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# INNOFLUID CO.,LTD.

SHENCHEN PERISTALTIC PUMP

Exported to 106 countries









Invention Patent No.: US 11,852,136 B2 Appearance patent No.: US D939,692 S

Easypump obtained U.S.





Appearance patent No.: 008005789-0002

# **APPLICATION**

#### **Biological Technology**

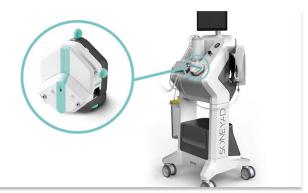
In biological laboratories, the peristaltic pumps play a key role in cell culture. Peristaltic pump can provide culture medium and automatic liquid addition to realize many functions like liquid circulation and mixing.

For providing culture medium, Shenchen LabN series peristaltic pump can transport culture medium stored in containers to cell culture vessels according to different flow requirements.

For automatic liquid addition process, Shenchen LabF series peristaltic pump can add equal amounts of liquid to multiple culture media according to preset parameters, ensuring a stable supply of culture media, reducing manual operations, and also achieving standardization and accurate control of the culture process.









#### **Medical Equipment Supporting**

In liposuction surgery, peristaltic pumps are mainly used for local swelling and anesthesia. A peristaltic pump injects a solution containing saline, lidocaine, epinephrine, and sodium bicarbonate under the liposuction site. In this process, except for the liquid-carrying device, the fluid path does not contact any parts, and the liquid reaches the affected area directly, which is hygienic and has no cross-contamination. For this application, it can be matched with Shenchen Easypump pump head or LabV series products which have the quantitative measuring function, it can accurately control the liquid flow, automatically stop after completing the amount of liquid. This product also can be matched with foot pedal switch. Shenchen peristaltic pump runs smoothly and is easy to operate. It only needs to replace the hose regularly for follow-up maintenance. It is an ideal choice for medical equipment.

#### **Environmental Resources**

Sewage water quality is very important for the adjustment of various process parameters in the sewage treatment process. Therefore, the detection and statistics of sewage water quality are the key points of control in the sewage treatment process. During the experiment, sewage needs to be sampled in batches. Sometimes it is necessary to regularly and quantitatively collect high-specific gravity liquids or solid-containing particle suspensions. Sometimes it is necessary to sample in layers. Sometimes it is necessary to collect and transport water samples over long distances without cross-contamination. Shenchen peristaltic pump LabV series has three metering modes: Fixed volume, dispensing, and timed start/stop, which can meet various transmission and distribution requirements.





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# Function comparison

# Specification comparison

Function Model	LabV	LabF	LabN	LabM
Color LCD Screen	•	•	•	
LED Display/Indicator Light				•
Flow Rate	•	•	•	
Speed Rate	•	•	•	•
Touch Screen Control	•	•		
Keypad Control	•	•	•	•
Knob Control			•	
Open Head Stop Running (Optional)	•	•	•	
Flow Rate Calibration	•	•	•	
Liquid Transmission Function	•	•	•	•
Liquid Volume/ Time Dispensing	•	•		
Speed/Time Dispensing		•	•	•
Fixed volume	•			
Dispensing	•	•		
Back Suction Angle	•	•	•	
Set Date & Time	•	•		
Power Down Memory	•	•	•	•
Active switch signal, 5V/24V universal(Start/stop, direction)	•	•	•	•
Active switch signal, 5V/24V universal(Flushing function)	•	•	•	
Passive switch signal(foot pedal/ handheld dispenser/ start/stop)	•	•	•	•
Passive switch signal (direction)				•
Speed adjusting by analog input (0-10V/0-5V/4-20mA)	•		•	•
RS232 interface	•	•	•	•
RS485 interface (Modbus protocol RTU mode)	•	•	•	•
Output operating status (Open collector output)	•	•	•	

Model Technical	LabV Series	LabF Series	LabN Series	LabM Series
Parameter Display	Industrial grade 4.3" LCD color display	Industrial grade 4.3" LCD color display	3.2" high definition LCD screen	3 digital LED
Control method	Touch screen and Mechanical keypad Touch screen and Mechanical		Digital knob and Mechanical keypad	Mechanical keypad
Keypad lifetime	300,000 times	300,000 times	300,000 times	300,000 times
Speed range	0.1-600 rpm	0.1-600 rpm	0.1-600 rpm	0.1-600 rpm
Speed Control	Touch screen/Analog signal/ Communication	Touch screen/ Communication	Digital knob/Analog signal/ Communication	Keypad/Analog signal/ Communication
Speed resolution	0.01rpm	0.01rpm	0.01rpm	0.1rpm when the speed is 0-100rpm, 1rpm when the speed is 100-600rpm.
Flow rate resolution	0.01 mL/min	0.01 mL/min	/	1
Dispensing volume range	0.01-9999L 0.01-9999mL	0.01-9999mL	I	I
Dispensing time	0.1-9999s	0.1-9999s	0.1s-9999h	0.5-999s
Pause time	0.1-9999s	0.1-9999.99s	I	1
Copy numbers	1-9999 times, setting'0'means unlimited	1-9999 times, setting'0'means unlimited	1	1
Back suction angle	0-360°	0-360°	0-360°	I
Motor type	LabV series: Stepper motor LabV-III series: Closed-loop stepper motor	LabF series: Stepper motor LabF-III series: Closed-loop stepper motor	LabN series: Stepper motor LabN-III series: Closed-loop stepper motor	LabM series: Stepper motor LabM-III series: Closed-loop stepper motor
Start/stop, direction signal	Passive switch signal, such as foot pedal switch; Active switch signal:5-24V universal	Passive switch signal, such as foot pedal switch; Active switch signal:5-24V universal	Passive switch signal, such as foot pedal switch; Active switch signal:5-24V universal	Passive switch signal, such as foot pedal switch; Active switch signal:5-24V universal
External speed control signal	0-5V, 0-10V, 4-20mA for option	I	0-5V, 0-10V, 4-20mA for option	0-5V, 0-10V, 4-20mA for option
Communication interface	RS232, RS485 support Modbus protocol(RTU mode)	RS232, RS485 support Modbus protocol(RTU mode)	RS232, RS485 support Modbus protocol(RTU mode)	RS232, support Shenchen protocol RS485, support Modbus protocol (RTU mode)
Outputinterface	Output motor working status (Open-Collector output)	Output motor working status (Open-Collector output)	Output motor working status (Open-Collector output)	1
Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)			
Drive dimension (L×W×H)	261.4×157.3×236.9mm	261.4×157.3×236.9mm	261.4×157.3×236.9mm	261.4×157.3×236.9mm
Power consumption	LabV series: <50w LabV-III series: <80w	LabF series: <50w LabF-III series: <80w	LabN series: <50w LabN-III series:<80w	LabMseries: <50w LabM-III series:<80w
Condition temperature	0-40℃	0-40℃	0-40℃	0-40°C
Relative humidity	<80%	<80%	<80%	<80%

# Flow Rates Peristaltic Pump

- Industrial grade 4.3" true color LCD screen, touch screen control.
- Dynamic display transferring status. Flow rate data, setting parameters and system configuration display in the same screen.
- 3 Kinds of working mode: fixed volume metering, fixed time and volume, timer start and stop, meet different transferring and dispensing request.
- Intelligent calibration function and online micro adjusting function.



