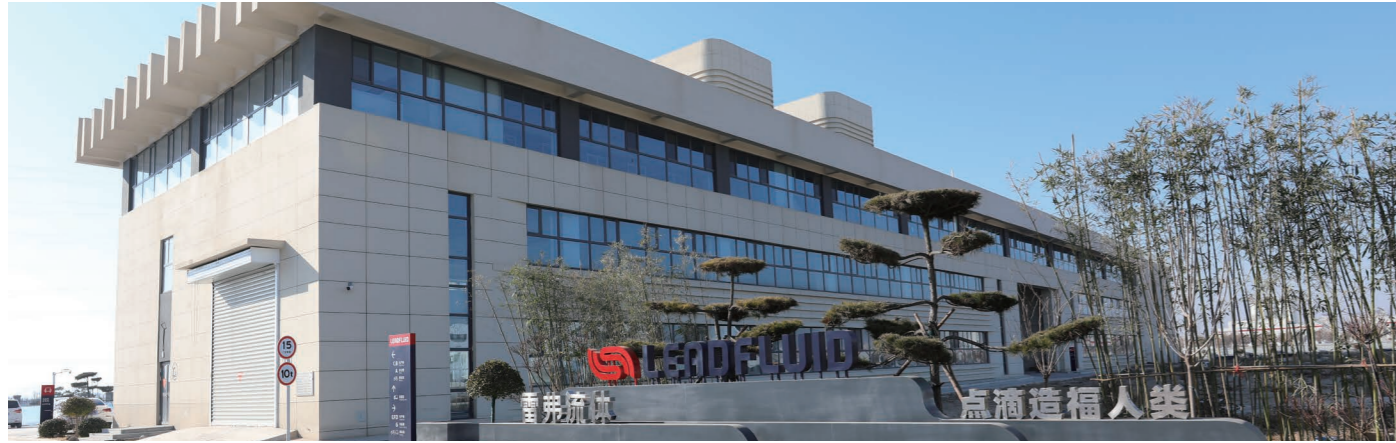




## COMPANY PROFILE



Since its established, Lead Fluid has been dedicated to pioneering research and innovation in small-scale precision pump products. We have positioned ourselves in the global high-end market, providing customers with professional and agile technical services through a comprehensive service system. With an exceptional technical team, we seamlessly tailor solutions to various application scenarios.

Our products find wide application in biotechnology, environmental protection, smart manufacturing, new energy, and other technical fields for high-precision fluid transmission and control. All our products have obtained CE and ROHS certifications and are exported to countries such as the United States, Germany, France, the Netherlands, Italy, Spain, and Japan,

earning widespread trust and praise from customers.

Having achieved over a hundred intellectual property milestones in pursuit of our mission, we have been recognized as a national high-tech enterprise, a national specialized and new "Little Giant" enterprise, an innovative entrepreneurial team under the "Giant Plan," and champions across various categories in Hebei Province.

We remain committed to continuously expanding our professional capabilities, driving industry transformation and diversified development, and exploring boundless possibilities in "microfluidic transmission, benefiting humanity drip by drip".

100  
+

Countries

1000  
+

Distributors

10000  
+

Customers

## Application Areas

- Cell Culture
- Extracorporeal Blood Circulation
- Tissue Perfusion
- Material Preparation
- Chromatographic Filtration
- Fermentation
- Spray Drying
- Thermal Ablation
- Ion Chromatography
- Titrator
- Water Treatment
- Environmental Monitoring
- Fine Chemicals
- Electronics Industry
- Analysis and Testing Equipment
- Teaching Equipment
- Filling Machine Supporting
- Papermaking
- Printing Ink
- Construction
- Ceramic Industry
- Paint and Coating Industry
- Mining and Metallurgical Industries



## Authority Certification Fruitful Achievements



International Invention Patent



CE Certification



ISO9001 Certification



RoHS Certification



Medical Treatment



Food and Beverage



Chemistry



Pharmaceutical



Laboratory

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## Peristaltic Pump

### Speed Variable Series **S**

<b>BQ80S</b>	0.0035~34mL/min	01P
<b>BT103S</b>	0.00011~500mL/min	02P
<b>BT101S</b>	0.00011~750mL/min	03P
<b>BT301S</b>	0.005~1750mL/min	03P
<b>BT601S</b>	0.005~3000mL/min	03P
<b>BT100S</b>	0.00011~750mL/min	04P
<b>BT300S</b>	0.005~1750mL/min	04P
<b>BT600S</b>	0.005~3000mL/min	04P
<b>BT100S-1</b>	0.00011~750mL/min	04P
<b>WT300S</b>	0.004~4200mL/min	05P
<b>WT600S</b>	0.005~6600mL/min	05P

### Intelligent Flow Series **L**

<b>BT101L</b>	0.00011~750mL/min	06P
<b>BT301L</b>	0.005~1750mL/min	06P
<b>BT601L</b>	0.005~3000mL/min	06P
<b>BT100L</b>	0.00011~750mL/min	07P
<b>BT300L</b>	0.005~1750mL/min	07P
<b>BT600L</b>	0.005~3000mL/min	07P

### Intelligent Dispensing Series **F**

<b>BT101F</b>	0.00011~750mL/min	08P
<b>BT301F</b>	0.005~1750mL/min	08P
<b>BT601F</b>	0.005~3000mL/min	08P
<b>BT100F</b>	0.00011~750mL/min	09P
<b>BT300F</b>	0.005~1750mL/min	09P
<b>BT600F</b>	0.005~3000mL/min	09P
<b>BT100F-1</b>	0.00011~1650mL/min	10P
<b>WT300F</b>	0.005~4200mL/min	11P
<b>WT600F</b>	0.005~6600mL/min	11P

### Industrial Series **WG**

<b>WG600S</b>	0.4~13.2L/min	12P
<b>WG600F</b>	0.0013~13.2L/min	12P

### Batch Transfer Series **JP**

<b>JP301S</b>	0.64~33L/min	13P
<b>JP300S</b>	0.64~33L/min	13P

### BT600P/BX600S

<b>BT600P</b>	0.006~2900mL/min	14P
<b>BX600S</b>	1.5~3700mL/min	14P

### Filling System

<b>DS600</b>	0.005~3000mL/min	15P
<b>HSP3000</b>	25μL~3000μL	16P
<b>WSP3000</b>	1μL~3000μL	16P

### High Protection series **MF/MS** 0.006~7800mL/min

### Explosion-proof Motor Peristaltic Pump **EF/FG**

<b>EF800 Series</b>	0.005~7800mL/min	19P
<b>EF900 Series</b>	0.005~33000mL/min	19P
<b>FP300S-A3</b>	0.6~33L/min	20P
<b>FG601S-A3</b>	1000~13000mL/min	20P
<b>FG600S-A3</b>	4~6000mL/min	20P
<b>FG601S-W3</b>	1800~13000mL/min	21P
<b>FG600S-W3</b>	8~6000mL/min	21P

### Pump Head

### Peristaltic Pump Accessory

### Tubing

### Lab Syringe pump

### Industrial Syringe Pump

### Syringe Pump Accessory

### Gear Pump

# BQ80S

## Speed Variable Peristaltic Pump



### Typical Application

Laboratory dispensing (e.g., neutralization reactions), Water treatment sampling, Liquid addition and discharge for synthetic reactions, Supporting new energy production lines, etc.

### Technical Parameter

Parameter	BQ80S
Flow range	0.0035~34mL/min
Speed range	0.1~80 rpm
Speed resolution	0.1rpm
Speed accuracy	<±0.5%
Working time	0.1~999 S/Min/H/D
Dispensing interval time	0.1~999 S/Min/H/D
Dispensing time	1~999, "0" Infinite loops
External control	(1) Start/Stop: passive contact, external control input level (5~24V) (2) Forward/Reverse: passive contact, external control input level (5~24V) (3) Speed Regulation: analog 0~5V, 0~10V, 4~20mA can be set.
Communication interface	RS485 communication interface, MODBUS protocol is available, DB15 external control interface
Power supply	AC100~240V, 50/60Hz(power adapter included)
Power consumption	<10W
Noise	60DB
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Dimensions (L×W×H)	DW10-1:152×112×107mm, DW10-3:164×112×107mm
Weight	1kg

### BQ80 Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
BQ80S	DW10-1	1	Wall 0.8~1mm, ID≤3.17mm	0.0035~34
	DW10-3	3	Wall 0.8~1mm, ID≤3.17mm	0.0035~34

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head

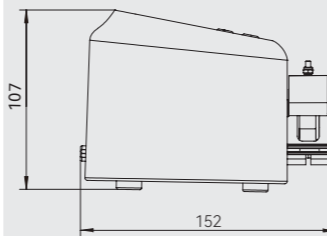
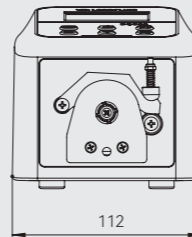


DW10-1

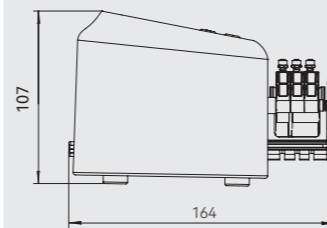


DW10-3

### Dimension(mm)



BQ80SV2-DW10-1



BQ80SV2-DW10-3

# BT103S

## Speed Variable Peristaltic Pump

### Typical Application

Material transfer and preparation, TFF/DFF ultrafiltration, Fluidized beds, Additives



### Technical Parameter

Parameter	BT103S
Flow range	0.00011~500mL/min
Speed range	0.1~100.0rpm
Speed resolution	0.1rpm
Speed accuracy	<±0.2%
Dispensing volume	0.1~999.9 S/Min/H, time unit adjustable
Dispensing time	0.1~999.9 S/Min/H, time unit adjustable
Dispensing interval time	1~999, "0" Infinite cycle
External control signal input	(1) Start/Stop: passive contact, external control input level (5~24V) (2) Forward/Reverse: passive contact, external control input level (5~24V) (3) Speed Regulation: analog 0~5V, 0~10V, 4~20mA can be set.
External control signal output	(1) Start/Stop: Level Signal (following input voltage) (2) Forward/Reverse: Level Signal (following input voltage)
Communication interface	RS485, MODBUS protocol is available, DB15 external control interface
Power supply	AC100~240V, 50Hz/60Hz
Power consumption	<30W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Dimension(L×W×H)	235x140x145mm
Weight	2.8 kg

### BT103S Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
BT103S	DG/DS (10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS (6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	YZ15/YZ15T	1	13# 14# 19# 16# 25# 17# 18#	0.005~427
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~500

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### S / SERIES

### Pump Head



DG6/10-1/2/4



DS6/10-1/2/4

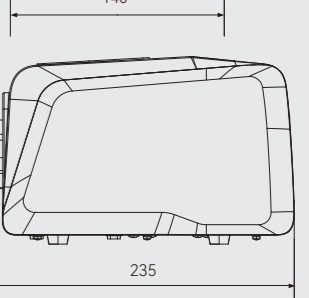
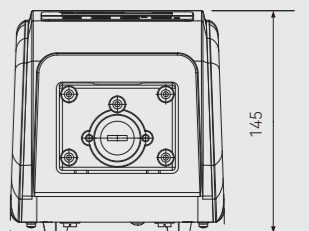


YZ15T



YT25

### Dimension(mm)



# BT101S/BT301S/BT601S

## Speed Variable Peristaltic Pump



### Typical Application

Bacterial/Cell Culture , Animal Heart Perfusion, Liquid Addition for Synthetic Reactions, Liquid Discharge, TFF Ultrafiltration , Liquid Supply for Coating and Granulation, Laboratory Dispensing , Quantitative Transfer, Medical Aesthetics (Swelling Anesthesia)



### Technical Parameter

Parameter	BT101S	BT301S	BT601S
Flow range	0.00011~750mL/min	0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150rpm	0.1~350rpm	0.1~600rpm
Speed resolution	0.1rpm (speed≤100rpm), 1rpm (speed > 100rpm)		
Speed accuracy	<±0.2%		
Dispensing Range	0.1~999seconds/minutes/hours/day		
External control signal input	Control start stop, direction, adaptive 5-24V; Analog quantity 0-5V/0-10V/4-20mA can be set Start/Stop, Forward/Reverse		
Communication interface	RS485 communication interface, MODBUS protocol is available		
Power supply	AC 100-240V 50/60Hz		
Power consumption	<30W	<40W	<50W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP grade	IP31		
Dimension (L×W×H)	284mm×180mm×197mm		
Weight	3.6kg	3.9kg	3.9kg

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

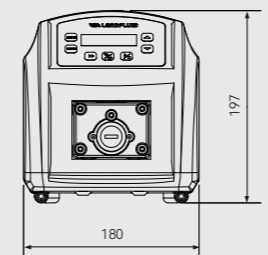
Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
BT101S	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-18/28	1,2	13# 14#, wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~750
BT301S	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~1750
BT601S	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1	114# 16# 15# 24# 35# 36#	0.024~3000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



### Dimension(mm)



# BT100S/BT100S-1/BT300S/BT600S

## Speed Variable Intelligent Peristaltic Pump



### Typical Application

Liquid addition for synthetic reactions, Liquid discharge, TFF ultrafiltration, Liposuction, Coating and granulation, Supporting fermentation equipment, Chromatography columns, Laboratory reaction vessels, Liquid circulation, Supporting filling machines, Coating



### Technical Parameter

Parameter	BT100S	BT100S-1	BT300S	BT600S
Flow range	0.00011~750mL/min		0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150 rpm		0.1~350 rpm	0.1~600 rpm
Speed resolution	0.1rpm (speed≤100rpm), 1rpm (speed > 100rpm)			
Speed accuracy	< ±0.2%			
Dispensing Range	0.1~999seconds/minutes/hours/day			
External control signal input	Control start stop, direction, adaptive 5-24V; Analog quantity 0-5V/0-10V/4-20mA can be set Start/Stop, Forward/Reverse			
External control signal output	Start/Stop, Forward/Reverse			
Communication interface	RS485 communication interface, Modbus protocol is available, DB15 external control interface, WIFI control (optional)			
Power supply	AC100~240V, 50Hz/60Hz			
Power consumption	<40W	<65W	<50W	<60W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%			
IP grade	IP31			
Dimension(L×W×H)	261x150x237mm	315x150x237mm	261x150x237mm	261x150x237mm
Weight	3.5kg	5.3kg	4.3kg	4.3kg

### BT100S/BT300S/BT600S Applicable Pump Head and Tube, Flow

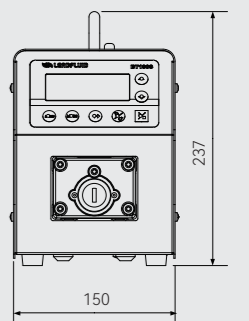
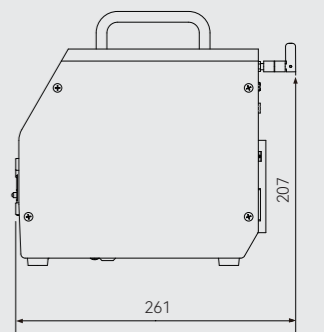
Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
BT100S	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-18/28/48	1,2,4	13# 14#, wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~750
	DT15-24	2	19# 16# 25# 17#	0.067~560
BT300S	DT15-44	4	19# 16# 25#	0.067~330
	DT15-24	2	19# 16# 25# 17#	0.67~1307
	DT15-44	4	19# 16# 25#	0.67~770
BT600S	YZ15 / YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~1750
	DT15-24	2	19# 16# 25# 17#	0.067~2240
BT100S-1	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~3000
	DG/DS (10 rollers)	8,12,16,24	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG /DS(6 rollers)	8,12,16,24	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-88	8	13# 14#, Wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1,2,4	114# 116# 15# 24# 35# 36#	0.024~750
	DT15-44	4	19# 16# 25# 17#	0.067~560

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



### Dimension(mm)



# WT300S/WT600S

## Large Torque Speed Variable Peristaltic Pump



**Typical Application**  
Liquid Material transfer and preparation, TFF/DFF ultrafiltration, Coating and granulation, Multi-channel transfer



