

Peristaltic Pumps



mrc

PERISTALTIC PUMPS

Basic, Flow 0.0002–20ml/min



PP-X-20, Basic Micro Peristaltic Pump



LAB

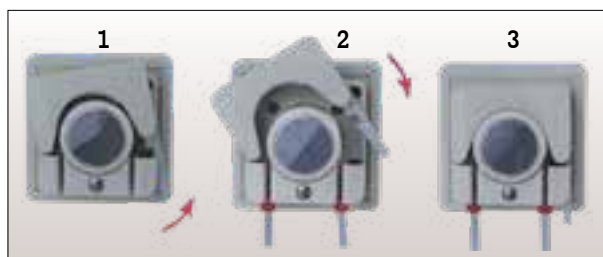
OEM

Standard External Control Interface—Order Separately

PP-X-20 peristaltic pump combines low flow and compact size into a single pump that mounts in the equipment rack or panel. The pump provides flow rates from 0.0002 to 20.0 mL/min. And it can be operated through hand-held remote controller, analog interface or RS485. White and black colors are available.

Features:

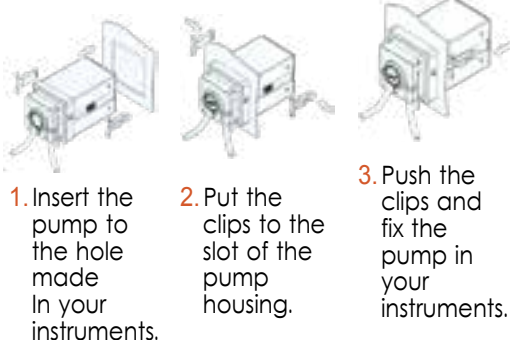
- **Prime Function:** Fast Filling, Fast Emptying
- **Memory function**
- **Ideal for OEM:** Compact size, Light weight
- **Installation Modes:** Inlaid, Rack
- **Control Modes:** Hand-held remote controller, Analog external control, Communication external control
- **Tubing Loading:** Flexible, Reliable.



Specifications:

| | |
|---------------------------------|--|
| Speed | 1 to 50rpm, reversible |
| Speed resolution | 1rpm (External control 0.1rpm) |
| Speed control | Hand-held remote controller |
| Display | Hand-held remote controller displays speed range and running status |
| External control | Start/stop & cw/ccw control, 0 to 5V, 0 to 10V, 4 to 20mA and 0 to 10kHz speed control |
| Communication interface | RS485 |
| Power Supply | DC 12V/1A adapter |
| Power consumption | <10W |
| Operating condition | Temperature 0 - 40°C Relative humidity <80% |
| Drive dimensions (LxWxH) | 135x72x72 (mm) |
| Controller DIM. (LxWxH) | 105x50x16 (mm) |
| Drive weight | 0.5kg |
| IP rating | IP 31 |

OEM Installation Sketch:



Standard Configuration:

- Pump Head
- Drive
- Hand-held Remote Controller
- Adapter
- Data Wire.

Optional Accessories:

- Small V-base (149-1-000020)
- Polished Stainless Steel Frame Tube (149-1-000021)
- Fixed Plate (149-1-000022).

| Model | Pump Head | Flow Rates (mL/min) | Tubing (mm) | Weight (Kg) |
|---------|-----------|---------------------|---|-------------|
| PP-X-20 | YZ1014 | 0.0002-20 | Wall Thickness: 0.8 - 1.0 Inner Diameter: s 3.17 ex. 0.5x0.8 1 x1 2x1 2.4x0.8 3x1 etc. | 0.5 |