# LabVseries

#### O Suitable Pump Head









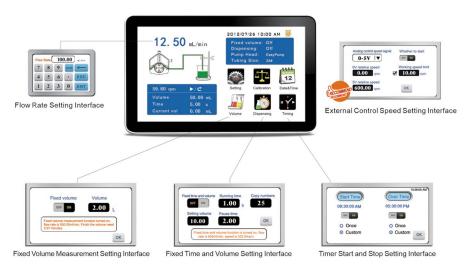
EasyPump Series (adjustable pressure)

EasyPump Series (non-adjustable pressure)

**AMC Series** 

KD 15/25 (Coming soon)

#### Screen Display



#### Product Composition and Flow Rate Range

Flow Rates Peristaltic Pump		Pump Head & Flow Rate (mL/min)							
riow Nates re	ristaitic ruilip	EasyPump Series							
	Tubing	EasyPumpI/III		EasyPu	EasyPumpII/IV		EasyPumpV/VI		
Drive&Speed		13", 14", 19", 16", 25", 17	7#, 18#	15 <sup>#</sup> , 24 <sup>#</sup> ,	35 <sup>#</sup> , 36 <sup>#</sup>	13	3*, 14*, 19*, 16*, 25*		
LabV1-III	0.1-150 rpm	0.0053~645		0.18~775			0.0053~295		
LabV3-III	0.1-350 rpm	0.0053~1505		0.18~	1808	0.0053~688			
LabV6-III	0.1-600 rpm	0.0053~2580		0.18~3100		0.0053~1180			
	- 11	AMC1~AMC12			KD15		KD25		
	Tubing	(10 rollers)	(10 rollers) (6 rollers)						
Drive&Speed		Inner diameter: 0.13 Wall thickness: 0.8-		•	13*, 14*, 19*, 25*, 17*, 18		15 <sup>#</sup> , 24 <sup>#</sup>		
LabV1	0.1-150 rpm				0.006~81	10	0.215~520.5		
LabV3	0.1-350 rpm	0.0002-48(working speed≤150rpm)		2-65(working ed≤150rpm)	0.006~18	90	0.215~1214.5		
LabV6	0.1-600 rpm				0.006~32	40	0.215~2082		

# **Dispensing Peristaltic Pump**

- Imported 4.3" industrial grade color LCD screen display, with touch screen control.
- Can preset dispensing volume, dispensing time, pause time and copy numbers.
- With intelligent calibration function and online micro adjusting function.
- The pump can store 60 commonly used filling modes.
- Back suction angle setting, avoid liquid drop off when the pump stops working.
- Two working mode:Volume dispensing and speed dispensing (speicial for viscous liquid)



Anti-corrosion and anti-static protective coating

# Labf series

#### Suitable Pump Head









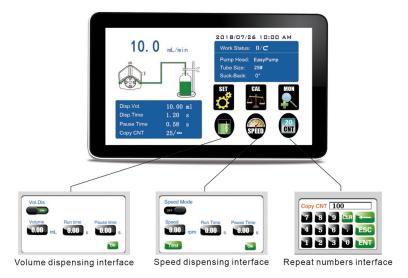
EasyPump Series (adjustable pressure)

EasyPump Series (non-adjustable pressure)

AMC Series

KD 15/25 (Coming soon)

#### Screen Display



#### Product Composition and Flow Rate Range Refer to page 20 for LabF6 series canned quantity reference

Dispensing Peristaltic Pump		Pump Head & Flow Rate (mL/min)						
Dispensing Pe	ristaitic Pump	EasyPump Series						
Tubing		EasyPumpI/III		EasyPumpII/IV			EasyPumpV/VI	
Drive&Speed		13*, 14*, 19*, 16*, 25*, 17	7#, 18#	15*, 24*,	35*, 36*	13	3 <sup>#</sup> , 14 <sup>#</sup> , 19 <sup>#</sup> , 16 <sup>#</sup> , 25 <sup>#</sup>	
LabF1-III	0.1-150 rpm	0.0053~645		0.18	~775		0.0053~295	
LabF3-III	0.1-350 rpm	0.0053~1505		0.18~	1808	0.0053~688		
LabF6-III	0.1-600 rpm	0.0053~2580		0.18~	3100	0.0053~1180		
	T 11	AMC1~AMC12		KD15		KD25		
	Tubing	(10 rollers)	(6	6 rollers)				
Drive&Speed		Inner diameter: 0.13 Wall thickness: 0.8-			13", 14", 19", 16" 25", 17", 18"		15*, 24*	
LabF1	0.1-150 rpm				0.006~81	0	0.215~520.5	
LabF3	0.1-350 rpm	0.0002-48(working speed≤150rpm)		2-65(working ed≤150rpm)	0.006~189	90	0.215~1214.5	
LabF6	0.1-600 rpm		0.006~324		40	0.215~2082		

# Flow Rates Peristaltic Pump

- 3.2" color LCD screen display.
- Flow rate and motor speed display in same screen.
- Timing function, time range 0.1s-9999 hours, can be used for simple dispensing function.



# LabNseries

#### O Suitable Pump Head









EasyPump Series (adjustable pressure)

EasyPump Series (non-adjustable pressure)

**AMC Series** 

KD 15/25 (Coming soon)

#### Screen Display



#### Product Composition and Flow Rate Range

Flow Rates Peristaltic Pump		Pump Head & Flow Rate (mL/min)							
Flow Rates Pe	ristaitic Pump	EasyPump Series							
	Tubing	EasyPumpI/III		EasyPumpII/IV		EasyPumpV/VI			
Drive&Speed		13*, 14*, 19*, 16*, 25*, 17	7#, 18#	15*, 24*,	35 <sup>#</sup> , 36 <sup>#</sup>	13	3 <sup>#</sup> , 14 <sup>#</sup> , 19 <sup>#</sup> , 16 <sup>#</sup> , 25 <sup>#</sup>		
LabN1-III	0.1-150 rpm	0.0053~645		0.18~775			0.0053~295		
LabN3-III	0.1-350 rpm	0.0053~1505		0.18~	1808	0.0053~688			
LabF6-III	0.1-600 rpm	0.0053~2580		0.18~	3100	0.0053~1180			
	T. bis.	AMC1~AMC12			KD15		KD25		
	Tubing	(10 rollers)	(	6 rollers)					
Drive&Speed	Drive&Speed  Inner diameter: 0.13-: Wall thickness: 0.8-1		•	13", 14", 19", 16" 25", 17", 18"		15#, 24#			
LabN1	0.1-150 rpm				0.006~81	0	0.215~520.5		
LabN3	0.1-350 rpm	0.0002-48(working speed≤150rpm)		2-65(working ed≤150rpm)	0.006~1890		0.215~1214.5		
LabN6	0.1-600 rpm				0.006~3240		0.215~2082		

# **Standard Peristaltic Pump**

- 3 digital LED display motor speed, mechanical keypad control.
- Timing function, the time range of 0.5 seconds -999 seconds can be used as a simple dispensing.
- Support RS232 and RS485 communication, Modbus protocol.