### Technical Parameter

Parameter	WT300S	WT600S
Flow range	0.004~4200mL/min	0.005~6600mL/min
Speed range	0.1~350rpm	0.1~600rpm
Speed resolution	0.1rpm (speed accuracy±0.5%)	
Timing range	0.1~999 S/Min/H/D	
Adjustment method	Mask and key operation	
Display	132*32 LCD screen	
Power supply	AC 180~240V 50Hz/60Hz , AC 100~240V 50Hz/60Hz(CE)	
Power consumption	<150W	<200W
External control signal input	Control start stop, direction, adaptive 5~24V; Analog quantity 0~5V/0~10V/4~20mA can be set Start/Stop, Forward/Reverse	
Communication interface	RS485, support Modbus protocol, WiFi remote control(optional)	
Display function	Display the current speed	
Working direction	Free adjustment of forward and reverse rotation direction	
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%	
IP grade	IP31	
Dimension(L×W×H)	318mm×185mm×230mm	
Weight	5.9kg	

### WT300S/WT600S Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
WT300S	YZ15T/YZ15	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1,2,4	114# 116# 15# 24# 35# 36#	0.024~1750
	DT15-24/44	2,4	19# 16# 25# 17#	0.067~1307
	KZ25	1,2	15# 24# 35# 36#	0.31~3850
	KZ25-L	1	15# 24# 35# 36#	0.31~3850
	DMD25-T	1	15# 24# 35# 36#	0.4~4200
	GN10	1	2.5×4 4×6	0.0069~21 0.026~78
WT600S	YZ15/YZ15T	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1,2,4	114# 116# 15# 24# 35# 36#	0.024~3000
	DT15-24/44	2,4	19# 16# 25# 17#	0.067~2240
	KZ25	1,2	15# 24# 35# 36#	0.31~6600
	KZ25-L	1	15# 24# 35# 36#	0.31~6600

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actuality using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



KZ25-PPS GN10



KZ25-PC YZ15T

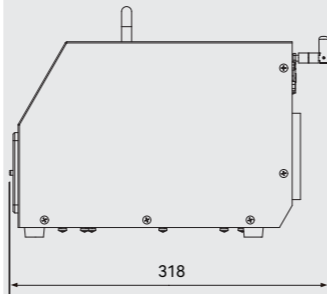
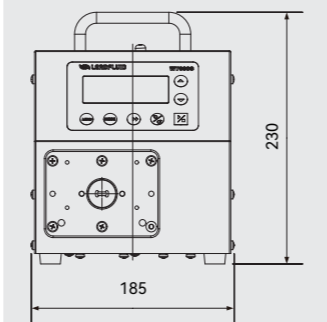


KZ25-L YT25



DMD25-T

### Dimension(mm)



# BT101L/BT301L/BT601L

## Intelligent Flow Peristaltic Pump



### Typical Application

Laboratory dispensing, Water treatment sampling, Liquid addition for synthetic reactions, Liquid discharge, TFF ultrafiltration, Liquid supply for coating and granulation



### Technical Parameter

Parameter	BT101L	BT301L	BT601L
Flow range	0.00011~750mL/min	0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150rpm	0.1~350rpm	0.1~600rpm
Speed resolution	0.1rpm		
Speed accuracy	< ±0.2%		
Power supply	AC 100~240V, 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(L×W×H)	258mm×180mm×197mm		
Weight	3.6 kg	3.9 kg	3.9 kg

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

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
BT101L	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~750
BT301L	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~1750
BT601L	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~3000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actuality using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### S / L / SERIES

### Pump Head



DG6/10-1/2/4



DS6/10-1/2/4

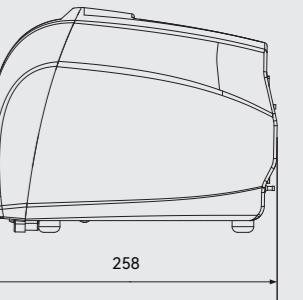
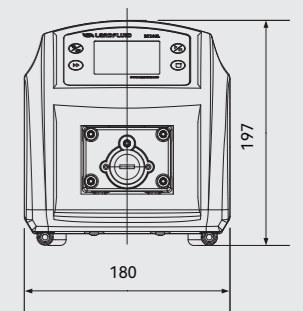


YZ15T



YT25

### Dimension(mm)



# BT100L/BT300L/BT600L

## Intelligent Flow Peristaltic Pump



### Typical Application

Water treatment sampling, Liquid addition for synthetic reactions, Liquid discharge, TFF ultrafiltration, Coating and granulation, Polishers, Coating (for fiberglass electrostatic agents, enamel wire lubricants, and handheld device adhesives)



### Technical Parameter

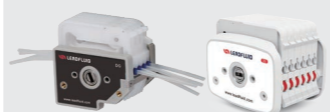
Parameter	BT100L	BT300L	BT600L
Flow range	0.00011~750mL/min	0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150 rpm	0.1~350 rpm	0.1~600 rpm
Speed resolution	0.1rpm		
Speed accuracy	< ±0.2%		
Delayed startup time	0.1~999.9 S/Min/H		
Delay stop time	0.1~999.9 S/Min/H		
Dispensing time	0.1~99.99 S/Min/H, time unit adjustable		
Dispensing interval	0.1~99.99 S/Min/H, time unit adjustable		
Dispensing number	1~999, 0 Infinite cycle		
External control signal input	Control start stop, direction, adaptive 5-24V; Analog quantity 0-5V/0-10V/4-20mA can be set		
External control signal output	Start/Stop, Forward/Reverse		
Communication interface	RS485 communication, support MODBUS protocol, DB15 external control interface, WIFI function(optional).		
Power supply	AC100~240V, 50Hz/60Hz		
Power consumption	< 40W	< 50W	< 60W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%		
IP grade	IP31		
Dimension(L×W×H)	292X160X183mm		
Weight	4.5 kg		

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

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
BT100L	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-18/28/48	1,2,4	13# 14#, Wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~750
	DT15-24	2	19# 16# 25# 17#	0.067~560
BT300L	DT15-44	4	19# 16# 25#	0.067~330
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~1750
	DT15-24	2	19# 16# 25# 17#	0.67~1307
BT600L	DT15-44	4	19# 16# 25#	0.67~770
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~3000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



DG6/10-1/2/4 DS6/10-1/2/4



DT10-18/28/48 DT15-44

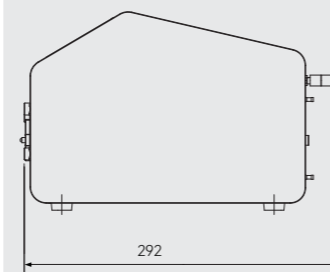
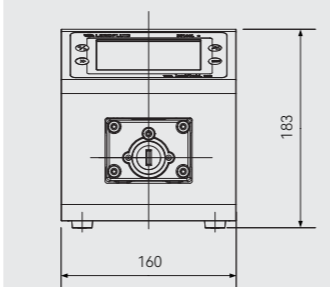


DT15-24 YZ15T



YT25

### Dimension(mm)



# BT101F/BT301F/BT601F

## Intelligent Dispensing Peristaltic Pump



### Typical Application

Bacterial/Cell Culture, Microfluidic Transfer, Reagent and Medium Dispensing



### Filling Process Specification Table

Filling Volume	Pump Head	Tube	Rotational Speed (r/min)	Filling Time (s)	Repeatability Error (%)
50μL	DG6-1	0.25×0.89mm	> 90	< 6.66	< ±2
0.1mL	DG6-1	0.5×0.92mm	> 90	< 3.33	< ±2
0.2mL	DG6-1	0.5×0.92mm	> 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

### Technical Parameter

Parameter	BT101F	BT301F	BT601F
Flow range	0.00011~750mL/min	0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150rpm	0.1~350rpm	0.1~600rpm
Speed resolution	0.1rpm		
Speed accuracy	< ±0.2%		
Dispensing volume	0.001μL~9999L (The recommended minimum filling volume is 50 μL)		
Dispensing time	1~999, "0" Infinite cycle		
Dispensing interval time	0.1~999.9S/Min/H, time unit adjustable		
Work mode	Flow mode, volume dispensing mode, time dispensing mode, copy dispensing mode, each dispensing mode can store five groups of working parameters.		
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 (L×W×H)	258mm×180mm×197mm		
Weight	3.6kg	3.9kg	3.9kg

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

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
BT101F	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
BT301F	YT25	1	114# 116# 15# 24# 35# 36#	0.024~750
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
BT601F	YT25	1	114# 116# 15# 24# 35# 36#	0.024~1750
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~3000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

## L / F / SERIES

### Pump Head



DG6/10-1/2/4



DS6/10-1/2/4

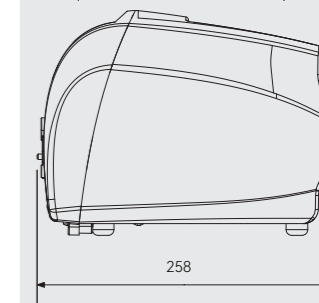
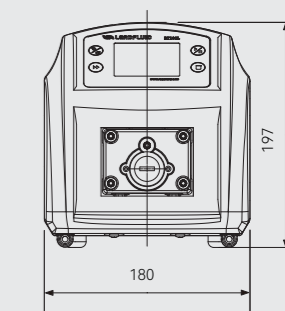


YZ15T



YT25

### Dimension(mm)



# BT100F/BT300F/BT600F

## Intelligent Dispensing Peristaltic Pump



### Typical Application

Bacterial/Cell Culture, Microfluidic Transfer, Reagent and Medium Dispensing



Filling Volume	Pump Head	Tube	Rotational Speed (r/min)	Filling Time (s)	Repeatability Error (%)
50μL	DG6-1	0.25×0.89mm	> 90	< 6.66	< ±2
0.1mL	DG6-1	0.5×0.92mm	> 90	< 3.33	< ±2
0.2mL	DG6-1	0.5×0.92mm	> 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

### Technical Parameter

Parameter	BT100F	BT300F	BT600F
Flow range	0.00016~750 mL/min	0.005~1750mL/min	0.005~3000mL/min
Speed range	0.1~150 rpm	0.1~350 rpm	0.1~600 rpm
Speed resolution	0.1rpm		
Speed accuracy	< ±0.2%		
Dispensing volume	0.001μL~9999L (It is recommended to have a minimum fill of 50μL.)		
Dispensing time	1~999, "0" Infinite cycle		
Dispensing interval time	0.1~999.9 S/Min/H, time unit adjustable		
Work mode	Flow mode, volume dispensing mode, time dispensing mode, copy dispensing mode		
External control signal input	Control start stop, direction, adaptive 5~24V; Analog quantity 0~5V/0~10V/4~20mA can be set		
External control signal output	Start/Stop, Forward/Reverse		
Communication interface	RS485 communication, support MODBUS protocol, DB15 external control interface, WIFI function(optional)		
Power supply	AC100~240V, 50Hz/60Hz		
Power consumption	<40W	<50W	<60W
Working environment	Temperature 0~40°C, relative humidity < 80%		
IP grade	IP31		
Dimension(L×W×H)	292×160×183mm		
Weight	4.5 kg		

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

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
BT100F	DG/DS(10 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	1,2,4	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-18/28/48	1,2,4	13# 14#, Wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~750
	DT15-24	2	19# 16# 25# 17#	0.067~560
BT300F	DT15-44	4	19# 16# 25#	0.067~330
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~1495
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~1750
BT600F	DT15-24	2	19# 16# 25# 17#	0.067~1307
	DT15-44	4	19# 16# 25#	0.067~770
	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1	114# 116# 15# 24# 35# 36#	0.024~3000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



DG6/10-1/2/4 DS6/10-1/2/4



DT10-18/28/48 DT15-44

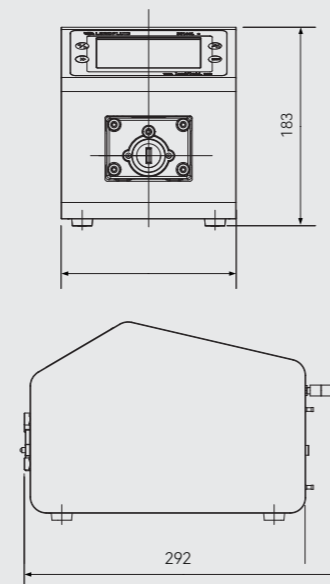


DT15-24 YZ15T



YT25

### Dimension(mm)



# BT100F-1

## Intelligent Dispensing Peristaltic Pump



### Typical Application

Bacterial/Cell Culture, Microfluidic Transfer, Reagent and Medium Dispensing



### Technical Parameter

Parameter	BT100F-1
Flow range	0.00011~1650mL/min
Speed range	0.1~150rpm
Speed resolution	0.1rpm
Speed accuracy	< ±0.2%
Dispensing volume	0.001μL~9999L (It is recommended to have a minimum fill of 50μL.)
Dispensing time	1~999, "0" Infinite cycle
Dispensing interval time	0.1~999.9 S/Min/H, time unit adjustable
Power supply	AC100~240V, 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
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Dimension(L×W×H)	288×150×237mm
Weight	5.2kg

### BT100F-1 Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
BT100F-1	DG/DS(10 rollers)	8,12,16,24	Wall 0.8~1mm, ID≤3.17mm	0.00011~32
	DG/DS(6 rollers)	8,12,16,24	Wall 0.8~1mm, ID≤3.17mm	0.00016~49
	DT10-88	8	13# 14#, Wall 0.8~1mm, ID≤3.17mm	0.00023~64
	YZ15/YZ15T	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.005~641
	YT25	1,2,4	114# 116# 15# 24# 35# 36#	0.024~750
	DT15-44	4	19# 16# 25# 17#	0.067~560
	KZ25	1,2	15# 24# 35# 36#	0.31~1650
	KZ25-L	1	15# 24# 35# 36#	0.31~1650

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



DG6/10-1/2/4 DT15-44



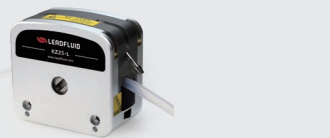
DS6/10-1/2/4 DT10-88



KZ25-PPS YZ15T

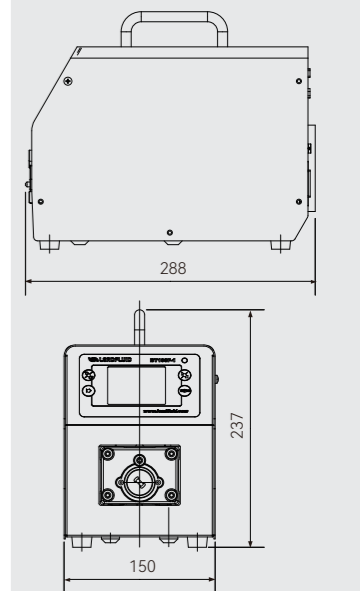


KZ25-PC YT25



KZ25-L

### Dimension(mm)



# WT300F/WT600F

## High Precision Dispensing Peristaltic Pump



### Typical Application

Material transfer and preparation, TFF/DFE ultrafiltration, Coating and granulation, Multi-channel transfer



### Technical Parameter

Parameter	WT300F	WT600F
Flow range	0.005~4200mL/min	0.005~6600mL/min
Speed range	0.1~350rpm	0.1~600rpm
Speed resolution	0.1rpm	
Dispensing volume	0.001μL~9999L (It is recommended to have a minimum fill of 100μL)	
Dispensing time	1~999, "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	< 150W	
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, DB15 external control interface	
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%	
IP grade	IP31	
Dimension(L×W×H)	286mm×180mm×230mm	
Weight	5.8kg	5.5kg

### Filling Parameters Table

Drive Type	Pump Head	Tube	Recommended filling volume(mL)	Filling Time		
WT600F	YZ15/YZ15T	13# 14# 19# 16# 25# 17# 18#	0.1~50	0.6~3s		
	YT25	114# 116# 15# 24# 35# 36#	10~100	1~4s		
	KZ25-L	15# 24# 35# 36#	20~200	1~4s		
Filling Volume	Pump Head	Tube	Rotational Speed (r/min)	Filling Time (s)	Repeatability Error (%)	
WT300F	30mL	DMD25-T	35#	> 300	< 0.7	< ±1
	50mL	DMD25-T	36#	> 300	< 0.85	< ±1
	80mL	KZ25	36#	> 300	< 0.96	< ±1

