



### Brief introduction



The pump adopts color LCD touch screen with intuitive and clear displaying interface, easy to operate. Mainly used for accurate measurement and distribution of fluid. If need high accuracy when dispensing, volume dispensing mode is available. If need high producing efficiency, time dispensing mode is more convenient. If want to separate fluid to number of equal parts, copy dispensing mode would be best. When working on flow mode, it is as same as intelligent flow peristaltic pump. The pump adopts intelligent temperature-control technology to reduce working noise. RS485 interface, as adopting the MODBUS communication protocol, the pump is easier to be connected with other equipments, such as computer, human machine interface and PLC.

### Function and Feature

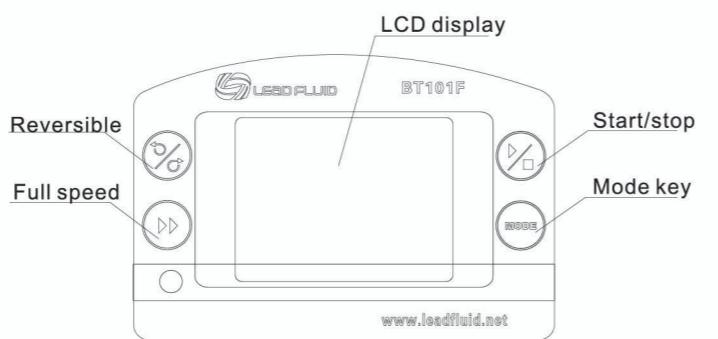
- Color LCD displaying, touch screen and keypad for operating.
- Three types of distributing mode: time dispensing mode; volume dispensing mode; copy dispensing mode.
- Automatically store five groups of working parameters.
- Precious controlling technology for motor's rotating angle increases the dispensing accuracy comparing to traditional time dispensing mode.
- Reversible direction, start/stop and full speed, state memory(power-down memory).

### Technical parameters

Technical parameters	BT101F	BT301F	BT601F
Flow range (ml/min)	0.0001~720	0.006~1600	0.006~2900
Speed range (rpm)	0.1~150	0.1~350	0.1~600
Speed resolution (rpm)	0.1rpm		
Speed accuracy	<0.2%		
Power supply	AC100~240V 50/60Hz		
Power consumption	<30W	<40W	<50W
External control	Input level 5V,12V(standard),24V(optional) External control analog 0-5v(standard),0-10v,4-20mA(optional)		
Communication interface	RS485 communication interface, MODBUS protocol is available.		
Operating condition	Temperature 0~40°C, Relative humidity <80%		
IP grade	IP31		
Dimensions (LxWxH)	257mm×180mm×197mm		
Weight	4.5 kg	4.7 kg	4.9 kg

### BT101F/BT301F/BT601F Intelligent Dispensing Peristaltic Pump introduction

- Speed resolution is 0.1rpm.
- Display and control flow rate, accumulate dispensing volume automatically.
- Calibrating flow function.
- The operating expert system guides users setting parameters correctly.
- Intelligent temperature-control technology reduces working noise.
- External high-low electrical level controls the start/stop,reversible direction and easy dispensing function, optically coupled isolator; external analog adjusts the rotate speed.
- RS485 interface, MODBUS protocol is available, easy to connect other equipments.
- Internal double-deck isolation structure; circuit board with conformal coating makes it dust-proof and moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment.
- ABS plastic housing, creative streamlined appearance.
- Can drive multi-channels and various types of pump heads.
- Optional footswitch or timer for dispensing fluid.



### BT101F/BT301F/BT601F Applicable Pump head and tubing,flow parameters

Drive type	Pump head	Channel number	Tubing(mm)	Single channel Flow rate (ml/min)
BT101F	DG (6rollers)	1 , 2 , 4	Wall0.8~1 , ID≤3.17	0.00016~49
	DG (10rollers)	1 , 2 , 4	Wall0.8~1 , ID≤3.17	0.00011~41
	DT10-18	1	13#14# Wall0.8~1 , ID≤3.17	0.0002~82
	DT10-28	2	13#14# Wall0.8~1 , ID≤3.17	0.0002~82
	YZ15	1	13#14#16#19#25#17#	0.006~420
	YZ25	1	15#24#	0.16~420
	YT15	1	13#14#16#19#25#17#18#	0.006~570
BT301F	YT25	1	15#24#35#36#	0.16~720
	YZ15	1	13#14#16#19#25#17#	0.006~990
	YZ25	1	15#24#	0.16~990
	YT15	1	13#14#16#19#25#17#18#	0.006~1300
	YT25	1	15#24#35#36#	0.16~1600
BT601F	YZ15	1	13#14#16#19#25#17#	0.006~1700
	YZ25	1	15#24#	0.16~1700
	YT15	1	13#14#16#19#25#17#18#	0.006~2300
	YT25	1	15#24#35#36#	0.16~2900



BT101F/BT301F/BT601F  
Drive with different pump heads combination

### Filling application reference table

Filling fluid volume	Recommend the pump head	Recommend the tube	Speed (RPM)	Filling time (second)	Reliability error (%)
50uL	DG6-1	0.25×0.89	>90	<6.66	<±2
0.1mL	DG6-1	0.5×0.8	>90	<3.03	<±2
0.2mL	DG6-1	0.5×0.8	>90	<6.06	<±1
0.3mL	YZ15	13#	>500	<0.6	<±2
0.5mL	YZ15	13#	>500	<1	<±1
0.8mL	YZ15	13#	>500	<1.6	<±1
1mL	YZ15	13#	>500	<2	<±1
2mL	YZ15	14#	>500	<1.1	<±1
3mL	YZ15	14#	>500	<1.65	<±1
5mL	YZ15	19#	>500	<1.68	<±1
8mL	YZ15	16#	>500	<1.2	<±1
10mL	YZ15	16#	>500	<1.5	<±1
20mL	YZ15	25#	>500	<1.43	<±1
50 mL	YZ15	17#	>500	<2.11	<±1