# LabMseries

#### O Suitable Pump Head









EasyPump Series (adjustable pressure)

EasyPump Series (non-adjustable pressure)

**AMC Series** 

KD 15/25 (Coming soon)

#### Screen Display



#### Product Composition and Flow Rate Range

Standard Peristaltic Pump		Pump Head & Flow Rate (mL/min)						
		EasyPump Series						
	Tubing	EasyPumpI/III		EasyPui	mpII/IV		EasyPumpV/VI	
Drive&Speed		13*, 14*, 19*, 16*, 25*, 17	<sup>#</sup> , 18 <sup>#</sup>	15 <sup>#</sup> , 24 <sup>#</sup> , 35 <sup>#</sup> , 36 <sup>#</sup>		13*, 14*, 19*, 16*, 25*		
LabM1-III 0.1-150 rpm		0.0053~645		0.18~775			0.0053~295	
LabM3-III	0.1-350 rpm	0.0053~1505		0.18~	0.18~1808		0.0053~688	
LabM6-III	0.1-600 rpm	0.0053~2580		0.18~	.18~3100		0.0053~1180	
	Tubing	AMC1~AMC12		KD15		KD25		
		(10 rollers)	(	6 rollers)				
Drive&Speed		Inner diameter: 0.13 Wall thickness: 0.8-			13*, 14*, 19*, 25*, 17*, 18		15*, 24*	
LabM1	0.1-150 rpm				0.006~81	10	0.215~520.5	
LabM3	0.1-350 rpm	0.0002-48(working speed≤150rpm)		2-65(working ed≤150rpm)	0.006~1890		0.215~1214.5	
LabM6	0.1-600 rpm				0.006~3240		0.215~2082	

# Flow Rates Peristaltic Pump

#### LabV3-IV



- Industrial Grade 4.3" true color LCD display, touch screen control.
- Dynamic display transferring status; Flow rate data, setting parameters, and system configuration display in the same screen.
- Three kinds of metering modes: fixed Volume metering, fixed time and voulme, timer start-stop, meet different transferring and dispensing requirements.
- Intelligent calibration Function and online micro adjusting function.
- Function of stop working when uncover to ensure the operation safety.
- Optional for UC15 pump head, can fit for 4 different size tubing,
- Optional for UC20 pump head, can use medical dialysis tube, matching with medical dialysis equipment.

#### Typical Application

• Mainly for laboratory.





Manual lever help install the tube, and can finish liquid circulation when power down unexpectedly.

#### Tubing Installation Procedure



1. Press the pipe clamp, put the tube into the U shaped groove.



2. Put the tube between the two guide posts. Hold the spanner, rotate the wheel body.



3. Press the pipe clamp, put the tube into the U shaped groove.



4.Installation is finished.

#### Product Composition and Flow Rate Range

Model	Pump Head	Speed Range(rpm)	Tubing Size	Flow Rate (mL/min)
			16"	0.1651-596
	UC15	0.1-350	15"	0.3440-1251
LabV3-IV	0015	0.1-350	17#	0.5818-2186
			18#	0.8652-3281
	UC20	0.1-200	Medical dialysis tube 8*2	0.7327-811



# **COMPACT LABORATORY PERISTALTIC PUMP**

# **Compact Peristaltic Pump**

#### LabK



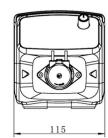
Three years warranty

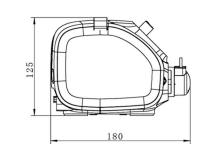




- ABS engineering plastic housing, anti-corrosion, anti-static.
- OLED screen display motor speed, digital knob control speed.
- Compact design, various external control.
- Easy to observe the pump head and tubing working situation.
- Low power consumption, mute working.
- Stable flow rate and suitable for continuous dosing applications.
- Easy to replace long life PharMed tubing.
- Digital knob control speed, memory back up, user setting saved if power lost.

O Dimension Drawing (Unit: mm)





#### Color Selection



#### Technical Specifications

	LabK										
Flow rate range	0.004-63.96mL/min	External control	Start/stop direction control (switch signal),								
Speed range	0.1-150rpm reversible	External control	0-5V, 4-20mA (standard), 0-10V (optional)								
Speed resolution	0.1rpm	Power adapter	Output: (12V/1A);								
Speed control	Digital knob	1 ower adapter	Input: AC100V-240V, 50Hz/60Hz								
Control method	Digital knob control and mechanical keypad	Dimension	180*115*125mm(L×W×H)								
Keypad lifetime	300,000 times	Weight	0.8kg								
Display	0.96" OLED display	Power consumption	<12W								
Communication	USB connector, RS485 interface (MODBUS protocol, RTU mode)	Condition temperature	0-40℃								
interface		Relative humidity	<80%,no condensation								

#### O Product Composition and Flow Rate Range

Model	Pump Head	Speed(rpm)	Tubing Size (ID×Wall Thickness <sub>(mm)</sub> )	Flow Rate Range (mL/min)
	MicroPump	0.1-150	1*1	0.004-6.38
l obl/			2*1	0.014-21.45
LabK			3*1	0.031-47.26
			4*1	0.042-63.96

# **Compact Peristaltic Pump**

#### LabQ



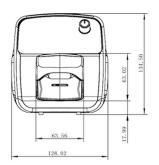
Three years warranty

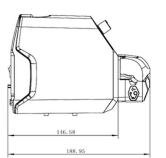




- LabQ with ABS engineering plastic housing, 2.4 inch LCD display; small and compact, low power and ultra-silence.
- The digital knob is convenient for speed regulation and easy to operate.
- Multiple external control modes are optional, support RS485 communication, standard MODBUS protocol (RTU mode).
- Meet complex work environment with the super anti-interference and wide voltage design.
- Flow rate and motor speed display in the same screen.
- Super silent drive setting, precise control, low vibration and low noise.
- Mechanical keypad control, menu interface, convenient for users setting the parameters.
- Digital rotary knob is convenient for speed regulation and easy to operate.
- Various external control functions, support 0-5V, 0-10V, 4-20mA analog signals control speed.