### WT300F/WT600F/ Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
WT300F	YZ15/YZ15T	1,2	13# 14# 16# 19# 25# 17# 18#	0.005~1495
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~1750
	KZ25	1,2	15# 24# 35# 36#	0.31~3850
	KZ25-L	1	15# 24# 35# 36#	0.31~3850
	DMD25-T	1	114# 119# 116# 15# 24# 35# 36#	0.58~4200
WT600F	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.005~2562
	YT25	1,2	114# 116# 15# 24# 35# 36#	0.024~3000
	KZ25	1,2	15# 24# 35# 36#	0.31~6600
	KZ25-L	1	15# 24# 35# 36#	0.31~6600

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Pump Head



KZ25-PPS



KZ25-PC



YZ15T



KZ25-L

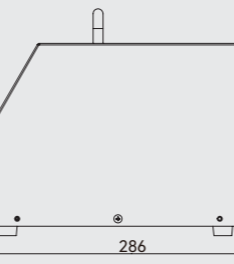
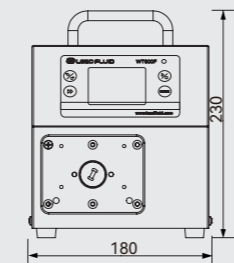


YT25



DMD25-T

### Dimension(mm)



# WG600S/WG600F

## Industrial Peristaltic Pump



WG600S



WG600F



### Typical Application

TFF/DFE ultrafiltration, Fluidized beds, Additives, Tubular centrifuges, Material transfer in pharmaceutical factories

### Technical Parameter

Parameter	WG600S
Flow range	0.4~13.2L/min
Speed range	30~600rpm
Speed resolution	1rpm
Speed accuracy	< ±3%
External control	External control input level 5V,12V(Standard),24V (Optional), External control analog 0-5V(Standard), 0-10V, 4-20mA (Optional), DB15 external control interface
Communication interface	RS485 communication interface, MODBUS protocol is available,
Power supply	AC200~240V (standard) AC 100~120V (optional) 50/60Hz
Power consumption	< 300W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Dimension (L×W×H)	356×232×224mm
Weight	11 kg

Parameter	WG600F
Flow range	0.0013~13.2L/min
Speed range	0.1~600.0rpm
Speed resolution	0.1rpm
Dispensing volume	0.001μL~999.0L (It is recommended to have a minimum fill of 100mL)
Dispensing time	1~999, "0" Infinite cycle
Dispensing interval time	0.1~999.9 S/Min/H, time unit adjustable
Speed accuracy	< ±0.2%
External control signal input	(1) Start/Stop: passive contact, external control input level (5~24V) (2) Forward/Reverse: passive contact, external control input level (5~24V) (3) Speed Regulation: analog 0~5V, 0~10V, 4~20mA can be set.
External control signal output	(1) Start/Stop: Level Signal (following input voltage) (2) Forward/Reverse: Level Signal (following input voltage) (3) Speed Status: Analogue 0~5V
Communication interface	RS485, MODBUS protocol is available, DB15 external control interface
Power supply	AC100~240V 50/60Hz
Power consumption	<400W
Working environment	Temperature 0~40°C, relative humidity < 80%
IP grade	IP31
Dimension(L×W×H)	333×233×269mm
Weight	10.2kg

### Filling Application Reference Table

	Filling Volume	Pump Head	Tube	Rotational Speed (r/min)	Filling Time (s)	Repeatability Error (%)
WG600F	100mL	YZ35	73#	> 500	< 0.89	< ±1
	200mL	YZ35	82#	> 500	< 1.13	< ±1
	300mL	YZ35	82#	> 500	< 1.7	< ±1
	500mL	2×YZ35	82#	> 500	< 1.41	< ±1

### WG600S/WG600F Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
WG600S	YZ35	1,2	73# 82#	0.4~13.2
WG600F	YZ35	1,2	73# 82#	0.0013~13.2

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

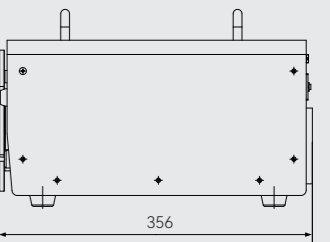
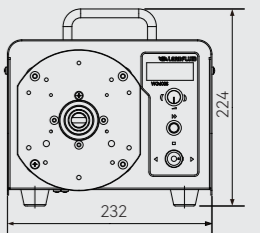
# WT / WG SERIES

### Pump Head

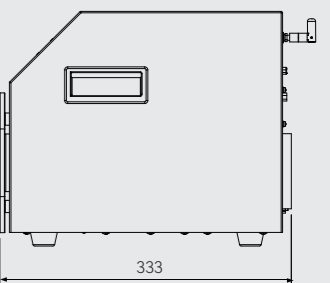
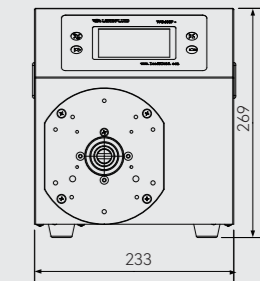


YZ35

### Dimension(mm)



WG600S



WG600F

# JP300S/JP301S

## Batch Transfer Peristaltic Pump



JP301S(Double channels)



JP300S

Typical Application Biocatalyst Transfer, Drug Filtration, Drug Transfer, etc.

### Technical Parameter

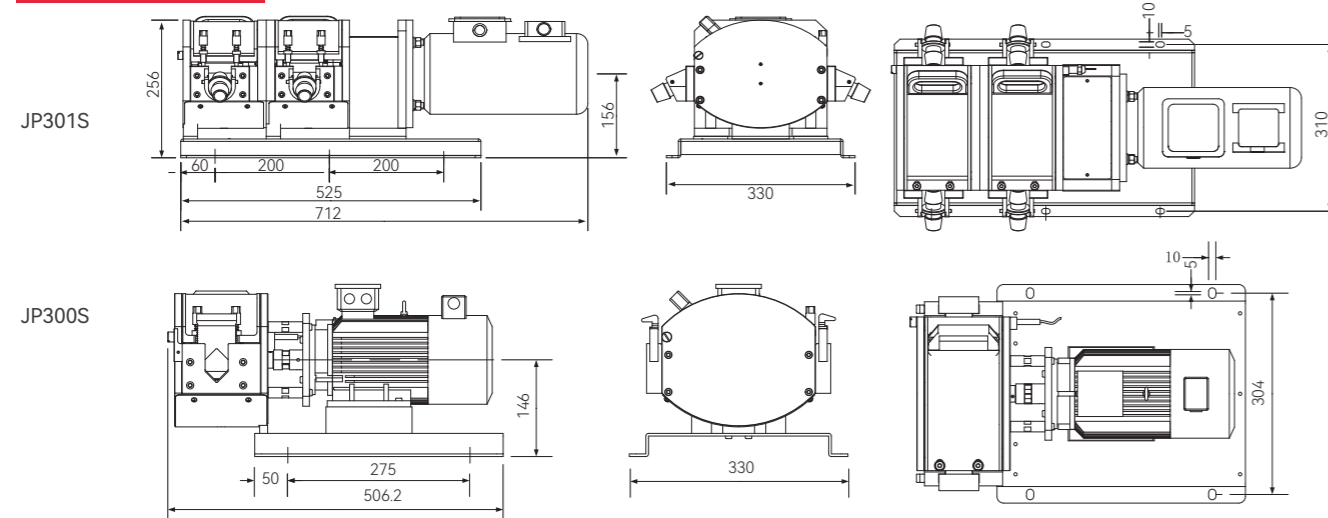
Parameter	JP301S	JP300S
Flow range	0.64~33L/min (single channel)	
Tube	88#, 92#, 193#, 191#	
Shell material	Aluminum alloy	
Rollers	4	
Speed range	30~350rpm/min	
Gap adjustment	Adjustable	
Working environment	Temperature 0 ~ 40°C	
Power supply	AC380V/220V	
Power consumption	1100W	400W
IP grade	IP54 (Not include frequency converter)	

### Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
JP301S-A3(AC380V) JP301S-A(AC220V)	PL48	2	88# 92# 193# 191#	0.64~33
JP300S-A3-V3(AC380V) JP300S-A2-V3(AC220V)	PL48	1	88# 92# 193# 191#	0.64~33

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Dimension(mm)



# BT600P Programming Peristaltic Pump

## Typical Application

Gradient Experiments, Pharmaceuticals, and more.

### Technical Parameter

Parameter	BT600P
Flow range	0.006~2900mL/min
Speed range	0.1~600rpm
Speed resolution	0.1rpm
Speed accuracy	< ±0.2%
Dispensing time	0.1~999.9 S/Min/H
Dispensing interval time	0.1~999.9 S/Min/H
Circle time	1~999
Dispensing volume	0.01uL~1000L
Working direction	Forward reverse reversible
Adjustment	Touch screen operation
Display	IPS liquid crystal
External control interface	5V/12V/24V level input optional; 0-5V/0-10V/4-20mA speed regulation optional
Analog input	Analog input 0-5V/0-10V/4-20mA software setting switching
Analog output	Analog output 0-5V
Input interface	DC5~24V
Communication interface	RS485 communication interface, Modbus protocol is available
Power supply	AC 100-240V, 50Hz/60Hz
Power consumption	<60W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Dimension(L×W×H)	Driver: 232mmx145mmx140mm Controller: 190mmx132mmx131mm
Weight	Driver: 3.15kg Controller: 0.96kg



### BT600P Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate(mL/min)
BT600P	YZ15/YZ15T	1,2	13# 14# 19# 16# 25# 17# 18#	0.006~1700
	YT25	1	114# 116# 15# 24# 35# 36#	0.16~2900

# BX600S Handheld Peristaltic Pump

### Technical Parameter

Power supply	DC10.8V lithium battery
Flow range	1.5~3700mL/min
Speed range	30~340rpm
Weight	1.05kg
Standard equipped	Drive, chargers, batteries, pump head, tube, protective box



### BX600S Applicable Pump Head, Tube and Flow Parameters

Pump Head	Pump Head	Flow Rate(mL/min)
YZ15/YZ15T	13# 14# 19# 16# 25# 17# 18#	1.5~1450
YZ25	15# 24#	50~1000
YT15	13# 14# 19# 16# 25# 17# 18#	1.8~1500
YT25	114# 116# 15# 24# 35# 36#	7.2~1700
KZ25	15# 24# 35# 36#	90~3700



protection box

## Typical Application

Outdoor water sampling, Emergency transfer or for use in locations without power supply

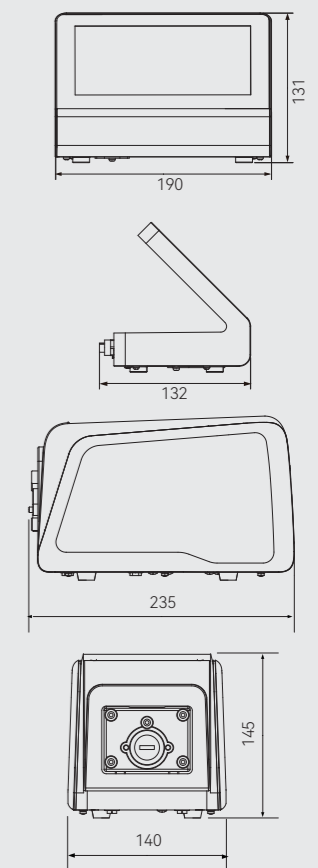
Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

## JP / BT600P ERIES

### Pump Head



### Dimension(mm)



# DS600 Peristaltic Filling System



## Pump Head



Typical Application Lyophilized powder production filling lines, Oral liquid filling lines, Disinfectant filling lines.

### Technical Parameter

Parameter	DS600
Flow range	0.005~3000mL/min
Filling range	0.01~9999.99mL
Speed range	0.1~600rpm
Speed resolution	0.1rpm
Speed accuracy error	< ±0.2%
Number of channels	3/4/5 channels, Supports up to 32-channel cascading
Filling time	0.01S~9999.99S
Pause time	0.01S~9999.99S
Loop count	1~999999(0 for infinite cycles)
Direction control	Freely adjustable bi-directional rotation
External control signal	Start signal input (dry contact), Distributed signal output (open-drain with weak pull-up)
Power voltage	100~240VAC
Display	7-inch HD color touchscreen
Operating environment	Ambient temperature 0~40°C, relative humidity <80%
Shell material	Stainless steel shell
Dimensions(L×W×H)	Three channels 550mm×183mm×260mm Four channels 705mm×183mm×260mm Five channels 855mm×183mm×260mm
Controller Dimensions	225.6mm×163.6mm×49.6mm
IP Grade	IP31
Weight	13.69kg(3channels) 17.4kg(4channels) 20.98kg(5channels)

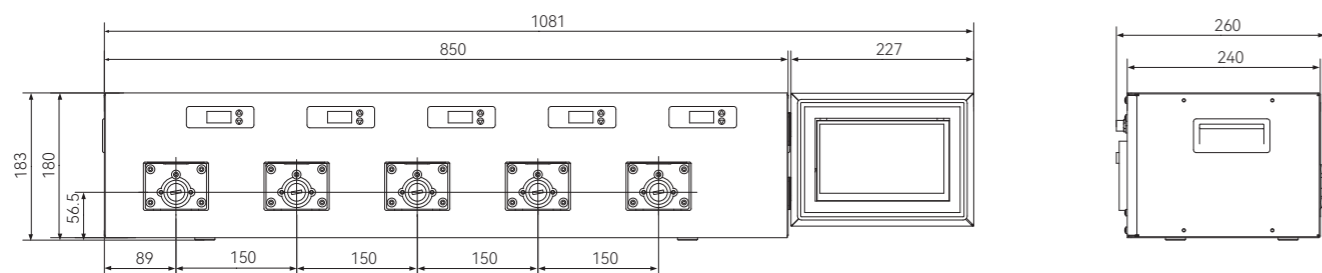
Filling Volume	Pump Head	Tube	Rotational Speed (r/min)	Filling Time (s)	Repeatability Error (%)
300μL	YZ(T)15	13#	>500	<0.6	<±2
500μL	YZ(T)15	13#	>500	<1	<±1
800μL	YZ(T)15	13#	>500	<1.6	<±1
1mL	YZ(T)15	13#	>500	<2	<±1
2mL	YZ(T)15	14#	>500	<1.1	<±1
3mL	YZ(T)15	14#	>500	<1.65	<±1
5mL	YZ(T)15	19#	>500	<1.68	<±1
8mL	YZ(T)15	16#	>500	<1.2	<±1
10mL	YZ(T)15	16#	>500	<1.5	<±1
20mL	YZ(T)15	25#	>500	<1.43	<±1
50mL	YZ(T)15	17#	>500	<2.11	<±1
200μL	DMD15	13#	>500	0.8	<±1.5
500μL	DMD15	13#	>500	1.13	<±1.5
1mL	DMD15	13#	>500	1.7	<±1
3mL	DMD15	14#	>500	1.1	<±1
5mL	DMD15	19#	>500	1.47	<±1.5
7mL	DMD15	19#	>500	1.95	<±1.5
10mL	DMD15	16#	>500	1.1	<±1.5
15mL	DMD15	16#	>500	1.42	<±1
20mL	DMD15	25#	>500	1.03	<±1.5
30mL	DMD15	25#	>500	1.34	<±1

### Filling Application Reference Table

Drive Type	Pump Head	Channel	Tube	Speed (rpm)	Filling Accuracy	Single Channel Flow Rate (mL/min)
DS600	YZ15/YZ15T	3	13# 14# 19# 16# 25# 17# 18#	> 500	±1%	0.005~2562
	YZ25	3	15# 24# 35# 36#	> 500	±1%	0.17~1800
	YT15	3	13# 14# 19# 16# 25# 17# 18#	> 500	±1%	0.006~2700
	YT25	3	15# 24# 35# 36#	> 500	±1%	0.18~3000
	DMD15	3	13# 14# 19# 16# 25#	> 500	±1%	0.1~2070

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Dimension(mm)



# HSP3000 Milliliter Peristaltic Pump

## Typical Application

Suitable for Micro-dosing of Magnetic Bead Liquids, Glycerol, Glycerol Serum, Glycerol Ethanol, Glycerol Paraffin Oil, Glycerol Mix Reagents, Glycerol Protease K, Cell Lysis Buffers, Urea, and other Trace Filling Applications.



