



Longer Precision Pump Co.,Ltd.

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► Technical Specification

Model	GF200-1B	GF400-1B	GF650-1B
Speed range	0-200rpm	0-400rpm	0-650rpm
Speed resolution	0.01rpm (@ 100rpm) and 0.1rpm (@ ≥100rpm)		
Working mode	Continuous speed, continuous flow rate, time speed, time flow rate, volume (single run) mode.		
Display	3.5-inch color LCD screen shows parameters and statuses, such as pump speed, flow rate, volume,time, etc.		
Key&screen Lock	The physical buttons and the touchscreen can be locked to prevent misoperation.		
Power-on state	In internal control mode, the system can be configured to stop or the state it was in before power off at next power-on. It can be set in system settings or communication.		
Parameter Storage	Power-off saving of the operating parameters and system parameters.		
Flow rate closed-loop	Optional flow sensor,to realize flow rate closed-loop auto calibration.		
Control mode	Touchscreen+ keypad control; foot switch / handheld dispenser control; external signal control; communication control. Multiple sources can be enabled simultaneously.		
Communication control	RS485 interface, Modbus RTU protocol or Longer OEM protocol.		
External control	Start/stop control, direction control: 5V-24V logic level signal or relay signal (dry contact) Speed control: 4-20mA, 0-5V, 0-10V, 0-10kHz, the signal range and speed range can be configured on the pump.		
Status outputs	Pump speed: 10Hz/rpm, OC gate frequency signal Running/stop: 24VDC/ 0.1A relay, open for stop Running direction: 24VDC/ 0.1A relay, close for clockwise Other alarms: 24VDC/ 0.1A relay, close for alarms		
Certification	LVD:IEC61010-2-201:2017 for use withIEC61010-1:2010, AMD1:2016 EMC: EN IEC 61326-1:2021, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019 RoHS: 2011/65/EU(RoHS2.0)		
IP rating	IP31		
Power supply	AC 100-240V 50/60Hz 25W	AC 100-240V 50/60Hz 45W	AC 100-240V 50/60Hz 65W
Operating condition	Environment temperature:0°C-40°C, relative humidity:<80%		
Noise(@ 1 meter)	≤55dB	≤55dB	≤60dB
Dimension (mm)	225x145x165 (LxWxH)		
Weight(g)	2650	2850	

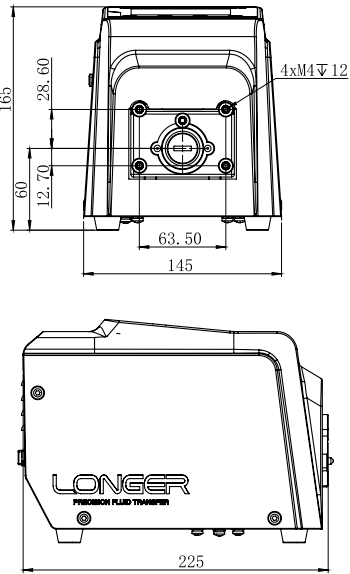
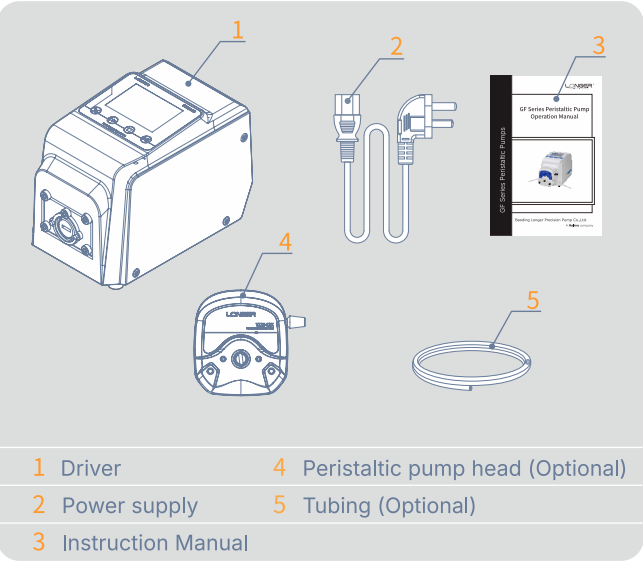