O Dimension Drawing (Unit: mm)





#### Technical Specifications

LabQ									
Flow rate range	0.0033-326.55mL/min	Start/stop,	Switch signal(The default is passive signal,						
Speed range	0.1-350rpm	reversing signal	active signal is optional)						
Speed resolution	0.1rpm	Communication	RS485, (MODBUS protocol, RTU mode)						
Control method	Digital knob control and mechanical keypad	interface	K3463, (MODBOS protocol, K10 mode)						
Display	2.4 inch LCD screen	Dimension	188*128*135mm(L×W×H)						
External speed control	0-5V, 0-10V, 4-20mA	Weight	1.1kg						
Output interface	Open-Collector output	Power consumption	<30W						
Power supply	Output: 24V/1.25A	Temperature	0-40°⊂						
Power supply	Input: AC100V-240V, 50Hz/60Hz	Relative humidity	<80%,no condensation						

#### Product Composition and Flow Rate Range

Model	Channel number	Tubing	ID×Wall thickness(mm)	mL/r	Speed(rpm)	Flow Rate(mL/min)	Weight(kg)
		13#	0.8×1.6	0.033		0.0033~11.55	
		14#	1.6×1.6	0.156		0.0156~54.60	
LabQ/KT15	Single channel	19#	2.4×1.6	0.286	0.1~350	0.0286~100.10	1.1
		16#	3.1×1.6	0.477		0.0477~166.95	
		25#	4.8×1.6	0.933		0.0933~326.55	

# **Compact Peristaltic Pump**

#### **LabT**



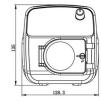
Three years warranty

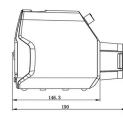




- ABS engineering plastic housing, anti-corrosion, anti-static.
- OLED screen display motor speed, digital knob control speed.
- Compact design, various external control.
- Easy to observe the pump head and tubing working situation.
- Low power consumption, mute working.
- Stable flow rate and suitable for continuous dosing applications.
- Easy to replace long life PharMed tubing.
- Digital knob control speed, memory back up, user setting saved if power lost.

#### O Dimension Drawing (Unit: mm)





#### Suitable Pump Head





LabT/MiniPump

LabT/KT15

Technical Specifications

	LabT									
	LabT/KT15	Display	0.96" OLED display							
Model	LabT/MiniPump	Power adapter	Output: 24V/1.25A;							
	LabT/UD15	Fower adapter	Input: AC100V-240V, 50Hz/60Hz							
	LabT/KT15: 0.1-350rpm	Communication	USB connector, RS485 interface							
Speed range	LabT/MiniPump: 0.1-300rpm	interface	(MODBUS protocol, RTU mode)							
	LabT/UD15: 0.1-350rpm	Dimension	189*128*135mm(L×W×H)							
Speed resolution	0.1rpm	Weight	1100g							
Control method	Digital knob control and mechanical keypad	Power consumption	< 30W							
External control	Start/stop direction control (switch signal),	Condition temperature	0-40°C							
External control	0-5V, 4-20mA (standard), 0-10V (optional)	Relative humidity	<80%,no condensation							

#### O Product Composition and Flow Rate Range

	Divers blood		Tubing	Speed	Flow Rate	Weight(kg)	
		Tubing Sizes	IDxWall thickness(mm)				
		16"	3.1×1.6		0.08~280		
	UD15	25"	4.8×1.6	0.1~350	0.16~580	1.1	
		17*	6.4×1.6		0.26~930		
		13"	0.8×1.6		0.0033~11.55	Weight(kg)  1.1  1.1  1.1	
		14"	1.6×1.6		0.0156~54.6		
	KT15	19"	2.4×1.6	0.1~350	0.0286~100.1		
		16"	3.1×1.6		0.0477~166.95		
		25"	4.8×1.6		0.0933~326.55		
		13"	0.8×1.6		0.0024-8.28	1.1	
		14"	1.6×1.6		0.0112-33.88		
LabT		19"	2.4×1.6		0.0252-77.23		
		16*	3.1×1.6		0.0394-114.31		
	MiniPump01	25"	4.8×1.6	0.1~300	0.0652-190.00		
		1×1	1×1		0.005-15.01		
		2×1	2×1		0.018-54.63		
		2.5×1	2.5×1		0.0256-76.84		
		3×1	3×1		0.0356-108.39		
		1×1	1×1		0.005-15.01		
	MiniPump02	2×1	2×1	0.1~300	0.018-54.63	1.1	
	wiiiii umpoz	2.5×1	2.5×1	0.1~300	0.0256-76.84	1.1	
		3×1	3×1		0.0356-108.39		

# **Compact Peristaltic Pump**

### **ST-HandyPump**

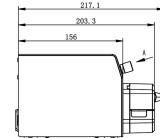


- 304 stainless steel shell, resist corrosion. Can be stacked to use
- Closed-loop stepper motor, compact structure, low noise, low vibration.
- OLED screen display working speed and status. Digital knob control speed, easy operation.
- Support RS232 and RS485 communication.
- Various external control interface.
- Wide voltage design, high versatility.

#### Model Number

ST-HandyPump

#### Dimension Drawing(Unit: mm)



#### O Suitable Pump Head



Single channel HandyPump01

Dual channel HandyPump02

#### Technical Specifications

	ST-HandyPump								
Flow rate range	0.0033~365.69mL/min	Power supply	AC100V-240V, 50Hz/60Hz						
Speed range	0.1~300rpm	Fower supply	AC100V-240V, 50H2/60H2						
Speed resolution	0.1rpm	Communication interface	RS485, RS232						
Control method	Digital knob control and mechanical keypad	Output interface	Output motor working status						
Motor type	57 closed-loop stepper motor	Drive dimension	217.1*132.5*128.5mm(L*W*H)						
Keypad lifetime	300,000 times	Weight	2.92Kg						
Display	OLED display(0.96")	Power consumption	≤75W						
	Start/stop control(switch signal)	Condition temperature	0-40°C						
External control	Speed: 0-5V, 4-20mA(standard),	Deletive humidity	000/						
	0-10V (optional)	Relative humidity	<80%,no condensation						

#### Product Composition and Flow Rate Range

Model	Channel number	Pump Head	Speed(rpm)	Tubing Size	Flow Rate Range(mL/min)
ST-HandyPump	1/2	HandyPump01	0.4.200	13 <sup>#</sup> ,14 <sup>#</sup> , 19 <sup>#</sup> , 16 <sup>#</sup> , 25 <sup>#</sup>	0.0033-365.69
	1/2	HandyPump02	0.1-300	13*,14*, 19*, 16*	0.0033-190.76



**PUMP HEAD** 

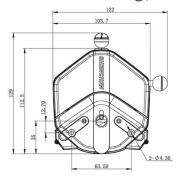
KT15 AMC EasyPump KD15/25 MiniPump UC15/20

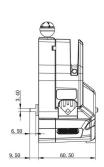
# **Pump Head - EasyPump Series**

### **EasyPump**



### Dimension Drawing(Unit: mm)





Pump Drive : LabV-III

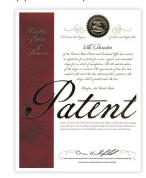
LabF-III

LabN-III

LabM-III

Easypump obtained **U**.S. Invention patent and Appearance patent.





Appearance patent.



