe ID (mm)	Min.Flow Rate (nL/min)	Max. Flow Rate (mL/min)
10μl	0.485	0.184	0.027
25μl	0.729	0.417	0.626
50μl	1.03	0.833	0.125
100μl	1.457	1.667	0.250
250μl	2.304	4.169	0.625
500μl	3.256	8.326	1.248
1mL	4.699	17.342	2.601
5mL	11.989	112.890	16.933
10mL	14.427	163.469	24.520
20mL	19.05	285.027	42.754
1mL	21.59	366.090	54.913
60mL	26.594	555.459	83.318

Dimension(TFD02-01)



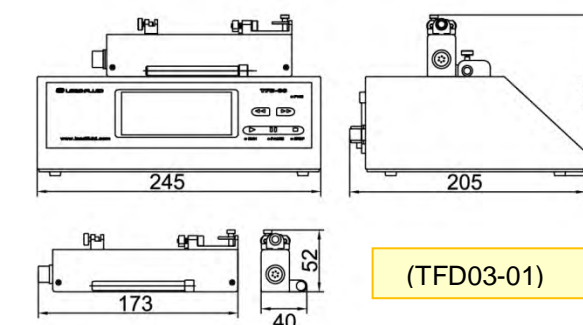
Smaller Size, Easier To Clamp

TFD03-01 syringe pump is a single-channel micro syringe pump, it consists of two parts, controller and execution unit. exquisite structure, high precision, stable operation. Through cables connecting, and equipped with fast socket connector, easy to disassemble and assemble. The controller and execution unit are separated. It can be used in conjunction with other instruments and devices, such as brain stereotaxis. Execution unit can cooperate with 0.5ul-100ul microliter syringe, which is suitable for various micro-injection experiments

TFD03-01 Split Style Syringe Pump Execution Unit
Suitable for syringe size 0.5ul-100ul,
Linear speed 0.6096um/min-91.44mm/min

TFD03-01 Syringe Size and Flow Rate Reference

Syringe Size	Syringe ID (mm)	Min. Flow Rate (nL/min)	Max. Flow Rate (μL/min)
0.5μl	0.103	0.005	0.761
1μl	0.146	0.010	1.531
2μl	0.206	0.020	3.047
5μl	0.3257	0.051	7.618
10μl	0.485	0.112	16.893
25μl	0.729	0.254	38.166
50μl	1.03	0.507	76.190
100μl	1.457	1.016	152.456



(TFD03-01)

The Parameters

The Parameters	Model	TFD01-01	TFD02-01	TFD03-01
Work mode		infuse, withdraw, infuse/withdraw, withdraw/infuse, continuous mode		
Channel number		1	1	1
Stroke of pump		70mm	110mm	70mm
Pusher advance per microstep		0.198um/ustep	0.156um/ustep	0.1905um/ustep
Linear speed		0.635um/min-95.25mm/min	1um/min-150mm/min	0.6096um/min-91.44mm/min
Linear resolution		0.635um/min	1um/min	0.6096um/min
Linear travel accuracy		error <±0.35% (>30% of pump stroke)		
Maximum rated linear force		>2kgf	>10kgf	>1kgf
Thrust regulation		1-100%arbitrary adjustable		
Syringe size		5uL-1000 uL	10uL-60mL	0.5uL-100 uL
Syringe selection		built-in main manufacturers, the main model syringe to choose, Can use custom syringe, direct input syringe size and diameter.		
Flow calibration		through the calibration procedure to obtain more accurate fluid volume		
Display mode		4.3-inch color LCD, with screen display and transfusion volume, residual fluid volume, flow, operation display operation status, direction, syringe specification, etc., Animation display operation status		
Operation mode		touch screen + Common function keys		
Power-off memory		storing the running parameters automatically		
Other function		pause and stop, the sound tip, the lock parameters, fast forward and retreat quickly, display brightness adjustment		
State signal output		1 road start-stop status, 1 road direction status		
Control signal input		1 road the falling edge triggers start and 1 road the falling edge triggers stop.		
Communication interface		RS485, MODBUS protocol		
Controller dimension (mm)		245x195x133mm	245x195x133mm	245x195x133mm
Execution unit dimension (mm)		70x44x194mm	266x86x76mm	173x24.4x52mm
Weight (controller + execution unit)		2+0.85kg	2+1.8kg	2+0.25kg
Power supply		AC100V ~ 240V 50/60Hz		
Working temperature		5-40 °C		
Relative humidity		<80%		



NEW

TFD04-0X Split Style Syringe Pump

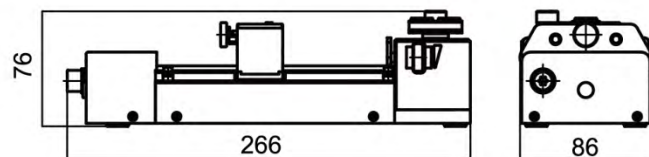
TFD04 laboratory syringe pump is a multi-channel (up to 8 channels) micro-syringe pump, it consists of a controller and an execution unit, the controller is equipped with high resolution color liquid crystal, touch screen control, convenient and fast setting parameters. The LED indicator clearly indicates the working state and supports five working modes, such as infusion withdraw, so as to achieve timing and quantitative infusion. Execution unit has exquisite structure, high precision, high stability, light weight, and can effectively reduce work tremor. Execution unit is equipped with mounting frame, which can be used in combination with other instruments and equipment.

Function and Features

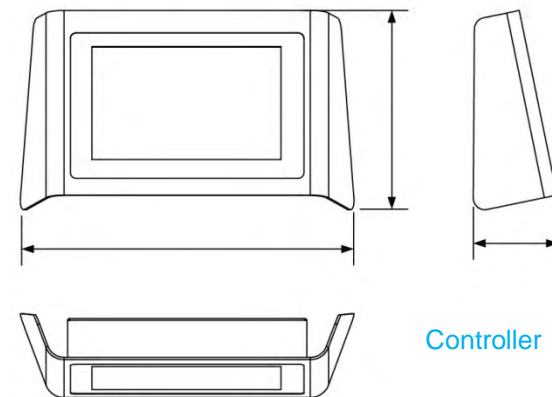
- 7 inch color LCD display, imagery and intuition
- Full touch screen brings good user experience
- 1-8 sets of main parameters and working state display on the same screen
- LF-GUI-OS software system, reliable operation, convenient product customization and upgrading
- Five working modes, only infuse, only withdraw, infuse/withdraw, withdraw/infuse, continuous mode
- Loss-step detection and stop-up protection function
- Precise flow control and display, micro-step algorithm to ensure the dispensing accuracy of different settings
- Wizard flow calibration function, simple and easy to use
- Setting different working parameters for eight channels respectively
- Each executive body is controlled to work independently, and up to eight executive bodies are controlled to work at the same time or delayed work
- Save 10 sets of custom Chinese formula parameters
- Automatic pump searching function
- Supporting USB upgrade software
- External control signal control start-stop, reversible direction, dispensing, physical isolation of external control signal
- RS485 communication, MODBUS protocol, Support the setting of communication parameters, convenient to connect with various control devices.
- Super anti-interference characteristic, wide voltage design, suitable for complex power supply environment

The Parameters

Product Model :	TFD04-0X
Software system	LF-GUI-OS
Work mode	infuse, withdraw, infuse/withdraw, withdraw/infuse, continuous mode
Channel number	1-8 channels
Linear travel accuracy	error < 0.5% (>30% of pump stroke)
Syringe selection	Controller built-in standard syringe specifications of major manufacturers, can customize syringe specifications (non-standard syringes)
Flow calibration	Compensation settings for the variation of liquid density caused by environmental changes such as temperature and humidity, resulting in the deviation of liquid output quality
Display	7.0 inch color LCD
Operation mode	LCD touch screen
Power-off memory	storing the running parameters automatically
Communication function	RS485, support MODBUS communication protocol
External Control	external control signal controls start and stop, and status signal output
Power supply	AC 100-240V 50Hz/60Hz
Power consumption	30W+20W (Each channel)
Working environment	environment temperature 5-40°C, relative humidity < 80%
Controller dimension	245*205*100mm
Controller weight	2.0kg



ZX02 Execution Unit



Controller

Execution Unit	ZX01	ZX02	ZX03
Syringe size	5uL-1000uL	10uL-60mL	0.5uL-100uL
Linear speed	0.058uL/min-1.587mL/min	0.0184uL/min-83.318mL/min	0.005uL/min-152uL/min
Channel number	1-8	1-4	1-8
Maximum stroke of pump	70mm	110mm	70mm
Maximum rated thrust	>2kgf	>10kgf	>1kgf
Execution body dimension	70x44x194		
Execution body weight	0.85kg	1.8kg	0.25kg

RP600S Valveless Rotary Piston Pump



NEW

The basic rotary piston pump is a small liquid precise transmission pump developed by Lead Fluid. It is suitable for high-precision dispensing and transmission of microfluids. Unique design of rotary pump head with consideration of accuracy and efficiency. The perfect combination of LCD and membrane key can display real-time information such as rotational speed, number of cycles and so on. The operation of users is intuitive and simple. External control input support wide voltage input, analog voltage and current can be automatically switched through software settings. Stainless steel shell design, simple and smooth, suitable for various working environments. The program has more parameter settings to make it perform well in different workplaces.

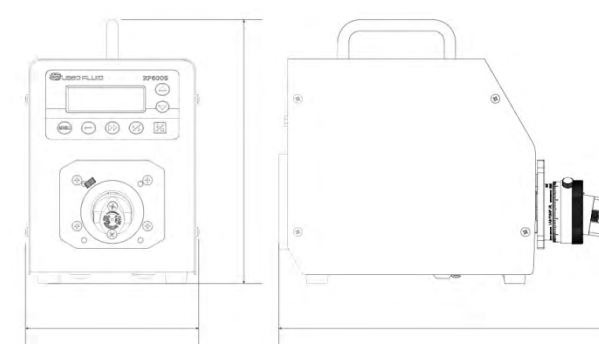
Function and Features

- Unique design of rotary pump head, compact structure, stable and reliable
- The outlet pressure can reach 6.9 bar. With reasonable pipeline design, the transmission capacity of viscous liquid can be improved.
- Can't transport liquid containing solid particles
- The flow rate does not change with the change of inlet and outlet pressure, so it has more reliable flow rate and liquid volume accuracy
- Single cycles liquid volume adjustable, dispensing repetitive accuracy error < 0.5%
- Efficient and stable LF-LCD-OS Software System
- New user interface, LCD panel, keyboard shortcut operation
- Three working modes: flow rate, time dispensing and volume dispensing
- The basic functions of start-stop control, reverse direction, full-speed emptying, speed regulation and so on.
- Unique back suction function, effectively prevent liquid drip leakage
- Support MODBUS protocol RS485 communication, can realize remote digital control, support the setting of communication parameters, and facilitate the connection with various control devices
- Adaptive external control signal input, support 5-24V wide voltage, physical isolation, with start-stop, reversible direction functions
- Can set different analog signals
- Open multiple control parameters for OEM customized applications
- The process of spraying three anti-paint on circuit board can achieve the effect of dust and moisture proof
- All stainless steel shell design, high strength, impact resistance, corrosion resistance
- Super anti-interference characteristic, wide voltage design, suitable for complex power supply environment

The Parameters:

Pump Head	RH1CKC	Q2CKC
Flow per cycle	0-0.1 mL	0-0.72 mL
Flow Range	0-60 mL/min	0-432 mL/min
Speed Range	0.1-600 rpm	
Outlet pressure	0.69Mpa	
Speed Resolution	<0.1 rpm	
Speed accuracy	<±0.2%	
Dispensing cycles	1-9999	
Dispensing time	0.1-999.9 S/Min/H	
Dispensing number	1-999, 0 Infinite cycle	
Dispensing interval	0.1-999.9 S/Min/H	
External control signal	External control analog 0-5V/0-10V/4-20mA, software setting, automatic switching outside control start and stop, directional signal support 5V-24V wide voltage	
Communication signal	RS485 communication, support MODBUS protocol	
Power supply	AC 100-240V 50/60Hz	
Power consumption	<60W	
Working environment	temperature 0-40°C relative humidity < 80%	
IP grade	IP31	
Dimension	315x160x240 mm	345x160x240 mm
Weight	4.7kg	4.9 kg

Dimension (Standard RH1CKC)



Suitable for Pump Head

Drive Model	Pump Head	Single Cycle	Pressure	Flow Range	Pump Head Material
RP600S	RH1CKC	0~0.1 mL	0.69Mpa	0~60 mL/min	Ceramic+PVDF
	Q2CKC	0~0.72 mL	0.69Mpa	0~432 mL/min	Ceramic+PVDF

Display Panel and Operation Key

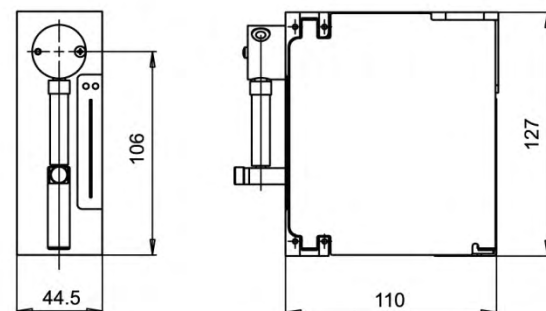


Industrial Syringe Pump G3030-1S

G3030-1S is a compact structure pump, is suitable for industrial automatic with high accuracy. Main used with the devices or instruments, especially for the task of programming and the automatic. Many mounting ways to choose, rotary valve reversers automatic, improving the flexibility of embedded installation. More complicated and comprehensive operating task can be finished with the matched PC software. It can program, storage, increases the degree of automation, which is very suitable for the high-automatic field. G3030-1S with wide linear velocity, can mounted with lots of syringe model, can easily realize the automatic of the transmission of flow, dilution, distribution and so on, with high precision and accuracy. Creative dynamic display function to facilitate users to observe and monitor the use of products at any time. The good material of the syringe, valve and tube coupling, providing excellent chemical characteristics, greatly increased the application field of the device.



Dimension



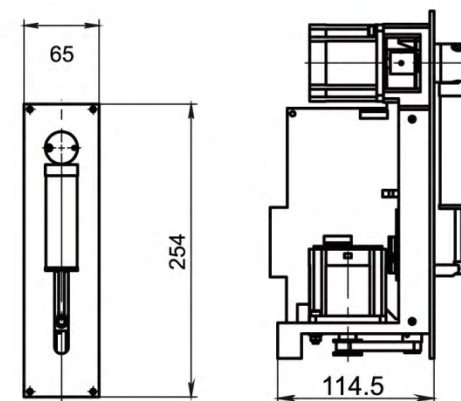
For specific usage, please consult
Lead Fluid technology department.

The Parameters

Model	G3030-1S	G6060-1S
The parameters		
Plunger drive	Stepper motor drives screw assembly, photosensitive decoding detection lost step	Stepper motor drives screw assembly, photosensitive decoding detection lost step
Rated stroke	30mm (3000step)	60mm (6000step)
Linear speed	0.005mm/s-25mm/s	0.001mm/s-50mm/s
Syringe size	50 uL, 100 uL, 250 uL, 500 uL, 1 mL, 2.5 mL, 5 mL	25uL, 50 uL, 100 uL, 250 uL, 500 uL, 1 mL, 2.5 mL, 5 mL, 10mL, 25mL
Valve type	Standard: 3 interfaces 120°valve, Customize: 4 interfaces90 °valve	Standard: 3 interfaces 120°valve, Customize: 4 interfaces90 °valve
Valve plug turn time	≤280ms (Between two adjacent opening)	≤280ms (Between two adjacent opening)
Tube fitting	1/4"-28UNF inner thread	1/4"-28UNF inner thread
Syringe fitting	1/4"-28UNF inner thread	1/4"-28UNF inner thread
Dimension(LxWxH)	110x44.4x127(mm)	114x65x254(mm)
Power supply	DC 24V/1.5A	DC 24V/2.0A
Control resolution	0.01mm(1 Step)	0.01mm(1 Step)
Rated stroke running time	1.2 S -100 Min	1.2 S -100 Min
Flow accuracy	errors≤1% (>30% of Maximum pump stroke)	errors≤1% (>30% of Maximum pump stroke)
Flow repeatability	repeatability≤0.5% (Rated travel)	repeatability≤0.5% (Rated travel)
Wetted Material	Borosilicate glass, PTFE, PCTFE	Borosilicate glass, PTFE, PCTFE
Max pressure	0.68Mpa	0.68Mpa
Signal input	2 gates TTL Level signal input drive current>16mA), Restart after controlling static pause instructions	2 gates TTL Level signal input drive current>16mA), Restart after controlling static pause instructions
Signal output	3-way OC gate signal output	3-way OC gate signal output
Communication interface	RS485/RS232	RS485/RS232
Bit rate	9600bps/38400bps can set	9600bps/38400bps can set
Device parameter setting	7 groups dial switch	8 groups DIP dial switch (communication interface, Communication rate etc.)
Working temperature	15℃-40℃(determined by the PTFE of the syringe)	15℃-40℃(determined by the PTFE of the syringe)
Relative humidity	20-80% (40℃)	20-80% (40℃)
Weight	1.23kg	2.1kg

Industrial Syringe Pump G6060-1S

G6060-1S is suitable for industrial automatic with high accuracy. Main used with the devices or instruments, can easily realize the transmission of flow, dilution, dispensing. In standard mode, the step increment of the pump is 6,000 steps per stroke. G6060-1S uses RS-485/RS-232 communication interface, compatible with OEM and DT instructions, and can achieve precise control of the executing mechanism. G6060-1S is installed with rotary valve and panel, and can mounted with lots of syringe model. G6060-1S with wide linear velocity, ranging from 1.2 seconds to 100 minutes per stroke. The good material of the syringe, valve and tube coupling, providing excellent chemical characteristics of G6060-1S, greatly increased the application field of the device.



Dimension



Industrial Syringe Pump Filling System DF30-G

This product is mainly used in small and medium batches of liquid filling assembly sets. It can support 2-15 channels working at the same time. It is suitable for high precision and small dose liquid filling. It can work with production line and use 7 Inch Touch screen. It has the advantages of compact structure, simple operation and high reliability.



The Parameters :

Filling accuracy	Errors≤0.5% (>30% of maximum pump stroke)
Filling range	10uL-5mL(Selection of syringes 20%-100%)
Filling, withdraw time	Free to set, prompting overflow errors
Filling, withdraw speed	Automatic calculation based on liquid volume and time
Syringe size	50uL, 100uL, 250uL, 500uL, 1mL, 2.5mL, 5mL
Plunger stroke	30mm
Wetted Material	Borosilicate glass, PTFE, PCTFE
Max pressure	0.68Mpa
Tube fitting	1/4"-28 inner thread fitting
Syringe fitting	1/4"-28 inner thread fitting
Filling start signal	24V Level signal input, high level effective (Synchronized control of each channel)
Lack bottle stop signal	24V Level signal input, high level effective (Individual control of each channel)
Voltage supply	AC 220V
Working temperature	15℃-40℃
Relative humidity	< 80%
Shell material	Stainless steel case

The number of channels
can be customized, up to
15 channels

Function and Features

- 7 inch color touch screen, simple operation, intuitive interface;
- Supporting 2-15 channels, stackable combination;
- Separate calibration of each channel
- Shortage of bottles to stop filling function
- Close temporarily unavailable channels
- Manual and automatic control modes

Micro Gear Pump CT3001S/CT3000S

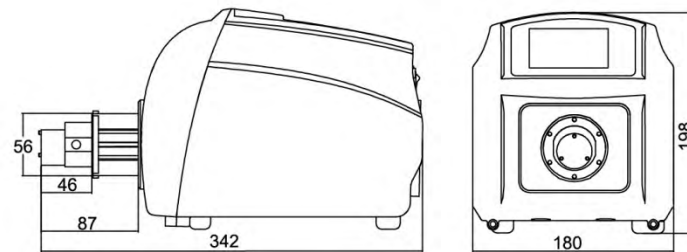
CT3001S/CT3000S adopts brushless motor drive, high performance, low noise, stainless steel, magnetic drive pump head, can be realized without pulsation, constant velocity flow transmission. LED display, key operation, easily set parameters. Speed display, time dispensing, suitable for various experimental fields. A variety of external control way, convenient use together with other devices, support MODBUS protocol communication, simplify the difficulty of system development.

Function and Features

- Can install various pump heads
- Suitable for transmission more viscous, high pressure liquid
- No pulsation transmission, low noise
- The magnetic coupling is designed, easy to maintain
- Brushless drive, high efficiency, maintenance-free.
- LED display, key operation
- LF-LED-OS software system
- Speed display
- Time dispensing
- External control signal control, physical isolation, analog control
- RS485 communication, support MODBUS protocol
- Wide range power input, adapted to different environments



Dimension (CT3001S/CT3001F)



The Parameters:

Technical parameters	CT3001S	CT3000S	CT3001F	CT3000F
Flow range	90 ~ 2700mL/min		15 ~ 2700mL/min	
Speed range	300 ~ 3000 rpm		50 ~ 3000 rpm	
Speed resolution	1 rpm			
Working mode	Speed-variable mode, time dispensing		Flow rate mode , time dispensing, volume dispensing, copy dispensing	
Dispensing time	0.1 ~ 999 S			
Transport limitation of liquid particles	particles ID ≤10μm (recommended pre-filter)			
Transmission liquid viscous	≤200cSt			
Analog input signal	0~5V (Standard), 0~10V, 4~20mA (Optional)			
Speed output Signal	—		0 ~ 5V	
External control signal	5V,12V (Standard), 24V (Optional)			
Communication	RS485 communication, MODBUS protocol			
Working environment	Working temperature 0~40℃, relative humidity <80%			
Power supply	AC100-240V 50/60Hz			
Power consumption	< 50W	< 150W	< 50W	< 150W
IP grade	IP31			
Dimension	343×198×182mm	320×150×237mm	343×198×182mm	320×150×237mm
Shell	plastic shell	Stainless Steel 304	Plastic shell	Stainless Steel 304
Weight	3.3KG	5.5 KG	3.5KG	5.5 KG

Micro Gear Pump CT3001F/CT3000F

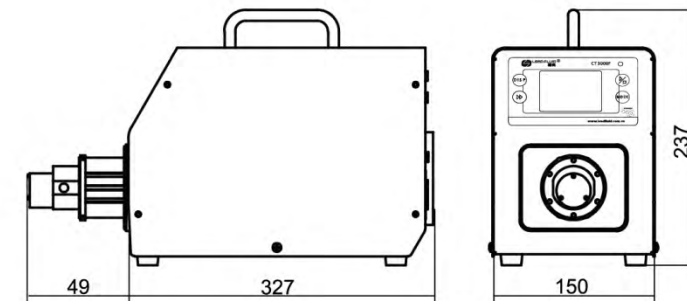
CT3001F/CT3000F adopts brushless servo motor drive, high performance, low noise, stainless steel, magnetic drive pump head, can be realized without pulsation, constant velocity flow transmission. Color LCD display, touch screen operation, can be easily set parameters. A variety of work mode, flow display, it is suitable for all kinds of experimental areas. A variety of external control way, convenient use together with other devices, support the MODBUS protocol communication, simplify the difficulty of system development.