GF Series
Peristaltic Pumps
Quick Start Guide



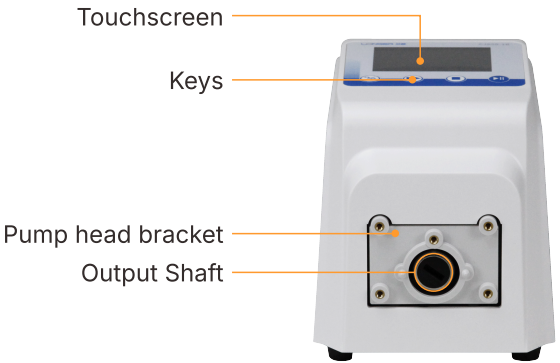
Packing Instruction

Unpack the package, on the top layer, there are user manual, power supply, and accessories, on the bottom layer, it is the peristaltic pump.

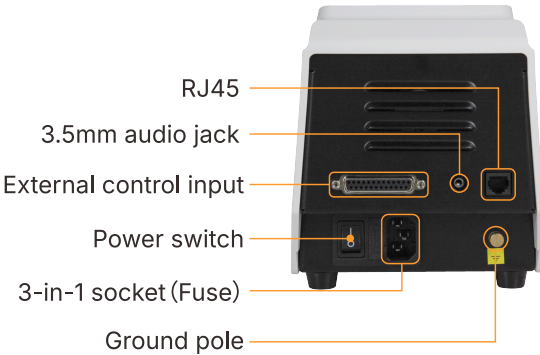


Production Introduction

Featured 3.5-inch touchscreen + keypad operation, maximum speed up to 650rpm, optional flow rate sensor for close-loop flow rate auto calibration.



During installation, align the main shaft of the applicable pump head with driver's output shaft, then adjust the position to secure the pump head on the pump head bracket.



- Power switch: [O] for off, [I] for on
- 3-in-1 socket: Containing a fuse
- External control input interface: Can be connected to a DB25 male connector signal cable
- 3.5mm audio port: For foot switch connection
- RJ45: For firmware update with software utility

Operation Introduction

The common functions on the home page are listed below, refer to user manual for detailed description and the introduction of other working modes.



	User account. Can be configured in system settings.
	Working mode, five options.
Head > YZ1515x Tubing > 13# 0.8mm	Pump head and tubing configuration.
Stop	Pump run state
	Working parameters button. Click to modify parameters.
	Reset button. Click to clear the accumulation parameters.
	Calibration button. Can make flow rate or volume calibration.
- +	Parameter fine adjustment button. Parameter changes by the minimum resolution on each click.
	Current transmission direction.
Feedback flow rate	Close-loop flow rate. When the flow sensor is connected, close-loop control is enabled, the real-time feedback flow rate will be shown.

DB25 Connector Pin Description

Pin Number	Pin Definition	Description
1	AIN_V/F+	Speed input signal (0~5V, 0~10V, or 0-10Khz)
14	AIN_I+(20mA)	Speed input signa or flow sensor input signal (4-20mA)
2	AIN_COM	Signal source reference ground
15	VCC_5V(10mA)	Power supply, 5V/0.01A
3	GND	
16	R/S_IN+	Start/Stop control signal +
4	R/S_IN-	Start/Stop control signal -
17	Z/F_IN+	Run direction control signal +
5	Z/F_IN-	Run direction control signal -
18	SPEED_OUT_C	Run speed control signal +
6	SPEED_OUT_E	Run speed control signal -
19	STAT_OUT+	Exception state output signal
7	STAT_OUT-	
20	R/S_OUT+	Run state output signal
8	R/S_OUT-	
21	Z/F_OUT1	Run direction output
9	Z/F_OUT2	
22	P1_RS485-A	RS485 communication bus
10	P1_RS485-B	
23	NC	Not defined.
11	NC	
24	485BUS_GND	RS485 communication ground
12	NC	Not defined.
25	DC24_OUT-	
13	DC24_OUT+	Power supply, 24V/0.1A