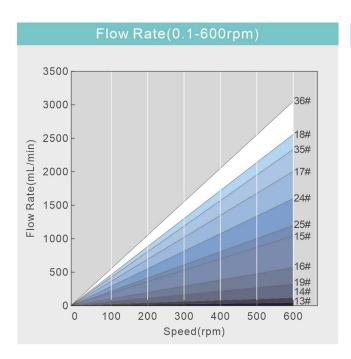
Easypump obtained EU

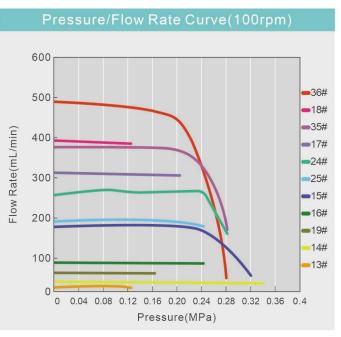
Invention Patent No.: US 11,852,136 B2 Appearance patent No.: US D939,692 S

Appearance patent No.: 008005789-0002

	Flow Rate										
Pump Head	Housing Material	Size	Tubing IDxWall Thickness	mL/r	Speed (rpm)	Flow Rate (mL/min)	Weight (kg)				
ricad	Waterial			0.050	(16111)	, ,	(9)				
		13#	0.8x1.6	0.053		0.0053-32					
		14#	1.6x1.6	0.27	0.1-600	0.027-162					
Cinala ahannal		19#	2.4x1.6	0.55		0.055-330					
Single channel EasyPumpI/III		16#	3.1x1.6	0.933		0.093-560					
		25#	4.8x1.6	1.967		0.197-1180	0.6				
		17#	6.4x1.6	3.333		0.333-2000					
	Engineering	18#	7.9x1.6	4.3		0.430-2580					
	plastic	15#	4.8x2.4	1.8		0.180-1080					
Single channel	1	24#	6.4x2.4	2.733		0.273-1640					
EasyPumpII/IV	PPS	35#	7.9x2.4	3.833		0.383-2300					
		36#	9.6x2.4	5.167		0.517-3100					
		13#	0.8x1.6	0.053		0.0053-32					
		14#	1.6x1.6	0.27		0.027-162					
Dual channel EasyPumpV/VI		19#	2.4x1.6	0.55		0.055-330					
		16#	3.1x1.6	0.933		0.093-560					
		25#	4.8x1.6	1.967		0.197-1180					

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.





		Fil	ling Volume Ref	erence Parame	ter		
Drive	Pump Head	Tubing	Filling Volume(mL)	Filling Time(s)	Accuracy(±%)	Output (pcs/min)	Motor Speed (rpm)
		13#	0.4	1.2	0.8	27	377.36
		13#	1	2.5	0.5	17	452.83
		14#	2	1	0.5	30	444.44
		19#	5	1.2	0.5	27	454.55
		16#	7	1	0.5	30	450.16
		25#	10	0.8	0.8	33	381.29
		25#	15	1	0.5	30	457.55
	EasyPump	25#	20	1.5	0.5	24	406.71
		17#	30	1.2	0.5	27	450.05
		18#	50	1.5	0.5	24	465.12
		15#	15	1.2	0.5	27	416.67
		24#	20	1.2	0.5	27	365.90
		35#	30	1.2	0.5	27	391.34
LabF6		36#	50	1.5	0.5	24	387.07
Series		13#	0.5	0.8	0.8	33	353.77
		13#	1	1.2	0.5	27	471.70
		14"	2	0.6	1	38	370.37
		14#	5	1.5	0.5	24	370.37
		19#	10	1.2	0.5	27	454.55
		16#	15	1.2	0.5	27	401.93
		16#	20	1.5	0.5	24	428.72
	2*EasyPump	25#	30	1	0.5	30	457.55
		17#	50	1	0.5	30	450.05
		18#	70	1	0.5	30	488.37
		15#	30	1.2	0.5	27	(rpm) 377.36 452.83 444.44 454.55 450.16 381.29 457.55 406.71 450.05 465.12 416.67 365.90 391.34 387.07 353.77 471.70 370.37 370.37 454.55 401.93 428.72 457.55 450.05
		24#	50	1.2	0.5	27	457.37
		35#	70	1.2	0.5	27	456.56
		36#	100	1.5	0.5	24	387.07

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

# **Pump Head - AMC Series**

#### **AMC Series**



#### Product Introduction

- The unique elastic positioning mechanism allows users to install and remove cartridge with one hand. Multichannel, small volume transferring.
- Elastic pressure tube design to extend the service life of the tube.
- Stepless adjustment of the tube pressure gap, effectively improving the accuracy between channels.
- 304 stainless steel roller assembly, including 6 rollers and 10 rollers structure, which are designed with low noise and high speed, suitable for supporting various analytical instruments.

#### AMC obtained EU Appearance patent.



#### Appearance patent No.: 008005789-0001

Pump Drive: LabV

LabM

Typical Application

 Support blood sugar analytical device. Support ammonian analytical instrument.







#### Technical Specifications

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

Tubing	Speed	Flow rate of pump head	Flow rate of pump head	Tubing maximum	n pressure (Mpa)
Tubilig	Speed	with 10 rollers (mL/min)	with 6 rollers (mL/min)	Continuous	Intermittent
1×1		0.0050~7.55	0.0062~9.36		
2×1		0.0183~27.52	0.0220~33.06		
2.4×0.8		0.0254~38.13	0.0319~47.81		
3×1		0.0323~48.38	0.0434~65.17		
0.13×0.86		0.0002~0.29			
0.19×0.86		0.0003~0.44	0.0003~0.46		0.1
0.25×0.86	0.1~150rpm	0.0005~0.76	0.0005~0.80	0.1	
0.51×0.86		0.0013~2.00	0.0014~2.05		
0.89×0.86		0.0030~4.47	0.0031~4.65		
1.14×0.86		0.0061~9.16	0.0065~9.74		
1.42×0.86		0.0125~18.75	0.0142~21.28		
2.06×0.86		0.0197~29.60	0.0234~35.17		
2.79×0.86		0.0286~42.86	0.0372~55.77		

# **Pump Head - KD Series**

KD15/25



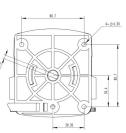
#### Dimension Drawing(Unit: mm)



0.215-1290

0.347-2082





Pump Drive: LabV LabF

Size

13#

14#

19#

16#

25#

17#

18#

15#

Pump Head

KD15

KD25

4.8x2.4(mm)

Tubing

IDxWall Th

LabN

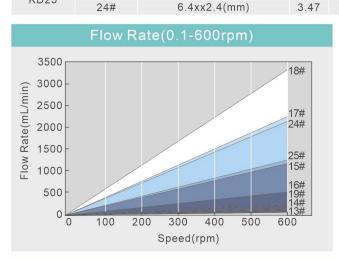
LabM

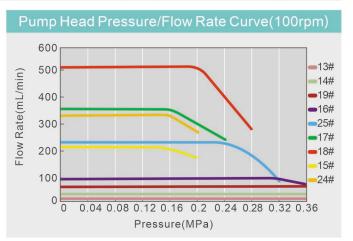
2.15

ubing		3 Rollers		4 Rollers		Weight
DxWall Thickness	(mL/r)	(mL/min)	(mL/r)	(mL/min)	(rpm)	(kg)
0.8x1.6(mm)	0.06	0.006-36	0.06	0.006-36		
1.6x1.6(mm)	0.26	0.026-156	0.25	0.025-150		
2.4x1.6(mm)	0.55	0.055-330	0.51	0.051-306		
3.1x1.6(mm)	0.92	0.092-552	0.88	0.088-528		
4.8x1.6(mm)	2.2	0.22-1320	1.9	0.19-1140	0.1-600	0.6
6.4x1.6(mm)	3.6	0.36-2160	3	0.30-1800		
7.9x1.6(mm)	5.4	0.54-3240	4.8	0.48-2880		