Function and Features

- Can install various pump heads
- Suitable for transmission more viscous, high pressure liquid
- No pulsation transmission, low noise
- The magnetic coupling is designed, easy to maintain
- Brushless servo drive, high efficiency, maintenance-free
- Color LCD display, touch screen operation
- LF-Touch-OS software system
- Flow display and control
- A variety of work mode
- Flow calibration wizard, ensure the accuracy of fluid volume
- Intelligent temperature control function
- External control signal control, physical isolation, analog control
- RS485 communication, support MODBUS protocol
- Wide range of power input, adapted to different environment



Dimension (CT3000S/CT3000F)



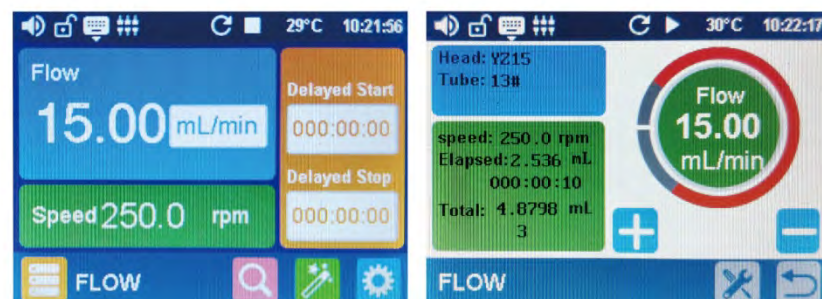
Pump Head Specifications and Flow Rate Reference

Drive Specification	Pump Head	Gear Material	Speed Range (rpm)	Transfer Pressure(Mpa)	Flow Range (mL/min)
CT3001S	MG204XD0PT00000	PEEK	300 ~ 3000	≤0.8	90-900
	MG209XD0PT00000			≤0.8	180-1800
	MG213XD0PT00000			≤0.3	270 ~ 2700
CT3000S	MS204XD0PT00000			≤1.4	90 ~ 900
	MS209XD0PT00000			≤0.9	180 ~ 1800
	MS213XD0PT00000			≤0.8	270 ~ 2700
CT3001F	MG204XD0PT00000		50 ~ 3000	≤0.8	15 ~ 900
	MG209XD0PT00000			≤0.8	30-1800
	MG213XD0PT00000			≤0.3	45-2700
CT3000F	MS204XD0PT00000			≤1.4	15 ~ 900
	MS209XD0PT00000			≤0.9	30 ~ 1800
	MS213XD0PT00000			≤0.8	45 ~ 2700

BT100L/BT300L/BT600L Intelligent Flow Peristaltic Pump

BT100L/BT300L/BT600L intelligent flow peristaltic pump, can realize high precision continuous transmission control and simple quantitative function. Compared with the previous generation of products, uses a larger screen, faster microprocessor, simple operation, powerful functions, new delay to start or stop the flow control process, to meet the complex transmission requirements. RS485 communication adds more settings on the basis of the MODBUS protocol to meet the requirements of different communication equipment.

Main Interface



Function and Feature

- 3.5 inch color LCD display, visual
- Touch screen cooperates with keypads operation, bring good user experience
- LF-GUI-OS software system, efficient and stable, has a good human-computer interaction mode. convenient product customization and upgrading
- With the standard function such as reversible direction, start/stop, full speed, back suction, timing start/stop etc.
- With the flow and time working mode
- Precise flow control and display, micro-step algorithm to ensure the dispensing accuracy of different settings
- Wizard-type flow calibration function, simple and easy to use
- volume mode supports long-timing start and stop;
- Unique back suction function to effectively prevent liquid dripping
- Reserved five-group dispensing parameters for volume and time dispensing
- Programming mode supports 30 different quantitative parameter settings, can realize complex control process
- Intelligent temperature control function, automatically adjust heat dissipation according to the environment, so that the equipment is always in the best state.
- Infrared remote control function to facilitate customer wireless connection
- External analog speed regulation, external control signal control start-stop, reversible direction, dispensing, external control signal, physical isolation
- RS485 communication, the MODBUS protocol, supporting up to 80 programming instructions, convenient connect with various control devices
- Open multiple control parameters for OEM customized applications
- The circuit board is sprayed with three anti paint processes to achieve dust and moisture-proof effect
- Super Anti-interference characteristics, wide voltage design, suitable for complex power supply environment
- New stainless steel shell, easy to clean, effectively prevent the erosion of various organic solvents

Technical parameters	BT100L	BT300L	BT600L
Flow range:	0.0001~720 mL/min	0.006~1690 mL/min	0.006~2900mL/min
Speed range:	0.1-150 rpm	0.1-350 rpm	0.1-600 rpm
Speed resolution:		0.1 rpm	
Speed accuracy:		<±0.2%	
Delayed startup time		1 S-999 H	
Delay stop time		1S-999 H	
Dispensing time:		0.1-99.99 S	
Dispensing number		1-999, 0 Infinite cycle	
Dispensing interval		0.1-999 S/Min/H	
Back suction degree		0-720°	
Pump Head:	DG, YZ15, YZ25, YT15, YT25, DT10, DT15		
Power supply	AC100~240V, 50Hz/60Hz		
Power consumption	<40W	<50W	<60W
External control interface	External Control Input Level 5V、12V(Standard)、24V (optional) External control analog 0-5V(standard),0-10V,4-20mA (optional)		
Communication interface	RS485 communication, support MODBUS protocol		
Working environment	temperature0 ~ 40°C, relative humidity<80%		
IP grade	IP31		
Dimension	(L×W×H) 260X161X186mm		
Weight	4.7KG	4.9 KG	5.2 KG



BT100L/BT300L, BT600L Drive With Different Pump Heads Combination

Appearance Size

BT100L/BT300L/BT600L Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT100L	DG (6 rollers)	1, 2, 4	Wall thickness0.8 ~ 1 , ID≤3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1 , ID≤3.17	0.0001 ~ 41
	DT10-18	1	13#14# Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	DT10-28	2	13#14# Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	DT10-48	4	13#14# Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1, 2	15#24#	0.16 ~ 420
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1, 2	15#24#35#36#	0.17 ~ 720
	DT15-14	1	19#16#25#17#	0.07 ~ 560
	DT15-24	2	19#16#25#17#	0.07 ~ 560
	DT15-44	4	19#16#25#	0.07 ~ 330
BT300L	YZ15	1. 2	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1. 2	15#24#	0.16 ~ 990
	DT15-14	1	19#16#25#17#	0.07 ~ 1300
	DT15-24	2	19#16#25#17#	0.07 ~ 1300
	DT15-44	4	19#16#25#	0.07 ~ 770
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 1300
BT600L	YT25	1	15#24#35#36#	0.16 ~ 1690
	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1, 2	15#24#	0.16 ~ 1700
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.16 ~ 2900

BT101L/BT301L/BT601L Intelligent Flow Peristaltic Pump

BT101L/BT301L/BT601L adopts color LCD and touch screen technology. The operator can input the flow rate directly. Simple operation, the operating interface is intuitive. Mainly uses in controlling the flow transmission, the highest accuracy of controlling flow is $\pm 0.5\%$. Unique dispensing function to meet the requirement of repeated timing and quantitative transmission of fluids, intelligent temperature control technology, in order to reduce unnecessary operating noise. RS485 communication, adopts the MODBUS communication protocol, the pump is easier to be connected with other equipments, such as computer, human machine interface and PLC.

Function and Feature

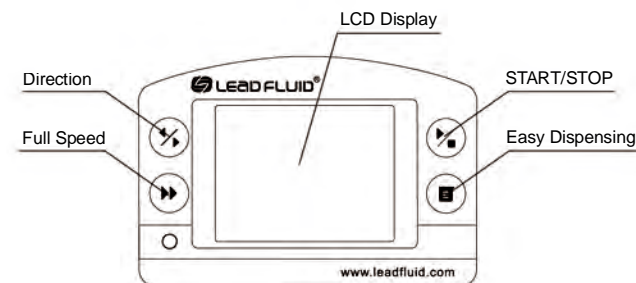
- Color LCD display, touch screen and keypad for operating
- LF-Touch-OS software system
- Reversible direction, start/stop and full speed, adjust speed state memory (power-down memory)
- Speed resolution 0.1 rpm
- Flow display, flow control and flow accumulation
- Calibrating flow function
- Easy dispensing function, it realizes the repeat timing quantitative dispensing without the time controller
- Peristaltic pump expert system, to the greatest extent user-friendly use
- Intelligent temperature control function to minimize peristaltic pump noise, 45 decibel super mute design
- External high-low electrical level controls the start/stop, reversible direction and easy dispensing function, optically coupled isolator, external analog adjusts the rotate speed
- RS485 interface, MODBUS protocol is available, easy to connect other equipments



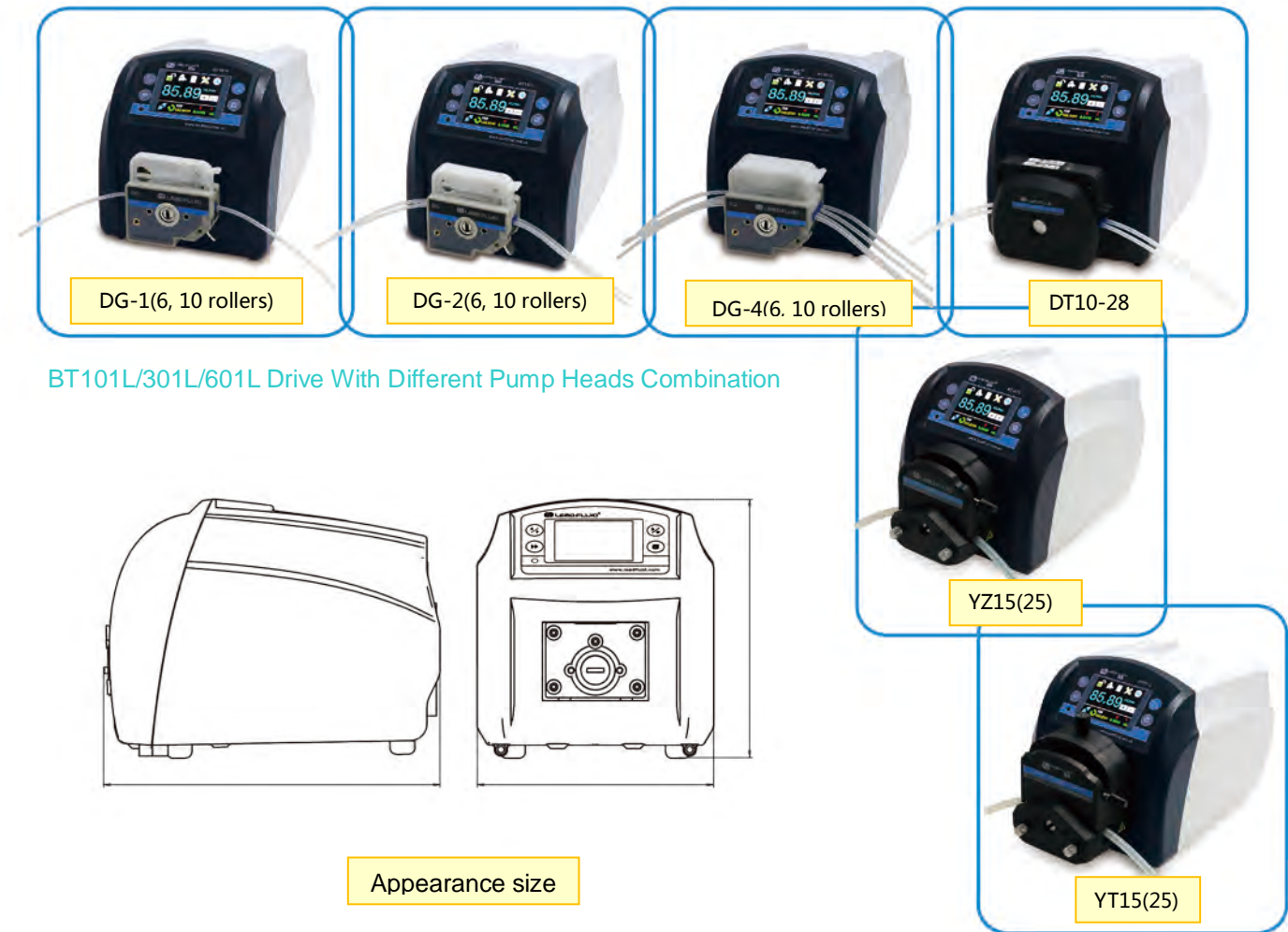
CE

- The internal structure adopts double-deck isolation design, and the circuit board with conformal coating makes it dust-proof and moisture-proof
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- ABS plastic housing, creative streamlined appearance, concise and beautiful
- Can drive multi-channels and various types of pump heads

Display Panel and Operating Keypads



Technical parameters	BT101L	BT301L	BT601L
Flow range	0.0001 ~ 720 mL/min	0.006 ~ 1600 mL/min	0.006 ~ 2900 mL/min
Speed range	0.1 ~ 150 rpm	0.1 ~ 350 rpm	0.1 ~ 600 rpm
Speed resolution	0.1 (rpm)		
Speed accuracy	< $\pm 0.2\%$		
Power supply	AC 100V-240V , 50Hz/60Hz		
Power consumption	< 30W	< 40W	< 50W
External control interface	External control input level 5V、12V(standard), 24V (optional) External control analog 0-5V(standard),0-10V,4-20mA (optional)		
Communication interface	RS485 communication interface. MODBUS protocol is available		
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP grade	IP31		
Dimension (LxWxH)	257mmx180mmx197mm		
Weight	4.5KG	4.7 KG	4.9 KG



BT101L/BT301L/BT601L Applicable Pump Head and Tube, Flow Parameters

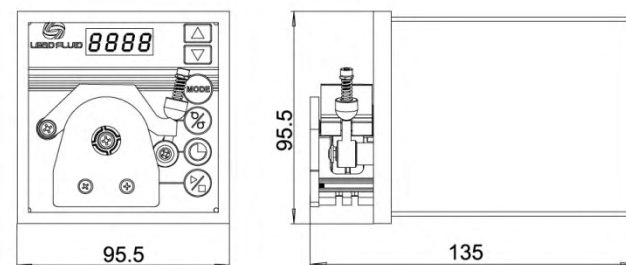
Drive Model	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT101L	DG (6 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1 , ID \leq 3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1 , ID \leq 3.17	0.0001 ~ 41
	DT10-18	1	13#14# Wall thickness 0.8 ~ 1 , ID \leq 3.17	0.0002 ~ 82
	DT10-28	2	13#14# Wall thickness 0.8 ~ 1 , ID \leq 3.17	0.0002 ~ 82
	YZ15	1	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1	15#24#	0.16 ~ 420
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1	15#24#35#36#	0.17 ~ 720
BT301L	YZ15	1	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1	15#24#	0.16 ~ 990
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 1300
	YT25	1	15#24#35#36#	0.16 ~ 1600
BT601L	YZ15	1	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1	15#24#	0.16 ~ 1700
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.16 ~ 2900

BQ80S Microflow Speed-Variable Peristaltic Pump

- Simple operation, small size, easy installation, suitable for ancillary equipment and laboratories
- Four-figure digital LED indicator displays working speed
- LF-LED-OS software system
- Mask keypad operation
- Start/stop, reversible direction, full speed and adjust speed, state memory (power-down memory)
- Easy dispensing function, it realizes the repeat timing quantitative dispensing
- Speed resolution is 0.1 rpm
- Engineering plastic housing, embedded design, can also be placed independently for desktop use
- The circuit board with conformal coating makes it dust-proof and moisture-proof
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- External high-low electrical level controls the start/stop, reversible direction and optically coupled isolator
- Can input the electrical level 5V, 12V, 24V
- RS485 communication, MODBUS protocol is available, easy to connect with other equipments
- Optional external foot switch or time distributor to control start and stop to realize simple dispensing filling function.

Technical parameters	BQ80S
Flow range	0.004 ~ 77 mL/min
Speed range	0.1 ~ 80 rpm
Speed resolution	0.1 rpm
Speed accuracy	<±0.5%
Power supply (Add power adapter)	AC 100-240V 50Hz/60Hz
Power consumption	<10W
External control interface	External control input level 5V, 12V(standard), 24V (optional)
Communication interface	RS485 communication, MODBUS protocol is available
Working environment	Temperature 0 ~ 40°C, relative humidity<80%
IP grade	IP31
Dimension (LxWxH)	135mm×96mm×96mm
Weight	0.8Kg

Dimension (DW pump head)



BQ80S Applicable Pump Head and Tube, Flow Parameters

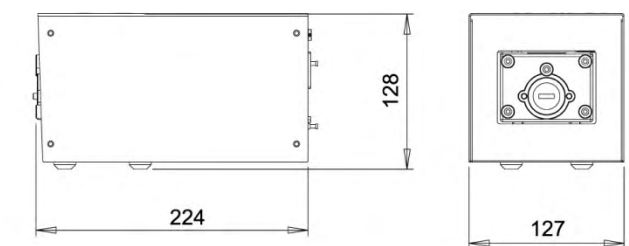
Drive Type	Pump Head	Channel Number	Tube	Single Channel Flow Rate (mL/min)
BQ80S	DW10-1	1	Wall thickness 0.8~1, ID≤3.17	0.005 ~ 32
	DW10-2	2	Wall thickness 0.8~1, ID≤3.17	0.005 ~ 19
	DW10-3	3	Wall thickness 0.8~1, ID≤3.17	0.005 ~ 32
	DW15-1	1	13#14#16#19#25#	0.004 ~ 64
	KD10-1/2	1, 2	Wall thickness 0.8~1, ID≤3.17	0.004 ~ 32
	KD15-1	1	13#14#16#19#25#	0.004 ~ 77

BT50S/BT102S Small Flow Speed-Variable Peristaltic Pump

- Four-figure digital LED indicator displays working speed
- LF-LED-OS software system
- The LED indicator displays the internal, external control, foot switch mode
- Mask keypad operation
- Start/Stop, reversible direction, full speed and adjust speed, state memory (power-down memory)
- Easy dispensing function, it realizes the repeat timing quantitative dispensing
- Speed resolution is 0.1 rpm
- Can drive multi-channels and various types of pump heads
- The circuit board with conformal coating makes it dust-proof and moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for complex power environment
- External high-low electrical level controls the start/stop, reversible direction and easy dispensing function, optically coupled isolator, 5v, 12v, 24V level input is optional
- RS485 communication, MODBUS protocol is available, easy to connect with other equipments
- Optional external foot switch or time distributor to control start and stop to realize simple dispensing filling function

Technical parameters	BT50S	BT102S
Flow range	0.0001~190mL/min	0.0001~480mL/min
Speed range	0.1 ~ 50 rpm	0.1 ~ 100 rpm
Speed resolution	0.1 rpm	
Speed accuracy	< ±0.5%	
Power supply	AC 100-240V 50Hz/60Hz	
Power consumption	< 25W	< 30W
External control interface	External control input level 5V, 12V(standard), 24V (optional)	
Communication interface	RS485 communication interface, MODBUS protocol is available	
Working environment	Temperature 0 ~ 40°C, relative humidity<80%	
IP grade	IP31	
Dimension	(LxWxH) 224mm×127mm×128mm	
Weight	2.6Kg	2.7Kg

Dimension



BT50S/102S Applicable Pump Head Combination



BT50S/BT102S Applicable Pump Head and Tube, Flow Parameters

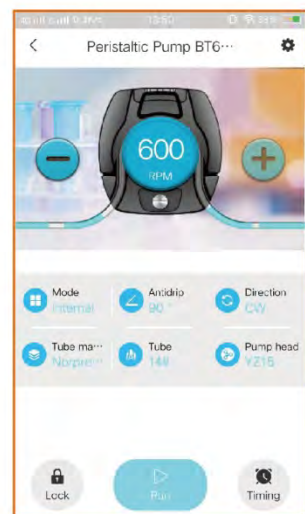
Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT50S	DG	1, 2	Wall thickness 0.8-1, ID≤3.17	0.0001~24
	DT10-18	1	Wall thickness 0.8-1, ID≤3.17	0.0002~41
	DT10-28	1	Wall thickness 0.8-1, ID≤3.17	0.0002~41
	YZ15	1	13#14#16#19#25#17#	0.006~140
	YT15	1	13#14#16#19#25#17#18#	0.006~190
BT102S	DG	1, 2	Wall thickness 0.8-1, ID≤3.17	0.0001~49
	DT10-18	1	Wall thickness 0.8-1, ID≤3.17	0.0002~82
	DT10-28	1	Wall thickness 0.8-1, ID≤3.17	0.0002~82
	YZ15	1	13#14#16#19#25#17#	0.006~280
	YZ25	1	15#24#	0.16~280
	YT15	1	13#14#16#19#25#17#18#	0.006~380
	YT25	1	15#24#35#36#	0.16~480

BT100S/BT300S/BT600S Speed-Variable Intelligent Peristaltic Pump

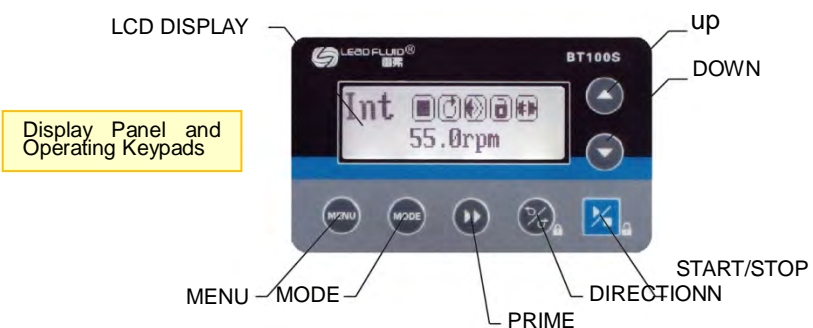
A new generation of speed-variable intelligent peristaltic pump, with Cortex-M3 core processor, high quality stepper servo motor drive, speed control accuracy is $\pm 0.2\%$, stepless speed regulation of mask keys (speed range 0.1-600 rpm). Can match various high performance pump head, such as DG series, YZ15, YZ25, etc. the single channel flow range is 0.0001-2900 mL/min.