### Technical Parameter

Parameter	HSP300
Filling range	25μL~3000μL
Accuracy	±2%
Channel	1(single), up to 16 channels cascade are supported
Filling time	0.01~999.99S
Interval time	0.40~3600S
Filling times	1~10000, 0 means circle.
Tubing	ID 0.5~4.8mm
Display	7 inch HD color touch screen
External control	Dry contact start signal, lack of bottle filling stop signal, feedback signal
Shell material	Aluminum alloy
Power supply	AC 100~240V 50~60 Hz
Power consumption	Single channel 35W
Working environment	Temperature 0 ~ 40°C, relative humidity < 80%
IP grade	IP31
Controller weight	1.5kg
Driver weight	3.2kg

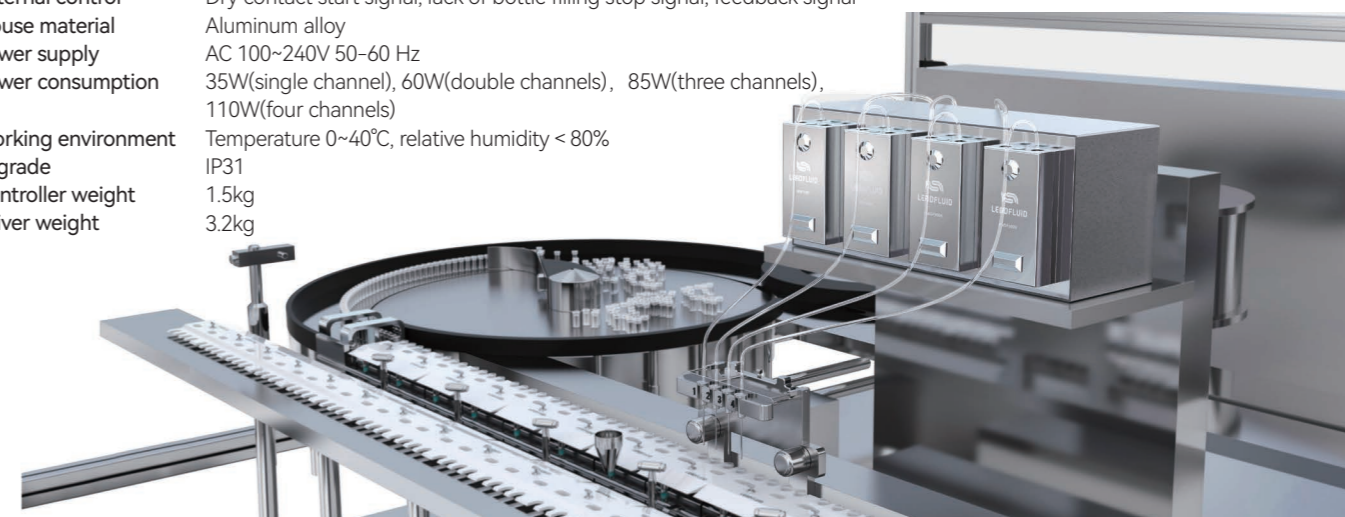


# WSP3000 Microliter Peristaltic Pump

Typical Application Suitable for micro-volume filling of magnetic bead solution, glycerol, glycerol serum, glycerol ethanol, glycerol paraffin oil, glycerol mix reagents, glycerol proteinase K, cell lysis buffer, urea, and more

### Technical Parameter

Parameter	WSP3000
Filling range	1μL~3000μL
Accuracy	10μL±0.15, 50μL±0.15, 100μL±1, 500μL±6, 1000μL±10, 3000μL±18
Channel	1(single), up to 16 channels cascade are supported
Filling time	0.01~999.99S
Interval time	0.4~3600S
Filling times	1~10000, 0 means circle
Tubing	ID 0.5~4.8mm
Display	7 inch HD color touch screen
External control	Dry contact start signal, lack of bottle filling stop signal, feedback signal
House material	Aluminum alloy
Power supply	AC 100~240V 50~60 Hz
Power consumption	35W(single channel), 60W(double channels), 85W(three channels), 110W(four channels)
Working environment	Temperature 0~40°C, relative humidity < 80%
IP grade	IP31
Controller weight	1.5kg
Driver weight	3.2kg



Pump Head



DMD15



KZ25



DMD25-T



YZ15T



YT25



YZ35



KL40



PL48



# High Protection Peristaltic Pump

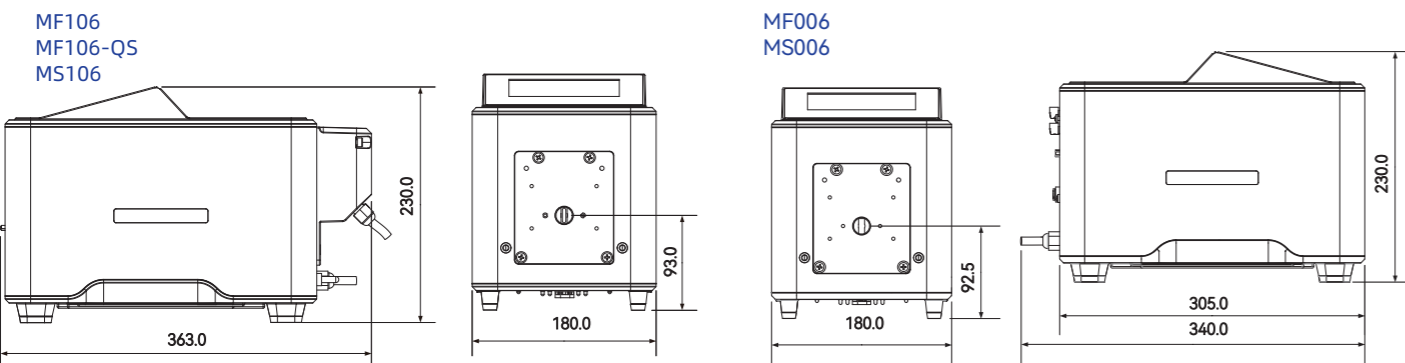
Application fields: Biopharmaceuticals, Mining, Petrochemical, Food Industry, and More

Typical Applications: Raw Liquid Transfer, Polycarboxylic Acid Synthesis Equipment, Mining Flotation Reagent Addition, etc.

## Technical Parameter

Parameter	MF106	MF106-QS	MF006	MF118	MF133	MS106	MS006
Flow range	0.006~7800mL/min			7~20000mL/min	10~33000mL/min	0.005~7700mL/min	
Speed range	0.1~360 rpm			0.1~265rpm	0.1~350rpm/min	0.1~350rpm	
Speed resolution	0.1rpm			0.1 rpm	0.1rpm	0.1 rpm	
Speed accuracy	< ±0.2%			< ±0.2%	< ±0.2%	< ±0.2%	
Power supply	AC 100-240V 50-60 Hz						
Power consumption	<180W			<400W	<350W	<180W	
Working environment	Working temperature 0~40°C, working humidity 80%						
Shell material	Aluminum						
IP grade	IP66/IP67	IP66/IP67	IP31	P66/IP67	P66/IP67	IP66/IP67	IP31
Dimension(L×W×H)	363x180x230mm			370*265*295 mm		363×180×230mm	
	340x180x230mm(MF006)					340×180×230mm(MS006)	
Weight	11kg	11kg	10.5kg	20kg	24KG(pump head included)	10.5kg	10kg

## Dimension(mm)

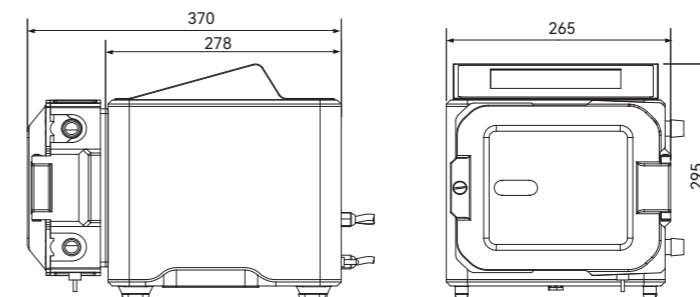


## Applicable Pump Head and Tube, Flow Parameters

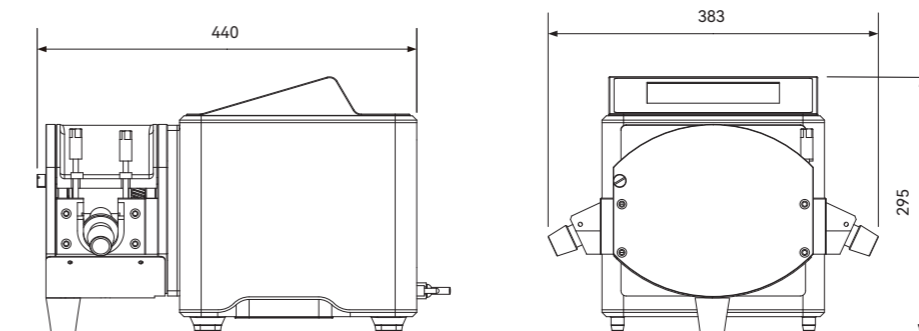
Drive Type	Pump Head	Channel	Tube	Single Channel Flow Rate (mL/min)
MF106 MF106-QS MF006	DMD15	1	13# 14# 19# 16# 25#	0.01~1266
	YZ15/YZ15T	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.006~1620
	YT25	1,2	15# 24# 35# 36#	0.16~1800
	KZ25	1	15# 24# 35# 36#	0.3~3600
	DMD25-T	1	114# 119# 116# 15# 24# 35# 36#	0.05~4000
MF118	YZ35	1	73# 82#	1.334~7800
	KL40	1	187# 186#	7~20000
	PL48	1	92#	9.4~33100
MF133		1	193#	2.2~7759
		1	88#	4~13800
		1	191#	8.2~28690
MS106 MS006	YZ15/YZ15T	1,2,4	13# 14# 19# 16# 25# 17# 18#	0.005~1575
	YT25	1,2	15# 24# 35# 36#	0.18~1750
	KZ25	1	15# 24# 35# 36#	0.31~3850
	DMD25-T	1	15# 24# 35# 36#	0.4~4200
	YZ35	1	73# 82#	1.33~7700

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### MF118

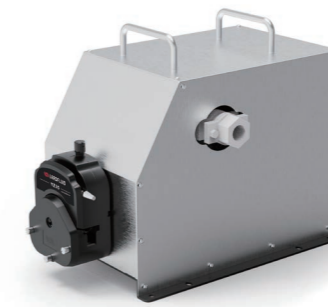


### MF133





FP300S-A3-K



FG601S-A3-K



FG600S-A3-k

## Variable Frequency Explosion-proof Motor Series Peristaltic Pump

## Explosion-proof Motor Peristaltic Pump

**Application Fields:** Biopharmaceuticals, Petrochemical, Mining, Textile Industry, Food Industry, and More  
**Typical Applications:** Mixing and Granulator, Wood Processing Industry, etc.

### Technical Parameter

Parameter	EF800 Series	AE900 Series (NEW)
Explosion proof level	Ex tb IIIC T130°C Db	Ex db IIC T4 Gb Ex tb IIIC T130°C Db
Flow range	0.005~7800mL/min	0.005~33000mL/min
Speed range	0.1~360rpm	0.1~600rpm
Speed resolution	0.1 rpm	0.1 rpm
Speed accuracy	<±0.2%	<±0.2%
Display	4.3 inch industrial grade color LCD screen	5 inch industrial grade color LCD screen
Operation	Explosion proof button with 8 keys	Explosion proof button with 8 keys
Working mode	Flow mode, volume dispensing mode, time dispensing mode, external control mode	Flow mode, volume dispensing mode, time dispensing mode, external control mode, programming mode
Communication interface	RS485, Ethernet support Modbus protocol	RS485, Ethernet support Modbus protocol, Profibus extension (optional)
Power supply	AC 100~240V 50Hz~60Hz	AC 100~240V 50Hz~60Hz
Power consumption	<200W	<400W
Working environment	Temperature 0~40°C, relative humidity < 80%	Temperature 0~40°C, relative humidity < 80%
Shell material	Aluminum	Aluminium alloy
IP grade	IP66	IP66
Driver dimension(L×W×H)	361.5mm×180mm×224.3mm	318mm×258mm×288mm
weight	12kg	28kg

### Flexible Tube Model And Flow Parameters

Pump Drive	Channel	Tube	Flow Range (mL/min)	Pump Drive	Channel	Tube	Flow Range (mL/min)
EF803-YZ25	1,2	15#24#	0.17~1100	AF903-YZ25	1~10	15# 24#	0.17~1800
EF806-DMD15	1	13#14#19#16#25#	0.01~1200	AF903-YZ15/YZ15T	1~10	13# 14# 19# 16# 25# 17# 18#	0.005~2700
EF803-YZ15/YZ15T	1,2,4	13#14#19#16#25#17#18#	0.005~1600	AF903-YT15	1~10	13# 14# 19# 16# 25# 17# 18#	0.006~2700
EF803-YT15	1,2,4	13#14#19#16#25#17#18#	0.006~1600	AF903-YT25	1~10	15# 24# 35# 36#	0.17~3000
EF803-YT25	1,2	15#24#35#36#	0.17~1800	AF906-DMD25-T	1,2	114# 119# 116# 15# 24# 35# 36#	0.058~4300
EF806-DMD25-T	1	114#119#116#15#24#35#36#	0.058~4300	AF906-KZ25	1,2,4	15# 24# 35# 36#	0.3~6600
EF806-KZ25	1	15#24#35#36#	0.3~3900	AF906-YZ35	1,2	73# 82#	1.3~13000
EF806-YZ35	1	73#82#	1.3~7800	AF918-KL40	1	186# 187#	7.8~20000
				AF933-PL48	1	193# 88# 191# 92#	2.2~33000

### Technical Parameter

Parameter	FP300S-A3-K	FG601S-A3-K	FG600S-A3-K
Pump head	PL48	YZ35	YZ15, YZ25, YT15, YT25, KZ25, KZ25-L
Flow range	0.6~33L/min	1000~13000mL/min	4~6000mL/min
Speed range	34.5~350rpm	72~600rpm	72~600rpm
Speed resolution	0.1Hz (corresponding speed 0.77rpm)	0.1Hz (corresponding speed 2rpm)	0.1Hz (corresponding speed 2rpm)
Speed accuracy	< ±3%		
Adjust speed	Frequency converter stepless speed (standard frequency converter motor without connection cable)		
Display function	Frequency converter display the Hz or flow rate (analog)		
Control function	Adjust speed, start/stop, reversible direction, analog speed control, RS485 communication		
Power supply	3 phase 380V 50Hz		
Power consumption	400W	0.55KW	0.55KW
Anti-explosion grade	ExdIIBT4		
IP grade	IP55 (motor)		
Working environment	Temperature 0~40°C, relative humidity < 80%		
Dimension (L×W×H)	460×330×413mm	462×330×422 mm	462×330×422 mm
Weight	49Kg	37Kg	37Kg

### Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Flow Rate(mL/min)
FP300S-A3	PL48	1	88# 92#191#193#	600~33000
FG601S-A3	YZ35	1~2	73# 82#	1000~13000
FG600S-A3	YZ15/YZ15T	1~4	13# 14# 19# 16# 25# 17# 18#	4~2479
	YT25	1~4	15# 24# 35# 36#	120~2900
	KZ25/KZ25-L	1~2	15# 24# 35# 36#	177~6000

### Pump Head





FG601S-W3



FG600S-W3

## Explosion-proof Motor Peristaltic Pump

### Technical Parameter

Parameter	FG601S-W3	FG600S-W3
Pump head	YZ35	YZ15/YZ15T, YT25, KZ25, KZ25-L
Flow range	1800~13000mL/min	8~6000mL/min
Speed range	135~600rpm	
Adjust speed	Manual stepless adjust speed	
Control function	Manual speed regulation function	
Power supply	3 phase 380V 50HZ	
Power consumption	400W	
Working environment	Temperature 0~40°C, relative humidity < 80%	
Motor anti-explosion grade	ExdII BT4	
IP grade	IP55(motor)	
Dimension(L×W×H)	538×330×472 mm	462×330×422mm
Weight	36.5Kg	