1.9

3.1





0.19-1140

0.31-1860

Filling Volume Reference Parameter											
Pump Head	Tubing	Filling Volume(mL)	Filling Time(s)	Accuracy(±%)	Output (pcs/min)	Motor Speed(rpm)					
	13#	0.1	0.5	0.8	40	200					
	14#	1	1	0.5	30	230.8					
	19#	3	1	0.5	30	327.3					
KD4E	16#	7	1.5	0.5	24	304.3					
KD15	25#	10	1	0.5	30	272.7					
	17#	30	1.5	0.5	24	333.3					
	18#	80	2.5	1	17	355.6					
KDOF	15#	10	1.2	0.5	27	232.6					
KD25	24#	30	2	0.5	20	259.36					

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only

# Pump Head - KT15

#### **KT15**



#### Product Introduction

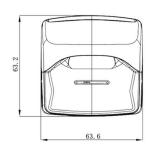
Exquisite appearance, small size. The upper pressing block is opened by a turning method, and the operation is simple. The elastic upper block can reduce tubing wear. Quickly replace tubing with self-adaptive tube clamp. Suitable for 5 different sizes of tubes to meet different flow rate requirements.

#### Typical Application

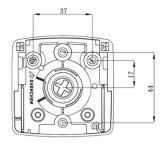
- Medical equipment, biotechnology, pharmaceutical
- Chemical and food industries

Pump Drive: LabQ LabT

Dimension Drawing(Unit: mm)





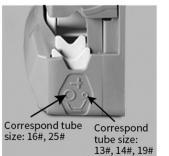


#### Tubing Installation Procedure



head to open the pump head.





2. Adjust the tube holder to the position corresponding to the installed size.



3. Put the tubing into the pump head.



4. Close the flip top of the pump head downward to complete the installation.

#### Technical Specifications

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only

Pump Head	Channel number	Tubing	ID×Wall thickness(mm)	mL/r	Speed(rpm)	Flow Rate(mL/min)	Weight(kg)
	KT15 Single channel	13#	0.8×1.6	0.033		0.0033~19.97	
		14#	1.6×1.6	0.156		0.0156~93.42	
KT15		19#	2.4×1.6	0.286	0.1~600	0.0286~171.6	0.096
- Circumor		16#	3.1×1.6	0.477		0.0477~286.32	
		25#	4.8×1.6	0.933		0.0933~560.04	

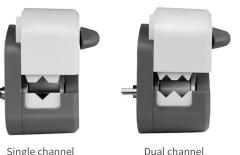
## Pump Head - HandyPump

#### **HandyPump**



#### Product Introduction

- Front knob to open the pump head, save space.
- Automatic tubing retention makes tube loading easy and quick.
- Single and dual-channel head available.
- 5 different sizes tubing to meet different flow rate requirements.



Single channel HandyPump01

Dual channel HandyPump02

#### Tubing Installation Procedure



1. Turn the knob anticlockwise 180°, open the upper block.



2. Put the tube between rollers and upper block, tighten up the tubing lightly.



3. Turn the knob clockwise 180°, put the upper block back to original position, fasten the tube.

#### Technical Specifications

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

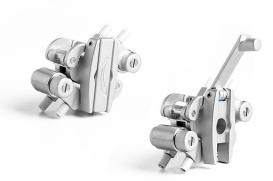
Model	Channel number	Tubing	IDxWall thickness(mm)	mL/r (3 rollers)	mL/r (6 rollers)	Speed (rpm)	Flow Rate(L/min) (3 rollers)	Flow Rate(L/min) (6 rollers)	Weight (kg)
HandyPump01		13#	$0.8 \times 1.6$	0.033	0.031		0.0033~10.03	0.0031~29.36	0.224
	Single channel	14#	1.6×1.6	0.187	0.126		0.0187~56.09	0.0208~37.68	0.302 (6 rollers)
		19#	$2.4 \times 1.6$	0.371	0.215	0.1~300	0.0371~111.17	0.0036~64.51	
		16#	3.1 × 1.6	0.636	0.345		0.0636~190.76	0.0059~103.51	
		25#	$4.8 \times 1.6$	1.219	0.636		0.1219~365.69	0.01038~190.81	
		13#	$0.8 \times 1.6$	0.033	_		0.0033~10.03	-	0.224 (3 rollers)
HandyPump02	Dual	14#	1.6×1.6	0.187	_	0.4.200	0.0187~56.09	-	
HandyPump02	channel	19#	$2.4 \times 1.6$	0.371	-	0.1~300	0.0371~111.17	-	
		16#	3.1 × 1.6	0.636	-		0.0636~190.76	_	

# Pump Head - UC15/20

#### UC15/20



#### Roller Assembly

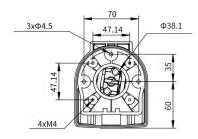


## Pump Drive: LabV3-IV

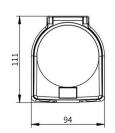
#### Product Introduction

UC15/UC20 spring pump head is widely used for medical dialysis equipment. Transparent protective cover, can observe the working situation anytime; uncover signal output, stop working when uncover to ensure safety; Elastic roller assembly, running smoothly; manual lever help install the tube, and can finish liquid circulation when power down unexpectedly; support stepper motor, DC motor.

#### Dimension Drawing(Unit:mm)







#### Tubing Installation Procedure



1. Press the pipe clamp, put the tube into the U shaped groove.



2. Put the tube between the two guide posts. Hold the spanner, rotate the wheel body.



3. Press the pipe clamp, put the tube into the U shaped groove.



4.Installation is finished.

#### Technical Specifications

Model	Housin	g Material	Rollers assemble	Tu	bing	Speed Range	Flow Rate (mL/min)	Weight(kg)
Wodel	Base Protecting cov	Protecting cover		Size	ID×Wall(mm)			
	UC15 PSF PC			16"	3.1x1.6		0.1651-596	1.37
11045		DO.	Spring-like structure	25#	4.8x1.6	0.1-350	0.3440-1251	
0015	PSF	PC		17"	6.4x1.6		0.5818-2186	
				18"	7.9x1.6		0.8652-3281	
UC20	PSF	PC	Spring-like structure	Medical dialysis tube	8×2	0.1-200	0.7327-811	1.37

## **Pump Head - MiniPump**

### **MiniPump**



#### Product Introduction

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





#### Pump Drive: LabT

#### Dimension Drawing(Unit: mm)



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

Tubing Installation Procedure

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





3. Make the compression 4. Press the compression block align the upper slide block into the pump head,

#### Technical Specifications

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C,the liquid is pure water, no pressure, no suction and lift. Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