Function and Feature

- LF-LCD-OS software system, high definition lattice LCD display, switching between Chinese-English interface, simple parameter setting, intuitive state display
- High-quality and high-torque step servo motor drive, speed accuracy, wide range, operation stability, high-precision flow transmission
- Industrial mask key operation, simple and convenient, high durability
- LF-Easy Change Universal design, large torque output, strong expansibility, can match various high-performance pump head
- Start/Stop, adjust speed, reversible direction, full speed and state memory (power-down memory)
- The parameters of running time, interval time and cycle times can be set to meet the requirements of timing, quantitative, liquid dispensing and flow testing
- Slow speed stop and suction function, which can effectively prevent the dropping of liquid when the machine stops
- Keyboard lock function to prevent misoperation
- The remote start-stop, adjust speed and timing operation can be realized by using LeadFluid APP software. It also has monitoring functions such as stop alarm, change of pump tube and so on
- Stainless steel 304 material housing, effective prevention of erosion of various organic solvents, easy to clean
- The internal structure adopts double-layer isolation design, and the circuit system provides special protection, which effectively improves the anti-dust, moisture-proof, anti-corrosion and oxidation resistance
- Super anti-interference characteristic, wide voltage design, suitable for complex power supply environment
- RS485 communication interface, new Modbus protocol, easy to connect with various control devices
- Acceptable multiple external industrial control signals to control start-stop, reversible direction and speed adjustment, optically coupled isolator
- Support start-stop, reversible direction, current speed etc. working state signal output
- External thermal printer (optional), real-time printing operation parameters
- Optional leak detector, pressure sensor, flowmeter, foot switch, pulse damper, countersunk head and other accessories to meet individual needs

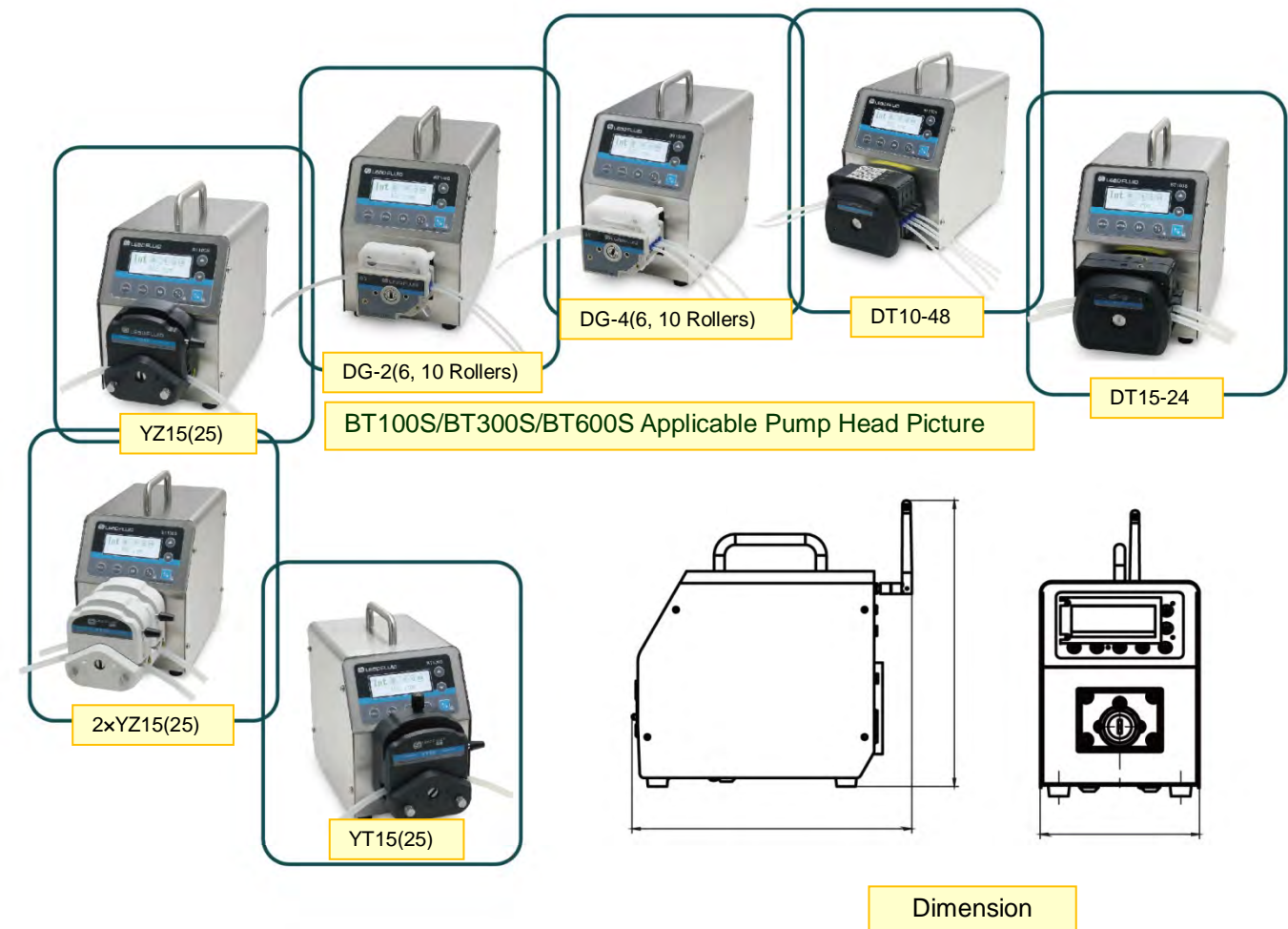


Mobile APP



Display Panel and Operating Keypads

Product model	BT100S	BT300S	BT600S
Flow range	0.0001 ~ 720 mL/min	0.006 ~ 1690 mL/min	0.006 ~ 2900mL/min
Speed range	0.1-150 rpm	0.1-350 rpm	0.1-600 rpm
Speed resolution	0.1 rpm (speed ≤ 100 rpm), 1 rpm (speed > 100 rpm), speed accuracy $< \pm 0.2\%$		
Display mode	Window 77mm*32mm, Monochromatic 132*32 lattice liquid crystal		
Language interface	Switching between Chinese and English		
Operation mode	Industrial mask key		
Key locking	Long press direction key to lock, long press start and stop key to unlock		
Timing function	Timed running time 0.1-999 S/Min/H/D, interval time 0.1-999 S/Min/H/D		
Cycle times	0-999 (0 Infinite cycle)		
Back Suction angle	0-720°		
External control signal input	Start /Stop: passive contact, external control input level 5-24V. Reversible direction: passive contact, external control input level 5-24V. Adjust speed: analog quantity 0-5V, 0-10V, 4-20mA can set		
External control signal output	Start /Stop: level signal (following input voltage). Reversible direction: level signal (following input voltage). Speed state: analog quantity 0-5V		
Communication interface	RS485, MODBUS protocol is available, DB15 external control interface		
Power supply:	AC100 ~ 240V, 50Hz/60Hz		
Power consumption	< 40W	< 50W	< 60W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP Grade	IP31		
Dimension	264×150×270 mm (LWH)		
Drive weight	4.9KG	5.2 KG	5.5 KG



BT100S/BT300S/BT600S Applicable Pump Head Picture

Dimension

BT100S/BT300S/BT600S Applicable Pump Head and tube, flow parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT100S	DG (6 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1, ID ≤ 3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1, ID ≤ 3.17	0.0001 ~ 41
	DT10	1, 2, 4	13#14# Wall thickness 0.8 ~ 1, ID ≤ 3.17	0.0002 ~ 82
	YZ15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 570
	YZ25	1, 2	15#24#	0.16 ~ 425
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1, 2	15#24#35#36#	0.17 ~ 720
	DT15-14/24	1, 2	19#16#25#17#	0.07 ~ 560
BT300S	DT15-44	4	19#16#25#	0.07 ~ 330
	YZ15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 1340
	YZ25	1, 2	15#24#35#36#	0.17 ~ 990
	DT15-14/24	1, 2	19#16#25#17#	0.07 ~ 1300
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 1340
BT600S	YT25	1	15#24#35#36#	0.17 ~ 1690
	YZ15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 2300
	YZ25	1, 2	15#24#35#36#	0.17 ~ 1700
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.17 ~ 2900
	DT15-14/24	1, 2	19#16#25#17#	0.07 ~ 2240

BT101S/BT301S/BT601S Basic Speed-Variable Peristaltic Pump

High quality stepper motor drive, digital display, has basic functions such as reversible direction, start/stop, full speed (fast cleaning, empty), and speed-variable. Easy dispensing function can realize the repeat timing quantitative dispensing. RS485 interface, as adopting the MODBUS communication protocol, the pump is easier to be connected with other equipments, such as computer, human machine interface and PLC.

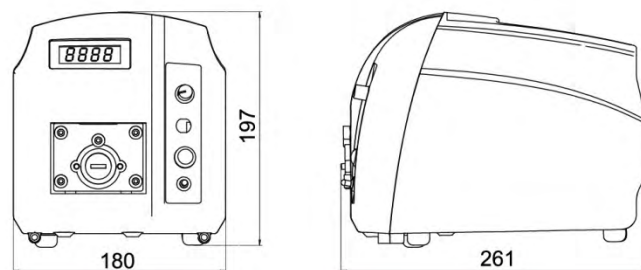
Function and Feature

- Four-figure digital LED indicator displays working speed
- LF-LED-OS software system
- The LED indicator displays the reversible direction, internal, external control, foot switch working mode
- The button is combined with the knob for operation.
- Start/stop, reversible direction, full speed, adjust speed, state memory (power-down memory)
- Easy dispensing function, it realizes the repeat timing quantitative dispensing
- Streamlined plastic housing design for driver, simple and fashionable
- Large torque output, can drive multi-channels and various types of pump heads.
- Internal double-deck isolation structure, circuit board with conformal coating makes it dust-proof and moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- External high-low electrical level controls the star/stop, reversible direction and easy dispensing function, optically coupled isolator, external analog adjusts the rotate speed
- RS485 interface, MODBUS protocol is available, easy to connect other equipments.
- External foot switch can control start-stop or time dispensing can control start-stop and realize simple dispensing filling function



Technical parameters	BT101S	BT301S	BT601S
Flow range	0.0001 ~ 720 mL/min	0.006 ~ 1600 mL/min	0.006 ~ 2900 mL/min
Speed range	0.1-150 rpm	0.1-350 rpm	0.1-600 rpm
Speed resolution	When running speed is 0.1 ~ 100 rpm, the resolution is 0.1 rpm. When running speed is 100 ~ 600 rpm, the resolution is 1 rpm		
Flow accuracy	< ±0.5%		
Power supply	AC100 ~ 240V, 50Hz/60Hz		
Power consumption	< 30W	< 40W	< 50W
External control interface	External control input level 5V, 12V(Standard), 24V (Optional) External control analog 0-5V(Standard), 0-10V, 4-20mA (Optional)		
Communication interface	RS485 communication interface, MODBUS protocol is available		
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP Grade	IP31		
Dimension	(LxWxH) 261mm×180mm×197mm		
Weight	4.5KG	4.7 KG	4.9 KG

Dimension



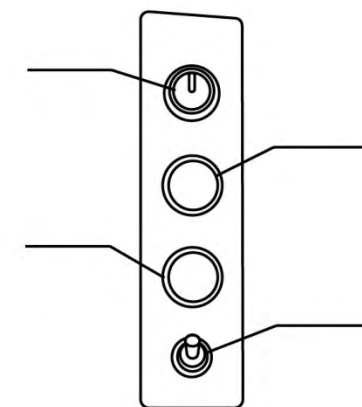
BT101S/BT301S/BT601S Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT101S	DG (6 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 3, 4	Wall thickness 0.8 ~ 1, ID≤3.17	0.0001 ~ 41
	DT10-18	1	13#14# wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 82
	DT10-28	1	13#14#Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 82
	YZ15	1	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1	15#24#	0.16 ~ 420
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1	15#24#35#36#	0.17 ~ 720
BT301S	YZ15	1	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1	15#24#	0.16 ~ 990
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 1300
	YT25	1	15#24#35#36#	0.16 ~ 1600
BT601S	YZ15	1	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1	15#24#	0.16 ~ 1700
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.16 ~ 2900

BT100S/BT300S/BT600S Applicable Pump Heads



Display Panel and Operating Keypads



DG-2(6, 10 Rollers)



DG-1(6, 10 Rollers)



DG-4(6, 10 Rollers)



YT15(25)



YZ15(25)



DT10-28

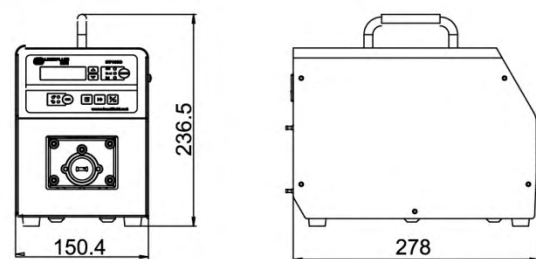
BT100S-1 Large Torque Speed-Variable Peristaltic Pump

Function and Feature

- Four-figure digital LED indicator displays working speed
- LF-LED-OS software system
- LED indicator displays the reversible direction, internal control, external control, footswitch and other working mode
- Start/stop, reversible direction, full speed, adjust speed, state memory (power down memory)
- Easy dispensing function, it realizes the repeat timing quantitative dispensing liquid
- The speed resolution is 0.1-100 rpm, the speed resolution is 0.1 rpm. 100-150 rpm, the speed resolution is 1 rpm
- Large torque, can drive multi-channels and various types of pump heads
- Super anti-interference feature, wide input voltage range, acceptable for complex power environment
- External high-low electrical level controls the start/stop, reversible direction and easy dispensing function, optically coupled isolator, external analog adjusts the rotate speed
- RS485 interface, MODBUS protocol is available, easy to connect other equipments
- External foot switch can control start-stop or time dispensing can control start-stop and realize simple dispensing filling function

The Parameters

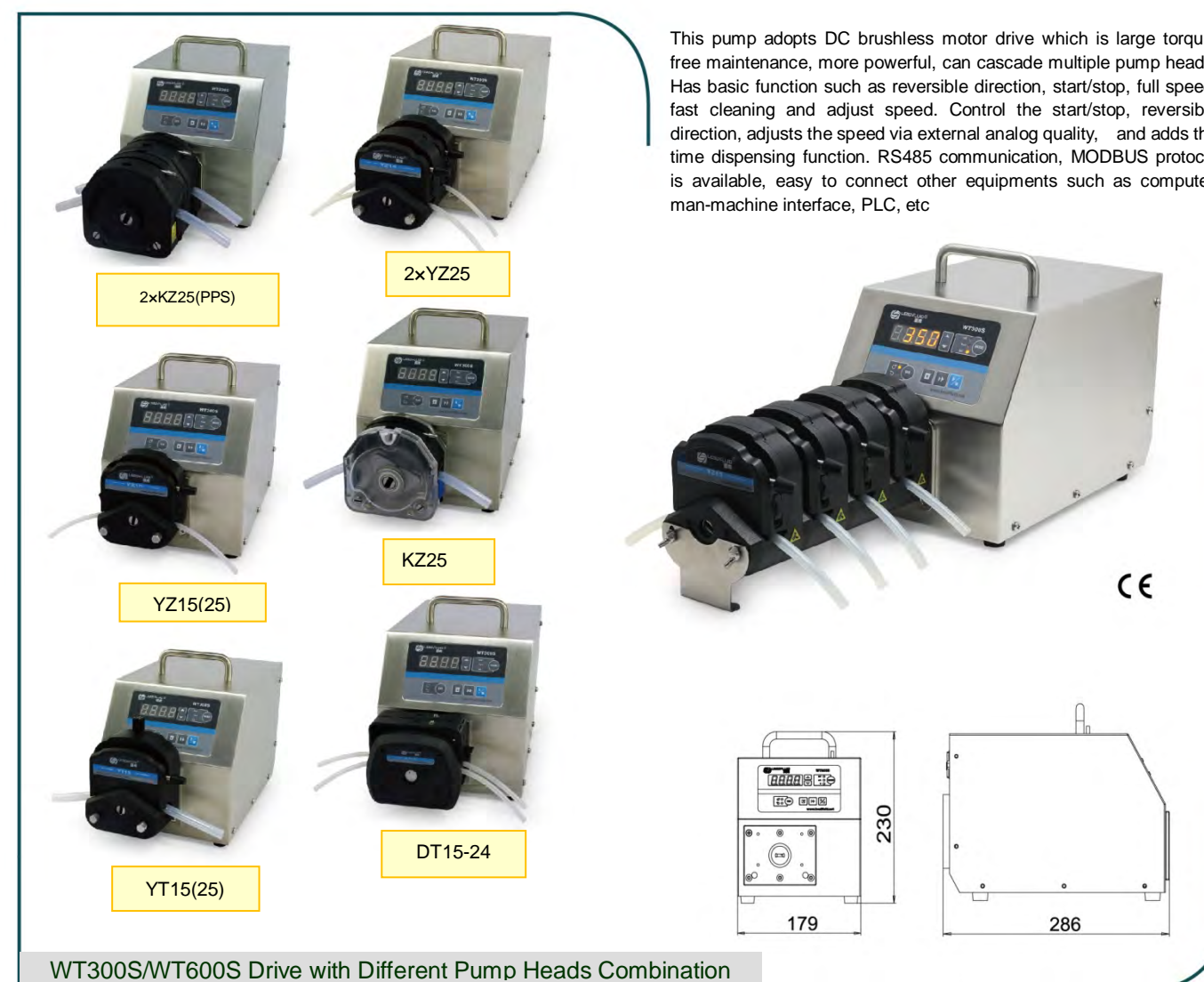
Flow range: 0.0001 ~ 1700 mL/min
 Speed accuracy: < ±0.5%
 Speed range: 0.1 ~ 150 rpm
 Speed resolution: 0.1 rpm
 Power supply: AC 100 ~ 240V 50Hz/60Hz
 Power consumption: < 60W
 External control: external control input electrical level 5V, 12V(standard), 24V(optional). External control analog 0-5V(standard), 0-10V, 4-20mA (optional)
 Communication interface: RS485 communication interface, MODBUS protocol is available
 Environment temperature: 0 ~ 40°C
 Relative humidity: < 80%
 IP grade: IP31
 Dimension: (LxWxH) 278mmx150mmx237mm
 Weight: 4.7KG



Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT100S-1	DG (6 Rollers)	8, 12, 16, 24	Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 49
	DG (10 Rollers)	8, 12, 16, 24	Wall thickness 0.8 ~ 1 , ID≤3.17	0.0001 ~ 41
	DT10-88	8	13#14#Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	YZ15	1, 2, 4	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1, 2, 4	15#24#	0.16 ~ 420
	YT15	1, 2, 4	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1, 2, 4	15#24#35#36#	0.16 ~ 720
	KZ25	1, 2	15#24#35#36#	1 ~ 1700
	DT15-44	4	19#16#25#17#	0.07 ~ 560

WT300S/WT600S Large Torque Speed-Variable Peristaltic Pump

This pump adopts DC brushless motor drive which is large torque, free maintenance, more powerful, can cascade multiple pump heads. Has basic function such as reversible direction, start/stop, full speed, fast cleaning and adjust speed. Control the start/stop, reversible direction, adjusts the speed via external analog quality, and adds the time dispensing function. RS485 communication, MODBUS protocol is available, easy to connect other equipments such as computer, man-machine interface, PLC, etc



WT300S/WT600S Drive with Different Pump Heads Combination

WT600S-65 (high protection grade)

Suitable for harsh working environment



The red label is WT600S-65 corresponding to the channels number

WT300S/WT600 Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate(mL/min)
WT300S	YZ15	1, 2, 4	13#14#16#19#25#17#	3 ~ 990
	YZ25	1, 2, 4	15#24#	50 ~ 990
	YT15	1, 2, 4	13#14#16#19#25#17#18#	3 ~ 1300
	YT25	1, 2, 4	15#24#35#36#	50 ~ 1600
	DT15-24	2	19#16#25#17#	20 ~ 1300
	DT15-44	4	19#16#25#17#	20 ~ 1300
WT600S WT600S-65	KZ25	1, 2	15#24#35#36#	80 ~ 3500
	YZ15	1, 2, 4	13#14#16#19#25#17#	3 ~ 1700
	YZ25	1, 2, 4	15#24#	50 ~ 1700
	YT15	1, 2, 4	13#14#16#19#25#17#18#	3 ~ 2300
	YT25	1, 2, 4	15#24#35#36#	50 ~ 2900
	DT15-24	2	19#16#25#17#	20 ~ 2240
	DT15-44	4	19#16#25#17#	20 ~ 2240
	KZ25	1, 2	15#24#35#36#	80 ~ 6000

BT100F/ BT300F/ BT600F Intelligent Dispensing Peristaltic Pump

This series of peristaltic pump adopts the advanced imported microprocessor, and cooperates with the large torque stepper motor. higher transmission accuracy, 3.5-inch high-definition LCD touch screen display and operation, simple and convenient. editable function, preset 30 groups of operation parameters, complete a complex control process. Multiple modes of work are optional , powerful, ideal for liquid timing quantitative transferring and dispensing.

Function and Feature:

- 3.5-inch color LCD display, intuitive image
- Touch screen with key operation, convenient and fast
- LF-Touch-OS software system, efficient and stable, with good human-computer interaction mode, convenient product customization and upgrade
- Four working modes, flow rate, time dispensing, volume dispensing, programming dispensing (cycle)
- Five sets of dispensing parameters for volume and time dispensing pre-storage
- Programming mode supports 30 different quantitative parameter settings for complex control processes
- Reversible direction, start/stop, full speed, suction function, timed start-stop
- Accurate flow control and display, microstep algorithm to ensure the dispensing accuracy of different settings
- Wizard flow calibration function, easy to use
- Unique back suction function to prevent liquid drips
- Support for serial print parameters and data
- Intelligent temperature control function, automatically adjusting the heat according to the environment, so that the device is always in the best state
- External analog adjust speed , external control start-stop ,reversible direction, dispensing, external signal physical isolation



- RS485 communication interface, MODBUS protocol is available, can set up communication parameters, convenient to connect various of control equipments
- Open multiple control parameters , suitable for OEM custom applications
- The circuit board is sprayed with three anti paint technology to achieve the effect of dustproof and moisture-proof
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- Innovative stainless steel housing, easy to clean, effectively prevent the erosion of various organic solvents

Filling Application Reference Table

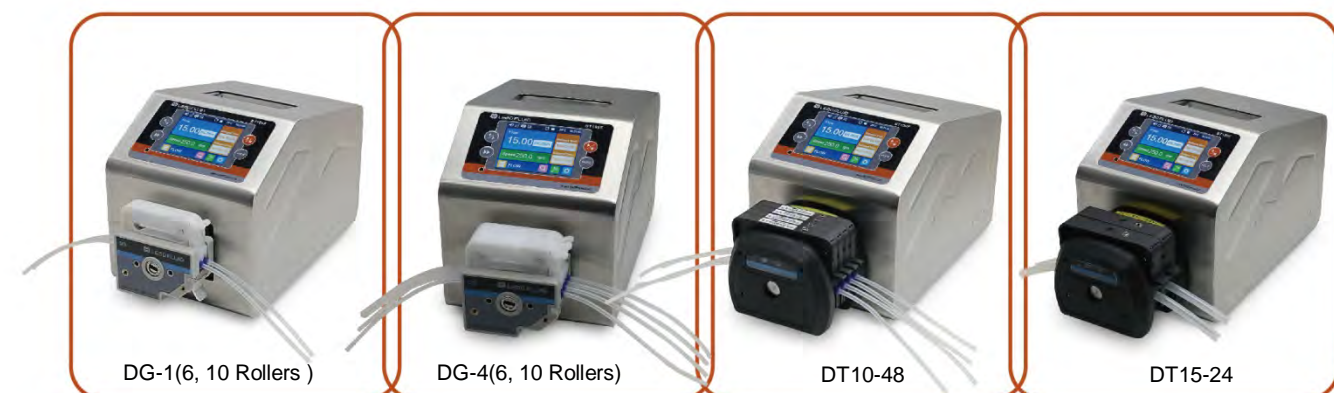
Filling fluid volume	Pump Head	Tube	Speed (RPM)	Filling time (S)	Reliability error (%)
50μL	DG6-1	0.25x0.89	> 90	< 6.66	< ±2
0.1mL	DG6-1	0.5x0.8	> 90	< 3.33	< ±2
0.2mL	DG6-1	0.5x0.8	> 90	< 6.06	< ±1
0.3mL	YZ15	13#	> 500	< 0.6	< ±2
0.5mL	YZ15	13#	> 500	< 1	< ±1
0.8mL	YZ15	13#	> 500	< 1.6	< ±1
1mL	YZ15	13#	> 500	< 2	< ±1
2mL	YZ15	14#	> 500	< 1.1	< ±1
3mL	YZ15	14#	> 500	< 1.65	< ±1
5mL	YZ15	19#	> 500	< 1.68	< ±1
8mL	YZ15	16#	> 500	< 1.2	< ±1
10mL	YZ15	16#	> 500	< 1.5	< ±1
20mL	YZ15	25#	> 500	< 1.43	< ±1
50mL	YZ15	17#	> 500	< 2.11	< ±1



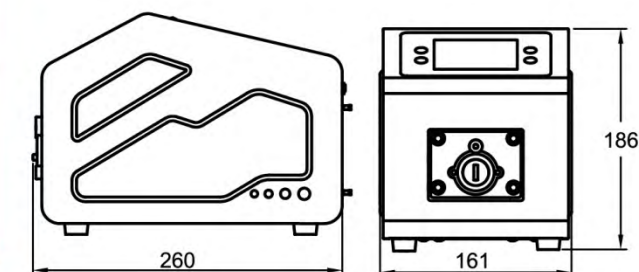
LCD display, touch screen operating keypads

Technical Parameters

Technical parameters	BT100F	BT300F	BT600F
Flow range	0.0001 ~ 720 mL/min	0.006 ~ 1690 mL/min	0.006 ~ 2900 mL/min
Speed range	0.1-150 rpm	0.1-350 rpm	0.1-600 rpm
Speed resolution	0.1 rpm		
Dispensing volume	0.05mL ~ 9999L		
Dispensing time	1 ~ 9999 , "0" Infinite cycle		
Dispensing interval time	0.1 ~ 999.9 S/Min/H., time unit adjustable		
Speed accuracy	< ±0.2%		
Power supply	AC100 ~ 240V , 50Hz/60Hz		
Power consumption	< 40W	< 50W	< 60W
External control	External control input level 5V, 12V(standard), 24V (optional) External control analog 0-5V(standard), 0-10V, 4-20mA (optional)		
Communication interface	RS485 communication interface, MODBUS protocol is available		
Working environment	Temperature 0 ~ 40°C, Relative humidity < 80%		
IP grade	IP31		
Dimension	(LxWxH) 260mmx161mmx186mm		
Weight	4.7KG	4.9 KG	5.2 KG



BT100F/BT300F/BT600F
Applicable Pump Head Picture



BT100F/BT300F/BT600F Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT100F	DG (6 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 3, 4	Wall thickness 0.8 ~ 1 , ID≤3.17	0.0001 ~ 41
	DT10-18	1	13#14#Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	DT10-28	2	13#14#Wall thickness 0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	DT10-48	4	13#14#Wall thickness0.8 ~ 1 , ID≤3.17	0.0002 ~ 82
	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1, 2	15#24#	0.16 ~ 420
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 570
	YT25	1, 2	15#24#35#36#	0.17 ~ 720
	DT15-14	1	19#16#25#17#	0.07 ~ 560
	DT15-24	2	19#16#25#17#	0.07 ~ 560
	DT15-44	4	19#16#25#	0.07 ~ 330
BT300F	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1, 2	15#24#	0.16 ~ 990
	DT15-14	1	19#16#25#17#	0.07 ~ 1300
	DT15-24	2	19#16#25#17#	0.07 ~ 1300
	DT15-44	4	19#16#25#	0.07 ~ 770
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 1300
BT600F	YT25	1	15#24#35#36#	0.16 ~ 1690
	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1, 2	15#24#	0.16 ~ 1700
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.16 ~ 2900

BT101F/ BT301F/ BT601F Intelligent Dispensing Peristaltic Pump

BT101F/BT301F/BT601F intelligent dispensing peristaltic pump, adopts color LCD touch screen with intuitive and clear displaying interface, easy to operate. Mainly used for accurate measurement and distribution of fluid. If you need high accuracy when dispensing, volume dispensing mode is available. If need high producing efficiency, time dispensing mode is more convenient. If want to separate fluid to number of equal parts, copy dispensing mode would be best. When working on flow mode, it is as same as intelligent flow peristaltic pump. Adopt intelligent temperature-control technology to reduce working noise. RS485 interface, as adopting the MODBUS communication protocol, easier to be connected with other equipments, such as computer, human machine interface and PLC.