PP-X-575, Basic Speed –Variable Peristaltic Pump

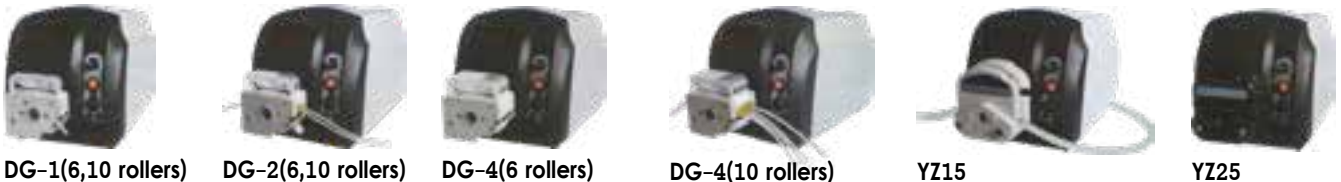
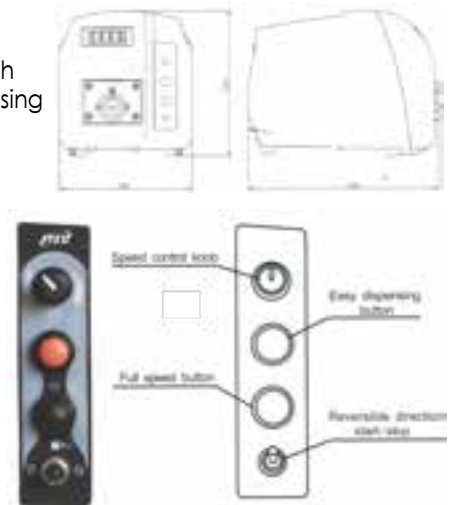
PP-X-575 Basic Speed –Variable Peristaltic Pump flow range is 0.00016–570ml/min. Rotate speed is 0.1–150rpm. With basic functions such as reversible direction, start/stop, full speed (fast cleaning), adjust speed .Dispensing function can realize the repeat timing quantitative dispensing liquid .RS485 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.



Functions and Features:

- Four-figure digital LED indicator displays working speed
- LED indicator displays the internal control, external control, footswitch and other working mode
- Mask keypad operation
- Reversible direction, start/stop, full speed, state memory (power-down memory)
- Easy dispensing function, it realizes the repeat timing quantitative dispensing liquid.
- 0.1–100 rpm, the speed resolution is 0.1 rpm. 100–150 rpm, the speed resolution is 1 rpm.
- ABS plastic housing, patent protection, creative streamlined appearance, beautiful and practical.
- Can drive multi-channels and various types of pump heads.
- The 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.
- 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.
- Optional footswitch or timer for dispensing fluid.

| | |
|---|--|
| Flow range (ml/min) | 0.00016-570 |
| Speed range (rpm) | 0.1-150 |
| Speed resolution (rpm) | When running speed is 0.1-100rpm, the resolution is 0.1rpm When running speed is 100-150rpm, the resolution is 1rpm |
| Speed accuracy | <0.5% |
| Power supply | AC 220V ±10%, 50Hz/60Hz (standard), AC 110V ±10%, 50Hz/60Hz (optional) |
| Power consumption | <30W |
| External control | Input electrical level 5V, 12V (standard), 24V (optional) External control analog 0-5V (standard), 0-10V, 4-20mA (optional) |
| External communication interface | RS485 communication interface support the MODBUS protocol. |
| Ambient temp. | 0 ~ 40°C |
| Relative humidity | <80% |
| IP grade | IP31 |
| Dimensions (LxWxH) | 260mmx181mmx198mm |
| Weight | 4.5KG |



Specifications:

| Model | Pump Head | Channel number | Tubing (mm) | One channel flow rate (ml/min) |
|----------|---------------------|----------------|-----------------------|--------------------------------|
| PP-X-575 | DG6-1 (6 rollers) | 1 | Wall 0.8 ~ 1, ID≤3.17 | 0.00016 ~ 49 |
| | DG10-1 (10rollers) | 1 | Wall 0.8 ~ 1, ID≤3.17 | 0.00016 ~ 41 |
| | DG6-2 (6 rollers) | 2 | Wall 0.8 ~ 1, ID≤3.17 | 0.00016 ~ 49 |
| | DG10-2 (10 rollers) | 2 | Wall 0.8 ~ 1, ID≤3.17 | 0.00011 ~ 41 |
| | DG6-4 (6 rollers) | 4 | Wall 0.8 ~ 1, ID≤3.17 | 0.00016 ~ 49 |
| | DG10-4 (10 rollers) | 4 | Wall 0.8 ~ 1, ID≤3.17 | 0.00011 ~ 41 |
| | YZ15 | 1 | 13#14#16#19#25#17#18# | 0.0006 ~ 575 |
| | YZ25 | 1 | 15#24# | 0.1667 ~ 425 |

