

## Function 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)		•	•	•	

## Specification comparison

Technical Parameter	Model	LabV Series	LabF Series	LabN Series	LabM Series
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 keypad	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	/	/
Dispensing volume range		0.01-9999L 0.01-9999mL	0.01-9999mL	/	/
Dispensing time		0.1-9999s	0.1-9999s	0.1s-9999h	0.5-999s
Pause time		0.1-9999s	0.1-9999.99s	/	/
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°	/
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	/	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)
Output interface		Output motor working status (Open-Collector output)	Output motor working status (Open-Collector output)	Output motor working status (Open-Collector output)	/
Power supply		AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)	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°C	0-40°C	0-40°C	0-40°C
Relative humidity		<80%	<80%	<80%	<80%