LCD display, touch screen operation

Function and Feature

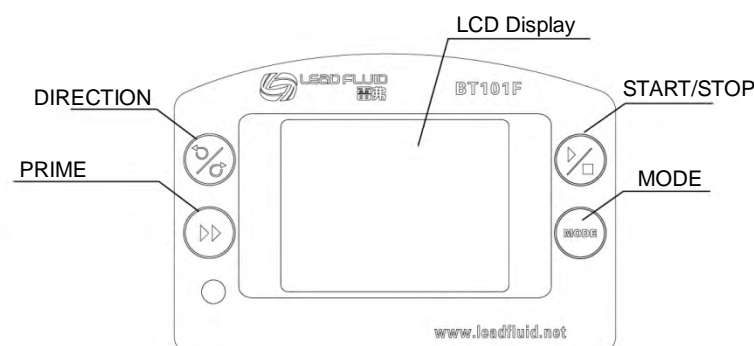
- Color LCD display, touch screen and keypad for operating
- LF-Touch-OS software system, efficient and stable, with good human-computer interaction mode, convenient product customization and upgrade
- Three types of distributing mode: volume dispensing mode, time dispensing mode, copy dispensing mode.
- Automatically store five groups of working parameters
- Precious controlling technology for motor's rotating angle increases the dispensing accuracy comparing to traditional time dispensing mode;
- Start/stop, reversible direction, full speed, adjust speed, state memory (power-down memory)
- Speed resolution is 0.1 rpm
- Display and control flow rate, accumulate dispensing volume automatically
- Calibrating flow function
- The operating expert system guides users setting parameters correctly.
- Intelligent temperature-control technology reduces working noise
- External high-low electrical level controls the start/stop, reversible direction and easy dispensing function, optically coupled isolator, external analog adjusts the rotate speed
- RS485 communication interface, MODBUS protocol is available, easy to connect other equipments
- Internal double-deck isolation structure, circuit board with conformal coating makes it dust-proof and moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- ABS plastic housing, creative streamlined appearance, beautiful and simple
- Can drive multi-channels and various types of pump heads
- External foot switch control start-stop for dispensing volume

Technical Parameters

Technical parameters	BT101F	BT301F	BT601F
Flow range	0.0001 ~ 720 mL/min	0.006 ~ 1690 mL/min	0.006 ~ 2900 mL/min
Speed range	0.1-150 rpm	0.1-350 rpm	0.1-600 rpm
Speed resolution	0.1 rpm		
Dispensing volume	0.05mL ~ 9999L		
Dispensing time	1 ~ 9999, "0" Infinite loops		
Dispensing interval time	0.1 ~ 999.9S/Min/H., time unit adjustable		
Speed accuracy	< ±0.2%		
Power supply	AC100 ~ 240V, 50Hz/60Hz		
Power consumption	< 30W	< 40W	< 50W
External control	External control input level 5V, 12V(Standard), 24V (Optional) External control analog 0-5V(Standard), 0-10V, 4-20mA (Optional)		
Communication interface	RS485 communication interface, MODBUS protocol is available		
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP grade	IP31		
Dimension	(LxWxH) 257mmx180mmx197mm		
Weight	4.5KG	4.7 KG	4.9 KG

BT101F/BT301F/BT601F Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
BT101F	DG (6 rollers)	1, 2, 4	Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 49
	DG (10 rollers)	1, 2, 3, 4	Wall thickness 0.8 ~ 1, ID≤3.17	0.0001 ~ 41
	DT10-18	1	13#14#Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 82
	DT10-28	2	13#14#Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 82
	YZ15	1	13#14#16#19#25#17#	0.006 ~ 420
	YZ25	1	15#24#	0.16 ~ 420
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 570
BT301F	YT25	1	15#24#35#36#	0.17 ~ 720
	YZ15	1	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1	15#24#	0.16 ~ 990
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 1300
	YT25	1	15#24#35#36#	0.16 ~ 1690
BT601F	DT15-24	2	16#19#25#	0.07-770
	YZ15	1	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1	15#24#	0.16 ~ 1700
	YT15	1	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1	15#24#35#36#	0.16 ~ 2900



Dimension

BT101F/BT301F/BT601F Applicable Pump Head Picture

Filling Application Reference Table

Filling Fluid Volume	Pump Head	Tube	Speed (rpm)	Filling Time (S)	Reliability Error (%)
50μL	DG6-1	0.25×0.89	> 90	< 6.66	< ±2
0.1mL	DG6-1	0.5×0.8	> 90	< 3.33	< ±2
0.2mL	DG6-1	0.5×0.8	> 90	< 6.06	< ±1
0.3mL	YZ15	13#	> 500	< 0.6	< ±2
0.5mL	YZ15	13#	> 500	< 1	< ±1
0.8mL	YZ15	13#	> 500	< 1.6	< ±1
1mL	YZ15	13#	> 500	< 2	< ±1
2mL	YZ15	14#	> 500	< 1.1	< ±1
3mL	YZ15	14#	> 500	< 1.65	< ±1
5mL	YZ15	19#	> 500	< 1.68	< ±1
8mL	YZ15	16#	> 500	< 1.2	< ±1
10mL	YZ15	16#	> 500	< 1.5	< ±1
20mL	YZ15	25#	> 500	< 1.43	< ±1
50mL	YZ15	17#	> 500	< 2.11	< ±1

BT100F-1 Intelligent Dispensing Peristaltic Pump

Function and Feature

- LF-Touch-OS software system. color LCD display, touch screen and button operation, more friendly human-computer interaction
- Multiple operation modes, each dispensing mode can store five groups of working parameters.
- Precision microstep control technology reduces the traditional time control. Dispensing mode due to factors such as slow start of the motor and other dispensing errors.
- Start/stop, reversible direction, full speed, adjust speed, state memory (power-down memory)
- Large torque output for cascading multiple pump heads
- Display and control flow rate, accumulate dispensing volume automatically
- Wizard flow calibrating function
- The operating expert system guides users setting parameters correctly
- Intelligent temperature-control technology reduces working noise
- External control controls the start/stop, reversible direction and dispensing function, optically coupled isolator, external analog adjusts the rotate speed
- RS485 communication interface, MODBUS protocol is available, easy to connect other equipments
- Internal double-deck isolation structure, circuit board with conformal coating makes it dust-proof and moisture-proof
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment.
- 304 stainless steel shell, easy to clean, corrosion resistant
- Can drive multi-channels and various types of pump heads
- External foot switch control start-stop for dispensing fluid

Technical Parameters

- Flow range: 0.0001 ~ 1700 mL/min
- Speed accuracy: < ±0.2%
- Speed range: 0.1 ~ 150 rpm
- Speed resolution: 0.1 rpm
- Working mode: flow rate mode, volume dispensing, time dispensing, copy dispensing
- Dispensing volume range: 0.05mL ~ 9999L
- Dispensing time: 1 ~ 9999, "0" Infinite cycle
- Dispensing interval time: 0.1 ~ 999.9 S/Min/H
- Power supply: AC100V ~ 240V, 50Hz/60Hz
- Power consumption: < 60W
- External control: external control input level 5V, 12V(standard), 24V (optional)
- External control analog 0-5V(standard), 0-10V, 4-20mA (optional)
- Communication interface: RS485 communication interface, MODBUS protocol is available
- Environment temperature: 0 ~ 40°C
- Relative humidity: < 80%
- IP grade: IP31
- Dimension: 278mm×150mm×237mm
- Weight: 4.7KG

BT100F-1 Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single channel Flow Rate (mL/min)
BT100F-1	DG (6 rollers)	8, 12, 16, 24	Wall thickness 0.8 ~ 1, ID≤3.17	0.0002 ~ 49
	DG (10 rollers)	8, 12, 16, 24	Wall thickness 0.8 ~ 1, ID≤3.17	0.0001 ~ 41
	D T 1 0 - 8 8	8	13#14#16#19#25#17# ID≤3.17	0.0002 ~ 82
	Y Z 1 5	1, 2	13#14#16#19#25#17#	0.006 ~ 420
	Y Z 2 5	1, 2	15#24#	0.16 ~ 420
	Y T 1 5	1, 2, 4	13#14#16#19#25#17#18#	0.006 ~ 570
	Y T 2 5	1, 2, 4	15#24#35#36#	0.16 ~ 720
	K Z 2 5	1, 2	15#24#35#36#	0.25 ~ 1200
	D T 1 5 - 1 4	1	19#16#25#17#	0.07 ~ 560
	D T 1 5 - 2 4	2	19#16#25#17#	0.07 ~ 560
	D T 1 5 - 4 4	4	19#16#25#	0.07 ~ 330
	D M D 2 5	1	15#24#35#36#	0.3 ~ 1700



WT300F/WT600F Intelligent Dispensing Peristaltic Pump

WT300F/WT600F intelligent dispensing peristaltic pump adopts LF-Touch-OS software system, color LCD touch screen with intuitive and clear displaying interface. Brushless servo motor drive with large torque, free maintenance. Four working mode: flow rate mode, volume dispensing, time dispensing, copy dispensing, suitable for different working requirements. The standard communication protocol, the pump is easier to be connected with other equipments. With intelligent temperature control fan, reduce noise, stainless steel housing, easy to clean, corrosion resistant.

Filling Application Reference Table

Filling Fluid volume	Pump Head	Tube	Speed(rpm)	Filling Time(S)	Reliability Error(%)
30mL	DMD25	35#	> 300	< 0.7	< ±1
50mL	DMD25	36#	> 300	< 0.85	< ±1
80mL	KZ25	36#	> 300	< 0.96	< ±1

CE

High level of protection, suitable for harsh environment such as wet dust



WT300F/WT600F Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube (mm)	Single Channel Flow Rate (mL/min)
WT300F	YZ15	1, 2, 4	13#14#16#19#25#17#	0.006 ~ 990
	YZ25	1, 2, 4	15#24#	0.16 ~ 990
	YT15	1, 2, 4	13#14#16#19#25#17#18#	0.006 ~ 990
	YT25	1, 2, 4	15#24#35#36#	0.16 ~ 990
	DT15-14	1	19#16#25#17#	0.07 ~ 1300
	DT15-24	2	19#16#25#17#	0.07 ~ 1300
	DT15-44	4	19#16#25#17#	0.07 ~ 1300
	KZ25	1, 2	15#24#35#36#	2.5 ~ 3500
	DMD25	1	15#24#35#36#	3 ~ 4000
WT600F WT600F-65	YZ15	1, 2	13#14#16#19#25#17#	0.006 ~ 1700
	YZ25	1, 2	15#24#	1.7 ~ 1700
	YT15	1, 2	13#14#16#19#25#17#18#	0.006 ~ 2300
	YT25	1, 2	15#24#35#36#	1.7 ~ 2900
	KZ25	1	15#24#35#36#	2.5 ~ 6000



KZ25-L



YZ15(25)



DMD25



DG-12



4xYZ15(25)



KZ25



DG-24



2xYT15 (25)

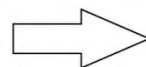


Function and Feature

- Rotary encoder controls running speed, reversible direction, start/stop, full speed, easy to operate
- LF-LED-OS software system, figure digital displays speed and working status
- Large torque brushless motor drive, free maintenance
- 304 stainless steel housing, easy to clean corrosion resistance
- Timed operation, run regularly easy dispensing.
- The circuit board with conformal coating makes it dust-proof and moisture-proof
- External control controls start/stop, reversible direction, optically coupled isolator. 5V, 12V, 24V input level optional
- External analog adjusts the rotate speed



Two Channels Picture



WG600S Applicable Pump Head, Tube, and Flow Parameters

Drive Type	Pump Head	Channel Number	Tube	Single Channel Flow Rate (L/min)
WG600S	YZ35	1	73#82#	0.4 ~ 13
(304SS)	2xYZ35	2	73#82#	0.4 ~ 13

Technical Parameters

- Flow range: 0.4 ~ 13 L/min
- Speed accuracy: < ±3%
- Speed range: 30 ~ 600 rpm
- Speed resolution: 1 rpm
- Timed running: 0.1-999 S
- Power supply: AC 220V±10%, 50Hz/60Hz (standard)
AC 110V±10%, 50Hz/60Hz (optional)
- Power consumption: <300W
- External control: analog 0-5V control speed, 0-10V, 4-20mA (optional), 5V, 12V, 24V input lever (optional)
- Communication interface: RS485 communication interface, MODBUS protocol is available
- Working temperature: 0 ~ 40°C
- Relative humidity: < 80%
- IP grade: IP31
- Dimension: (LxWxH) 340mmx235mmx175mm
- Weight: 13KG

WG600F Industrial Intelligent Dispensing Peristaltic Pump

WG600F industrial intelligent dispensing peristaltic pump, is suitable for transferring and dispensing large amount of fluid industry. Flow range 0.01-13 L/min, speed range 0.1-600 rpm, can cascade two pump heads, brushless servo motor drive with large torque, no maintenance, high rotating accuracy. The basic function such as reversible direction, start/stop, full speed (fast cleaning), adjust flow. The pump has the volume dispensing mode, time dispensing mode and copy dispensing mode, meets all kinds of complex dispensing requirement. RS485 communication interface, MODBUS protocol is available, easier to be connected with other equipments such as computer, human machine interface and PLC.

Function and Feature

- Brushless servo motor drive, powerful, precise control, no maintenance
- LF-Touch-OS software system, color LCD display, touch screen and keypad for operating
- Flow display, flow adjustment, cumulative liquid volume display
- Three dispense mode: volume dispensing, time dispensing and copy dispensing.
- Automatically store five groups of working parameters
- Wizard flow calibrating function
- Intelligent expert system to minimize the difficulty of users
- Remote Infrared controlling function
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment
- Circuit board with conformal coating makes it dust-proof and moisture-proof
- 304 stainless steel shell, easy to clean, corrosion resistant
- External control controls start/stop, reversible direction, optically coupled isolator, 5V, 12V, 24V input level optional, external analog control flow
- RS485 communication interface, MODBUS protocol is available, easy to connect other control equipments

Technical Parameters

- Flow range: 0.01 ~ 13 L/min
- Pump head: YZ35, 2xYZ35
- Speed accuracy: < ±0.2%
- Speed range: 0.1 ~ 600 rpm
- Speed resolution: 0.1 rpm



- Working mode: flow rate mode, volume dispensing mode, time dispensing mode, copy dispensing mode
- Dispensing liquid range : 100mL ~ 9999L
- Dispensing time: 1~9999, "0" infinite cycle
- Dispensing interval time: 0.1~999.9s/Min/H, time unit adjustment
- Power supply: AC100 ~ 240V , 50Hz/60Hz
- Power consumption: < 400W
- External interface: analog 0-5V, 0-10V, 4-20mA control analog, 5V, 12V, 24V input level optional
- Communication interface: RS485 communication interface, MODBUS protocol is available
- Working temperature: 0 ~ 40°C
- Relative humidity: < 80%
- IP grade: IP31
- Dimension: (LxWxH) 350mmx235mmx315mm
- Weight: 15Kg

Filling Application Reference Table

Filling Fluid volume	Recommend The pump Head	Recommend The Tube	Speed (RPM)	Filling Time (second)	Reliability Error (%)
100mL	YZ35	73#	> 500	< 0.89	< ±1
200mL	YZ35	82#	> 500	< 1.13	< ±1
300mL	YZ35	82#	> 500	< 1.7	< ±1
500mL	2xYZ35	82#	> 500	< 1.41	< ±1

Two Channels Picture



WG600F Applicable Pump Head and Tube, Flow Parameters

Drive Type	Pump Head	Channel Number	Tube	Single Channel Flow Rate (L/min)
WG600F	YZ35	1	73#82#	0.01 ~ 13
(304SS)	2xYZ35	2	73#82#	0.01 ~ 13

JP300S Batch Transfer Peristaltic Pump

This pump mainly used in industrial applications, maximal flow rate is 33L /min, max pressure is 0.3Mpa . Compact and reasonable structure, easy to install the tube. The roller adopts the planetary gear transmission, safe and reliable, and prolong the tubing life.

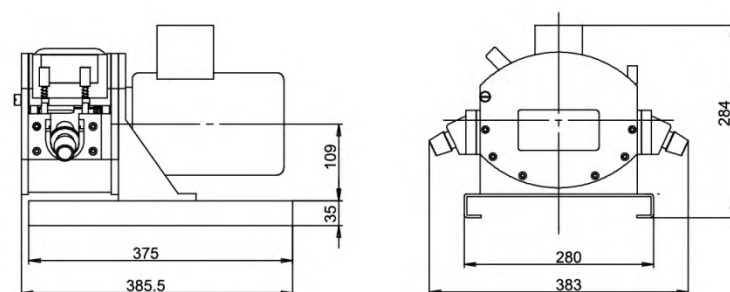
Function and Feature

- Wide flow range , can reach 2m3/hour, suitable for batch transferring .
- Higher transmission pressure, suitable for high viscosity and high-lift fluids.
- Pump head adopts planetary gear design, safe and reliable.
- The roller driving force rotation, rolling friction with tube can prolong the tubing life .
- Open the lid ,the pump stop running, safe and reliable.
- Elastic pressure tube structure can prolong the tubing life.
- AC motor drive, external frequency control . It can be operated manually, also can be achieved networking operation with PLC, IPC and computer.

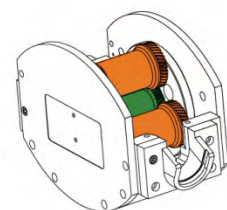
The Parameters

- Flow rate:3-33L /min(per channel)
- Suitable Tubing: 88# 92# 191# 193#
- Shall material : Aluminum alloy
- Roller number :4
- Speed range :30-350rpm
- Gap adjustment: Adjustable
- Working temperature :0 ~ 40°C
- Power supply : AC 220V ±20%/400W
- IP grade:IP54 (frequency except)

Dimension



Planetary Gear Transmission Structure



IP54



JP100S-32/40 Batch Transfer Pump

Max Constant Flow Rate : 6000L/hour



JP100S-32



JP100S-40

Function and Feature:

- Self-priming can reach 9.5 meters height.
- Can transporting high viscosity and shear sensitive fluids.
- Multi-layer compound tube with high transfer pressure up to 16bar.
- Easy transmit abrasive slurry, corrosive acid, gas fluids.
- No internal leakage phenomenon, flow stability, provide accurate and repeatable .measuring ability, repetition measurement volume accuracy±1%
- No need accessory equipment(like valve, gasket, piston etc)
- Can be reversed running, easy to remove blockage
- Transfer liquid temperature max reach 80 °C
- No need more maintain, only change the tube
- Can dry running and reliable quality

DS600-X Multichannel Dispensing System

DS600-X multichannel Dispensing System is design for the multi heads & high accuracy filling . HMI interface centralized operation, individually control each channel, Filling accuracy is <±1% . Not only for match the automatic production line, but also operation by hand.

Acceptable Customization According The Needs



12 Channels



4 Channels



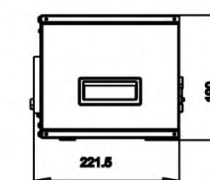
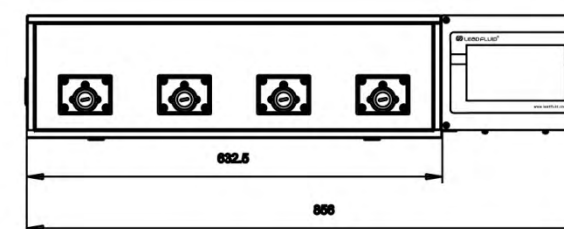
5 Channels

Function and Feature

- HMI interface centralized control, easy to operate.
- High quality servo motor or stepper motor, stable and efficient operating system and pipeline greatly ensure the filling accuracy.
- Intelligent calibration system, greatly reducing the workload and improving the working efficiency.
- Fine adjustment on line, convenient to users adjusting flow rate as tubing's aging.
- Online and offline function.
- Can cascade for more channels.
- Each channel will stop working when lack of the bottle.
- 304SS box, good chemical resistance and easy clean.
- The circuit board with conformal coating makes it dust-proof and moisture-proof.

Technical Parameters

Technical parameters	DS600-X
Filling Volume Range	0.1-5000mL
Filling Time	0.1~99.99s, resolution0.1s
Speed Range	0.1-600rpm, resolution0.1rpm
Channel number	2~100
Signal input	start signal, bottle-lack signal
Signal output	5VLevel start and stop status
External Interface	Line terminal /DB15
Power supply	AC220V±10%,50Hz/60Hz(standard) AC110V±10%,50Hz/60Hz(optional)
Power Consumption	≤100W/channel
Environment Condition	Temperature 0-40°C, Relative humidity < 80%
IP Grade	IP31
Dimensions	According to the needs customization
Weight	According to the needs customization

Reference Dimension
(DS600-4 Channel)

Filling Volume, Applicable Pump Head and Tube Parameters

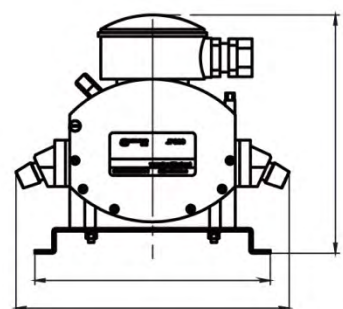
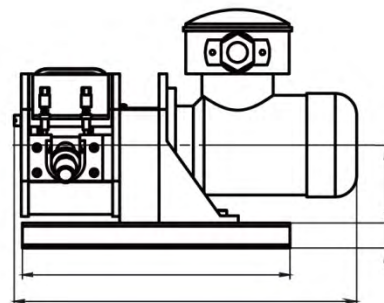
Pump Head	Tube	Filling volume (mL)	Filling Time
YZ15	13#14#16#19#25#17#	0.1 ~ 50	0.6~3s
YZ25	15#24#	10 ~ 50	1~3s
YT25	15#24#35#36#	10 ~ 100	1~4s
KZ25	15#24#35#36#	20~200	1~4s
YZ35	73#82#	100~1000	2~5s

FP300S-A3 AC Explosion-Proof Motor Peristaltic Pump

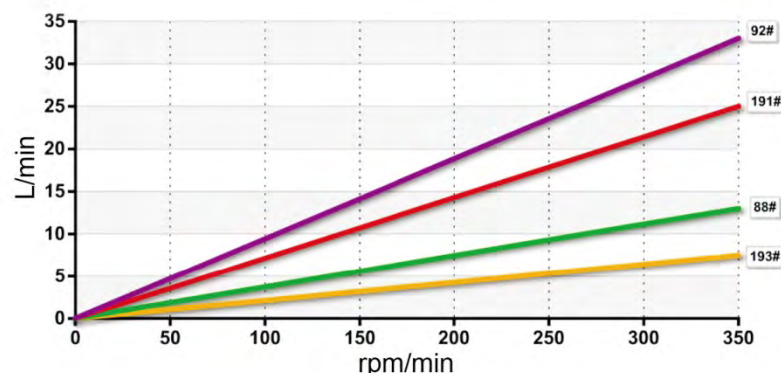


- Special explosion-proof pump head design, more safety and reliable, motor comprehensive protection, wide speed range.
- AC slow explosion-proof motor driver, separation design, Separate driver and frequency converter.
- Frequency converter control, with the start/stop, positive and negative, adjust speed ,communication etc functions.
- Design of planetary deceleration mechanism
- Stepless speed ,the speed resolution is 0.1HZ.
- Large torque design , stable operation
- Max flow is 33L/min
- The table structure, convenient operation
- High protection grade of IP55, suitable to complex working environment
- Suitable for high precision of the liquid transmission
- Frequency converter cannot place dangerous environment, Explosion-proof frequency is optional.

