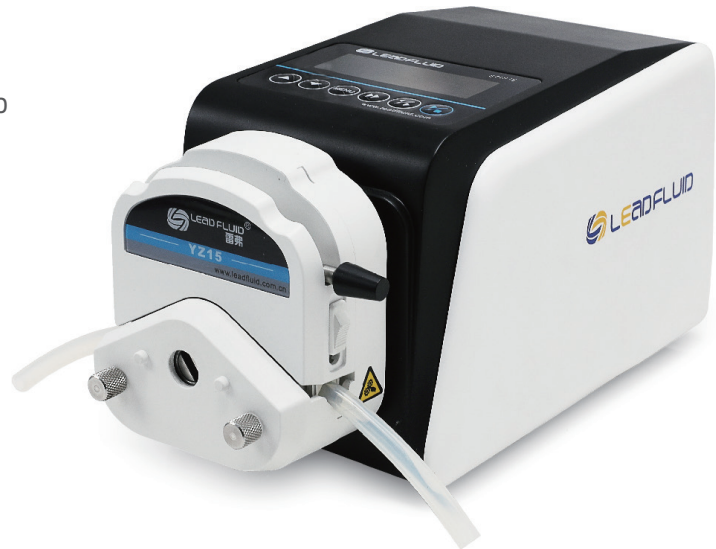


## BT103S Speed-Variable Peristaltic Pump

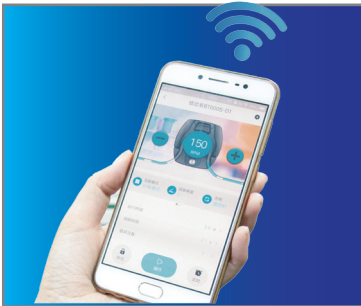


BT103S speed-variable peristaltic pump adopts high quality closed-loop stepper motor drive, speed range 0.1 ~ 100rpm, speed accuracy  $\leq \pm 0.2\%$ , one channel flow range 0.0001 ~ 480ml/min. Through Lead Fluid APP software, the pump can be controlled remotely and running status can be monitored in real time. RS485 communication, MODBUS protocol is available, the pump through a variety of signal mode is easier to be connected with other equipments, such as computer, human machine interface and PLC.

### Function and Feature

- LF-LED-OS software system, high definition lattice LCD display, switching between Chinese-English, parameter setting simply, intuitive state display.
- Industrial mask keypad operation, simple and convenient, high durability.
- High quality closed-loop stepper motor drive, speed precision, running stability, high-precision flow transmission.
- Start/Stop, adjust speed, reversible direction, full speed and, state memory (power-down memory).
- Can set the parameters of running time, interval time and cycle times to meet the requirements of timing, quantitative, liquid dispensing and flow testing.
- Slow speed stop and suction function, which can effectively prevent the dropping of liquid when the machine stops.
- Keypad locked function to prevent misoperation.
- The remote start-stop, adjust speed and timing operation can be realized through LeadFluid APP software. It also has monitoring functions such as stop alarm, change of pump tube (optional).
- Streamline injection molding shell design, simple, beautiful and easy to clean.
- The circuit board with conformal coating makes it dust-proof and moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for complex power environment.
- External analog adjust speed, external control start-stop, reversible direction, external control signal physical isolation.
- RS485 communication interface, Modbus protocol is available, support setting communication parameters, easy to connect with various control devices.
- Can match various high performance pump head, realize different pump head and drive combination.
- Support blocking turn alarm, leakage alarm (optional).
- Thermal printer can be connected, real-time printing operation parameters (optional).