### Applicable Pump Head and Tube, Flow

Drive Type	Pump Head	Channel	Tube	Flow Rate(mL/min)
FG601S-W3	YZ35	1~2	73# 82#	1800~13000
FG600S-W3	YZ15/YZ15T	1~4	13# 14# 19# 16# 25# 17# 18#	8~2479
	YT25	1~4	15# 24# 35# 36#	225~2900
	KZ25/KZ25-L	1~2	15# 24# 35# 36#	332~6000

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only



- Typical Applications:**  
 FP300S-A3 FG601S-A3 FG600S-A3
- Coating and Granulation
  - Flammable Liquid Filling
  - Chemical Synthesis Reactions
  - Petroleum Refining

## Pump Head



### YZ15/YZ15T

Flow range ≤2817mL/min(Pharmed)  
 ≤2479mL/min(Silicone)  
 Applicable tubing 13#14#19#16#25#  
 17#18#



### YZ35

Flow range ≤13L/min  
 Applicable tubing 73#82#



### DT10/15

Flow range ≤2240mL/min  
 Applicable tubing 13#14# wall 0.8~1mm,  
 ID≤3.17mm(DT10)  
 19#16#25#17#(DT15)  
 Channel 1,2,4,8



### WMD15

Flow range ≤1740mL/min  
 Applicable tubing 13#14#19#16#25#17#



### FT1524

Flow range ≤889mL/min  
 Applicable tubing 13#14#19#16#25#  
 17#18#



### FT1505

Flow range ≤550mL/min  
 Applicable tubing 120#13#14#19#16#  
 25#



### DMD15

Flow range ≤2070mL/min  
 Applicable tubing 13#14#19#16#  
 25#



### YT25

Flow range ≤3000mL/min  
 Applicable tubing 114#116#15#24#  
 35#36#



### KZ25-L, KZ25-PC/PPS

Flow range ≤6600mL/min  
 Applicable tubing 15#24#35#36#  
 Material PC, PPS, Alufer



### DG/DS

Flow range ≤49mL/min((DG)  
 ≤50mL/min((DS)  
 Applicable tubing Wall 0.8~1mm, ID≤3.17mm  
 Channel 1,2,4,8,12  
 Roller 6,10



### DMD25-T

Flow range ≤4200mL/min  
 Applicable tubing 114#119#116#15#  
 24#35#36#



### GN10

Flow range ≤78mL/min  
 Applicable tubing 2.5×4mm  
 4×6mm(PTFE)



### BZ15, BZ25

Flow range ≤2100mL/min  
 Applicable tubing 13#14#19#16#25#  
 17#18#(BZ15)  
 15#24#(BZ25)

## ZN90 /100/60Pulse Damper



ZN90

	ZN90-PE	ZN90-PTFE
Tube Material	Silicone,Pharmed,PVC,Viton,A-60-G/F	
Tube ID	1.6~9.6mm	
Connector	External thread~ turret connector	
Volume	180mL	
Maximum Pressure	0.3Mpa	
Dimension	90×90×90mm	
Shell	PE	PTFE
Seal Material	EPDM	FFKM
Working Temperature	0~40°C	0~80°C
Temperature change	< 5°C/min	< 5°C/min
Weight	220g	510g

The Lead Fluid ZN90 pulse damper is a damper developed specifically for peristaltic pumps. It is a pressure vessel divided into upper and lower chambers. The lower chamber contains the fluid being pumped, while the upper chamber contains gas. Due to the compressibility of the gas, it absorbs the pulsation instantaneously, allowing the system to achieve stable liquid flow and pressure, thereby reducing pulsation.



ZN60

The Lead Fluid ZN100/60 pulse damper features a unique dual-sided flexible buffer film design that absorbs pulsating flow in the fluid delivery line, effectively smoothing out pulse fluctuations in the tube, resulting in smoother fluid delivery. The pulse damper is equipped with buffer film of various thickness specifications, expanding its applicability to a wider range of flow rates. It boasts excellent resistance to high temperatures and chemical corrosion and is also explosion-proof. This damper is suitable for low-flow applications and can be used in equipment, instruments, laboratories, and other matching scenarios.

The recommended pressure value for the ZN60 buffer film specification.

The thickness of the buffer film	Max Working Pressure	Holding pressure	
0.1mm	0.12MPa	0.15MPa	Note: The damper is equipped with a 0.5mm buffer film by default, and the accessory package also includes 0.1mm and 0.2mm buffer film and buffer membrane gaskets. Please choose the buffer film to replace according to the pressure and flow requirements. For specific replacement methods, please refer to the operation manual.
0.2mm	0.13MPa	0.16MPa	
0.5mm	0.15MPa	0.18MPa	



ZN100

The recommended pressure value for the ZN100 buffer film specification

The thickness of the buffer film	Max Working Pressure	Holding pressure	
1mm	0.03 MPa	0.15 MPa	Note: The default configuration is a 1mm buffer film. Buffer films with thicknesses ranging from 2mm to 5mm are custom configurations. You can choose to customize a buffer film with a thickness of 2mm to 5mm according to pressure requirements.
2mm	0.05 MPa	0.16 MPa	
3mm	0.08 MPa	0.20 MPa	
4mm	0.14 MPa	0.23 MPa	
5mm	0.14 MPa	0.23 MPa	

Type	Threaded Joint			Tube	Size Parameters (mm)						
	Specification	No.			D	H	L	Do	Di	r	x
ZN60	A	1/8-2.4	1070301100023	14#, 19#	58	32.5	85	3.6	1.8	45	3
	B	1/8-3.2	1070301100024	16#, 19#			91	4.8	2.3		
	C	1/8-4.0	1070301100026	16#, 25#			95	5.8	2.8		
	D	1/8-4.8	1070301100027	15#, 25#			99	7.1	3.5		
	E	1/8-6.4	1070301100036	17#, 24#			112	8.9	4.8		
ZN100	A	3/8-6	1070301100071	16#, 15#, 25#	99	63	162	6.5	3.5	41	4
	B	3/8-8	1070301100072	17#, 24#			162	8.5	5		
	C	3/8-10	1070301100067	18#, 35#			168	10.5	7		
	D	3/8-12	1070301100068	36#, 73#			172	12.5	8		
	E	3/8-14	1070301100069	73#, 82#			174	14.5	10		
	F	3/8-16	1070301100070	82#			174	16.5	12		

## Filling Table

Filling Needle	Tube	Mainly used for small batches of single and multiheads, increase productivity
ZT-1	13#, 0.5×0.92mm	Dimensions: 290×180×250mm
ZT-2	1×0.92mm	Table size: 210×140mm
ZT-3	14#,19# 2×0.92mm ,3×0.92mm	Filling head: 1~4channele (other quantities can be customized)
ZT-6	16#,25# ,15#	Needle interval range: ≥35mm
ZT-8	17# ,24#	Container height: ≤150mm Material: SS304



## SF01 Hand Dispenser

The hand dispenser is equipped with LEAD FLUID ZT series filling needles, which is mainly suitable for manual and semi-automatic dispensing of peristaltic pump. The grip is comfortable, small in size and light in weight.

Dimensions  
ID≤8mm, wall thickness≤2.4mm



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 table or self-supporting fixing bracket.



### Lead Fluid Silicone Tubing

Excellent biocompatibility, Odorless, non-toxic, no plasticizer, very little precipitation. The inner wall is very smooth and has good antibacterial performance. Suitable for neutral liquids, weak acids, weak bases and some low-concentration solvents.



### Tygon®Pharmed BPT Long-life Tubing

It is suitable for medium acid and alkali liquid transmission, cell culture, fermentation, synthesis, separation, purification and process control (can be used for sensitive cell culture), filtration and fermentation, sterile filling, and has long service life.



### Tygon®Chemical Delivery Tubing for Long Life

It is resistant to strong acids and alkalis and strong corrosive organic solvents, and can transport 98% concentrated sulfuric acid, acetone, and toluene.

## Tube Connector Materials: PP,PVDF,SS316,etc.

Straight, Y Type, T Type		Adjustable Joints			
1.6mm	7.9 mm	2.4-1.6mm	4.8-2.4mm	6.4-4.8mm	9.6-7.9mm
2.4 mm	9.6 mm	3.2-1.6mm	4.8-3.2mm	7.9-4.8mm	9.6-8.0mm
3.2 mm	12.7 mm	3.2-2.4mm	6.3-3.5mm	7.9-6.4mm	12.7-6.4mm
3.9 mm	12.7 mm	3.9-2.4mm	6.3-4.8mm	8.0-6.3mm	12.7-7.9mm
4.8 mm		3.9-3.2mm	6.4-3.2mm	9.5-6.4mm	12.7-9.6mm
6.4 mm		4.8-1.6mm	6.4-3.9mm	9.6-6.3mm	

## Foot Switch JT101

### Features

Mainly cooperate with Lead Fluid's full range of products to control the start and stop of the pump.

Dimensions 103×72×25mm  
IP grade IP54

## Anti-adsorption Countersunk

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

## Dispensing Needles

Model	Material	Dimension mm (ID×OD×H)	Tubing
ZT-1	304	0.7×0.9×100	13# , 0.5×0.92mm
ZT-2	304	1.8×2×100	1×0.92mm
ZT-3	316L	2×3×100	14#,19# 2×0.92mm,3×0.92mm
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-12-4	316L	4×12×80	36#,73#
ZT-16	316L	13×16×100	82#

# Lead Fluid Silicone Tubing

Lead Fluid silicone tubing is made of imported silicone rubber material and processed by platinum vulcanization process, high cleanliness, excellent elasticity and abrasion resistance, it is a high-quality peristaltic pump tube and transmission tube. It is widely used in pharmaceutical, bioengineering, fine chemical, food, medical and other fields.

### Function and Feature:

1. Has excellent biocompatibility.
2. Odorless, non-toxic, no plasticizer, very little precipitation.
3. The inner wall is very smooth and has good antibacterial performance.
4. Good elasticity, can quickly restore shape after radial compression (shore hardness:50~55)
5. Weatherproof, ozone-resistant, anti-radiation, excellent anti-aging performance.
6. Suitable for neutral liquids, weak acids, weak bases and some low-concentration solvents.
7. Temperature resistance range -50~230°C under static state, -40~100°C temperature resistance under working condition.
8. Can use hot water, distilled water for cleaning; high temperature and high pressure, ethylene oxide, gamma ray sterilization.
9. The color is transparent, translucent to milky white, etc.

### Silicone Tubing Specifications:

Tubing No.	0.5x0.92	1x0.92	2x0.92	2.4x0.92	3x0.92	13#	14#	19#	16#	25#	17#	18#		
Tubing section (1:1)														
Wall thickness (mm)	0.92					1.6								
ID (mm)	0.5	1.0	2.0	2.4	3.0	0.8	1.6	2.4	3.1	4.8	6.4	7.9		
Tubing pressure (Mpa)	Continuous	0.1					0.17					0.14	0.1	0.07
	Interval	0.1					0.27					0.24	0.14	0.1

Tubing No.	114#	119#	116#	15#	24#	35#	36#	
Tubing section (1:1)								
Wall thickness (mm)	2.4							
ID (mm)	1.6	2.4	3.1	4.8	6.4	7.9	9.6	
Tubing pressure (Mpa)	Continuous	0.17					0.14	
	Interval	0.27					0.24	

Tubing No.	73#	82#	193#	191#	88#	92#
Tubing section (1:1)						
Wall thickness (mm)	3.3			4.8		
ID (mm)	9.6	12.7	9.5	19	12.7	25.4
Tubing pressure (Mpa)	Continuous	0.17	0.1	0.14		
	Interval	0.27	0.1	0.14		

1. The tubing picture in the table is a 1:1 cross-sectional view of the actual product
2. The tubing specifications are marked with a tubing no. or "ID x wall thickness", such as: 25# or 4.8x1.6mm.
3. The wall thickness of 1.6mm or more can adapt to the higher speed of the peristaltic pump, generally up to 600rpm.
4. High speed cannot be used below 1.0mm wall thickness, generally not more than 100rpm.

# Imported Pump Tubing



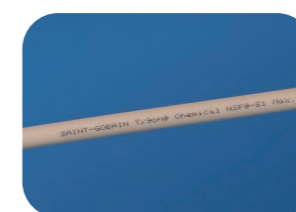
### Tygon S3™ E-3603

Tygon S3™ tubing based on bio-materials combines high-performance standards required by customers with bio-environmentally friendly requirements. Crystal-like transparency, flexibility, durability, and anti-cracking characteristics make the delivery performance of the new Tygon S3™ E-3603 tube meet your needs. Tygon S3™ E-3603 tubing does not contain phthalate plasticizers and is used to transport the most demanding food and beverages. It will not be oxidized and contaminated, and the air tightness is better than that of a rubber tube. The glass-smooth cavity helps prevent particles from accumulating and facilitates cleaning.



### Tygon® SPT-3350

The inner surface smoothness of Tygon® SPT-3350 silicone tube is three times that of other silicone tubes, reducing the risk of particle retention and micro-scale fouling when transporting fluid. Due to the smoother fluid flow, the overall hygiene of the conveying system is also better. Tygon® SPT-3350 silicone tubing will not be clogged even if it is reused, which is helpful for thorough cleaning and disinfection. Comply with USP Class VI, FDA and NSF related standards. The biocompatibility of Tygon3350 can reach ISO10993 standard. The max operating temperature can reach 205 °C.



### Tygon® Chemical

As a high-performance co-extrusion product, Tygon chemical peristaltic pump tubing adopts a special formula to ideally combine chemical resistance and pump tubing life. Its inert, super-smooth, plasticizer-free inner cavity can inhibit fluid adsorption or adhesion, and its Tygon elastic outer layer ensures long pump tube life. Tygon chemical peristaltic pump tubing is the best choice for disinfection and detergent delivery.

- Long life of peristaltic pump tube
- Excellent chemical resistance
- Meets FDA's food contact requirements
- Hardly affected by chemical disinfectants and cleaning agents.
- Withstand a wide temperature range, from -60°C to 74°C
- Plasticizer-free cavity
- Anti-fluid adsorption/adhesion performance



### Tygon® Pharmed BPT

Maintains the integrity of the fluid during delivery, and delivers fluid through a peristaltic pump, reducing the risk of fluid contacting any part of the pump body. It has a long service life of the pump tube, shortens the production downtime caused by the failure of the pump tube, and simplifies the production process. The PharMed® BPT tubing is easy to clean and disinfect. It is compatible with almost all commercially available cleaning agents and disinfectants, and it can also be exposed to up to 5MRads of cobalt 60 gamma irradiation. In terms of gas and vapor permeability, PharMed® BPT tubing is lower than silicone tubing. PharMed® BPT tubing has good chemical resistance and excellent resistance to acids, alkalis and oxides. Since it is impervious to visible and UV light, PharMed® BPT hose helps protect light-sensitive fluids.

- The service life of the peristaltic pump tube is 30 times better than that of the silicone tube
- High temperature and high pressure sterilization can be repeated
- The temperature range is -60F(-51°C) to 275F(135°C)
- Can withstand repeated CIP and SIP
- Comply with REACH, RoHS, USP Class VI, FDA, NSF and ISO 10993 certification

# TYS01-02 Dual Rate Syringe Pump

One Machine, Dual Execution  
Say Goodbye to Equipment Redundancy  
Double Your Efficiency



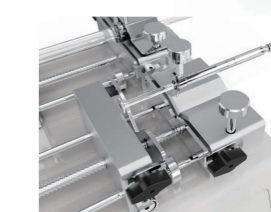
Typical Applications:  
Microfluidic Chips, Microsphere Preparation, Organoid Culture and More.