Dimension



Flow Rate Reference



Technical Parameters

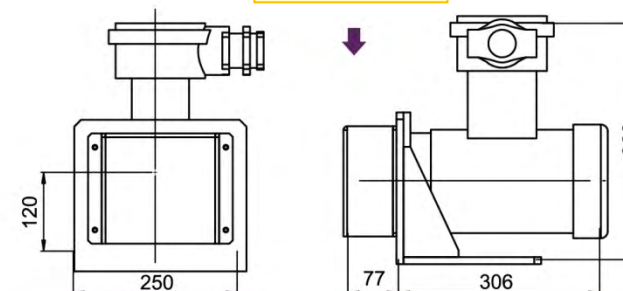
Technical Parameters	FP300S-A3	FG600S-A3	FG601S-A3
Pump Head	PL48	YZ15 YZ25, YT15 YT25, KZ25	YZ35
Display Function	Frequency display the Hz		
Flow Range	0.6 ~ 33L/min	6 ~ 6000mL/min	800 ~ 12000ML/min
Speed Range	30 ~ 350RPM	100 ~ 600 RPM	60 ~ 570 RPM
Speed Regulation	Stepless speed (Standard frequency converter motor without connection cable)		
Speed Resolution	0.1Hz (corresponding speed 0.77rpm)	0.1Hz (corresponding speed 1.8rpm)	0.1Hz (corresponding speed 1.14rpm)
Control Function	Start/stop, positive and negative, adjust speed ,communication etc functions.		
Speed Accuracy Error	< 0.2%		
Power Supply	3 phase 380V 50Hz/60Hz(customization AC220V)		
Power Consumption	0.37KW		
Working condition :	Temperature 0 ~ 40°C relative humidity < 80%		
Anti-explosion Grade	ExdIIBT4		
IP Grade	IP55 (only drive)		
Dimension : (LxWxH)	416x280x334mm	324x250x291mm	560x250x271.5mm
Weight	49Kg	26Kg	36Kg

FG600S-A3 AC Explosion-Proof Motor Peristaltic Pump

- Special explosion-proof pump head design, more safety and reliable, motor comprehensive protection, wide speed range.
- AC slow explosion-proof motor driver, separation design, Separate driver and frequency converter.
- Frequency converter control, with the start/stop, positive and negative, adjust speed ,communication etc functions
- Stepless speed ,the speed resolution is 0.1HZ.
- Stable operation
- Install a variety of pump heads and tubes.
- The table structure, convenient operation
- protection grade of IP55, suitable to complex working environment
- Suitable for high precision of the liquid transmission.
- Frequency converter cannot place dangerous environment .Explosion-proof frequency is optional.



Dimension



Technical Tips

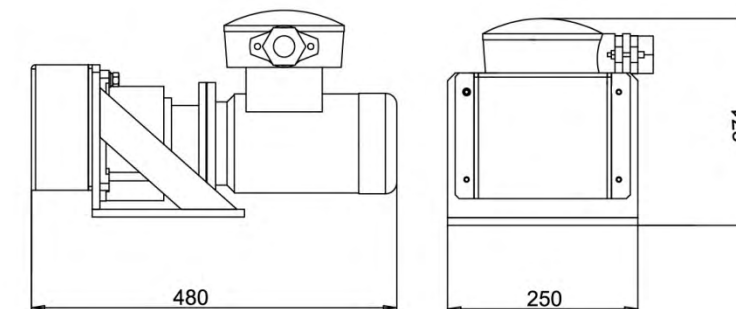
Specific application please consult
LEAD FLUID technology department

FG601S-A3 AC Explosion-Proof Motor Peristaltic

- Special explosion-proof pump head design, more safety and reliable, motor comprehensive protection, wide speed range.
- Special reducer design, lower speed ,larger torque.
- AC slow explosion-proof motor driver, separation design, Separate driver and frequency converter.
- Frequency converter control, with the start/stop, positive and negative, adjust speed ,communication etc functions
- Stepless speed ,the speed resolution is 0.1HZ.
- Install a variety of pump heads
- High protection grade of IP55, suitable to complex working environment
- Suitable for high precision of the liquid transmission.
- 380V can work without frequency, fixed speed 570rpm.



Dimension



Pump Head and Tube

Drive Model	Pump Head	Channel	Tube	Single Channel Flow Rate (mL)
FP300S-A3	PL48	1	88#92#191#193#	600 ~ 33000
	YZ15	1	13#14#16#19#25#17#	6 ~ 1700
FG600S-A3	2xYZ15	2	13#14#16#19#25#17#	170 ~ 1700
	YZ25	1	15#24#	170 ~ 1700
	2xYZ25	2	15#24#	250 ~ 6000
	KZ25	1	15#24#35#36#	250 ~ 6000
FG601S-A3	2xKZ25	2	15#24#35#36#	180 ~ 6000
	YZ35	1	73#82#	800 ~ 12000
	2xYZ35	2	73#82#	800 ~ 12000

FG600S-Q/FG601S-Q Pneumatic Motor Peristaltic Pump



- Special explosion-proof pump head design, more safe and reliable.
- Adopts the Pneumatic motor , safe and reliable .
- With the start/stop control.
- Large torque design ,can be installed a variety of pump heads.
- The table structure ,convenient operation .
- Stepless speed regulation, by adjusting the air pressure or flow valve to control speed.
- Suitable for liquid transfer.
- Pump box adopts the metal painting, 304ss is optional.

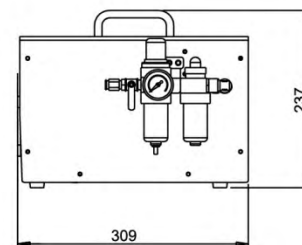
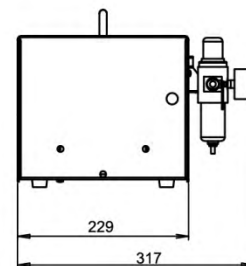
Technical Parameters

- Flow Rate: <13L/min
- Speed Range: 140 ~ 600rpm
- Adjust Speed : Stepless speed regulation, by adjusting the air pressure or flow valve to control speed
- Control Function : Start/stop (standard), reversing function (optional).
- Gas supply pressure : 0.1~0.7MPa
- Gas consumption : ≥0.3m³/min
- Working environment : Temperature -10°C~60°C , relative humidity <80%
- IP grade : IP65
- Dimensions : (LxWxH) 309*316*237mm
- Weight : 11Kg

Pump Head and Tube

Drive	Pump Head	Channels	Tube	Signal Channel Flow Rate (mL/min)
FG600S-Q	YZ15	1	13#,14#,19#,16#,25#,17#	9 ~ 1700
	2xYZ15	2	13#,14#,19#,16#,25#,17#	9 ~ 1700
	YZ25	1	15#,24#	250 ~ 1700
	2xYZ25	2	15#,24#	250 ~ 1700
FG601S-Q	KZ25	1	15#,24#,35#,36#	350 ~ 6000
	YZ35	1	73#,82#	2000 ~ 13000

Dimension



BX600S Handheld Sampling Peristaltic Pump

- Handheld sampling peristaltic pump, smaller size, easy carry. Specially designed for field liquid sampling.
- Peristaltic pump flow is variable.
- Adopts the rechargeable power supply, suitable for without AC power.
- An assemble a variety of specifications of the pump head, simple and convenient to replace the tube, wide flow range.
- The suction head lift 8 meters.
- Battery life: 30 min (600 rpm, single battery)

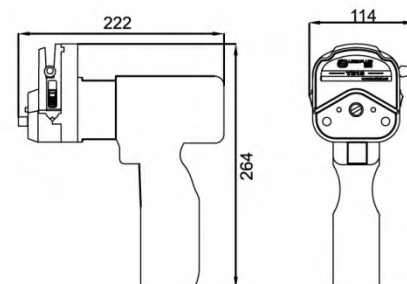
Technical Parameters

protective box.

- Voltage: DC10.8V Rechargeable batteries
- Flow Range : 1.8 ~ 3300mL/min
- Speed Range : 30 ~ 340 rpm.
- Weight : 0.9Kg
- Standard equipped : drive, chargers, batteries, pump head, hose, protective box.

BX600S Pump Head, Tube and Flow Parameters

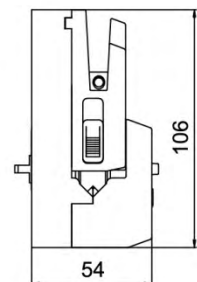
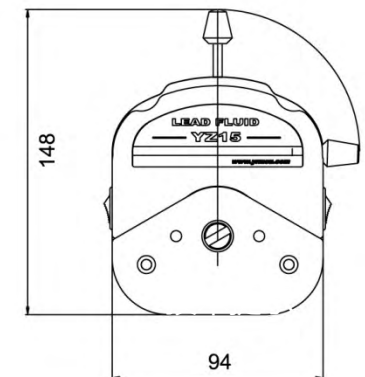
Pump Head	Tube	Flow Range
YZ15	13#14#16#19#25#17#	1.8 ~ 900mL/min
YZ25	15#24#	50 ~ 900mL/min
YT15	13#14#16#19#25#17#18#	1.8 ~ 1300mL/min
YT25	15#24#35#36#	50 ~ 1600mL/min
KZ25	15#24#35#36#	300 ~ 3300mL/min



YZ15/YZ25 Pump Head

Can load various tubes, easy to replace tube and compact structure. Can be cascade multi pump heads. PPS material is resistance to corrosion liquids and the pump head is solid and durable.

Dimension

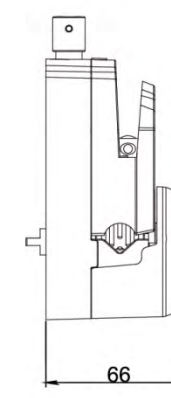


Model	Tube	Max.Speed (rpm)	Max.Flow (mL/min)	Roller Material	Roller Number	Shell Material	Color	Weight (Kg)
YZ15	13#,14#,19# 16#,25#,17#	600	2300	304 SS	3/6	PPS PES	Black/white	0.4
YZ25	15,24#	600	1700	304 SS	3/6	PPS PES	Black/white	0.4

YT15/YT25 Easy-Load Pump Head

Can load various tubes, wide flow, 4 rollers ,lower pulsation, easy to replace tubes and compact structure. Can be cascade multi pump heads, Pressure tube clearance adjustable . realize higher working pressure and prolong the tube life . PPS material is resistance to corrosion liquids and the pump head is solid and durable.

Dimension



Technical Parameters

- Max. Flow : 2900 mL/min
- Max. Speed : 600 rpm
- Tubes :
- YT15: 13#14#19#16#25#17#18#
- YT25: 15#24#35#36#
- Shell Material : PPS

- Roller Material : 304SS
- Roller Number : 4
- Pressure tube clearance : Fine Adjustment
- Color: Black
- Working Condition : 0°C ~ 40°C
- Chemical compatibility : Resistance to acid, alkali and organic solvents.

Pressure Tube Clearance Can Adjust



Install the schematic

Cascade multi- pump heads

YZ35 Pump Head

Can load various tubes, easy to replace tube and compact structure. , Can be cascade multi pump heads. PPS material is resistance to corrosion liquids and the pump head is solid and durable.

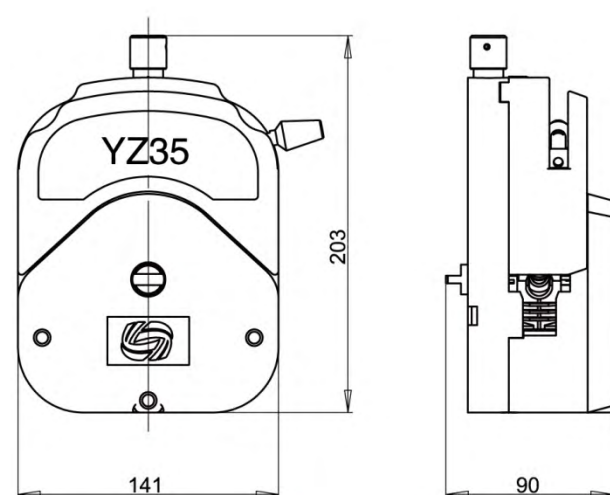
Technical Parameters

- Max. Flow : 13L/min
- Max. Speed : 600 rpm
- Tubes : 73#82#
- Shell Material : PPS
- Roller Material: 304SS
- Roller Number : 3
- Pressure tube clearance : Fine Adjustment
- Color: Black
- Working Condition : 0°C ~ 40°C
- Chemical compatibility : Resistance to acid, alkali and organic solvents.

Note

New loading structure of tubing, tube does not deviation in the process of operation.

Dimension



Lead Fluid DG Series Pump Head Can Use Two Types of Cartridges



1. Spring Cartridge

Adopts the special alloy spring mechanism, Self adapting different wall thickness tubes, can effectively prevent operating overpressure or loose. Through the consistency of the spring tension, to ensure consistent of the pressing gap, reducing flow error between each channel

Spring Cartridge

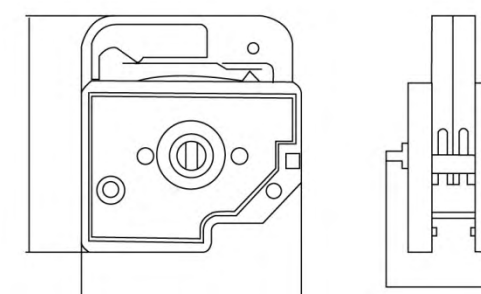


Note

When transport corrosive liquid, users need to change the special material tubes, for details, please consult the Lead Fluid

DG Series Pump Head

DG series pump head are designed for small flow and multi-channel transmission, can realize the 1-48 channels parallel transmission. easy to replace and fix tubing. Reasonable mechanical structure and high-precision processing technology ensure the consistency of flow between channels
The rollers are made of 304ss , 6 rollers pump head wide flow range , tube life more longer . 10 rollers pump head more lower pulsation, larger tube wear.



Model	DG-1	DG-2	DG-3	DG-4	DG-6	DG-8	DG-10	DG-12
L (mm)	38.5	47.5	55.5	63.5	80.5	95.5	112.5	128

DG Series Pump Head

DG-1

DG-2

DG-4

DG-8

DG-12



Cartridge



2. Smart Cartridge

Adjust the color code for the ratchet wheel positions, and the occlusion gap can be fine tuned, to fit the different material and wall thickness tubes. At the same time, the output pressure is changed, general condition, please use the recommended ratchet wheel position, to keep long life of tube

Smart Cartridge



Trigger Gear



Color Code

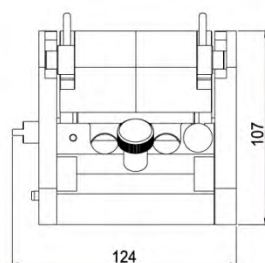
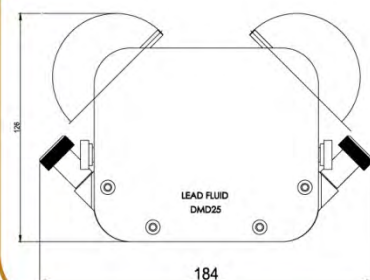
DMD25 High Precision & Low- Pulse Pump Head

DMD25 pump head is designed for low-pulse transmission and precision dispensing .Special complementary phase design decreases transmitting pulse and improves dispensing accuracy ,load tubes in Y structure. Unique tubing-fixing structure prevents tubing's wears caused by vibration. The shell adopts aluminum-magnesium alloy and POM materials, high mechanical strength and reliable performance .

Technical Parameters

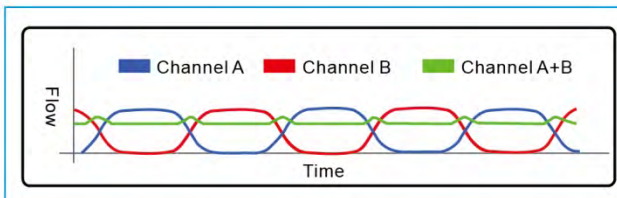
- Flow Range : ≤4000mL/min
- Speed Range : ≤350rpm
- Shell Material : Aluminum-magnesium alloy, POM
- Roller Material : 304 SS
- Roller Number : 6
- Tubing -Fixing adjustment : manual
- Gap Adjustment : Fine adjustment
- Tubes : 15# , 24# , 35# , 36#

Dimension



DMD25 pump head adopts double press blocks with complementary phase structure, the fluid from channel A and B are complementary, so this special device can decrease transmitting pulse and improve dispensing accuracy efficiently.

DMD25 Pump Head Working Elements



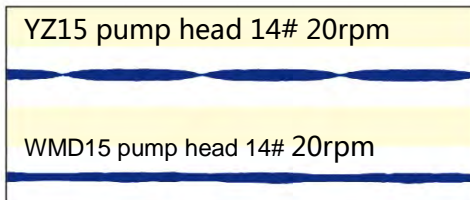
WMD15-X Micro Pulsation Pump Head

Can load various tubes, pump head shell adopts the aluminum alloy, anodic oxidation after machined minutely, sturdy and durable. Excellent for chemical resistance ,especially different organic solvent .Can realize more pulsation compare with other pump heads under same condition . Can be multi -pump head cascade. Rollers adopts the 304ss, suitable for continue working at high speed.

Technical Parameters

- Flow Range : ≤1700mL/min
- Speed Range : ≤600rpm
- Tube : 13#,14#,19#,16#, 25# , 17#
- Shell Material : Aluminum-magnesium alloy
- Roller Material : 304ss
- Roller Number : 3
- Gap Adjustment : fixed
- Working Temperature: 0°C ~ 40°C

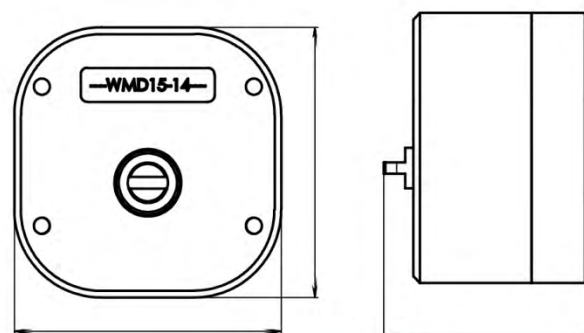
Micro Pulsation Pump Head Coating Contrast



Note

Pulse videos please contact with Lead Fluid

Dimension



KZ25 Pump Head

KZ25 Pump Head is suitable for the larger flow transmission, up to 6000mL/min, Can load various tubes. Easy and fast load & replace tubes, Can be mounted cascade .The rollers adopts 304ss,The shell adopts PC,PPS and AL materials, suitable for various working environment.

Technical Parameters

- Flow Range: ≤6000mL/min
- Speed Range: ≤600rpm
- Shell material: PC,PPS,AL
- Press block material: PPS,AL
- Roller Material: 304ss
- Roller number: 3;
- Tubing-fixing adjustment: manual
- Gap Adjustment: fixed
- Tube: 15#, 24#, 35#, 36#.

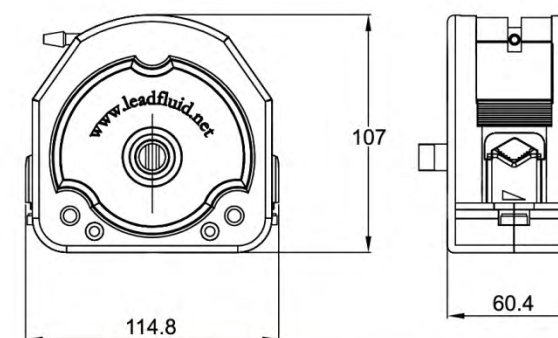


PPS



AL

Dimension

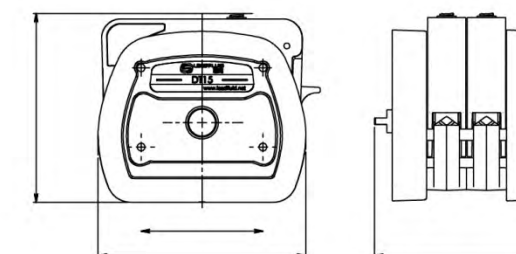


Flow reference table pls consult Lead Fluid

DT multi-Channel Pump Head

DT pump head is designed for small and medium flow ,multichannel fluid transmission. Plug type card is convenient and quick to replace tube, Pump Head is equipped with high quality stainless steel roller, Gap adjustment Multi-roller design reduces pulsation effectively. Pump head adopts PPS material, it is good performance for chemical resistance. Can instead of 2/4 channels YZ15 pump head, smaller size.

Dimension



DT10-28



DT15-44

Note

Pulse smaller, gap is adjustable

Model	Channel Number	Roller Number	Roller Material	Card Material	Max. Speed (rpm)	Tube	Max. Flow (mL/min)	Weight (Kg)
DT15-12	1	4	304ss	PPS	600	19#,16#, 25#,17#	2240	0.62
DT15-24	2							1
DT15-44	4							1.44
DT10-18	1	8			100	ID < 3.17mm Wall thickness 0.8-1mm 13#,14#	82	0.72
DT10-28	2							0.78
DT10-48	4							1.08
DT10-88	8							1.68

BZ15/BZ25 Series Standard Pump Head

- Lead Fluid BZ series pump head max flow rate 2300 mL/min , multiple pump heads can be used in series
- The ingenious pressure tube structure ensures very low transmission pulsation without increasing the roller, highest transmission accuracy and repeatability
- Each type of pump head corresponds to a special one size tube , It has better performance and longer service life than general pump head
- The shell material can be PC or PPS, the PC is transparent and easy to observe the internal operation of the pump head, PPS is better chemical resistance
- The roller adopts 304 stainless steel, can work long time with high speed
- Support two kinds of tube fixed way the whole tube and built-in tube connector, strong applicability
- Classic design, stable structure, high cost performance, It can be widely used in various small and medium-sized instruments and equipment.

