

# Intelligent Type Peristaltic Pump

Model No: LabV1

Flow Rate: 0.0002-645mL/min



## Product Features

Industrial grade 4.3" true color LCD screen, touch screen control.

Mechanical keypad control pump start, stop, full speed and direction.

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.

## Screen Display

Real-time flow rate changeable by touching

Display area for setting parameter

Display area for dynamic working

Display area for running parameter

Function setting are changeable by touching

Setting

Fixed volume  Volume **6.00** L

Fixed volume measurement function turned on, flow rate is 10.00ml/min. Finish the volume need 0.00 minutes

OK

Dispensing

Volume disp. Speed disp. Dispensing

Disp.Vol. **5.00** mL Disp.Time **1.00** s

Pause Time **1.00** s Repeat **0002**

OK

Timing Start/stop

Start Time **10:08:39 PM** Over Time **10:08:39 PM**

ON  OFF

Once  Custom

OK

Fixed Volume Measurement Setting Interface      Dispensing Setting Interface      Time Start and Stop Setting Interface

## Pump Head



EasyPump



AMC



YZ1515x



YZ2515x

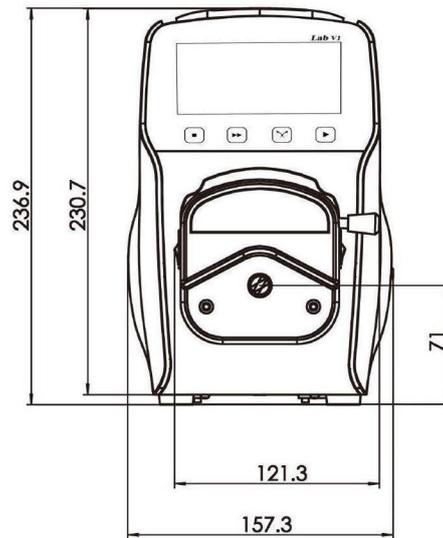
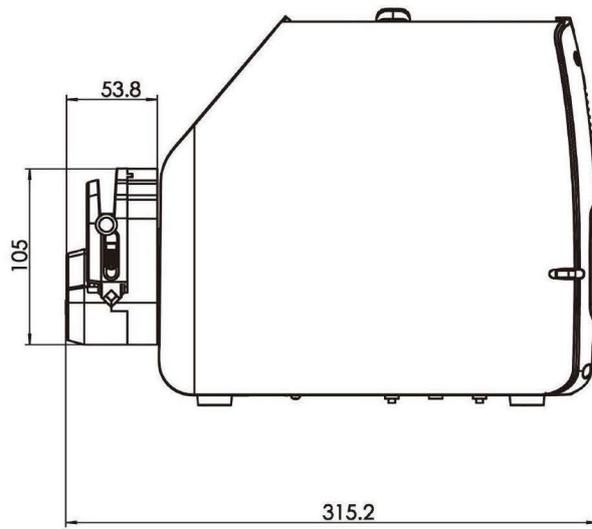
Drive	Pump head	Tubing Size	Speed	Flow rate (mL/min)
LabV1	EasyPumpI/III	13#,14#,19#,16#,25#,17#,18#	0.1-150rpm	0.0053-645
	EasyPumpII/IV	15#,24#		0.18-410
	EasyPumpV/VI	13#,14#,19#,16#,25#		0.0053-295
	2*EasyPumpI/III	13#,14#,19#,16#,25#		0.0053-295
	2*EasyPumpII/IV	15#		0.18-270
	2*EasyPumpV/VI	13#,14#,19#,16#		0.0053-140
	AMC1-AMC12(10)	ID:0.13-3mm,Wall thickness:0.8-1mm		0.0002-48(suggestion working speed≤150rpm)
	AMC1-AMC12(6)	ID:0.13-3mm,Wall thickness:0.8-1mm		0.0002-65(suggestion working speed≤150rpm)
	YZ1515x	13#,14#,19#,16#,25#,17#,18#		0.007-570
	YZ2515x	15#,24#		0.17-435

Channel number	1	2	3	4	5	6	8	10	12
Cartridge material	POM/PVDF								
Rollers material	304 stainless steel material								
Rollers number	6rollers, 10rollers								
Tubing	Speed	Flow rate of pump head with 10 rollers (mL/min)	Flow rate of pump head with 6 rollers (mL/min)	Tubing maximum pressure (Mpa)					
				Continuous	Intermittent				
1×1	0.1~150rpm	0.0050~7.55	0.0062~9.36	0.1	0.1				
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	0.0002~0.31						
0.19×0.86		0.0003~0.44	0.0003~0.46						
0.25×0.86		0.0005~0.76	0.0005~0.80						
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	Tubing	ID×Wall thickness(mm)	mL / r	Flow Rate(mL/min) (0.1-150rpm)	Tubing Max.Pressure(Mpa)		Weight(kg)
					Intermittent	Continuous	
Single Channel EasyPump I/III	13#	0.8×1.6	0.053	0.0053-8	0.27	0.17	0.6
	14#	1.6×1.6	0.27	0.027-41			
	19#	2.4×1.6	0.55	0.055-83			
	16#	3.1×1.6	0.933	0.0933-140	0.24	0.14	
	25#	4.8×1.6	1.967	0.1967-295			
	17#	6.4×1.6	3.333	0.3333-500	0.14	0.10	
18#	7.9×1.6	4.3	0.43-645	0.10	0.07		
Single Channel EasyPump II/IV	15#	4.8×2.4	1.8	0.18-270	0.27	0.17	
	24#	6.4×2.4	2.733	0.2733-410			
Dual Channel EasyPump V/VI	13#	0.8×1.6	0.053	0.0053-8	0.27	0.17	
	14#	1.6×1.6	0.27	0.027-41			
	19#	2.4×1.6	0.55	0.055-83			
	16#	3.1×1.6	0.933	0.0933-140	0.24	0.14	
	25#	4.8×1.6	1.967	0.1967-295			

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

 Dimension Drawing (Unit:mm)



## Technical Specifications

Flow rate range	0.0002-645mL/min
Flow rate resolution	0.01mL/min
Speed range	0.1~150rpm
Speed resolution	0.01rpm
Dispensing volume	0.01~9999mL
Volume resolution	0.01mL
Dispensing time	0.1~9999s
Pause time	0.1~9999s
Time resolution	0.01s
Repeat number	1-9999 times, setting "0" as infinite / continuous dispensing
Flow rate accuracy	<±0.5%
Back suction angle	0-360°
Motor type	Stepper motor
Display	4.3 inch-industrial grade-True color LCD screen
Control method	Touch screen and Mechanical keypad
Keypad lifetime	300,000 times
External control signal	0-5V,0-10V,4-20mA for option
Start/stop,change direction signa	Passive switch signal,such as:foot pedal switch,Active switch signal:5V-24V
Communication interface	RS232,RS485 support MODBUS protocol(RTU mode)
Output interface	Output motor working status(Open-Collector output)
Power supply	220V +10%50Hz/60Hz (standard),110V +10%50Hz/60Hz (optional)
Drive dimension (LxWxH)	259×157×237(L×W×H)
Drive Weight	4.40kg
Power consumption	<80W
condition temperature	0-40°C
Relative humidity	<80%