### High Precision Motor

High precision stepper motor  
Speed accuracy  $< \pm 0.2\%$   
Closed-loop control

### Intelligent Cloud Control

Wifi function  
Support mobile phone App remotely control

### Anti-Interference

Super anti-interference feature  
CE certification guarantee

### External Control Function

Powerful external control function  
Support 5 ~ 24V wide voltage input  
RS485 interface  
MODBUS communication protocol

### Exquisite Appearance

ABS injection molding shell  
Streamline design  
Simple and beautiful

## Parameter

- Flow range: 0.0001 ~ 480ml/min
- Speed range: 0.1 ~ 100rpm
- Speed resolution: 0.1 rpm
- Speed accuracy:  $\leq \pm 0.2\%$
- Display mode: Window 77x32mm, Monochromatic 132\*32 lattice liquid crystal
- Language: Switching between Chinese and English
- Operation mode: Industrial mask keypad
- Keypad locked: Long press direction keypad to lock, long press start and stop key to unlock.
- Timing function: Timing running time 0.1-999 S/Min/H/D, interval time 0.1-999 S/Min/H/D.
- Cycle times: 0 ~ 999 (0 Infinite cycle)
- Back Suction angle: 0 ~ 720°
- External control signal input: Start /Stop: passive contact, external control input level 5-24V. Reversible direction: passive contact, external control input level 5-24V. Adjust speed: analog quantity 0-5V, 0-10V, 4-20mA can set.
- External control signal output: Start /Stop: level signal (following input voltage). Reversible direction: level signal (following input voltage). Speed state: analog quantity 0-5V.
- Communication interface: RS485, MODBUS protocol is available, DB15 external control interface.
- Power supply: AC100 ~ 240V, 50Hz/60Hz.
- Power consumption:  $< 30W$
- Working environment: Temperature 0 ~ 40°C, relative humidity  $< 80\%$
- IP Grade: IP31
- Dimension: 232x140x145mm
- Drive weight: 2.9 kg

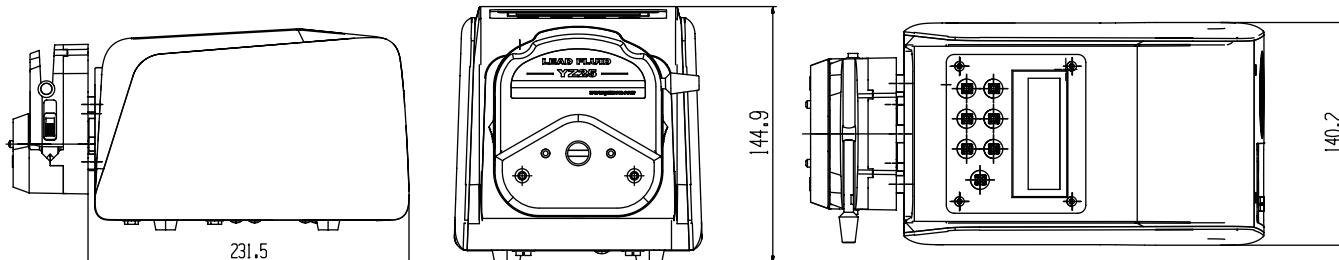
## Applicable pump head and tube, flow parameters

Pump head	Channel number	Tube	Per channel flow rate (ml/min)
DG6(6 rollers)	1, 2, 4	Wall 0.8 ~ 1mm, ID $\leq 3.17$ mm	0.0002 ~ 49
DG10(10 rollers)	1, 2, 4	Wall 0.8 ~ 1mm, ID $\leq 3.17$ mm	0.0001 ~ 41
DT10-18	1	13#14#, Wall 0.8 ~ 1mm, ID $\leq 3.17$ mm	0.0002 ~ 82
DT10-28	2	13#14#, Wall 0.8 ~ 1mm, ID $\leq 3.17$ mm	0.0002 ~ 82
YZ15	1	13#14#19#16#25#17#	0.006 ~ 280
YZ25	1	15#24#	0.16 ~ 280
YT15	1	13#14#19#16#25#17#18#	0.006 ~ 380
YT25	1	15#24#35#36#	0.16 ~ 480

Above flow parameters are obtained by using silicone tube to transfer pure water under normal temperature and pressure, in actually using it is effected by specific factors such as pressure, medium etc. Above for reference only.

## Dimension

UN: mm



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