- BZ15-13# (suitable for 13# tube)
- BZ15-14# (suitable for 14# tube)
- BZ15-16# (suitable for 16# tube)
- BZ15-19# (suitable for 19# tube)
- BZ15-25# (suitable for 25# tube)
- BZ15-17# (suitable for 17# tube)
- BZ15-18# (suitable for 18# tube)

- BZ25-15# (suitable for 15# tube)
- BZ25-24# (suitable for 24# tube)

Parameters

- Flow range: 0.006 ~ 2300 mL/min
- Speed range: 0.1~600 rpm
- Shell material: PPS/PC
- Roller material: SS304
- Roller number: 3
- Fixed way: built-in tube connector\ the whole tube
- Clearance adjustment: fixed clearance
- Motor: Stepper motor\ DC gear motor\ AC gear motor

BZ15 Pump Head Flow Parameter

Tube material: Silicone, Pharmed, Viton

Tube size (Wall thickness 1.6mm)	13#	14#	19#	16#	25#	17#	18#
ID (mm)	0.8	1.6	2.4	3.1	4.8	6.4	7.9
mL/rpm	0.06	0.22	0.48	0.8	1.67	2.83	3.83
rpm (continuous operation with max speed 600rpm) :	36	130	286	480	1000	1700	2300

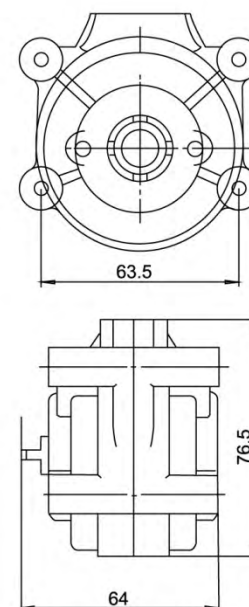
BZ25 Pump Head Flow Parameter

Tube material: Silicone, Pharmed, Viton

Tube size (Wall thickness 2.5mm)	15#	24#
ID (mm)	4.8	6.4
mL/rpm	1.67	2.83
rpm (continuous operation with max speed 600rpm) :	1000	1700



Dimension



DH10 Series ODM

DH10 series pump head adopts Spring-Loading structure, the service life of tube is greatly prolonged 12 rollers design makes the transmission pulse smaller and the quantitative accuracy higher. 1-4 channels are optional, and the pressure tube clearance of multiple channels can be individually adjusted, and the flow accuracy $\pm 1\%$;

Parameters

Model	DH10- (1, 2, 3, 4)
Channel number	1~4
Max Flow rate	≤ 13.9 mL/min
Tube size	ID 0.13~3.2mm, wall thickness 0.8~1mm
Tube material	Silicone, Pharmed, PVC
Speed range	0.1~100rpm, resolution 0.1rpm
Rollers	12
Pump head material	PEI
Pressure tube clearance	Adjustable spring
Motor	57 Stepper motor
Transmission pressure	≤ 0.10 MPa
Working environment	Temperature 0~40°C, humidity <80%
Dimension	121x92x85mm (4 Channels)



GN10 Flow Range 0.004~65mL/min

Using PTFE tube, transport most of the strong acids, strong bases and organic solvents, outlet pressure 0.68Mpa

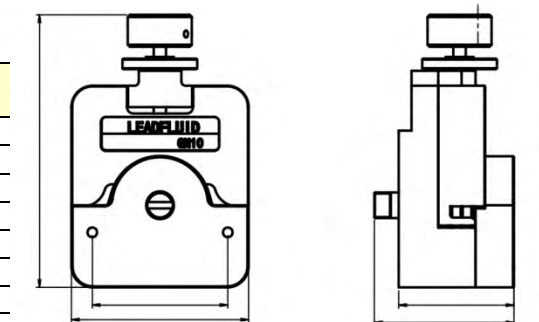
Parameters

Channel number: 1	Roller number: 6
Tube size: 2x1mm/4x1mm (IDxWall thickness)	Suction stroke: ≤ 2 m
Tube material: PTFE	Life of tube: 500 hour (speed 100rpm continuous operation)
Speed range: 0.1~300rpm	Temperature: $\leq 100^\circ\text{C}$
Max flow rate: 65mL/min	Dimension: 82x130x65mm
Outlet pressure: ≤ 0.68 MPa	Weight: 0.92kg

Speed Flow Table (mL/min)

Tube Speed (rpm)	2x1mm	4x1mm
0.1	0.004	0.021
10	0.4	2.1
50	2	10.5
100	4	21
200	8	42
300	12	65

Remarks: Above 200rpm is only suitable for intermittent operation (intermittent time ≥ 10 minutes)



WX Series Peristaltic Pump

Parameters

Model	WX05	WX08
Flow rate	≤ 0.3 mL/min	≤ 3 mL/min
Tube	Silicone tube, pharmed	Silicone, pharmed tube, Viton tube
Tube size (ID x Wall thickness)	1.6x0.5mm	1.6x0.8mm
Pump pressure	50kpa	
Motor	DC brush gear motor, life <300 hour	
Rated working voltage	DC 3V	
Power consumption	< 1W	
Dimension	20x20x36mm (WHL)	



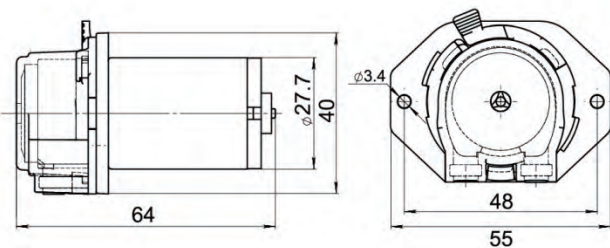
Ultra small size
Ultra low noise

MC10 Flow Range 0.15~60mL/min Single Channel



Function and Feature

- Tube size: ID≤2.29
- Wall thickness 0.86~1mm
- Tube material: Silicone Pharmed
- Motor: 12V/24V DC motor (Brush / Brushless) , Power 3W



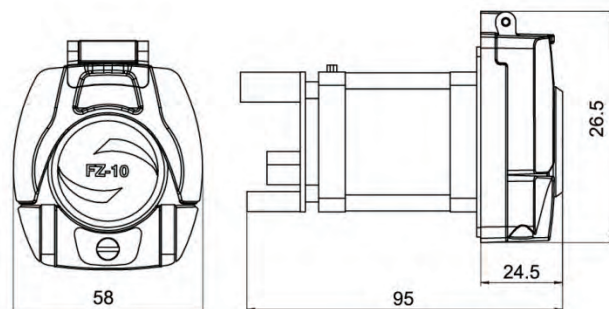
FZ10 Flow Range 0.01~36mL/min Single Channel



Function and Feature

- Compact structure, beautiful appearance
- Change the tube convenient, only need a few seconds
- Motor vibration noise is small

Channel number	1
Flow range	0.01~36mL/min
Tube size	ID≤3.17mm, Wall thickness 0.86~1mm
Tube material	Silicone tube, Pharmed, Viton
Max. speed	≤100rpm
Motor	42 Stepper motor (Optional Lead Fluid drive control circuit board)
Installation mode	Panel installation, Soleplate Installation



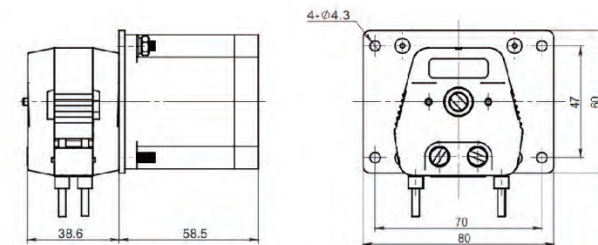
KD10-1(Single Channel) KD10-2(Dual Channel) KD15 (Single Channel)



Function and Feature

- Exquisite shape, small size
- 4 pump heads in series connection, can extend to 8 channels.
- Low pulsation design, spring pressure tube, excellent stability and tube lifetime
- Loadable silicone tube, Pharmed, Viton, Tygon 3603 etc. tube
- Can match 42, 57 stepper motor

Pump head	Tube size	Flow range
KD10-1	ID≤3.17, Wall thickness 0.8~1mm	0.01~156ml/min
KD10-2		
KD15	13#14#19#16#25#	0.03~388ml/min



LT20 Pump Head Special Pump Head For Medical Dialysis

LT20 pump head adopts double roller spring adaptive design, can install various specification of tube optional DC brushless or servo motor All metal design, stable operation, low noise. Reliable cover opening and pump stopping function, transparent upper cover, directly observe the operation state of tube and pump head, compact structure, special for medical dialysis.



Parameters

- Max flow rate: 300mL/min
- Max speed: 100 rpm
- Tube size: external diameter < 10mm, wall thickness 1.75-2mm
- Dimension: (LxWxH) 166x80x93mm
- Temperature: 0°C ~ 40°C
- Relative humidity: < 80%
- Weight: 1.7Kg

KT15 Series

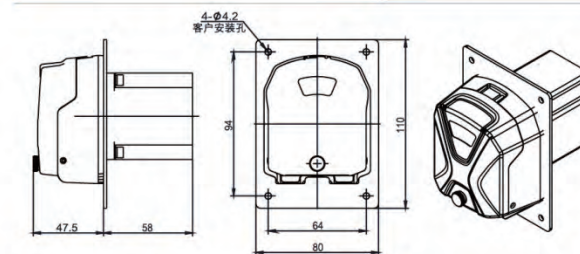
Elastic roller body, stable and accurate flow and excellent tube life
Support two kinds of tube fixed way tube connector and tube clamp, adapt to more conditions.

Motor Specifications

Stepper motor	step angle 1.8° \ phase 2 \ phase voltage 3.9V \ phase current 3A \ phase resistance 1.3Ω±20% \ phase inductor 5.0mH±20%
60 DC gear motor	speed : 15rpm, 30rpm, 60rpm, 100rpm voltage : DC12V/15W, DC24V/15W
60 AC gear motor	speed : 15rpm, 30rpm, 60rpm, 100rpm voltage : AC220V/10W
AC synchronous motor	speed : 2.5rpm, 7.5rpm, 20rpm, 30rpm, 60rpm voltage : AC220V/8W

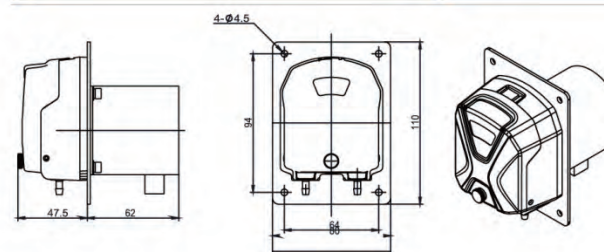


Stepper Motor Dimension

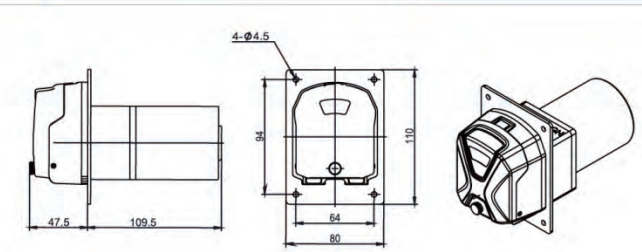


Channel number	1
Flow range	≤255mL/min (Max 100rpm, Continuous operation) ≤630mL/min (Max 250rpm, Intermittent operation)
Tube size	13#14# 19# 16# 25# 17#
Tube material	Silicone tube, Pharmed, Viton, Norprene
Roller number	2
Motor	57stepper, AC synchronous, DC gear, AC gear
Installation mode	Panel installation

AC Synchronous Motor Dimension



DC/AC Gear Motor Dimension



KJ15 Flow Range 0.014~340mL/min

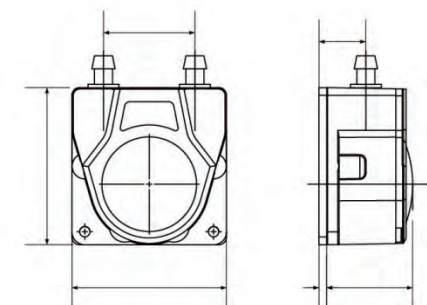
Suitable for various material tube with wall thickness of 1.6mm, high mechanical strength, excellent corrosion resistance of the whole material, transparent shell, convenient to observe the working state inside the pump head, Small size, clean appearance.

Parameters

Channel number: 1	Roller number: 2
Tube size: 14#19#16#25#17#	Pump head material: PPS+PVDF+SS304
Tube material : Silicone tube, Pharmed, Viton, Norprene	Dimension: 61x60x34mm
Speed range: 0.1~200rpm	Motor: Stepper, DC gear, AC synchronous
	Installation mode: Panel, L soleplate



UN: mL/min					
Tube Speed	14#	19#	16#	25#	17#
1	0.14	0.3	1	1.2	1.7
10	1.4	3	10	12	17
50	7	15	50	60	85
100	14	30	100	120	170
200	28	60	200	240	340



TY15 Flow Range:0.78~428mL/min

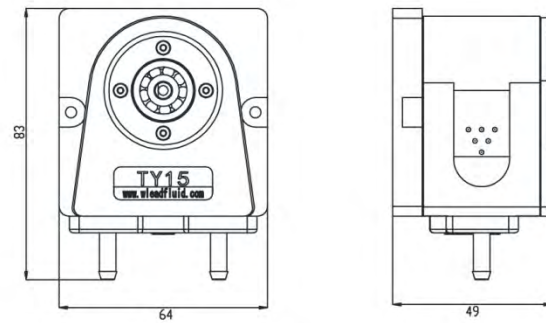
Elastic roller body construction for excellent pump tube life
High mechanical strength, excellent corrosion and aging resistance
Especially suitable for CEMS, COD and other instruments that require long-time continuous operation

Specification

Number of channel: 1
Applicable tube: 16#, 25#
Tube material: silicone tube, Pharmed, Norprene
Speed range: 0.1~300rpm
Number of rollers: 2
Pump head material: IXEF+PVDF+POM
Pump head size: 48 × 63 × 82mm
Applicable motor: AC synchronization motor, stepper motor
Installation method: L soleplate, panel

Speed Flow Range (mL/min)

Tube RPM	25#	16#
1	1.47	0.78
10	14.7	7.8
50	73.5	39
100	147	78
300	428	234



MM10 Flow Range 0.001~120mL/min

Ultra-small volume, rotary card design, adjustable tube in 3 directions: up, down and left.
Excellent flow stability and repeatability.
High mechanical strength, excellent corrosion resistance and aging resistance.

Specification

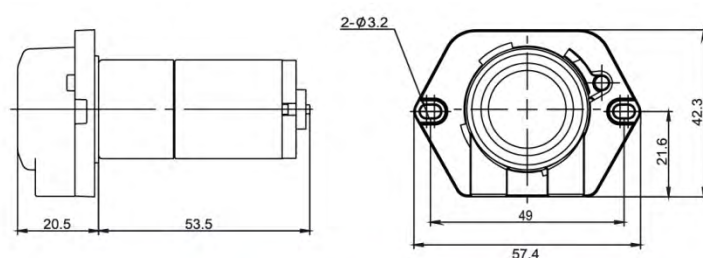
Number of channel: 1
Tube size: ID0.13~3mm, wall 0.8~1mm
Tube material: silicone, Pharmed, Viton, Tygon3603
Speed range: 0.1~400rpm
Number of rollers: 3
Pump head material: PES+PVDF+SS304
Pump head size: 57.3 × 42.3 × 19.5mm
Applicable motor: DC deceleration motor, stepper motor
Installation method: panel



Speed Flow Range (mL/min)

Tube RPM	1x0.92	2x0.92	3x0.92
0.1	0.05	0.15	0.3
10	0.5	1.5	3
50	2.5	7.5	15
100	5	15	30
400	20	60	120

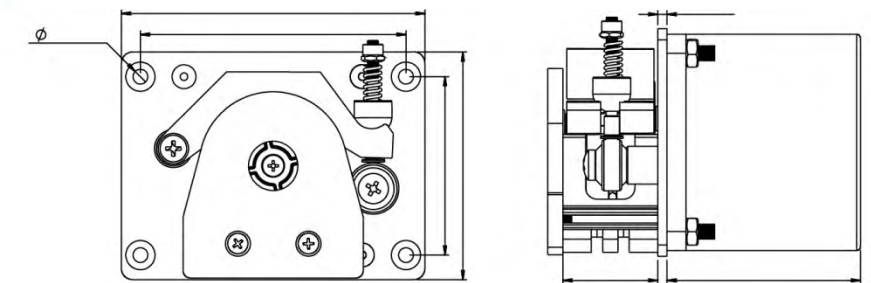
Remark: more 100rpm only suitable for intermittent working (stop time≥10 minutes)



DW Series ODM

Spring-loaded tube structure for precise, smooth flow and excellent tube life
The pressure tube gap can be finely adjusted to different tube wall and output more pressure
The DW10 pump head has 1 to 3 channels, small size and excellent cost performance.

Length Pump Head	L1	L2	
		Stepper motor	DC gear motor
DW10-1	25mm	51mm	83mm
DW10-2			
DW10-3	35.5mm		



Pump Head

Pump head material: roller, upper clamp (PVDF), base (aluminum), spring, bearing (SS304), front baffle (PMMA)

Channels DW10-1 (1 channel) \ DW10-2 (2 channels) \ DW10-3 (3 channels) \ DW15-1 (1 channel)

Number of rollers 4

Tube loading Whole (pipe clamp) \ External straight connector (tube ID≥1.0mm)

Net weight 100~200g

Pump Head Flow Range Specification DW 10-1\DW 10-2\DW10-3

Tube material : Silicone, Pharmed, Viton, Tygon 3603	Tube wall 0.8~1mm								
ID(mm)	0.5	0.76	1.0	1.3	1.6	2.0	2.4	2.79	3.17
mL/rpm :	0.012	0.03	0.05	0.08	0.12	0.15	0.24	0.33	0.43
mL/min (continuous max100rpm)	1.22	3	5	8	12	15	24	33	43
mL/min (Intermittent max150rpm)	2.44	6	10	16	24	30	48	66	86

★DW10-2 suitable for the tube ID ≤2.54mm

Pump Head Flow Range DW 15-1

Tube material : Silicone, Pharmed, Viton	Tube wall 1.6mm				
ID(mm)	0.8mm (13#)	1.6mm (14#)	2.4mm (19#)	3.1mm (16#)	4.8mm (25#)
mL/rpm :	0.03	0.12	0.24	0.41	0.8
mL/min (continuous max100rpm)	3	12	24	41	80
mL/min (Intermittent max200rpm)	6	24	48	82	160

★The above flow data is obtained by testing pure water under normal temperature and pressure. The actual using by specific factors such as pressure and medium, and is for reference only.

Motor Specification

57 stepper motor	Speed : 0.1~200rpm Step angle 1.8 ° \ phase 2 \ phase voltage 4.8V \ phase current 1.2A \ resistance 4Ω \ inductor 0mH
DC gear motor	Speed : 5rpm, 10rpm, 40rpm Voltage : DC12V \ DC24V Power : ≤ 10W

B150MD-A

B150MD-B
(Circuit board is optional)

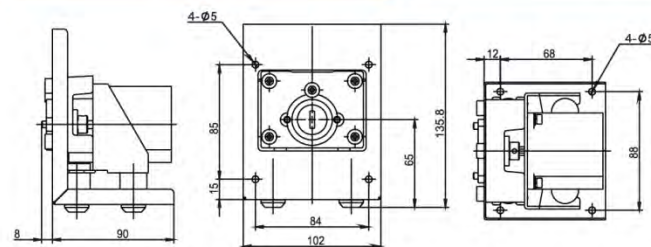
Motor Specification

Speed range \ 0.1-150rpm \ Step angle 1.8° \ Phase number 2 \ Phase voltage 4.0V \ Phase current 2A \ Phase resistance 2Ω±10% \ Phase inductance 4.2mH±20% \ Insulation resistance ≥100MΩ \ Wiring definition red line-A, green line-C, yellow line-B, blue line-D

B150MD-A, B150MD-B Pump Head And Flow Range

Pump head	Channels	Tube size	Single Channel (mL/min)
DG6-1(6rollers)	1, 2, 3, 4	Wall 0.8~1, ID≤3.17mm	0.0002~49
DG10-1(10rollers)	1, 2, 3, 4	Wall 0.8~1, ID≤3.17mm	0.0001~41
DT10-18	1, 2	13#14#, Wall 0.8~1, ID≤3.17mm	0.0002~82
YZ15	1	13#14#19#16#25#17#18#	0.006~570
YZ25	1	15#24#	0.17~425
YT15	1	13#14#19#16#25#17#18#	0.006~570
YT25	1	15#24#35#36#	0.17~725
DT15-14	1	19#16#25#17#	0.066~560
DT15-24	2	19#16#25#	0.066~330
BZ25 Series	1	15#24#	0.17~420
BZ15 Series	1	14#16#	0.02~120

B150MD-A Dimensions

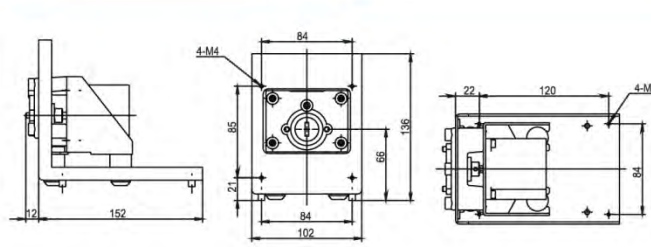


Side

Front

Bottom

B150MD-B Dimensions



Side

Front

Bottom

B600 Series ODM Peristaltic Pump

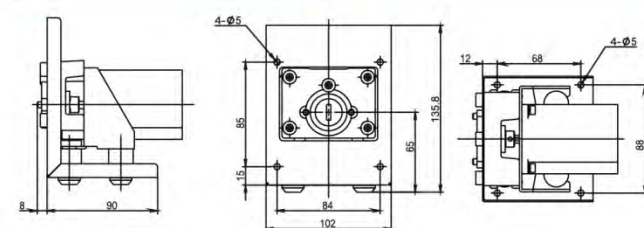
Motor Specification

Speed\ 0.1-600rpm \ Step angle 1.8° \ Phase 2 \ Phase voltage 1.5V \ Phase current 3A \ Phase resistance 0.5Ω±10% \ Phase inductance 2mH±20% \ Insulation resistance ≥100MΩ \ Wiring definition red line -A, green line -C, yellow line-B, blue line-D

B600MD-A, B600MD-B Pump Head And Flow Range

Pump head	Channels	Tube size	Single Channel (mL/min)
DG(6 rollers)	1, 2, 3, 4, 6, 8	Wall 0.8~1, ID≤3.17mm	0.0002~49
DG(10 rollers)	1, 2, 3, 4, 6, 8	Wall 0.8~1, ID≤3.17mm	0.0001~41
DT10 Series	1, 2, 4	13#14#, Wall 0.8~1, ID≤3.17mm	0.0002~82
YZ15	1, 2	13#14#19#16#25#17#18#	0.006~2300
YZ25	1, 2	15#24#	0.17~1700
YT15	1, 2	13#14#19#16#25#17#18#	0.006~2300
YT25	1, 2	15#24#35#36#	0.17~2900
DT15-14	1	19#16#25#17#	0.066~2240
DT15-24	2	19#16#25#17#	0.066~2240
BZ25 Series	1	15#24#	0.17~1700
BZ15 Series	1	14#16#	0.02~480

B600MD-A Dimensions

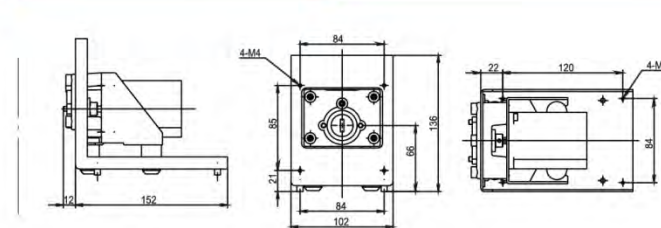


Side

Front

Bottom

B600MD-B Dimensions



Side

Front

Bottom

B600MD-B



B600MD-A

Motor Specification

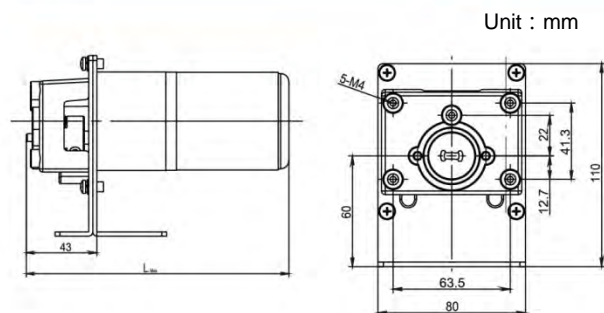
60 series DC gear motor Power \ DC24V, DC12V \ Consumption 25W \ RPM 15, 20, 30, 50, 80, 100, 120, 200 \ (brush) Life >2000 Hour \ Speed accuracy ±10% \ Temperature 0°C-40°C, humidity <80% \ Installation soleplate /panel