## Reference Table of Syringe Specifications and Flow Rate

Syringe	Syringe ID	Mix Flow	Max Flow
0.5µL	0.103mm	8pL/min	1.249µL/min
1 µL	0.146mm	16pL/min	2.511µL/min
2 µL	0.206mm	33pL/min	4.999µL/min
5 µL	0.343mm	83pL/min	12.497µL/min
10µL	0.485mm	184pL/min	24.004µL/min
25µL	0.729mm	417pL/min	54.233µL/min
50µL	1.03mm	833pL/min	108.264µL/min
100µL	1.457mm	1.667nL/min	216.638µL/min
250µL	2.304mm	4.169nL/min	541.724µL/min
500µL	3.256mm	8.326nL/min	1.081mL/min
1000 µL	4.608mm	16.676nL/min	2.167mL/min
1mL	4.699mm	17.342nL/min	2.253mL/min
3mL	8.585mm	57.885nL/min	7.521mL/min
5mL	11.989mm	112.89nL/min	14.668mL/min
10mL	14.427mm	163.469nL/min	21.241mL/min
20mL	19.05mm	285.027nL/min	37.034mL/min
30mL	21.59mm	366.09nL/min	47.568mL/min
50mL	26.594mm	555.459nL/min	72.174mL/min
60mL	26.594mm	555.459nL/min	72.174mL/min
100mL	35.7mm	1000.982nL/min	150.147mL/min

### Three Operating Modes, Covering All Scenarios

- Independent Mode
- Synchronous Mode
- Programming Mode

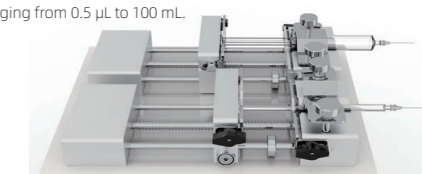


### Quick Installation Time-Saving and Effortless

The syringe can be securely fixed with one hand

### Powerful Compatibility

Compatible with a variety of syringes ranging from 0.5 µL to 100 mL.



### Tygon® A-60-F

Tygon® A-60-F tubing is designed to transport the specified food or beverage in the temperature range of -59°C to 135°C without cracking or aging.

The tubing has excellent flexibility, simple and quick installation, anti-knot and anti-deformation. Its excellent resistance to bending fatigue makes this tubing particularly suitable for use in peristaltic pumps for dispensing equipment.

Because the tubing can be repeatedly heated and pressurized, it can be steam cleaned online without frequent replacement. When it is strictly disinfected, it exhibits excellent chemical resistance and is completely unaffected by various cleaning methods.

- Long service life in peristaltic pumps
- Wide temperature range, from -59°C to 135°C
- Can withstand almost all common disinfectants and cleaning agents
- Ozone and UV resistant
- Can be heated and pressurized repeatedly
- Chemical resistance to a variety of foods and cleaning agents



### Versilon™ F-5500-A \ Viton®

Versilon F-5500-A \ Viton®

Made of patented fluorine rubber, its physical and chemical properties make it an ideal choice for harsh environment hoses, such as dry cleaning cleaning fluids and solvent recovery systems, where most tubing are not suitable.

Can work continuously at temperatures up to 400°F (204°C). At the same time, the black body of the tubing can protect the transported light-sensitive materials, and will not crack and age prematurely under the influence of ozone, sunlight and bad weather.

- Can work continuously at temperatures up to 204°C
- Excellent resistance to corrosion chemicals, oils, fuels and solvents
- Resistance to ozone and sunlight, good weather resistance
- Opaque black can protect light-sensitive fluids



### Tygon® F-4040-A

Tygon® F-4040-A fuel and lubricating oil delivery tube can withstand the swelling and hardening caused by hydrocarbon fluids, so it is specially designed to deliver most fuels and industrial lubricants. The application of the tubing can significantly reduce failures caused by rupture and leakage. Its extremely low precipitation can protect the conveyed fluid or steam from being mixed with impurities.

- Embrittlement resistance
- Compatible with most hydrocarbons
- Anti-swelling
- Excellent flexibility, high flexibility, easy to install
- Specially used to transport fuel and lubricants
- Ozone and UV resistant



### Tygon® 2475

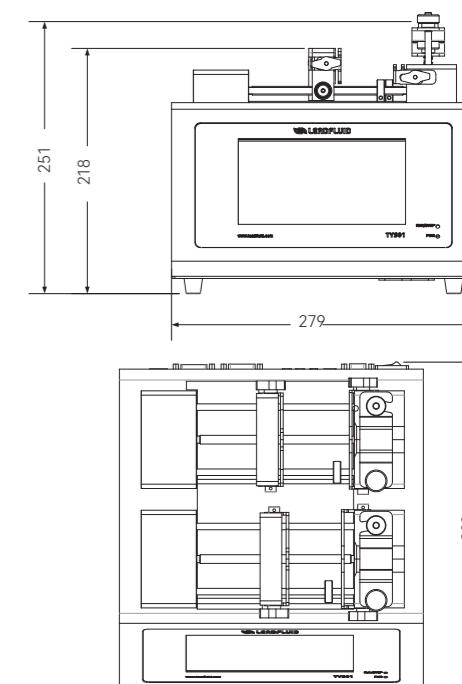
No plasticizers, no particles precipitated.

Good hydrophobicity, very smooth inner wall; resistant to corrosion by strong acids, strong alkalis and a variety of organic solvents.

## Technical Parameter

Parameter	TYS01-02
Work mode	Independent mode: Infuse, withdraw, infuse / withdraw, withdraw/infuse, continuous mode Synchronous mode: Infuse, withdraw Program mode: Infuse, withdraw
Number of channel	2
Stroke of pump	110mm
Advance per microstep	0.156µm/µstep
Linear speed	1µm/min - 150mm/min
Dispensing Positioning Precision	±0.35% (>30% of pump stroke)
Zeroing Accuracy	±0.05%
Max rated linear force	35kg, adjustable thrust
Operation mode	Touch screen + button
Display	7-inch color LCD screen display
Power-off memory	Storing the running parameters automatically
External control	External signal control for start/stop operations (two rode control direction and two for start/stop statue), 5-24V wide input voltage range; Status signal output (two rode indication of start status, two rode indication of direction signal)
Communication interface	RS485, MODBUS protocol (external function)
Power supply	AC 100-240V 50/60Hz
Power consumption	<65W
Working environment	Temperature 5~40°C, relative humidity < 80%
IP grade	IP31
Driver dimension mm(L×W×H)	279*300*251
Weight	7.55kg
Syringe selection	0.5µL-100mL (single syringe)

## Dimension(mm)

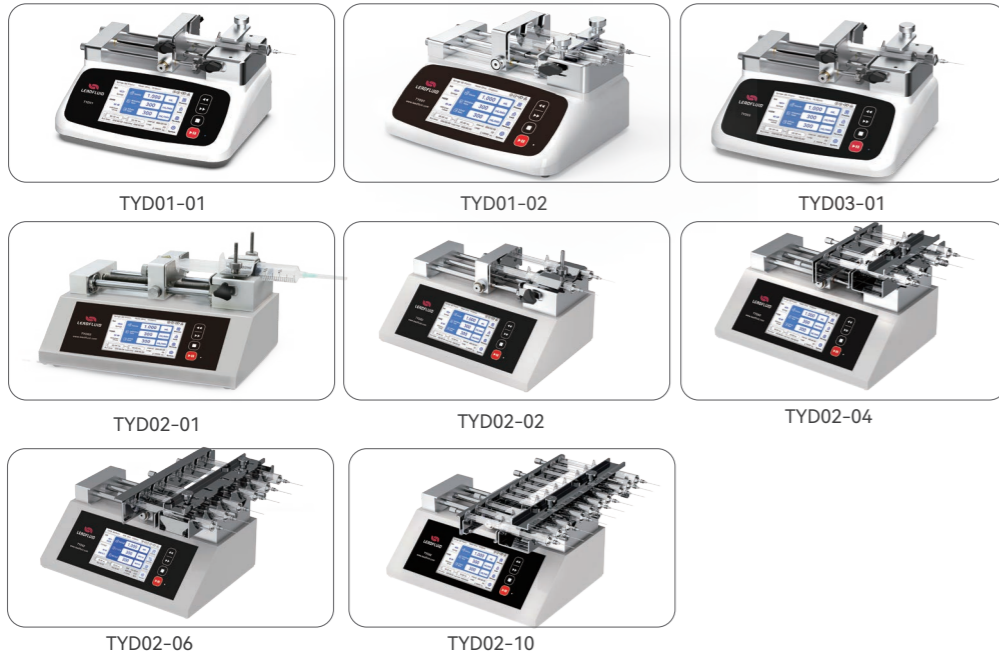


Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

# TYD Series Laboratory Syringe Pump

- Add vertical screen mode and support horizontal and vertical screen switching for more convenient display.
- Integrated design, wide-angle high-definition display.
- Multiple operational modes with smooth flow rate.
- Pre store multiple sets of data, meet high-precision control requirements.

**Typical Applications:** Microsphere Preparation Machines, Electrospinning, Animal Experiments, Coating Machines, Mass Spectrometers, and Other Equipment.



## Reference Table of Syringe Specifications and Flow Rate

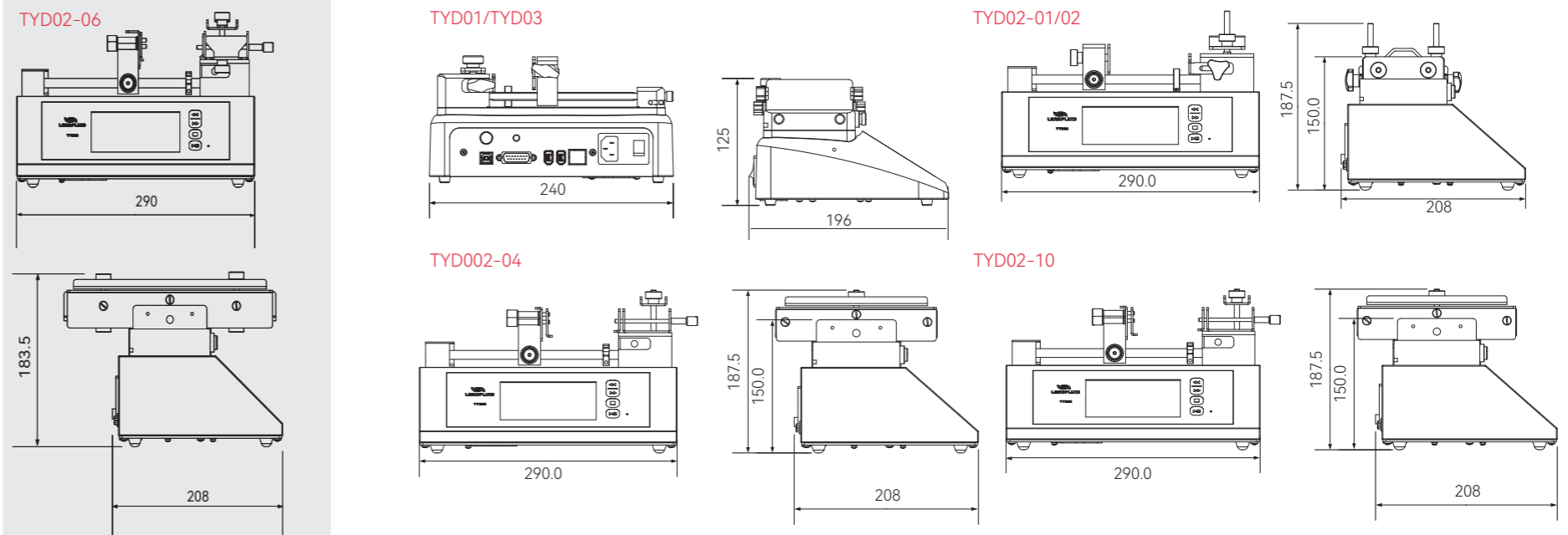
Syringe	Syringe ID	Mix Flow	Max Flow
10µL	0.485mm	184.00pL/min	27.71µL/min
25µL	0.729mm	417.00pL/min	62.608µL/min
50µL	1.03mm	833.00pL/min	124.984µL/min
100µL	1.457mm	1.667nL/min	250.092µL/min
250µL	2.304mm	4.169nL/min	625.383µL/min
500µL	3.256mm	8.326nL/min	1.248mL/min
1000µL	4.608mm	16.676nL/min	2.501mL/min
1mL	4.699mm	17.342nL/min	2.601mL/min
3mL	8.585mm	57.885nL/min	8.682mL/min
5mL	11.989mm	112.890nL/min	16.933mL/min
10mL	14.427mm	163.469nL/min	24.520mL/min
20mL	19.05mm	285.027nL/min	42.754mL/min
30mL	21.59mm	366.090nL/min	54.913mL/min
50mL	28.998mm	555.459nL/min	83.318mL/min
60mL	28.998mm	555.459nL/min	83.318mL/min
100mL	35.7mm	1000.982nL/min	150.147mL/min
140mL	38.4mm	1158.117nL/min	173.718mL/min

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

## Technical Parameter

Parameter	TYD01-01	TYD01-02	TYD02-01	TYD02-02	TYD03-01	TYD02-04	TYD02-6	TYD02-10
Work mode	Infuse,withdraw,infuse /withdraw,withdraw/infuse,continuous mode							
Number of channel	1	2	1	2	1	4	6	10
Stroke of pump	110mm		140mm		110mm	140mm		
Advance per microstep	0.156µm/µstep 2		0.156µm/µstep		0.03125µm/µstep	0.156µm/µstep		
Linear speed	1µm/min~150mm/min		1µm/min ~150mm/min		0.2µm/min ~30mm/min	1µm/min ~150mm/min		
Syringe size	10µL~60mL		10µL~140mL		10µL~60mL	10µL~10mL 10µL~60mL	10µL~60mL	10µL~60mL
Flow range	0.184nL/min~83.318mL/min		0.184nL/min~173.718mL/min		0.037nL/min~16.663mL/min	0.184nL/min ~24.520mL/minTYD02-04	0.184nL/min(10µL) ~ 83.318mL/min(60mL) TYD02-06	0.184nL/min ~24.520mL/minTYD02-10
Liner speed	>16kgf		>20kgf		>16kgf	>20kgf		
Thrust regulation	25%~100% adjustable							
Accuracy	<±0.35%,(>30% of pump stroke)							
Flow calibration	Through the calibration procedure to obtain more accurate fluid volume							
Display	5-inch color LCD screen display and transfusion volume, residual fluid volume, flow ,operation direction,syringe specification, etc. Animation display operation							
Operation mode	Touch screen + button							
Power-off memory	Storing the running parameters automatically							
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 startup and stop status ,1 road directional signal							
Communication interface	RS485, MODBUS interface, WIFI(optional)							
Driver dimension mm(L×W×H)	240×196×125	240×196×125	290×208×187.5	290×208×187.5	240×196×125	290×208×187.5	290×258×183.5	290×290×187.5
Weight	2.95kg	2.95kg	4.95kg	4.95kg	2.99kg	5.35kg	5.55kg	5.75kg
Power supply	AC100~240V, 50/60Hz							
Working environment	Temperature 5~40°C, relative humidity < 80%							
IP grade	IP31							
Syringe selection	Built-in main manufacturers, the main model syringe to choose. Can use custom syringe, direct input syringe size and diameter							

## Dimension(mm)



# TFD Series

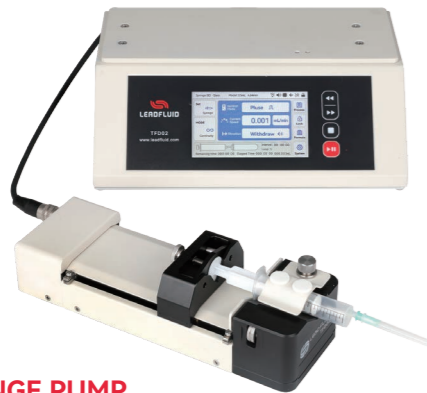
## Split Style Laboratory Syringe Pump



**TFD01-01 SYRINGE PUMP**  
 Syringe: 5µL~1mL  
 Flow Range: 0.058nL/min(5µL)~1.587mL/min(1mL)



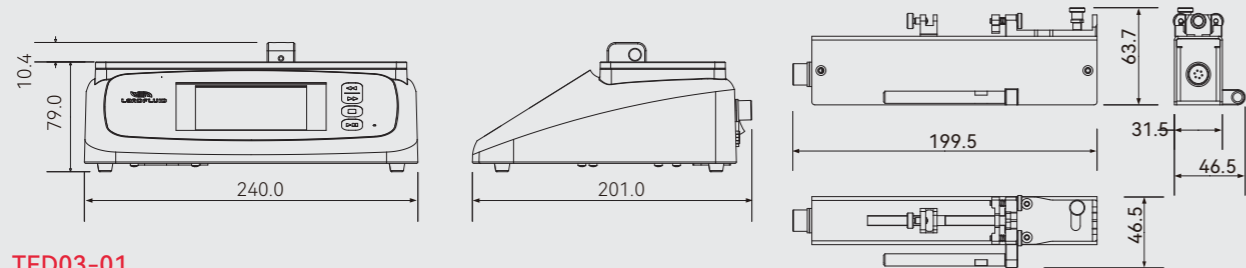
**TFD03-01 SYRINGE PUMP**  
 Syringe: 0.5µL~100µL  
 Flow Range: 0.005nL/min(10µL)~152.456µL/min(100µL)