PERISTALTIC PUMPS Standard



PP-L-100-1S-2, Standard Peristaltic Pump

Mainly designed for Laboratory & light industry applications. With precise speed control in 0.01rpm resolution (10000:1 turndown ratio), and flow rate calibration function, the pump has more accurate & wider range of flow rate. With the intelligent fan control, the pump has lower noise and better energy efficiency. LCD with specially designed run screen displays parameters and running status, which provides enough information for correct operation.

Pump Head Options:

- YZ1515X ● YZ2515X ● YZ1115 ● YZ1125 ● BZ15 ● BZ25 ● DMD-15-13-B ● DMD-15-13-D ● FG-15-13 ● FG-25-13 ● DG-15-24 ● DG-15-28 ● DG-1 ● DG-2 ● DG-4 ● DG-6 ● DG-8.

| | |
|--------------------------------|--|
| Speed | 0.01 ~ 100rpm, CW/CCW |
| Speed resolution | 0.01rpm resolution within the speed of 0.01 ~ 10rpm 0.1rpm resolution within the speed of 10 ~ 100rpm |
| Display | LCD |
| Control mode | Keypad control, external signal control & communication control |
| Work mode | Speed control mode & flow rate mode |
| Flow rate mode | Flow rate is displayed & the pump runs continuously at the set flow rate |
| Flow rate calibration | Improve the flow rate accuracy |
| Flow rate setting range | 0.01μL/min-999L/min, unit could be set as μL/min, mL/min or L/min |
| External control | Start/stop control (switch signal), direction control (switch signal), speed control (0-5V, 0-10V, 4-20mA, 0-10kHz are optional with uniform interface, from 0-10rpm in 0.01rpm resolution, from 10-100rpm in 0.1rpm resolution) |
| Communication control | RS485 interface, MRC protocol or Mod bus protocol, the communication parameters (address, baud rate, parity, stop bit) can be set through keypad |
| Timing function | Set the running time (13 options), the pump could run/stop automatically |
| Parameter memory | Operating parameters will be saved automatically |
| Status when powered up | The pump status when powered up could be set as stop or as the status before power loss |
| Prime | Fast filling or emptying at full speed |
| Keypad lock function | Keypad can be locked to prevent the misoperation. The delay time before lock is settable |
| Dimension (LxWxH) | 232 x 142 x 149 (mm) |
| Power supply | AC100V-240V/25W, 50/60Hz |
| Relative humidity | <80% |
| Operating temp. | 0 ~ 40°C |
| IP rating | IP31 |
| Weight | 2.38KG |

| Model | Pump Head | Tubing (mm) | Flow Rate Reference | Weight (kg) |
|---------------|--------------------------|---|--|-------------|
| PP-L-100-1S-2 | Yz1515X, YZ1115 | 13#14#16#19#25#17#18# | 0,6μL/min -380ml/min | 2.78 |
| | YZ2515X | 15#24# | 1GμL/min - 270ml/min | |
| | YZ1125 | 15#24#35#36# | 16μL/min - 500ml/min | |
| | FG-15-13 | 13#14#16#19#25#17#18# | 0,5μL/min -430ml/min | 2.66 |
| | FG-25-13 | 15#24# | 2WL/min -320ml/min | |
| | DMD-15-13-B, DMD-15-13-D | 2x13#2x14#2x16#2x19#2x25# | WL/min - 375ml/min | 2.81 |
| | BZ-15-13-A | 14# | WL/min - 22ml/min | 2.69 |
| | BZ-15-13-B | 16# | 8μL/min - 80ml/min | |
| | BZ-15-13-C | 25# | 16μL/min - 150ml/min | |
| | BZ-15-13-D | 17# | 27μL/min - 270ml/min | |
| | BZ-25-13-B | 24# | 27μL/min - 250ml/min | |
| | DG-15-24 | 16#17#25# | 8μL/min - 300ml/min (Single channel) | 3.2 |
| | DG-15-28 | 13#14# ID≤3.17mm Wall Thickness 0.8-1mm | 0.31μL/min - 75ml/min (Single channel) | 3.05 |
| | DG-(1,2,4,6,8) 6 Rollers | ID≤3.17mm Wall Thickness 0.8-1mm | 0,2μL/min -48ml/min (Single channel) | 2.58-3.01 |
| | DG-(1,2,4) 10 Rollers | | 0.15μL/min -32mL/min (Single channel) | |