60 series AC gear motor Power \ AC220V \ Consumption 30W \ RPM 15, 20, 28, 47, 95, 112, 155, 186 \ Life >5000 Hour \ Speed accuracy ±10% \ Temperature 0°C-40°C, humidity <80% \ Installation soleplate /panel

Z60, J60 Series Pump Head And Flow Range

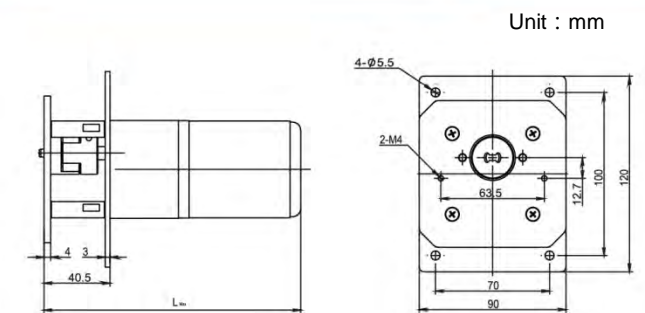
Pump head	Channels	Tube size	Single Channel (mL/min)
DG(6 rollers)	1, 2, 3, 4, 6, 8	Wall 0.8~1, ID≤3.17mm	<100rpm
DG(10 rollers)	1, 2, 3, 4, 6, 8	Wall 0.8~1, ID≤3.17mm	<100rpm
DT10 series	1, 2, 4, 8	13#14#, Wall 0.8~1, ID≤3.17mm	<100rpm
YZ15	1, 2	13#14#19#16#25#17#18#	<200rpm
YZ25	1, 2	15#24#	<200rpm
YT15	1, 2	13#14#19#16#25#17#18#	<200rpm
YT25	1	15#24#35#36#	<200rpm
DT15-14	1	19#16#25#17#	<200rpm
DT15-24	2	19#16#25#	<200rpm
BZ25 series	1	15#24#	<200rpm
BZ15 series	1	14#16#	<200rpm

Z60D/J60D Dimensions (Soleplate Mounting)

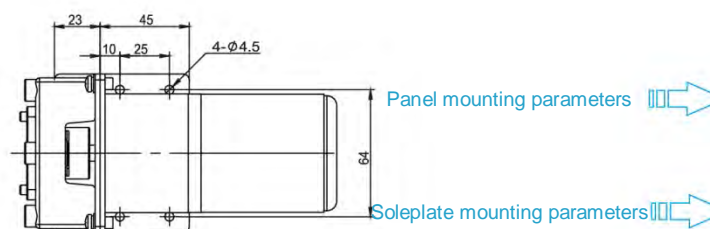


Unit : mm

Z60M/J60M Dimensions (Panel Mounting)



Unit : mm



Panel mounting parameters

Soleplate mounting parameters

RPM	Motor	DC gear motor	AC gear motor
≤150rpm		LMAX=171.5mm	LMAX=157.5mm
≥150rpm		LMAX=161.5mm	LMAX=147.5mm

RPM	Motor	DC gear motor	AC gear motor
≤150rpm		LMAX=174mm	LMAX=160mm
≥150rpm		LMAX=164mm	LMAX=150mm

Z80, J80 Series ODM Peristaltic Pump

Motor Specification

80 series DC gear motor Power \ DC24V/40W DC12V/40W \ RPM 166, 200, 240, 333, 500, 600 \ Life >2000 Hour \ Speed accuracy ±10% \ Temperature 0°C-40°C, humidity <80% \ Installation Soleplate /panel

80 series AC gear motor Power \ AC220V/45W \ RPM 138, 166, 250, 347 \ Life >5000 Hour \ Speed accuracy ±10% \ Temperature 0°C-40°C, humidity <80% \ Installation Soleplate /panel

Z80, J80 Series Pump Head And Flow Range

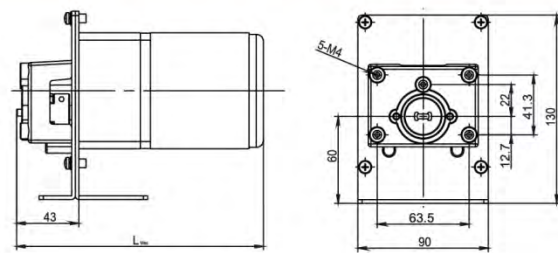
Pump head	Channels	Tube size
YZ15	1, 2, 3, 4	13#14#19#16#25#17#18#
YZ25	1, 2, 3	15#24#
YT15	1, 2, 3, 4	13#14#19#16#25#17#18#
YT25	1, 2, 3	15#24#35#36#
DT15-14	1	19#16#25#17#
DT15-24	2	19#16#25#17#
DT15-44	4	19#16#25#
BZ25 series	1, 2, 3	15#24#
BZ15 series	1, 2, 3, 4	14#16#

Kind reminder

- ※ Exact flow parameters please check corresponding flow rate table.
- ※ The above parameters are obtained by using pure silicone water to transfer pure water under normal temperature and pressure. The actual use is affected by specific factors such as motor speed, pump tube material, pressure, medium characteristics, environment, etc. Please contact LEADFLUID engineers or agents to confirm.

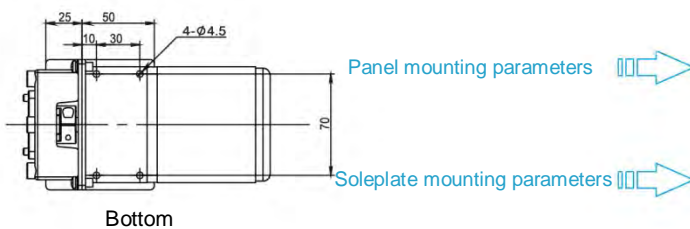
Z80/J80 Dimensions (Soleplate mounting)

Unit : mm



Side

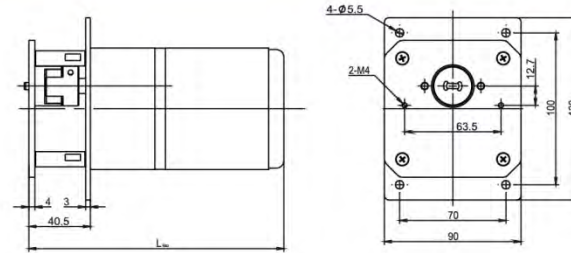
Front



Bottom

Z80/J80 Dimensions (Panel mounting)

Unit : mm



Side

Front

Motor	DC gear motor	AC gear motor
RPM		
≤150rpm	LMAX=203.5mm	LMAX=168mm
≥150rpm	LMAX=193mm	LMAX=157.5mm

Motor	DC gear motor	AC gear motor
RPM		
≤150rpm	LMAX=206mm	LMAX=170.5mm
≥150rpm	LMAX=195mm	LMAX=160mm

Motor Specification

Z90, J90 Series ODM Peristaltic Pump

90 series DC gear motor power \ DC24V, DC12V \ consumption 90W \ rpm 186, 240, 370, 460, 560 \ (brush) life > 2000 hour \ speed accuracy $\pm 10\%$ \ Temperature 0°C-40°C , humidity < 80% \ installation soleplate/panel

90 series AC gear motor power AC220V \ consumption 90W \ rpm 208, 250, 347, 410 \ life > 5000 hour \ speed accuracy $\pm 10\%$ \ Temperature 0°C-40°C , humidity < 80% \ installation soleplate/panel



Panel mounting



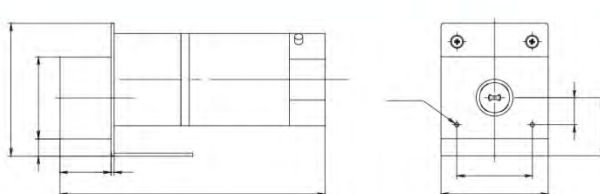
Soleplate mounting

Z90, J90 Series Pump Head And Flow Range

Pump head	Channel	Tube size
YZ15	1, 2, 3, 4, 5, 6	13#14#19#16#25#17#18#
YZ25	1, 2, 3, 4	15#24#
YT15	1, 2, 3, 4, 5, 6	13#14#19#16#25#17#18#
YT25	1, 2, 3, 4	15#24#35#36#
KZ25	1, 2	15#24#35#36#
DT15-14	1	19#16#25#17#
DT15-24	2	19#16#25#17#
DT15-44	4	19#16#25#
BZ25-24	1, 2, 3, 4	24#
BZ25-15	1, 2, 3, 4	15#
BZ15-16	1, 2, 3, 4, 5, 6	16#
BZ15-14	1, 2, 3, 4, 5, 6	14#

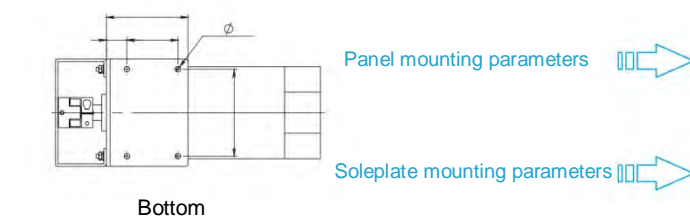
Z90/J90 Dimensions (Soleplate Mounting)

Unit : mm



Side

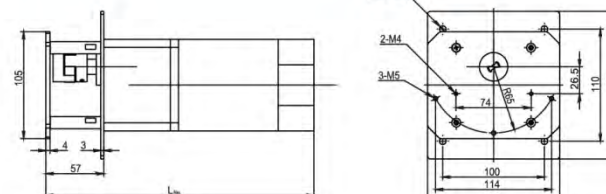
Front



Bottom

Z90/J90 Dimensions (Panel Mounting)

Unit : mm



Side

Front

Motor	DC gear motor	AC gear motor
RPM		
≤150rpm	LMAX=265.5mm	LMAX=263.5mm
≥150rpm	LMAX=265.5mm	LMAX=263.5mm

Motor	DC gear motor	AC gear motor
RPM		
≤150rpm	LMAX=261.5mm	LMAX=259.5mm
≥150rpm	LMAX=261.5mm	LMAX=259.5mm

Z90D-2, J90D-2 Series ODM Peristaltic Pump

Motor Specification

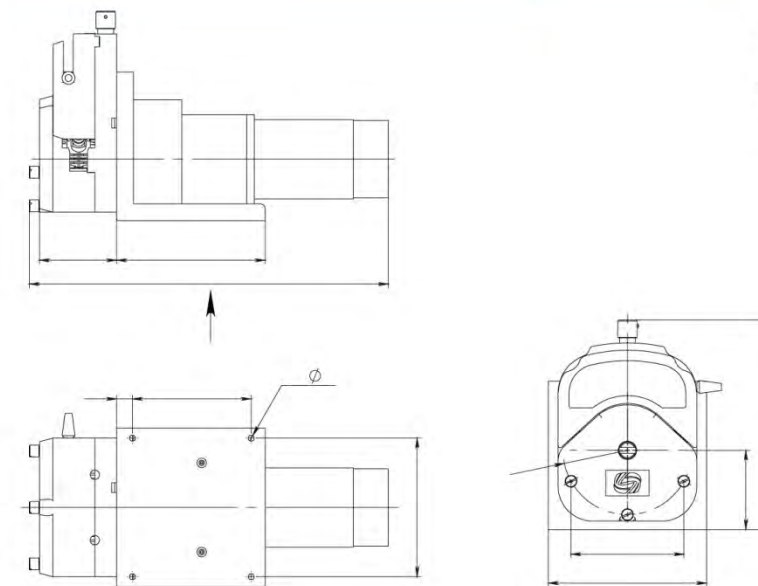
90 Series DC gear motor power \ DC12V or DC24V \ consumption 120W \ rpm 186, 240, 370, 460, 560 \ (brush) life > 2000 hour \ speed accuracy $\pm 10\%$ \ Temperature 0°C-40°C , humidity < 80% \ installation soleplate/

90 Series AC gear motor power \ AC220V \ consumption 90W \ rpm 208, 250, 347, 417 \ life > 5000 hour \ speed accuracy $\pm 10\%$ \ Temperature 0°C-40°C , humidity < 80% \ installation soleplate/

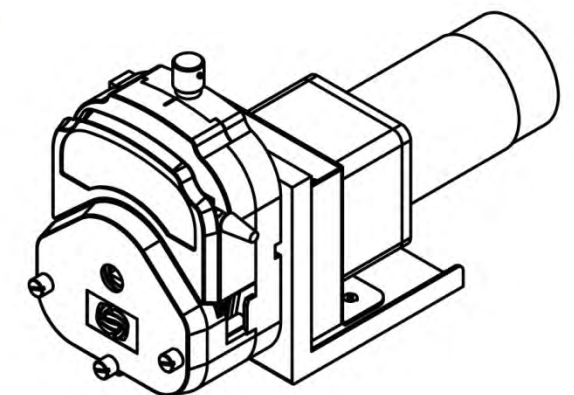
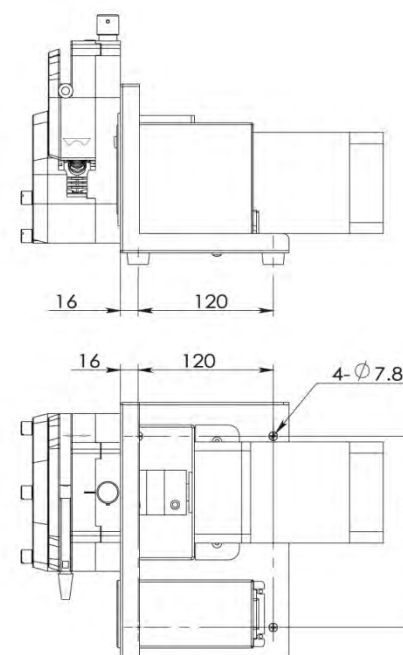
Z90D-2, J90D-2 Series Pump Head And Flow Range

Pump head	Channels	Tube	mL/rpm
YZ35	1	73#	13.3ml
		82#	21.3ml

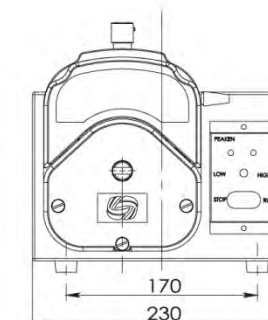
Z90D-2/J90D-2 Dimensions (Soleplate mounting)



J90D-2-A Dimensions (Soleplate mounting)



With speed control module





DF Series Solenoid Valve Control Box

The DF series solenoid valve control box is matched with the fluid transfer pump to complete the automatic conversion of the transmission liquid path. The product is divided into single and double roads. The pipeline installation is convenient and quick. The solenoid valve has a variety of materials to choose and has strong chemical resistance. It is for small flow, low viscosity applications. Can be used with equipment, instruments, and laboratories.

Product model	DF01-E	DF01-F	DF02-E	DF02-F
Tube connect interface	1/4-28 Thread			
Tube diameter	1.52mm			
Cv flow coefficient	0.035			
Internal volume	<67ul			
Work pressure	<0.3Mpa			
Number of channels	1		2	
Maximum viscosity	35cst (Suitable for low viscosity liquids)			
Solenoid valve body material	PEEK			
Solenoid valve sealing material	EPDM	Rubber	EPDM	Rubber
Suitable liquid	General liquid	Strong acid strong alkali	General liquid	Strong acid, strong alkali
Action response time	<20ms			
Liquid temperature	-10°C~+100°C			
Working temperature	0~+40°C			
External control interface	DC5-24V, 2 channels of signal, each channel can be controlled separately			
Voltage	AC85-264V 50/60HZ			
Consumption	<10W			
Dimensions	(L x W x H) 98x166x119mm			
Pump head weight	0.76kg		0.81kg	

Infrared Remote Control

Match with LEADFLUID flow type and dispense type peristaltic pump, wireless remote control flow start and stop, dispense start and stop, forward and reverse, full speed, and do not disturb functions can be realized.



Liquid Level Sensor

The LEADFLUID YW01 intelligent non-contact liquid level sensor is a liquid level detecting device with convenient installation and high sensitivity. Breaking through the influence of the wall thickness of the non-metallic container, the liquid level sensor is installed on the outer wall of the container to be tested, and the liquid level of the toxic substances, strong acid, strong alkali and various liquids in the closed container can be detected. Accurate automatic feeding is achieved by connecting to a peristaltic pump.



Bubble Sensor

The LEADFLUID QP01 bubble sensor is used to monitor air bubbles in the transmission line in real time.

Function and Features :

- High detection accuracy, the smallest detectable 5ul small bubbles.
- Snap-in tube, no need to cut off the pipeline, no pollution to the detection liquid
- Detects bubbles in most liquids regardless of fluid color and tube changes
- No external power supply required (use the internal 12V power supply of the peristaltic pump).
- The peristaltic pump automatically stops when a bubble is detected.



Pressure Sensor

It is used for detecting and alarming the pressure in the outlet end pipeline during liquid transfer to prevent the hose from rupturing or damaging other external equipment due to excessive pressure.

Function and features :

- Detect pipeline pressure to prevent the tube from over-pressure rupture.
- Detection range: 0-0.4MPa
- The external control wire can be connected to the peristaltic pump.

The peristaltic pump can set the pressure alarm threshold. When the pressure transmitter detects the alarm value, the peristaltic pump automatically stops.

- The peristaltic pump can be started again after the alarm message has been manually cleared.



Pulse Damper



The LEADFLUID ZN90 series of pulsation dampers is a pressurized container, the container is divided into two upper and lower chambers. The lower chamber has a fluid to be transported through, and the upper chamber is a gas. Due to the compressibility of the gas and the instantaneous absorption of the pulse, the system can obtain a stable flow and pressure and slow down the pulsation of the pipeline.

Model	ZN90-PE	ZN90-PTFE
Tube	1.6~9.6mm	
Connect	External thread ~ Pagoda	
Volume	180mL	
Maximum	0.3Mpa	
Size	90x90x90mm	
House	PE	PTFE
Sealing	EPDM	FFKM
Temperature	0~40°C	0~80°C
Temperature change	< 5°C/min	< 5°C/min
Weight	220g	510g

PH Controller

It is mainly used to stabilize the pH value of the solution in the production process, and realize automatic acid addition and alkali addition.



Function and Features

Mainly used for the stabilization of the pH value of the solution in the production process. Through RS485 communication (4-20mA analog signal), it can realize closed-loop control with peristaltic pump, so as to realize automatic addition of acid solution or Alkali to maintain the pH value of the solution

Specification

- Application: various acid and alkali solutions
- PH range: 0-14 pH
- Target PH value setting
- Add acid or Alkali
- Control mode: RS485, 4-20mA
- Power supply: DC24V (AC220V optional)
- Temperature: 0-60 °C



Dispensing Controller

FK-10 dispensing controller is main matched with speed-variable pump to dispense fluid semi-automatically, simple operation, large screen displays parameters, the information is intuitive and clear

Specification

- Display mode: 4.3 inch LCD
- Parameter setting: mask button
- Dispense time: 0.01-9999 seconds, 0.01 second resolution
- Interval: 0.01-9999 seconds, 0.01 second resolution
- Recycle times: 1-9999 times or 0 infinite loops
- External control: external start and stop signal input



Leak Detection Controller

Function and Feature

LY01 leakage controller is mainly used for the detection of various liquid leaks and alarm, wide detection range, stable and reliable. After receiving the sensor signal, the sound and light alarms and turns off the main pump, and outputs a TTL level signal.



Hand Dispenser

The SF01 hand dispenser is equipped with LEADFLUID ZT series filling needles, which are mainly suitable for manual and semi-automatic dispensing of peristaltic pumps; the grip is comfortable, small in size and light in weight.

Specification

- Adapted tube: inner diameter $\leq 8\text{mm}$, wall thickness $\leq 2.4\text{mm}$
- Adapter needle: ZT series
- Main function: start and stop signal output
- Status display: power indicator, working status indicator
- Cable length: 1 meter

Peristaltic Pump Controller



It is a controller that integrates logic control, multi-channel optocoupler input and output, digital tube or liquid crystal display. It adopts advanced microprocessor, integrates the basic functions of stepper motor control, is equipped with high-speed pulse output, multi-channel optocoupler isolation input and output, can control multi-step stepper motor or DC servo motor, and can be separated by optical. The I/O interface facilitates automatic control of the device.

Filling Table

Mainly used for small batches of single and multi-heads

Dimensions: 290 × 180 × 250mm
Table size: 210 × 140mm
Filling head: 1~4 (other quantities can be customized)
Needle interval range: $\geq 35\text{mm}$
Container height: $\leq 150\text{mm}$
Main material: SS304



Model	Needles	Tube size
GDT-1	ZT-1	13#, 0.5×0.92
GDT-2	ZT-2	1×0.92
GDT-3	ZT-3	2×0.92, 3×0.92, 14#, 19#
GDT-6	ZT-6	16#, 25#, 15#
GDT-8	ZT-8	17#, 24#

Dispensing Needles

Dispensing needle is designed for liquid dispensing and anti-dropping, it can be directly applied by hand, it can be equipped with LEADFLUID handheld dispenser, simple filling station or self-supporting fixing bracket.



Model	material	Size mm (ID×OD×H)	Tube size
ZT-1	304	0.7×0.9×100	13# 0.5×0.92
ZT-2	304	1.8×2×100	1×0.92
ZT-3	316L	2×3×100	2×0.92 14# 19#
ZT-6	316L	4×6×100	16# 25# 15#
ZT-8	316L	5×8×100	17# 24#
ZT-12	316L	9×12×100	18# 35# 36#73#
ZT-12B	316L	4×12×100	36#73#
ZT-16	316L	13×16×100	82#

Model	material	Size mm (ID×OD)	Tube size
CT-2	316L	1.5×2.5	13# 1×0.92
CT-3	316L	2×3	14# 19# 2×0.92 3×0.92
CT-6	316L	4×6	16# 25# 15#
CT-10	316L	8×10	17# 24#
CT-12	316L	9×12	36# 73# 18#35#
CT-16	316L	13×16	82#

Anti Adsorption Countersunk



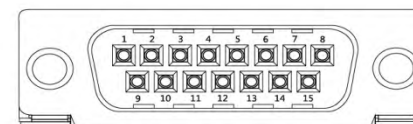
Straight, Y, T		Change ID connector		
1.6mm	7.9 mm	1.6-2.4mm	2.4-6.4mm	4.8-9.6mm
2.4 mm	9.6mm	1.6-3.2mm	3.2-4.8mm	6.4-7.9 mm
3.2mm	12.7mm	1.6-4.8mm	3.2-6.4mm	6.4-9.6 mm
3.9mm	17.8mm (straight)	2.4-3.2mm	3.9-4.8mm	6.4-12.7 mm
4.8mm	25mm (straight)	2.4-3.9mm	3.9-6.4mm	7.9-9.6 mm
6.4mm		2.4-4.8mm	4.8-6.4mm	9.6-12.7 mm
		2.4-5.6mm	4.8-7.9mm	12.7-19 mm

Connector

Variety of materials: PP (polypropylene), PVDF (polyvinylidene fluoride), stainless steel 316, etc.

Electrical Interface Specifications

LEADFLUID standard RS485 interface to meet different external control needs of users.



DB15No.	English annotation	Instructions
1	ADC_W	Positive terminal of external analog signal input
2	B	Communication interface, B end of RS485
3	A	Communication interface, A terminal of RS485
4	VCC_W	External power input
5	DAC	Analog voltage output
6	CW_W	External direction signal input terminal
7	PWM	Pulse output
8	COM	External public land
9	AGND	The negative terminal of the external analog signal input
10	+12V	Internal +12V power output
11	GND	Internal power ground
12	CW	Internal direction signal output
13	RS_W	External start and stop signal input
14	PWM_W	External pulse signal input
15	RS	Internal start/stop signal output

Footswitch



JT01 footswitch with DB15 connector, can be equipped with the full range of products, control the start and stop of the pump; Cable length: 1 meter



Lead Fluid SiliconeTubing

Overview: Lead Fluid peristaltic pump standard tube applies imported silicone rubber raw materials and platinum sulfide production process. The tube has the characteristics of non-toxic, biological inert and UV resistance, ozone resistance, heat resistance, high transparency, strong resilience, resistance to compression, etc. It is the optimal material of peristaltic pump tube. It can be widely used in GMP pharmaceutical, biotechnology, molecular biology, fine chemical, environmental protection, food processing and other areas of scientific research and production. Characteristics: excellent durability and heat aging resistance, made of imported high-quality rubber, excellent physical and mechanical properties, weak in acid and solvent resistance. Advantages: high tearing proof, high transparency, capability 4-8bar water pressure.