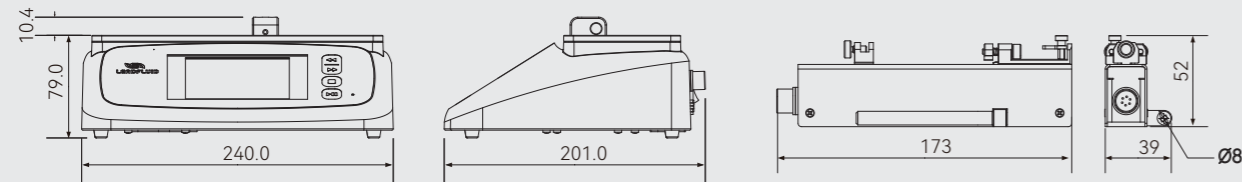
**TFD02-01 SYRINGE PUMP**  
 Syringe: 10µL~60mL  
 Flow Range: 0.184nL/min~83.318mL/min

### Dimension (mm)

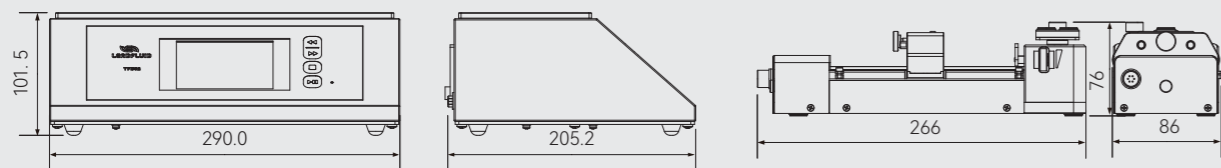
**TFD01-01**



**TFD03-01**



**TFD02-01**



### Technical Parameter

Parameter	TFD01-01	TFD03-01	TFD02-01
Working Mode	Infuse, withdrawal, pre-infuse followed by withdrawal, pre-withdrawal followed by infuse, continuous circulation.		
Channel	1		
Flow Range	0.058nL/min(5uL)~1.587mL/min(1mL)	0.005nL/min(10µL)~152.456µL/min(100uL)	0.184nL/min(10uL)~ 83.318mL/min(60mL)
Maximum stroke	70mm	70mm	110mm
Stroke resolution	0.198µm/µstep	0.1905µm/µstep	0.156um/µstep
Linear Velocity	0.635µm/min~95.25mm/min	0.6 096um/min~91.44mm/min	1um/min~150mm/min
Stroke Control Accuracy	Error±0.35% (when working stroke >30% of whole stroke)		
Linear Thrust	>4kgf, adjustable	>1kgf,adjustable	>10kg,adjustable
Syringe size	5µL~1mL	0.5uL~100uL	10uL~60mL
Display	5-inch high-resolution color LCD touch screen		
Method of operation	Mask key + touch screen operation		
States signal output	Start/stop states and direction states.		
Control signal input	Start/stop states and direction states.		
Power consumption	<30W	<30W	<30W
Dimensions of driver	240×196×125mm	240×196×125mm	290×205.2×101.5mm
Dimensions of execution unit	199.5×46.5×63.7mm	173×39×52mm	266×86×76mm
Weight	1.495kg+0.443kg	1.495kg+0.245kg	1.495kg+1.8kg
(controller+execution unit)			
IP grade	IP31		
Power Supply	AC 100~240V 50Hz/60Hz		
Working environment	Temperature 5~ 40°C, relative humidity<80%		

### Reference Table of Syringe Specifications and Flow Rate

Model	Syringe Size	Syringe ID (mm)	Min Flow Rate (nL/min)	Max Flow Rate	Model	Syringe Size	Syringe ID (mm)	Min Flow Rate	Max Flow Rate
TFD01-01	5 µL	0.343mm	0.058	0.009mL/min	TFD02-01	0.5µL	0.103mm	8.000pL/min	1.249µL/min
	10µL	0.485mm	0.117	0.017mL/min		1 µL	0.146mm	16.000pL/min	2.511µL/min
	25µL	0.729mm	0.264	0.039mL/min		2 µL	0.206mm	33.000pL/min	4.999µL/min
	50µL	1.03mm	0.529	0.079mL/min		5 µL	0.343mm	83.000pL/min	12.497µL/min
	100µL	1.457mm	1.058	0.158mL/min		10µL	0.485mm	184.00pL/min	27.711µL/min
	250µL	2.304mm	2.645	0.396mL/min		25µL	0.729mm	417.00pL/min	62.608µL/min
	500µL	3.256mm	5.290	0.793mL/min		50µL	1.03mm	833.00pL/min	124.984µL/min
	1000µL	4.608mm	10.580	1.587mL/min		100µL	1.457mm	1.667nL/min	250.092µL/min
						250µL	2.304mm	4.169nL/min	625.383µL/min
						500µL	3.256mm	8.326nL/min	1.248mL/min
TFD03-01	0.5µL	0.103mm	0.005	0.762µL/min	1000 µL	4.608mm	16.676nL/min	2.501mL/min	
	1µL	0.146mm	0.010	1.531µL/min	1mL	4.699mm	17.342nL/min	2.601mL/min	
	2µL	0.206mm	0.020	3.048µL/min	3mL	8.585mm	57.885nL/min	8.682mL/min	
	5µL	0.343mm	0.056	8.449 µL/min	5mL	11.989mm	112.890nL/min	16.933mL/min	
	10µL	0.485mm	0.112	16.893µL/min	10mL	14.427mm	163.469nL/min	24.520mL/min	
	25µL	0.729mm	0.254	38.166µL/min	20mL	19.05mm	285.027nL/min	42.754mL/min	
	50µL	1.03mm	0.507	76.190µL/min	30mL	21.59mm	366.090nL/min	54.913mL/min	
	100µL	1.457 mm	1.016	152.456µL/min	50mL	26.594mm	555.459nL/min	83.318mL/min	
					60mL	26.594mm	555.459nL/min	83.318mL/min	

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.



TFD01-01  
Syringe: 5µL~1mL



TFD02-01  
Syringe: 10µL~60mL



TFD03-01  
Syringe: 0.5µL~100µL

# TFD04 Series

## Split Style Syringe Pump

- Precise flow control and display.
- Multi-channel micro-syringe pump(up to 8 channels).
- 1-8 sets of main parameters and working state display on the same screen and each executive body is controlled to work independently.

### Typical Application

Suitable for Continuous Injection, Microsphere Preparation Instruments, Electrospinning, Animal Experiments, Coating Machines, Mass Spectrometers, and Other Equipment.



### Technical Parameter

Parameter	TFD04
Channel	1~4 channels, independently control(8 channels customizable )
Syringe size	0.5μL~60mL(replace the execution unit)
Syringe selection	Built-in mainstream brand syringe specifications, support customization
Working mode	Infuse, withdraw ,infuse/withdraw, withdraw/infuse
Travel control accuracy	< ±0.5% ( > 30% of pump stroke)
Flow calibration	Intelligent guide
Display	7 inch 65565 color LCD
Operation method	Touch screen
Delay time	0.1~999s/min/h
Cycles times	0~9999
Cycles interval time	0.1~999s/min/h
Power-down memory	Memorize parameters set before power off
Status signal output	1 road indicates running status, 1 road indicates direction status
Control signal input	5~24V Wide voltage, control start, stop and pause
Communication	RS485, support Modbus protocol
Power supply	AC100~240V, 50Hz/60Hz
Power consumption	Controller 40w+30w(each execution unit)
Environment	Temperature 5~40°C , relative humidity < 80%
Controller dimension	200×142×88mm
Controller weight	2.0kg

### Execution Unit



	ZX01	ZX02	ZX03
Syringe	0.5μL~1000μL	10μL~60mL	0.5μL~100μL
Flow range	0.005nL/min~1.587mL/min	0.184nL/min~83.318mL/min	0.005nL/min~152.456μL/min
Channel	1~4(8 customizable channels)	1~4	1~4(8 customizable channels)
Max stroke of pump	70mm	110mm	70mm
Rated thrust	>40N, adjustable thrust	>10kgf,adjustable thrust	>1kgf,adjustable thrust
Advance per microstep	0.198μm/μstep	0.156μm/μstep	0.1905μm/μstep
Linear speed	0.635μm/min~95.25mm/min	1μm/min~150mm/min	0.6096μm/min~91.44mm/min
Execution unit dimension	187×32×65mm	266×86×76mm	173×39×52mm
Execution unit weight	0.45 KG	1.8 KG	0.25 KG

### Reference Table of Syringe Specifications and Flow Rate

#### ZX01

Syringe size	Syringe ID(mm)	Min Flow(nl/min)	Max Flow(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

#### ZX02

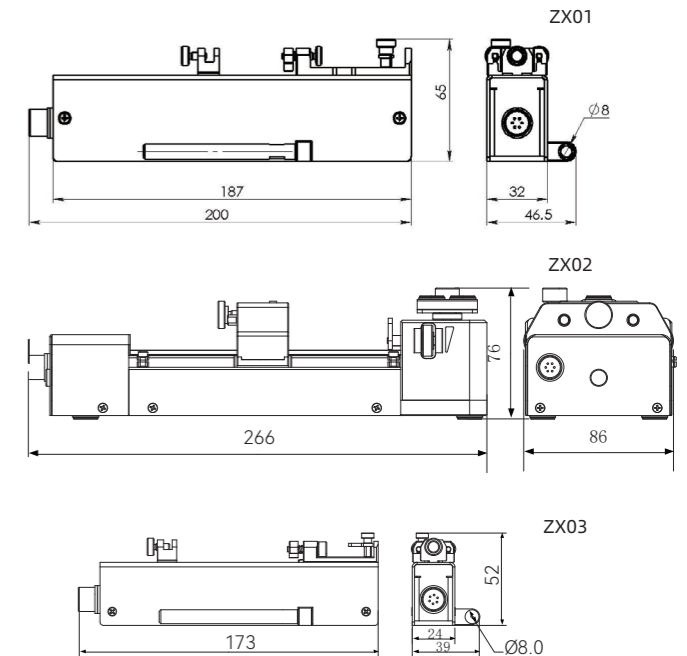
Syringe size	Syringe ID	Min Flow	Max Flow
10μL	0.485mm	184.00pL/min	27.711μL/min
25μL	0.729mm	417.00pL/min	62.608μL/min
50μL	1.03mm	833.00pL/min	124.984μL/min
100μL	1.457mm	1.667nL/min	250.092μL/min
250μL	2.304mm	4.169nL/min	625.383μL/min
500μL	3.256mm	8.326nL/min	1.248mL/min
1000μL	4.608mm	16.676nL/min	2.501mL/min
1mL	4.699mm	17.342nL/min	2.601mL/min
5mL	11.989mm	112.890nL/min	16.933mL/min
10mL	14.427mm	163.469nL/min	24.520mL/min
20mL	19.05mm	285.027nL/min	42.754mL/min
30mL	21.59mm	366.090nL/min	54.913mL/min
60mL	26.594mm	555.459nL/min	83.318mL/min

#### ZX03

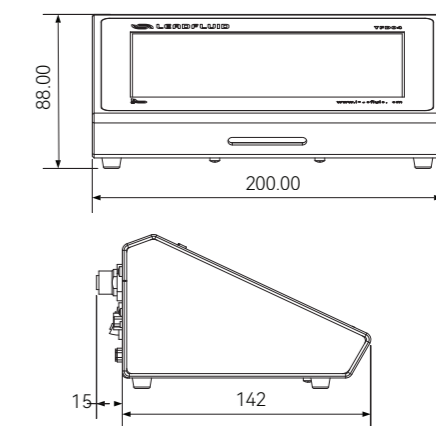
Syringe size	Syringe ID(mm)	Min Flow	Max Flow
0.5μL	0.103	0.005PL/min	0.762μL/min
1μL	0.146	0.010PL/min	1.531μL/min
2μL	0.206	0.020PL/min	3.048μL/min
5μL	0.343	0.056PL/min	8.449μL/min
10μL	0.485	0.112PL/min	16.893μL/min
25μL	0.729	0.254PL/min	38.166μL/min
50μL	1.03	0.507PL/min	76.190μL/min
100μL	1.457	1.016nL/min	152.456μL/min

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure,in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Execution Unit Dimension ( mm )



### Controller Dimension ( mm )



# TGD01-01

## Precision High Pressure Syringe Pump

- Can be loaded with stainless steel syringes for high pressure or viscous liquid transmission.
- Accuracy and stability of liquid injection.
- Simple to complex programming operations can be performed without a computer.

### Typical Application

High thrust injection, injection of highly corrosive liquids, injection of high-viscosity liquids; Micro-volume high-precision injection, injection into high-pressure containers, coating, and injection of highly corrosive liquids.

TGD01 Flow Range 3.000pL/min~214.915mL/m



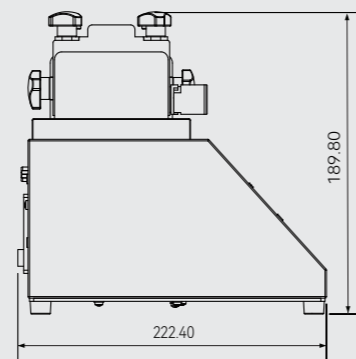
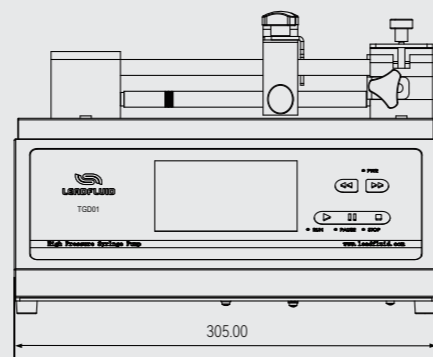
### Technical Parameter

Parameter	TGD01-01
Syringe size	0.5μL~140mL
Flow range	3.000pL/min (0.5μL syringe) ~214.915mL/min (140mL syringe)
Working mode	Infuse, withdraw, infuse /withdraw, withdraw/infuse, continuous mode
Channel	1 Channel
Stroke of pump	140mm
Pusher advance	0.156μm/μstep
Linear speed	0.36μm/min~190mm/min
Accuracy	Error < ±0.35% (> 30% of pump stroke)
Rated linear force	91kg(100% thrust, Wide range of flow velocity)
Thrust regulation	1~100% arbitrary adjustable
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 transfusion volume, residual fluid volume, flow, direction, syringe. Animation display operation status.
Operation mode	Touch screen + button
Power-off memory	Storing the running parameters automatically
Communication	RS485, MODBUS Protocol
External control	External signal control start/stop, status signal output
Power supply	AC100~240V, 50Hz/60Hz
Working environment	Temperature 5~40°C, relative humidity<80%
Driver dimension (L×W×H)	305×222×190 mm
IP grade	IP31
Shell material	Metal with anti-corrosion coating
Weight	6.6KG

### Syringe Size

Type	Size
Plastic syringe	1~140mL
Micro injection needle	0.5~1000μL
Glass syringe	1~50mL
Gas tight syringe	5~100mL
Stainless steel syringe	8mL 20mL 50mL 100mL Stock inventory
(316L syringe, perfluoro/fluoro rubber seal)	2.5mL customized

### Dimension(mm)



### Stainless Steel Syringe

Syringe Size	8mL	20mL	50mL	100mL
ID(mm)	9.53	19.13	28.6	34.9
OD(mm)	13	22	32	38
Effective stroke(mm)	112.4	69.6	77.83	104.5
Effective strokeRated working pressure PN(Mpa)	12.8	4.8	4.8	4.8
Adapter tube	φ3×0.5 mm	φ6×1.0 mm	φ8×1.0 mm	φ10×1.5 mm

# TSD01-01

## Two-way Push-pull Syringe Pump

- Assemble two syringes, through several tube-line connection, realize continuous transmission liquid.
- Support five kinds of working modes.
- Syringe protection and stall alarm

### Typical Application

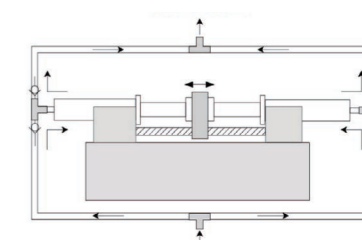
Microsphere Preparation Machines, Electrospinning, Animal Experiments, Coating Machines, Mass Spectrometers, and Other Equipment.