PP-D-720, Speed-variable peristaltic pump

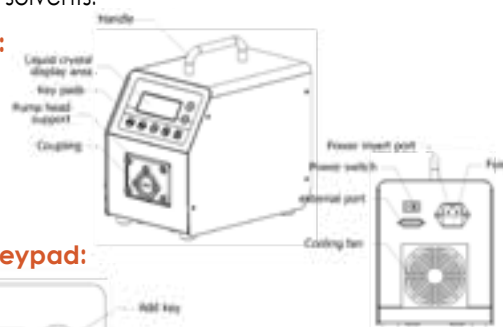
PP-D-720 Speed-variable peristaltic pump not only has start/stop, speed adjustable, full speed etc basic functions, improved LCD English/Chinese display, increased multi-stage timing dispensing operation, pause time, times and back-suction function, but also via MODBUS protocol RS485 communication to connect with other equipment easily. This series speed-variable peristaltic pump inclusion: PP-D-720 flow rate: 0.00016-720ml/min, working speed 0.1-150rpm.



Functions and Features:

- LCD displays rotating speed and operating mode.
- Membrane Keypad operation.
- Reversible direction, start/stop, full speed and adjustable speed functions.
- It can setting the working time, interval time, running times.
- High precision speed control.
- External analog value control the speed, high low-level output control the start/stop, reversible, split charging easily, physical isolations.
- RS485 interface, support MODBUS communication protocol, friendly connected with other equipments.
- Internal structure adopted double-deck isolation design, circuit board with conformal coating make it dust-proof and moisture-proof.
- Super anti-interference feature, wide voltage design, acceptable for the complex power environment.
- Stainless steel crust, easy to clean, prevent the corrosion of the acid, alkali and sodium and the organic solvents.

Components and Interfaces:



Display panel & operating keypad:



Applications:

- Applicable to the corrosive liquid.
- Pump body keeps clear of the liquid.
- No valve block.
- Smooth inner surface & easy to clean.
- Liquid only touch the tube.
- Suction could reach 8m spout.
- Low shear force, applicable to transfer the emulsified liquid or the liquid with foaming.
- Applicable to gassy liquid.
- Applicable to accurate measurement and ration feedstock, it could reach highest precision.
- Applicable to transfer viscous liquid.
- It could use in food and medical care via changing the tube and material.

Suitable Pump Heads and Tubing, Flow Parameters:

| Model | Pump Head | Channel number | Tubing size (mm) | Flow rate per channel (ml/min) |
|----------|--------------------|----------------|---------------------------------|--------------------------------|
| PP-D-720 | DG6-1 (6rollers) | 1 | Wall:0.8-1, ID:≤2.4 | 0.00016-26 |
| | DG10-1 (10rollers) | 1 | Wall:0.8-1, ID:≤2.4 | 0.00011-20 |
| | DG6-2 (6rollers) | 2 | Wall:0.8-1, ID:≤2.4 | 0.00016-26 |
| | DG10-2 (10rollers) | 2 | Wall:0.8-1, ID:≤2.4 | 0.00011-20 |
| | DG6-4 (6rollers) | 4 | Wall:0.8-1, ID:≤2.4 | 0.00016-26 |
| | DG10-4 (10rollers) | 4 | Wall:0.8-1, ID:≤2.4 | 0.00011-20 |
| | DT10-18 | 1 | 13# 14# , Wall: 0.8-1, ID:≤3.17 | 0.0002-82 |
| | DT10-28 | 2 | 13# 14# , Wall: 0.8-1, ID:≤3.17 | 0.0002-82 |
| | DT10-48 | 4 | 13# 14# , Wall: 0.8-1, ID:≤3.17 | 0.0002-82 |
| | YZ15 | 1 | 13# 14# 16# 17# 19# 25# | 0.006-420 |
| | YZ251 | 1 | 15# 24# | 0.17-420 |
| | 2 x YZ15 | 2 | 13# 14# 16# 17# 19# 25# | 0.006-420 |
| | 2 x YZ25 | 2 | 15# 24# | 0.17-420 |
| | YT15 | 1 | 13# 14# 16# 17# 18# 19# 25# | 0.006-570 |
| | YT25 | 1 | 15# 24# 35# 36# | 0.17-720 |
| | 2 x YT15 | 2 | 13# 14# 16# 17# 18# 19# 25# | 0.006-570 |
| | 2 x YT25 | 2 | 15# 24# 35# 36# | 0.006-720 |
| | DT15-24 | 2 | 16# 17# 19# 25# | 0.05-400 |



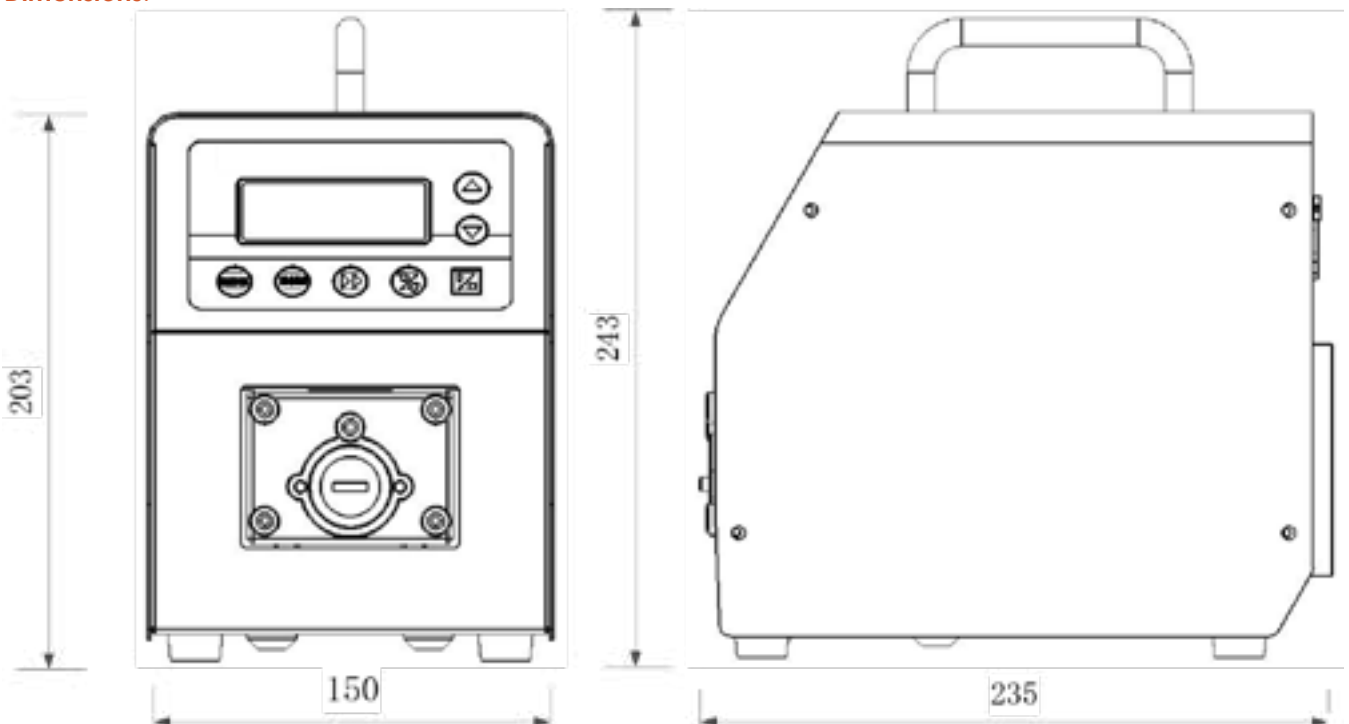
Technical Parameters: -Main Function:

| | |
|----------------------------------|---|
| Acceptable pump head | YZ15,YZ15×2,YZ25,YZ25×2 ,YT15,YT25 DT15-26, DT10-28,DT10-48 |
| External Control Function | keypad controlling speed, reversible direction, start/stop, full speed, memory function; Footswitch controlling, external controlling start/stop, external controlling direction, physical isolation, 5V, 12V, 24V, electrical level input for selection: 0~5V/10V, 4~20mA, 0~10KHz speed regulation for selection. |
| Communication Function | RS485, support MODBUS communication protocol |
| Display Function | Display the working speed |
| Direction Control | Reversible direction |

-Main Performance:

| | |
|---------------------------------|--|
| Flow range (ml/min) | 0.00016-720 |
| Speed range (rpm) | 0.1-150 |
| Speed resolution (rpm) | 0.1, accuracy 0.5% |
| Regulate mode | The mask button operation |
| Display mode | 132 X 32 LCD display |
| Acceptable Power | AC 220V±10%, 50Hz/60Hz(Standard) AC 110V±10%, 50Hz/60Hz(Optional) |
| Consumption power | < 48W |
| Working environment | environment temperature 0~40°C, relative humidity < 80% |
| Outer Dimensions (LxWxH) | 243×150×235mm |
| Driver weight | 4.7 kg |
| Protection Level | IP31 |

Dimensions:



Basic, Flow 0.07–2200ml/min PERISTALTIC PUMPS



PP-X-2200/PP-X-1100, Basic Peristaltic Pumps



Acceptable pump head of YZ1515x, YZ2515x, YZ II 15, YZ II 25. The pump delivers flow rates from 0.07 to 2200 ml/min. The speed can be adjusted manually or automatically through external control interface. Dispensing function can be realized by connecting dispensing controller FK-1 C.

Specifications:

| Model | PP-X-1100 | PP-X-2200 |
|---------------------|---|-------------------------|
| Speed | 1 to 300rpm, reversible | 1 to 600rpm, reversible |
| Speed precision | 1rpm | |
| Speed control | Rotary encoded switch | |
| Display | 3-digit LED displays current speed | |
| External control | start/stop and cw/ccw control, 0 to 5V, 0 to 10V, 4-20 mA and 0 to 10Hz speed control | |
| Power supply | AC 90V - 260V 50/60Hz | |
| Operating condition | Temp. 0 to 40°C Relative humid. < 80% | |
| Dimensions (LxWxH) | 285x207x180 (mm) | |
| Drive weight | 3.6kg | 3.8kg |
| Power consumption | < 48W | < 100W |
| IP rating | IP 31 | |

Functions and Features:

- Applicable pump heads: YZ1515x, YZ2515x, YZII15, YZII25
- Prime button for fast filling and emptying
- Adjust speed manually or automatically through external control
- Memory function, storing the running parameters automatically
- Realize computer control through RS-485 communication interface
- Indoor use only.

Applicable Pump Heads:



| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|-----------|-----------------|---------------------|-----------------------------|-------------|
| PP-X-1100 | YZ1515x, YZII15 | 0.07 - 1140 | 13# 14# 19# 16# 25# 17# 18# | 4.0 |
| | YZ2515x, YZII25 | 1.7 - 870 | 15# 24# | |
| PP-X-2200 | YZ1515x, YZII15 | 0.07 - 2200 | 13# 14# 19# 16# 25# 17# 18# | 4.2 |
| | YZ2515x | 1.7 - 1600 | 15# 24# | |
| | YZII25 | 1.7 - 1600 | 15# 24# | |