Tubing

Tubing NO	0.13x0.86	0.5x0.86	0.86x0.86	1.52x0.86	2.06x0.86	2.4x0.86	2.79x0.86	3.17x0.86	1x0.92	2x0.92	3x0.92
Tubing Section(1:1)	●	●	●	●	●	●	●	●	●	●	●
Wall thickness(mm)	0.86								0.92		
ID(mm)	0.13	0.5	0.86	1.52	2.06	2.4	2.79	3.17	1.0	2.0	3.0
Tubing Pressure (Mpa)	Continuous										
	InteVAL										

Tubing NO	13#	14#	19#	16#	25#	17#	18#	15#	24#	35#	36#
Tubing Section(1:1)	●	●	●	●	●	●	●	●	●	●	●
Wall thickness(mm)	1.7		1.6				2.4				
ID(mm)	0.8	1.6	2.4	3.1	4.8	6.4	7.9	4.8	6.4	7.9	9.6
Tubing Pressure (Mpa)	Continuous										
	InteVAL										

Tubing NO	73#	82#	193#	191#	88#	92#
Tubing Section(1:1)	●	●	●	●	●	●
Wall thickness(mm)	3.3		4.8			
ID(mm)	9.7	13	9.5	19	12.7	25.4
Tubing Pressure (Mpa)	Continuous					
	InteVAL					

Details on the right note

The main factors for selecting tubing

Tubing's characters:

- Good flexibility, quick recovery after pressure(shore hardness:40-80)
- Abrasion resistance.
- Common press-endurance
- No leakage(good air-tightness),low adsorption.
- Good temperature-endurance and aging-resistance.
- No swelling,corrosion resistance.

Chemical compatibility :

Chemical compatibilities of tubing are some good chemical properties the tubing appears when transferring fluid. The normal tubing only general touch with chemical material, but peristaltic pump's tubing touch with chemical material under working conditions, so the chemical compatibility level is different between peristaltic pump's tubing and general tubing. Peristaltic pump's tubing has the corresponding materials to meet demand, according to transmission various liquid. The user should check every kind of chemical material in the solution, to make sure it can handle with the chosen tubing compatible.

Compression:

The factors of affecting the tubing compression: material, diameter and the wall thickness of the scale. If the system pressure over the limit of the tubing, the tubing will be expended, result in the tubing excessive wear or tubing burst.

Temperature:

The working temperature range of tubing is the main factor of user considers. Different materials have different temperature performance. Some materials such as silicone rubber is wider temperature range, it is suitable for the high temperature and low temperature. But some tubing materials can work only for a small range. The user in the selection of tubing materials, should first make clear the maximum and minimum temperature, then ensure the selected tubing can work in the temperature range.



Size:

The size of the tubing directly influences the flow, the inner diameter of the tubing decides the flow, is directly proportional to the flow. Wall thickness not only influences the resilience of tubing, but also influences the life of the tubing.

Transparency

If the operator needs observe the status such as: the bubbles, particles, pollution case, should choose the Tygon® or silicone rubber tubing, and if the fluid is not easy to expose, should choose not transparent tubing.

Gas permeability :

For some fluid is sensitive with the gas, some easy by oxidation, or anaerobic cell cultures. Users should consider the gas permeability factor of tubing. In general, the highest porosity is silicon tubing. So some fluid that unfavorable contact with the gas, should choose the low porosity of tubes.

The authentication :

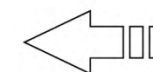
Tubing is used for related purposes may be through the relevant authentication. Such as the United States pharmacopoeia USP, European pharmacopoeia EP, the United States food and drug administration standard FDA, the United States department of agriculture standard USDA and the national sanitation foundation standard NSF.

Working life :

Different tubes have different abilities of roller extruding, friction resistance. Different tubing type pipe, pump head, operation speed, the life are different. Choose the long life, thick wall tubing, big flow pump, run in lower speed can be obtained more long service life.

Flow range :

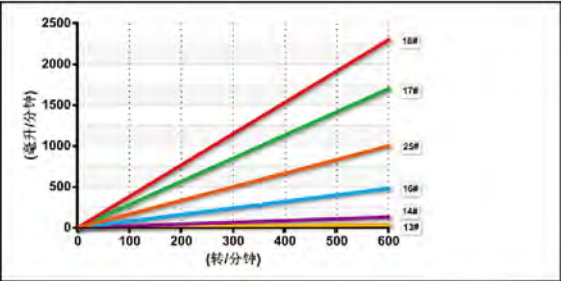
Each tubing is corresponding fixed flow range. We according to our customers' needs of flow range choose corresponding tubing.



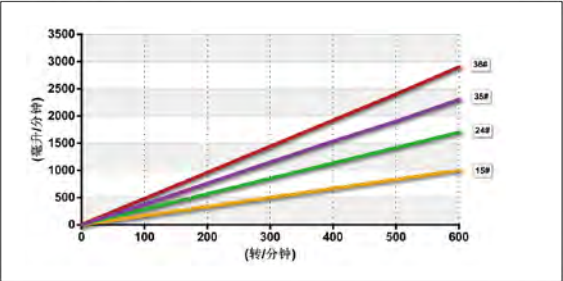
1. Left sectional graph of tubing(1:1)
2. The main index of tubing are ID and wall thickness, the expressions are different from various companies, such as: normal code or "ID*OD"
3. The tubes with thick wall are adapted to speed as high as 600rpm, while the tubes with thin wall are only used under 100rpm.

Reference Flow Curve Of Peristaltic Pump Head Suitable Tube

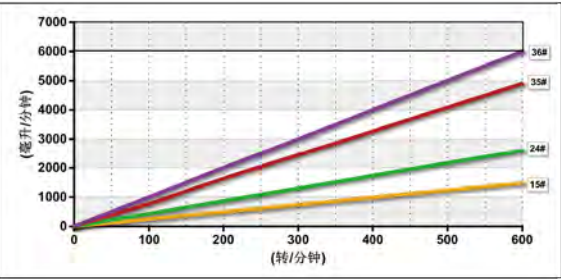
YZ15/YT15



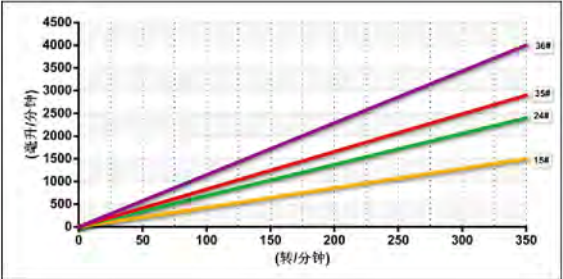
YZ25/YT25



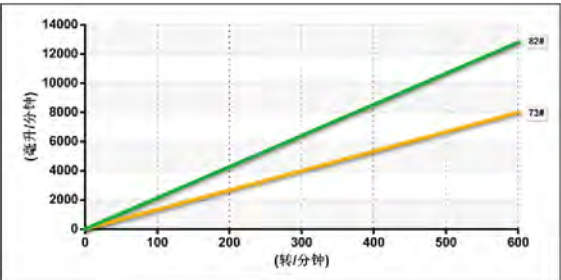
KZ25



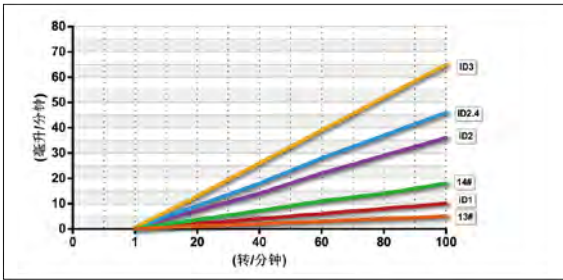
DMD25



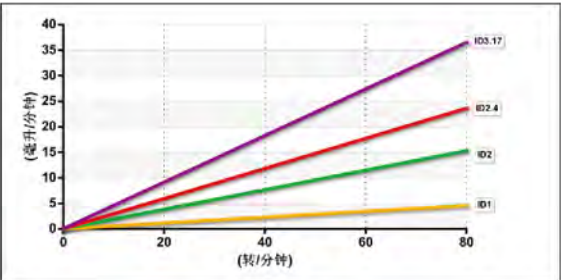
YZ35



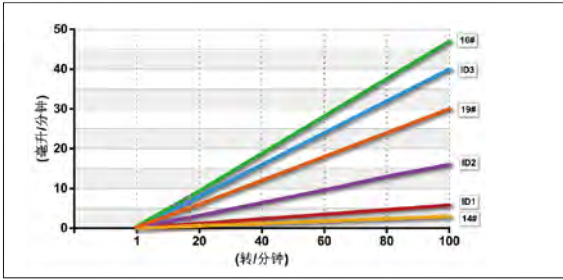
DT10



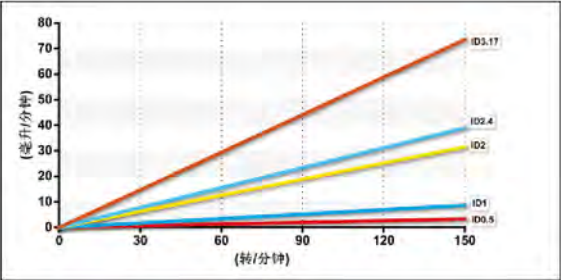
FZ10



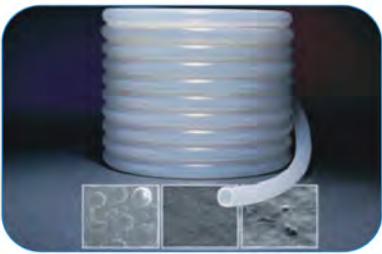
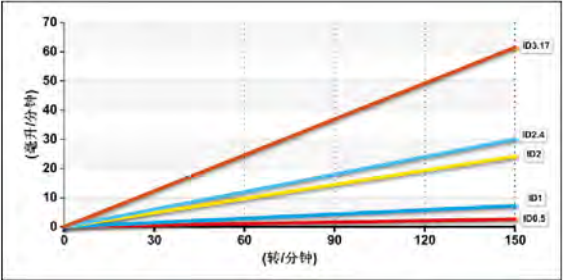
KD10/KD15



DG-6



DG-10



Lead Fluid Silicone Tubing

Designed for high-purity applications,Lead Fluid Silicone Tubing's ultra-smooth inner bore can reduce the risk of particle entrapment and microscopic buildup during sensitive fluid transfer.in-house analysis of the inner surface of Lead Fluid silicone Tubing compared to other silicone tubing shows that it is up to

three times smoother.Additionally,this smoother fluid path facilitates complete system cleaning and sterilization.



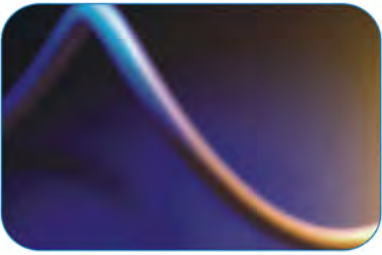
Tygon® R-3603 Vacuum Tubing

Tygon R-3603 Vacuum Tubing has extra-heavy walls that will withstand a full vacuum at room temperature(29.9"[759mm]of mercury at 73°F [23°C]) And up 27"[686mm] of mercury at140°F[60°C].

Like stand Tygon® Laboratory Tubing, Tygon® Vacuum Tubing resists most inorganic chemicals and can be used in corrosive atmospheres.

Clarity allows monitoring for possible backups which could result in equipment daage. Tygon® Vacuum Tubing will not swell closed if vacuum pump oil should back up into it.

Low vapor pressure(low outgassing)makes it suitable for vacuum applications down to 3x 10-2mm Hg at 165°F(74°C).Ideal for analytical testing of gases or vapors.Well-suited for use in making manometers.



Norprene® Chemical Tubing

Features

- Long flex life in peristaltic pumps.
- Temperature range of -75F to 165F
- Superior chemical resistance.
- Plasticizer-free bore.
- Meets FDA criteria for food contact.
- Resists absorption of aqueous fluids.
- Virtually unaffected by chemical sanitizers

and cleaners

- Complies with FDA 21 CFR,177.1520 criteria and is applicable for food contact applications.
- Unaffected by most commercial sanitizers and cleaners.
- Can be autoclaved for up to five cycle times without affecting its overall service life.



Pharmed® BPT Tubing

Pharmed® BPT Tubing is less permeable to gases and vapors than silicone tubing.It is ideal for cell culture,fermentation,synthesis, separation,purification and process monitoring and control.independent tests show that PharMED® 65 Tubing is safe for use in sensitive cell culture applications.PharMED® BPT Tubing has very good general chemical resistance and excellent acid,alkali and oxidation resistance.opaque to visible and UV light,it helps protect sensitive fluids.

Continuous Service temperature asnge is -60°F(-51°C) to 275°F (135°C).

Features

- Outlasts silicone tubing in peristaltic pumpsby up to 30 times.
- Can be autoclaved repeatedly.
- Heat welding for sterile access in closed systems.
- Documented biocompatibility to the ISO 10993 standard.



Fluran® F-5500-A Severe Environment Tubing

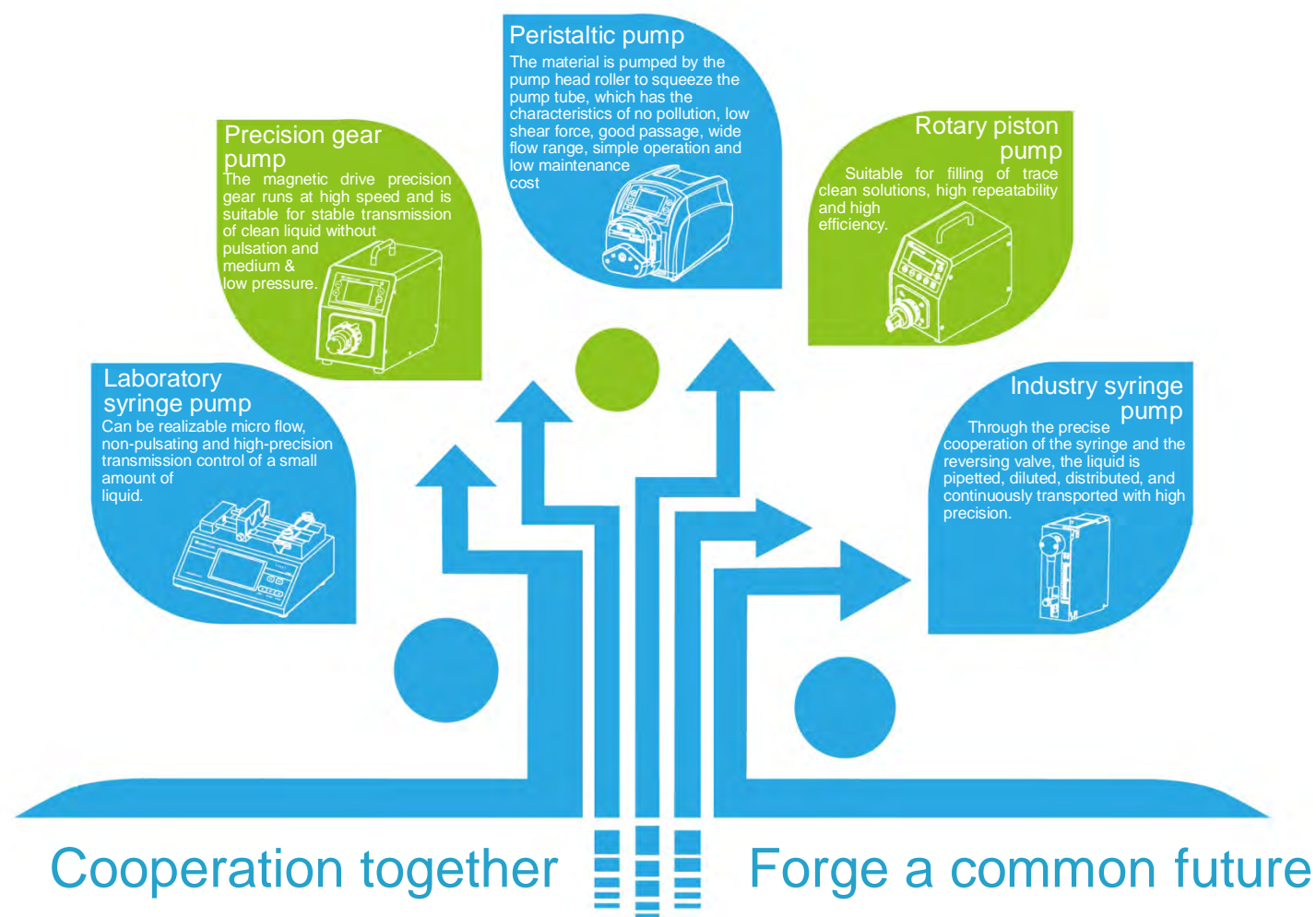
He physical and chemical characteristics that make it ideal for severe envi ronments,such as dry cleaning fluid lines and solvent recovery systems,where other flexible tubes fail.Fluran® Severe Environment Tubing can be used in continuous service with temperatures as high as 400°F(204°C) and has excellent resistance to corrosive chemicals,oils,fuels,solvents and most mineral acids.

This opaque,black tubing helps protect light-sensitive materials being transferred and will

not prematurely crack and age when exposed to ozone,sun and weather.It is highly flexible and resilient,making it the ideal choice in peris-taltic pumping of extremely corrosive materials.A food grade formulation is available upon request.

- Provides continuous service at temperatures up to 400°F(204°C).
- Excellent resistance to corrosive chemicals,oils,fuels and solvents.
- Resists ozone,sunlight and weathering.

Products Selection

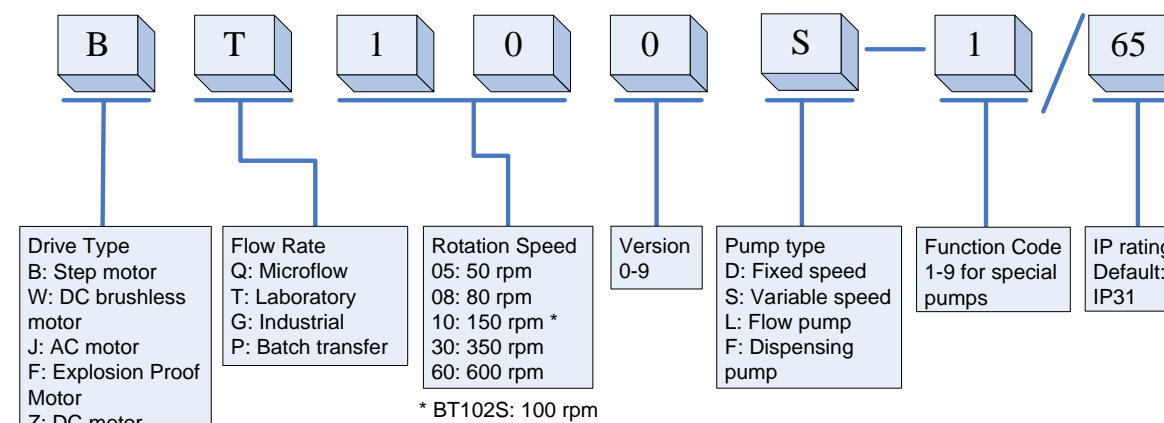


Select Suitable Lead Fluid Pumps

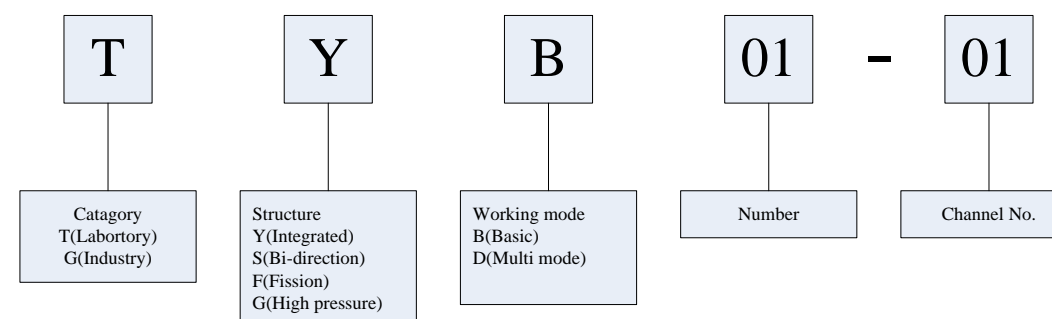
Model	Peristaltic pump (P11-35)	Laboratory syringe pump (P1-6)	Industrial syringe pump (P7-8)	Precision gear pump (P9-10)	Rotary piston pump (P11)
Functions					
Flow range	0.0006mL/min -100L/min	0.005nL/min-173.718mL/min	0.00025mL/min -1250mL/min	15mL/min-2700mL/min	0-432mL/min
Dispense range	0.1-2000mL	0.0001-120mL	0.01-30mL	0.1-50mL	0.001-20mL
Pulse	More lower	no	no	small	big
Export pressure	Normal <0.2Mpa , Some available 1.6Mpa	Normal <0.4Mpa	Normal <0.68Mpa	Normal <1.4Mpa	Normal <0.69Mpa
Transfer suspension	●	-	-	-	-
Easy clean	●	-	-	-	-
Idle running	●	-	-	-	-
Volume dispense	○	●	●	○	●
Constant transfer	●	-	-	●	●
External control	○	●	●	●	●
communicate	○	●	●	●	●

●Standard , ○Part models , -without

LEADFLUID PRODUCTS NAMING :



LEADFLUID SYRINGE PUMP NAMING :



Product FAQ

1、How to better transfer high viscosity liquids ?

Answer: increase the diameter of tube, shorten the length of tube, especially the liquid inlet; increase the liquid temperature, reduce the viscosity; apply positive pressure at the inlet end, including raising the liquid inlet end.

2、How to reduce the pulsation of the peristaltic pump?

Answer: (1) Select a thinner hose at the same flow rate: the flow rate per revolution of the thin tube pump is small, and the pulsation amplitude is small. (2) Select the LEADFLUID micropulsation pump head. (3) Use pulse damper: absorb the pulsation by the principle of air compression. (4) Increase the number of rollers: increase the frequency of the pulsation and reduce the amplitude of the pulsation. (5) Two pump heads are used, and the rollers are staggered at an angle: the pulsation is eliminated by pulsating cross complementation. (6) Use back pressure (pressure on the output): The output has pressure to make the pump tube deform and absorb the pulsation.

3、Can LEADFLUID peristaltic pump transfer slurry fluid or abrasive solution?

Answer: Yes. However, the viscosity and upper particle size limit of the pumping are related to the inner diameter of the pump tube used. The size of the soft particles must never be greater than 25% of the inner diameter of the tube; the size of the hard particles should never be greater than 5% of the inner diameter of the tube.

4、How to improve the pump transmission accuracy?

Answer: Choose a smaller flow range, a thinner tube or syringe.

5、Is the flow type and distribution type peristaltic pump accurate?

Answer: The flow parameters that come with the system are for reference only. If you want to accurately correct the flow please calibration before use.

6、What is the relationship between peristaltic pump hoses and chemical compatibility?

Answer: Different liquids use different materials of the pump tube, users need to check the chemical compatibility table to determine suitable or not, can be judged by experiments, the known strong acid, alkali, organic solvent solution has a corresponding peristaltic pump hose match.

7、What are the factors that affect the life of tube?

Answer: Mainly consider the working speed, the material and chemical compatibility of tube. And the outlet pressure of the pump tube, the abrasiveness of the pumped fluid.