Flow Range 0.184nL/min~83.318mL/min



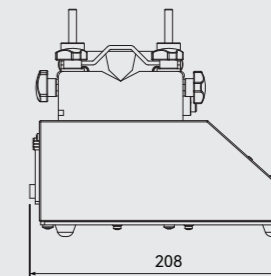
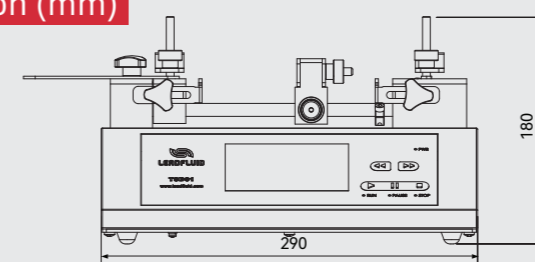
### Technical Parameter

Parameter	TSD01-01
Work mode	Infuse, withdraw, infuse /withdraw, withdraw/infuse, continuous mode
Syringe	10μL~60mL
Flow range	0.184nL/min~83.318mL/min
Display	5-inch color LCD screen display and transfusion volume, residual fluid Vvolume, flow ,operation direction ,syringe specification, etc. Animation display operation
Operation mode	Touch screen + button
Accuracy	<±0.35% (>30% of pump stroke)
Max rated linear force	>20kgf
Thrust regulation	25%~100% arbitrary adjustable
Advance per microstep	>0.15625μm/μstep
Linear speed	1μm/min~150mm/min
External control	External control 24V signal input controls start stop, working status signal input
Power supply	AC100~240V, 50/60Hz
Working environment	Temperature 5~40°C, relative humidity < 80%
Driver dimension(L×W×H)	290×208×180mm



Schematic diagram of continuous flow principle

### Dimension (mm)



# G3030-1S/G6060-1S Industrial Syringe Pump

- The applicable glass syringes from 50μL to 5mL.
- Mainly suitable for high-precision micro liquid continuous transmission, dilution and dispensing.
- It can run automatically according to the previously stored commands.
- Can assembly a 50μL~5mL gas tight syringe, wide linear speed range.
- It can be used in various ways, it can be controlled by external signal, it can also be controlled by PC communication or it can run automatically offline.

## Typical Application

Spray gold film applicator, liquid handling machine, water quality testing, materials preparation, etc.

G3030-1S Flow Range 0.0005~250mL/min  
 G6060-1S Flow Range 0.0003125~1250mL/min



G3030-1S



## OLED Display

- Real-time Display
- From Blind to Brilliant

Dynamic Piston Position Display  
 Dynamic Valve Position Display



## CAN Bus Protocol

Optimized for High-Efficiency Control

Delivers fast, stable, and interference-resistant communication. Seamlessly integrates with complex industrial control systems

## Technical Parameter

Parameter	G3030-1S
Line speed range	0.005mm/s~25mm/s
Maximum thrust	10kg
Maximum stroke	30mm
Flow accuracy	≤1%
Stroke resolution	0.01mm/step
Channel	1
Operating time range	1.2S-100min
Power supply	DC24V±10%, current ≤ 1.5A.
Compatible syringes	50μL,100μL,250μL,500μL,1mL,2.5mL,5mL
Compatible valves	Three-way valve, four-way valve, six-way valve, nine-way valve
Communication interface	RS-232/RS-485, CAN
Shell material	Aluminum Alloy
Programming function	Task programmable and storable; syringe protection and blockage alarm, multiple installation methods, automatic switching of rotary valves, and higher flexibility for embedded installation; high precision control: Achieves automated high-precision and accuracy for fluid transmission, dilution, and distribution.
Working environment	15°C~40°C, relative humidity <80%
Dimensions (L×W×H)	130.7×44.5×127(mm)



## G3030-1S Applicable Syringe Flow Parameters

Syringe	50μL	100μL	250μL	500μL	1mL	2.5mL	5mL
Min Flow (mL/min)	0.005	0.0010	0.0025	0.005	0.010	0.025	0.05
Max Flow (mL/min)	2.5	5	12.5	25	50	125	250

## Tubing Connectors and Tubes



Transmission Specifications	0.5×1.6mm	1.0×1.6mm	1.6×3.2mm
Tube Material	PTFE		

Tube

## Technical Parameter

Parameter	G6060-1S
Line speed range	0.01mm/s~50mm/s
Rated stroke	60mm (6000 step(standard)/48000 step(microstep))
Flow accuracy	≤±1%
Stroke resolution	0.01mm/step
Channel	1
Operating time range	1.2S~100min
Power supply	DC 24V/2.0A
Compatible syringes	50μL,100μL,250μL,500μL,1mL,2.5mL,5mL,10mL,25mL
Applicable valve	3-way valve,4-way valve,6-way valve,9-way valve
Communication interface	RS232/RS485, 9600/38400 baud rate optional
Shell material	Aluminum alloy
Programming function	Ramp, cut-off speed, gap compensation, infuse speed, circulation, real-time termination of movement and delay, error detection, valve rotation selection, storage of 15 groups of operating modes
Working environment	Temperature 15°C~40°C, relative humidity < 80%
Dimension(L×W×H)	114×65×254mm
Weight	2.1kg



G6060-1S

## Tubing Connectors and Tubes

### G6060-1S Applicable Syringe Flow Parameters

Syringe	50μL	100μL	250μL	500μL	1mL	5mL	10mL	25mL
Min Flow (mL/min)	0.0003125	0.000625	0.001563	0.003125	0.00625	0.03125	0.0625	0.15625
Max Flow (mL/min)	2.5	5.0	12.5	25	50	250.0	500	1250.0

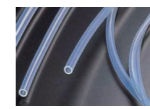


### Connector and Tubeline

Thread inverted taper joint	Specification	3,4 channel valves
	Material	PTFE

Transmission line	Specification	0.5×1.6mm	1.0×1.6mm	1.6×3.2mm
	Material	PTFE		

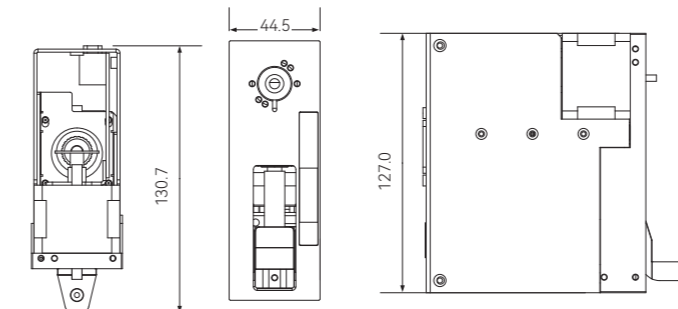
Tube



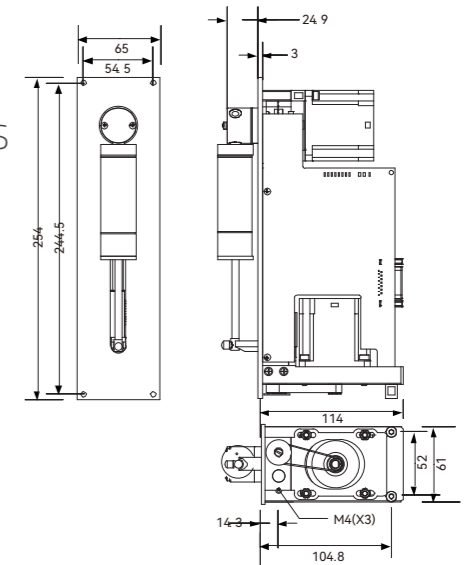
Above flow parameters are obtained by transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only

## Dimension (mm)

G3030-1S



G6060-1S



# Syringe Pump Accessory

## Syringe

Size: 1mL 3mL 5mL 10mL 20mL 30mL 60mL  
 Syringe head type: straight  
 Material: plastic



Size: 1mL 3mL 5mL 10mL 20mL 30mL 60mL 100mL 140mL  
 Syringe head type: luer  
 Material: plastic



Size: 1m 2mL 10mL 5mL 20mL 30mL 50mL  
 Syringe head type: fixed needle  
 Material: glass



Size: 25μL 50μL 100μL 250μL 500μL 1mL 2.5mL 5mL 10mL 25mL 50mL 100mL  
 Syringe head type: fixed needle  
 Material: glass



Size: 0.5μL 1μL 2μL 5μL 10μL 25μL 100μL 250μL 500μL 1mL  
 Syringe head type: fixed needle  
 Material: glass



Material: stainless steel



## Caution

### Plastic syringe

1. In a syringe pump with a knob compression structure, after the syringe is in contact with the pressure plate, the screw nut is selected to rotate 1/2-3/4 turns to pre-compact the syringe.
2. When there is no liquid or gas in the syringe, it is recommended to push the piston to the bottom of the syringe and then hold the syringe.
3. When a large pressure is expected to occur in the syringe, please set the thrust of the syringe pump within a safe range (Section × pressure for theoretical calculation).

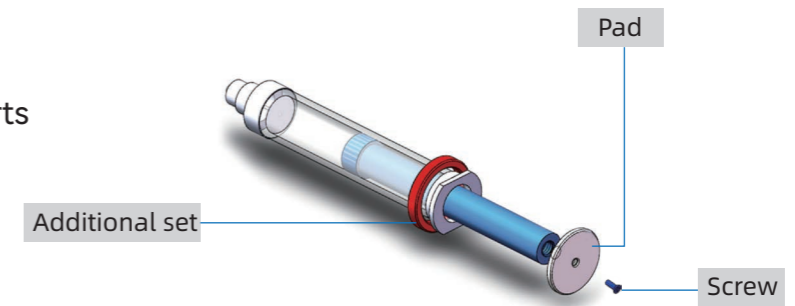
### Glass syringe

1. It is recommended to select the single push mode when using a glass syringe.
2. When selecting the single push mode, remove the syringe clamp on the syringe pump.
3. When using a glass syringe for injection, it is recommended to adjust the thrust to 30%.
4. If you find that the shape of the glass syringe needle is not regular cylinder, please consult our company to avoid rupture of the syringe due to irregular syringe.

### Glass sampling needle

1. Gas tight syringes are usually used for high precision injection of corrosion-resistant liquids or liquids.
2. There are metal parts on both ends of the gas tight syringe, which makes it difficult to clamp the injection pump and requires additional clamping parts.

## Auxiliary Clamping Parts



Size	500μL	1000μL	5mL	10mL	25mL	50mL	100mL	50mL glass syringe
Additional set	TYD319 additional set	TYD319 additional set	TYD318 additional set	TYD106 additional set	TYD319 additional set	TYD317 additional set	TYD317 additional set	TYD337 additional set
Putter accessories	\	\	\	TYD338 additional set	TYD338 additional set	TYD316 additional set	TYD316 additional set	\

## Hard Tube Connection Element

Luer female male connector 1/4-28	Swivel nut 1/4-28	Inverted cone joint 1.6/3.2(mm)	Luer male threaded joint 1/4-28	PTFE\PEEK hard tube(ID×OD) 0.5×1.6 \ 1.0×1.6 \ 1.6×3.2(mm)
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## External Control Module



USB data line

USB to RS485 converter

DB15

Footswitch

## CT3001S/CT3000S Basic Speed Variable Precision Gear Pump

- Transmission fluid viscosity: 200cSt or less.
- DC brushless motor, high performance, low noise.
- External control signal control, physical isolation, analog control.
- RS485 communication, support MODBUS protocol.
- Wide range power input, adapted to different environments.



CT3001S

CT3000S

### Typical Application

Spray gold film applicator, liquid handling machine, water quality testing, materials preparation, etc.

### Technical Parameter

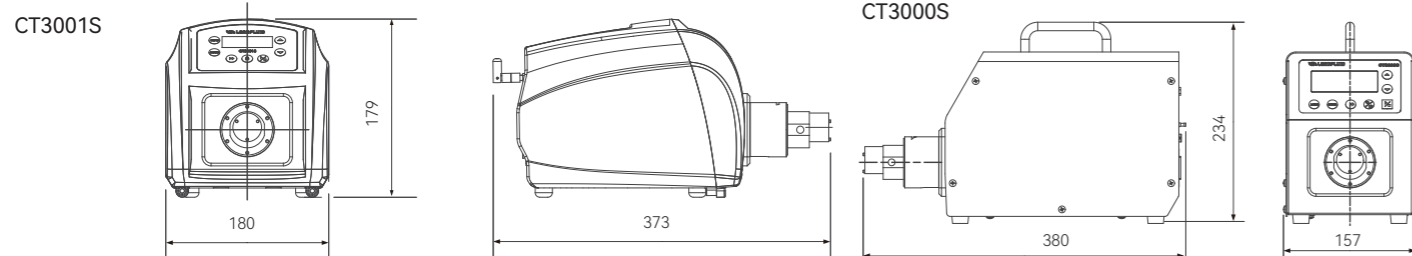
Parameter	CT3001S	CT3000S
Flow range	15~2700mL/min	
Speed range	50~3000rpm	
Speed resolution	1rpm	
External Control	Key control for start/stop, full speed, and status memory (power-off memory); foot switch control, external control for start/stop with physical isolation, 5V/12V/24V level input optional; 0-5V/0-10V/4-20mA speed adjustment optional; time dispensing mode.	
Adjustment method	Mask and key	
Display type	128x32 LCD display	
Communication function	RS485, supports Modbus communication protocol	
Direction control	CW/CCW	
Power supply	AC100-240V/50-60Hz	
Power consumption	<50W	<150W
Working environment	Operating temperature within 5~40°C, relative humidity: <80%.	
Dimensions(L x W x H)	373×180×179mm	380×157×234mm
Drive Weight	3.8kg	5.5kg
IP Grade	IP31	

### Applicable Pump Head , Flow

Drive Type	Pump Head	Gear Material	Speed Range(rpm)	Transfer Pressure (Mpa)	Flow Range(mL/min)
CT3001S	MG204XD0PT00000	PEEK	50~3000	≤1.4	15~900
	MG209XD0PT00000			≤0.9	30~1800
	MG213XD0PT00000			≤0.8	45~2700
CT3000S	MS204XD0PT00000	PEEK	50~3000	≤1.4	15~900
	MS209XD0PT00000			≤0.9	30~1800
	MS213XD0PT00000			≤0.8	45~2700

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Dimension(mm)



## CT3001F/CT3000F Intelligent Dispensing Precision Gear Pump

- Suitable for transmission more viscous, high pressure liquid.
- Color LCD display, touch screen operation. Servo brushless motor, high performance, low noise.
- Four working modes, three dispensing ways: flow rate mode, time dispensing, volume dispensing, copy dispensing.
- LF-Touch-OS software system.
- Flow calibration wizard, ensure the accuracy of fluid volume.
- Intelligent temperature control function.
- External control signal control, physical isolation, analog control.
- RS485 communication, supports MODBUS protocol



CT3001F

CT3000F

### Typical Application

High-viscosity liquid transfer, Cosmetics, Reaction vessels

### Technical Parameter

Parameter	CT3001F	CT3000F
Flow range	15~2700 mL/min	
Speed range	50~3000rpm	
Speed resolution	1rpm	
Working mode	Flow rate mode, time dispensing, volume dispensing, copy dispensing	
Dispensing time	0.1~999S	
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°C, relative humidity < 80%	
Power supply	AC100~240V, 50/60Hz	
Power consumption	<50W	<150W
IP grade	IP31	
Dimension(L×W×H)	343×182×198mm	320×150×237mm
Drive Weight	3.5kg	5.5kg

### CT3001F/CT3000F Applicable Pump Head , Flow

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

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

### Dimension(mm)