Pump Head	Tubing	IDxWall(thickness(mm)	mL/r	Speed (rpm)	Flow Rate (mL/min)
	13#	0.8×1.6	0.024		0.0024-8.28
	14#	1.6×1.6	0.112		0.0112-33.88
	19#	2.4×1.6	0.252		0.0252-77.23
	16#	3.1×1.6	0.394		0.0394-114.31
MiniPump01	25#	4.8×1.6	0.652	0.1~300	0.0652-190.00
	1×1	1×1	0.05		0.005-15.01
	2×1	2×1	0.18		0.018-54.63
	2.5×1	2.5×1	0.256		0.0256-76.84
	3×1	3×1	0.356		0.0356-108.39
	1×1	1×1	0.05		0.005-15.01
MiniPump02	2×1	2×1	0.18	0.1~300	0.018-54.63
WiniPumpo2	2.5×1	2.5×1	0.256	0.1~300	0.0256-76.84
	3×1	3×1	0.356		0.0356-108.39

# Pump Head - MicroPump

### **MicroPump**



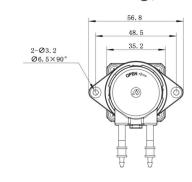


Pump Drive : LabK

#### Product Introduction

Beautiful appearance, compact size, variety colors to choose, OEM ideal choice, can be driven by stepper motor, DC motor

#### Dimension Drawing(Unit: mm)



### O Tubing Installation Procedure







#### Technical Specifications

Experimental conditions:Standard atmospheric pressure, room temperature at 20°C, the liquid is pure water, no pressure, no suction and lift.

Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

Flow model selection								
	Tubing No.	B04	B06	B10	B22			
Tul	bing ID. (wall thicknes	1.0*1.1	2.0*1.0	3.0*1.0	4.0*1.0			
	Tubing material	PharMed BPT	PharMed BPT	PharMed BPT	PharMed BPT			
	24V Brush/Brushless	Single gear	14.88	50.05	110.27	149.23		
	HA/HD	Double gear	1.28	4.29	9.45	12.79		
	12V Brush/Brushless HB/HE	Single gear	14.88	50.05	110.27	149.23		
Flow rate		Double gear	1.28	4.29	9.45	12.79		
(mL/min)	6V Brush/Brushless	Single gear	14.88	50.05	110.27	149.23		
	HC/HF	Double gear	1.28	4.29	9.45	12.79		
	35Stepper motor(350rpm)STB		14.88	50.05	110.27			
	42Stepper motor(350rpm)STA		14.88	50.05	110.27	149.23		

# **Peristaltic Pump Tubing**

#### Silicone Tubing

Platinum-cured silicone tubing: Soft, slightly transparent, smooth inner wall; low protein adhesion, low protein penetration, temperature range: -51~238°C.

	Micro Flow Rate Tubing										
Tubing	Size	0.13×0.86	0.5×0.86	0.86×0.86	1.52×0.86	2.06×0.86	2.79×0.86	1×1	2×1	3×1	2.4×0.8
Tubing cross sections(1:1)		•	•	•	0	0	0	•	0	0	0
Wall thic (mm				0	.86				1.0		0.8
Inside dia (mm		0.13	0.5	0.86	1.52	2.06	2.79	1.0	2.0	3.0	2.4
Maximum	Conti- nuous					0.1					
	Interm- ittent					0.1					

Basic Flow Rate Tubing												
Tubing	Size	13#	14#	19#	16#	25#	17#	18#	15#	24#	35#	36 <sup>#</sup>
Tubing cross sections (1:1)		•	0	0	0	0	0	0	0	0	0	0
Wall	mm				1	.6					2.4	
thickness	inch	1/16					3/32					
Inside	mm	0.8	1.6	2.4	3.2	4.8	6.4	7.9	4.8	6.4	7.9	9.6
diameter	inch	1/32	1/16	3/32	1/8	3/16	1/4	5/16	3/16	1/4	5/16	3/8
Maximum pressure (Mpa)	Conti- nuous	0.17				0.14	0.1	0.07	0	.17		0.14
	Interm- ittent		0	.27		0.24	0.14	0.1	0	.27		0.24

Industrial Tubing								
Tubing Size		26#	73#	82#	86#	90#	88#	92#
Tubing section (1:1	ons							
Wall	mm		3.3		6.4		4.8	
thickness	inch		1/8		1/4		3/16	3
Inside	mm	6.4	9.6	12.7	9.5	19	12.7	25.4
diameter	inch	1/4	3/8	1/2	3/8	3/4	1/2	1
Maximum pressure	Conti- nuous		0.2			0	.25	
(Mpa)	Interm- ittent		0.27			(	0.3	

# Peristaltic Pump Tubing

## SAINT-GOBAIN Tubing: Tygon, PharMed BPT, Norprene etc

	A Tygon3350	B Tygon E-3603	Norprene Chemical	PharMed	■ Norprene A-60-F
Formulation	Tygon3350	Tygon R-3603	Norprene Chemical	PharMed	Norprene A-60-F
Application	Pharmaceutical, cosmetic, medical and autoanalysis application.	General laboratory, food & beverage, biopharm-aceutical, analytical instruments.	Elcellent for chemical processing and general industrial applications. Food and beverage applications where extractables are a concern.	Cell and tissue culture work and pharmaceutical uses. Also good for light- sensitive samples.	Ideal for the food, dairy and beverage.
Advantages	Ultra-smooth; minimizes bacterial growth. Good for mild to medium concentration bases, salts and alcohols; odorless, tasteless, and nontoxic. Transparent.	Inexpensive tubing for general lab application. Nonaging,nonoxidizing. Clear for easy flow monitoring. Handles virtually all inorganic chemicals. Low gas permeability. Smooth bore; good for viscous fluids. High dielectric constant.	Norprene thermoplastic elastomer outer jacket with chemically inert Tygon® 2075 inner bore for excellent chemical resistance. Plasticizer-free to guard against extractables. Long flex life. Opaque beige.	Great for tissue and cell work-nontoxic and nonhemolytic; long service life minimizes risk of fluidexposure; reduces tubing costs and pump downtime.  Opaque to UV and visible light to protect light-sensitive fluids. Heat sealable, bondable, and formable.  Extremely low gas permeability.	Heat, ozone, and UV light resistant. Nonaging; nonoxidizing; superior acid and alkali resistance. Opaque beige.
Application Suitability		ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS STERILE FLUIDS GOOD		ACIDS GOOD ALKALIES GOOD ORGANIC NO PRESSURE GOOD VACUUM EXCELLENT VISCOUS FLUIDS STERILE FLUIDS ECOOD	
Physical characteristics		Thermoplastic. PVC-based material with plasticizer. Firm (stiff) material. Transparent, clear.		Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm( stiff) material. Opaque, beige.	
Temp.range	−75 to 450° F (−60~232° C)	−58 to 165° F (−50~74° C)	−76 to 165° F (−60~74° C)	−60 to 270° F (−59~135° C)	−60 to 275° F (−51~135° C)
Meets classifications	FDA 21 CFR 177.2600 USP Class VI EP 3.1.9. Exceeds 3A standards Manufactured according to GMP.	FDA 21 CFR 175.300	None.	None.	FDA 21 CFR 177.2600 NSF listed ( Standard 51) Manufactured according to GMP.
Cleaning/ Sterilization	Ethylene oxide gamma irradiation, or autoclave for 30 min, 15psi (1 bar).	Unaffected by commercial sanitizers (with recommended procedures) Sterilize with ethylene oxide (ETO) or autoclave. To autoclave: Coil loosely in nonlinting cloth or paper, autoclave at 121°C (250°F). 1KG/cm³ (15psi) for 30 minutes (tubing will appear milky); air dry at max 66°C (150°F) for 2 to 2 ½ hours until clear.	Sterilize with ethylene- oxide(ETO), autoclave or gamma irradiation up to 2.5Mrad. Repeated autoclaving will not affect overall life.	Autoclave, ethylene oxide, or gamma irradiation.	Autoclave.

