



Precision Peristaltic Pump

PP-2002 Manual



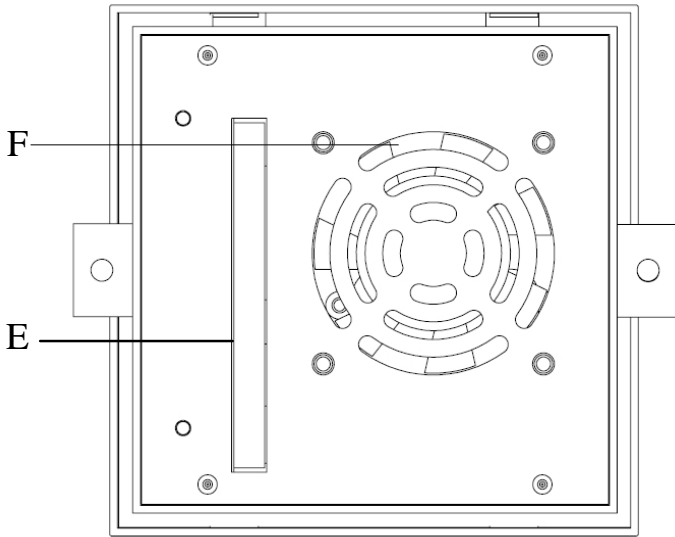
Technical Specification

- Speed range: 0.1~350rpm, reversible
- Speed resolution: 0.1rpm;
- Speed control method: Membrane mechanical keypad
- External control method: Level pattern control start and stop
TTL pulse control start/stops and direction 0-5V/4-20Ma/0-10V control speed
- Communication method: RS485 communication interface, standard MODBUS communication protocol
- Power supply: 24V DC power supply
Consumption: <24W
- Working environment: Temperature 0~40℃, relative humid < 80%
- Weight: 0.8Kg
- Protection rating: IP31

PP-2002 Functions & Features

- Acceptable pump head: PP-202 Pump Head
- Membrane keypad control speed, can control speed by manual, can also automatic control through external control port, operate easy and simple.
- One controller controls multiple pumps simultaneously, 485 addresses cannot repeat.
- High performance of drive circuit, good heat dissipation condition, low working noise, stable operation, have Load-shedding memory function.
- External control adopt standard wire connection terminal, more suitable for industrial supporting.
- RS485 standard modbus protocol, more convenient to connect with PLC program.

Product Appearance

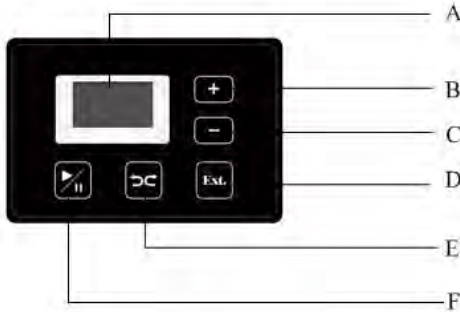


A — OLED

B — Drive

C — Pump head

Operation Panel



| | |
|----------|-------------------------|
| A | Blue screen |
| B | Speed up |
| C | Speed down |
| D | External control |
| E | Direction |
| F | Start/stop |

Start/Stop Button

Control drive start and stop, the drive status will change every time you press the button; Drive working, liquid crystal display operation icon “▶” ; Drive stop, liquid crystal display stop icon “■”.

Direction Changing Button

Used for changing the flow direction, the flow direction will change every time you press the button.

Speed Up/Down Button

Used for increase or decrease the motor speed. The motor speed will increase /decrease 0.1rpm/min every time you press the button. Hold down the key to increase /decrease speed rapidly.

External Control Button

The external control key only validates when the drive is in stop mode. It is used for starting the external control.

Operation Mode

1. The first time press the key is 0-5V analog speed control, display



0.0
■ c V 0.01

2. The second time press the key is 4-20mA analog speed control, display



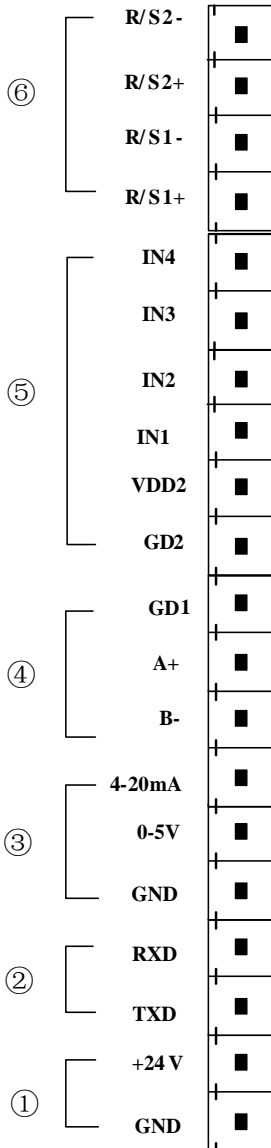
0.0
■ c mA 0.01

3. The third time press the key is exiting external control, display



300.0
■ c 0.01

Drive External Control Interface Production



- ① **24V power input**
- ② **Empty pin**
- ③ **Analog quantity signal input port: Through analog quantity signal to control motor speed from 0rpm to highest speed.**

0-5V/0-10V: 0V to 5V/10V voltage signal input port

4-20mA: 4 to 20mA current signal input port

GND: analog quantity signal negative terminal

Note:

1. Voltage simulate speed control, factory default is 0-5V, if customer need 0-10V control speed, please contact Shenchen technical department.
2. Connect 0-5V signal to 4-20mA input port is forbidden, fault connection may lead to machine damage. External control port plug should be inserted and pull in outage situation, to avoid damage external control port.

- ④ **RS485 communication port**

B-: Connect RS485 B-port

A+: Connect RS485 A+port

GD1: RS485 signal ground

- ⑤ **External control start-stop signal input sport**

GD2: External control signal common port

VDD2: Isolated voltage signal input port

IN1: External control start-stop signal input port

IN2: External control direction signal input port

IN3: Empty pin

IN4: External control recognition port

Note:

1. When external control isolated signal is 5V, can connect voltage directly to isolated signal input port, when isolated control is 12V or 24V, the electric resistance must be suitable (such as: 1K or 2K) to avoid over-range voltage damage the machine.
2. PP-2002 drive can connect foot pedal, please contact distributor if customer need.

Maintenance

When pump is not in use, loosen the cartridge to avoid damage to the tube. Keep the rollers of the pump head clean and dry. Make sure pump head & rollers do not come in contact with any corrosive liquid.

Warranty and After Service

This pump comes with a one year warranty. The warranty does not include the tubing. Misuse of this product by the user will void the warranty.



Binaca Pumps

41636 Enterprise Circle North, Suite A
Temecula, CA 92590

Phone: (951) 296-3397

Fax: (951) 296-3398

Email: info@BinacaPumps.com

Website: www.BinacaPumps.com