# Peristaltic Pump Tubing

	■ Norprene A-60-G	G Tygon F-4040-A	<b>Ⅲ</b> Tygon LFL	■ TYGON 2475	K Viton
	TUBNGTH THE THE TOTAL OF THE TO	GASOLINE		828 111	
Formulation	Norprene A-60-G	Tygon F-4040-A	Tygon LFL	TYGON 2475	Viton
Application	For applications requiring excellent chemical, heat, ozone, and ultraviolet (UV) light resistance.	Fuels and industrial lubricants-gasoline, kerosene, heating oils, cutting compounds, and glycol-based coolants. Resists most hydrocarbons.	General laboratory use, provides longer life with peristaltic tubing pumps.	Sensitive fluid transfer applications requiring high purity.	Acid and solvent transfer, high-temperature.
Advantages	Best choice for vacuum/ pressure applications. Offers longest life with good flow consistency. Heat and ambient ozone resistant. Good resistance to acids/alkalies. Black color hides dirt and dust. Heat sealable, nonaging, and nonoxidizing. High dielectric constant.	Resists embrittlement and swelling, ozone-and UV-resistant, with low- extractability. Translucent yellow.	Longest life of all Tygon® peristaltic tubing (1000hrs). Nonaging, nonoxidizing. lear for easy flow monitoring. Broad chemical resistance; low gas permeability. Smooth bore. Good for viscous fluids. High dielectric constant.	Plasticizer free, smooth inner surface (inhibits particulate buildup and bacterial growth), safely disposed of through incineration and nontoxic.  Transparent.	The most chemical resistant tubing. Registand to corrosives solvents, and oils at elevated temperatures. Low gas permeability.
Application Suitability	ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS PRESSURE EXCELLENT VACUUM EXCELLENT VISCOUS EXCELLENT FLUIDS STERILE FLUIDS		ACIDS GOOD ALKALIES GOOD ORGANIC SOLVENTS PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS STERILE FLUIDS POOR		ACIDS EXCELLENT ALKALIES EXCELLENT ORGANIC SOLVENTS EXCELLENT PRESSURE GOOD VACUUM GOOD VISCOUS FLUIDS STERILE FLUIDS FAIR
Physical characteristics	Thermoplastic elastomer. Polypropylene-based material with USP mineral oil. Excellent tensile strength. Firm ( stiff) material. Opaque, black. Manufactured according to GMP.		Thermoplastic. PVC-based material with plasticizer. Firm ( stiff) material. Transparent, clear.		Thermal set rubber. Viton B (67% fluorine) Firm (stiff) material Opaque, black. Manufactured according to GMP.
Temp.range	–60 to 270° F (–59∼135° C)	–35 to 165° F (−37~74° C)	−58 to 165° F (−50~74° C)	−94 to 125° F (−70~52° C)	−25 to 400° F (−32~205° C)
Meets classifications	None.	Meets NSF-51 and 3A sanitary standards.	USP Class VI, FDA 21 CFR 175.300	FDA 21 CFR 177.1520, USP 23 Class VI, Manufactured according to GMP.	None.
Cleaning/ Sterilization	Sterilize by autoclave only.	Not recommended.	Sterilize by ETO/autoclave. Coil loosely in nonlinting cloth or paper; autoclave at 250°F(121°C), 15 psi (1kg/cm²), 30 minutes ( tubing will appear milky); air dry at max 150°F (66°C) for 2 to 2 ½ hrs until clear.	Ethylene oxide or gamma irradiation.	Sterilization is not recommended.

## **Peristaltic Pump Accessories**

#### A Filling Nozzle

Name	Material	Picture
Reducer anti-splash filling nozzle	SS316	
Flat filling nozzle	SS304/316	

#### B One Way Checkvalve



Avoid liquid drop off after filling and transferring.



Used for the output of tube, preventing the tube floating or absorbing the wall of container.

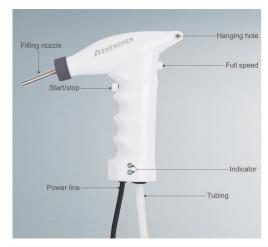
Name	Material	Tube
Counter sunk	304/316 stainless steel	13", 14", 19", 16", 25", 17", 18", 15", 24", 35", 36", 26", 73", 82"

#### D Fluid Pulse Dampe





Special design for peristaltic pump, effectively suppress the peristaltic pump pulsation and improve the flow rate accuracy. The pulsation suppression rate can reach more than 95%.



Filling nozzle and tubing cap							
Filling nozzle size	13#	14#	19#				
Inner diameter	3mm	3.5mm	4.5mm				
Picture			•				
Filling nozzle size	16#	15#/25#	17#/24#				
Inner diameter	5mm	7mm	9mm				
Picture	•						
Tubing size	17#	18#	Plum blossom				
Inner diameter	9.6mm	11.1mm	cap				
Picture			•				

Based on ergonomics design, elegant appearance, grip feeling comfortable, easy operation. Connect to peristaltic pump external control interface, with start/stop and full speed control, can realize transferring and dispensing function. Power supply and working indicator, show the dispenser working status. With hanging hole, can be hang up when do not use.



Control the pump start/stop with foot pedal switch.

#### Handling Dispenser Patent No: ZL201830096683.4; ZL201820353029.1

# **Peristaltic Pump Accessories**

#### G Tube Connector













☐ Tee tube connector ☐ Reducer tube connector ☐ "L" tube connector ☐ Flexible/Hard

Straight tube



Work with peristaltic pump, can control the liquid PH value, add acid or alkali automatically.

- Function: 1. Liquid: Acid-Base Solutions
- 2. PH value: 0-14PH
- 3. Set up target PH value
- 4. Add acid or alkali liquid automaticall
- 5. Control: RS485, 4-20mA
- 6. Power supply: DC24V (AC220V for option)
- 7. Suitable temperature: 0-60°C

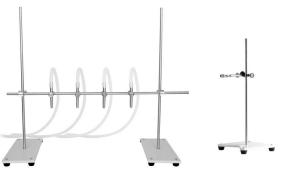


When applied in the dispensing line, it can detect weather there is filling bottle in the production line. When the bottle approach the sensor side, the switch action will be made without any mechanical contact or pressure, thereby providing filling control order to the pump. In the same way, when no filling bottle is detected, the stop filling control order is provided to the pump.



Stainless steel blade, makes right-angle cuts in several sizes of plastic tubing.





The multiple filling stand is suitable for more than 2 channels filling. It can hold 2-8 filling nozzles. We can customize the suiatble one according to your request.