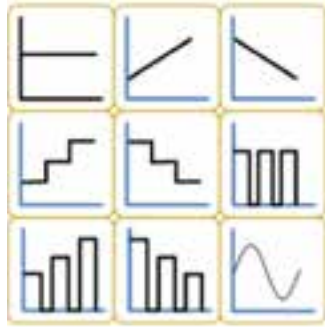


PP-L-300-1F, Basic Peristaltic Pump

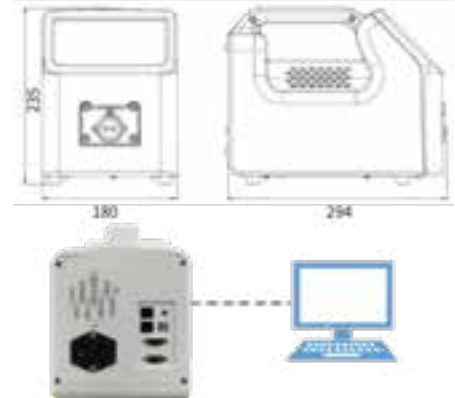
- 7 inch color display, full touch screen and intuitive graphic interface, provide easy-to-use operations
- Customize parameters by programming, and the parameter methods can be stored and easily recalled
- Multiple function modules & intelligent algorithms are designed for a wide variety of applications, including routine & multi-step complex applications
- Pump can be controlled through touch screen, foot switch, analog signal and communication commands, combined with a variety of interfaces (USB, RJ11, D89 etc.) for easy system connection.



Parameter Program Configuration



Running Control Module



| Model | PP-L-100-1F | PP-L-300-1F | PP-L-600-1F |
|------------------------------------|--|---|------------------------|
| Speed | 0.1 ~ 100rpm, CW/CCW | 0.1 ~ 300rpm, CW/CCW | 0.1 ~ 600rpm, CW/CCW |
| Speed resolution | 0.1rpm | 0.1rpm resolution when speed <100rpm, 1rpm resolution when speed >=100rpm | |
| Flow rate | 0.15µL/min-500ml/min | 0.15µL/min-1500ml/min | 0.15µL/min-3000ml/min |
| Dispensing volume | 0.1mL-9999L (accuracy of ±2% with calibration) | | |
| Calibration | Improve the flow rate and dispensing volume accuracy | | |
| Display | 7Inch 1024X600 color LCD | | |
| Language | Chinese or English, set as needed | | |
| Control mode | Touch screen control, foot switch control, external signal control and communication control | | |
| Work mode | Programming | | |
| Programming function | Running control module: constant, ramp up/down, stepped up/down, sine, constant dispensing, incremental/ decremental dispensing. Logic control module: direction, delay, event trigger, status output, pause, jump, loop, stop. Configure multi-step program with multiple modules for complex application | | |
| External control | Start/stop control, direction control: logic level signal or switch signal (dry contact) Speed control: 0-5V, 0-10V, 4-20mA or 0-10kHz with uniform interface, max speed can be set. | | |
| Communication control | USB or RS485 (RJ11) interface, Mod bus protocol, multiple baud rate (1200/2400/4800/9600/19200/38400bps) | | |
| Status output | Output logic level signals to indicate pump running status, direction status, and other custom status. | | |
| Parameter method function | 7 parameter methods can be stored and easily recalled, 1 external control method is reset | | |
| Scheduled start | The delay start time can be set, and the pump will start running at desired time. | | |
| Back suction | Antidrip through setting back suction angle & delay time for high dispensing accuracy | | |
| Dispensing volume setting range | 0.001µL-9999L | | |
| Dispensing time and Interval time | 0.5s-9000s | | |
| Dispensing cycle | 1-999999 (0 for unlimited) | | |
| Time in fluid transferring modules | 1s-9000s (0s for continuous transfer without time limit) | | |
| Delay time setting range | 0.5s-9000s | | |
| Prime | Fast filling or emptying at full speed | | |
| EMC | Comply with EN61326-1:2013 | | |
| Dimension (LxWxH) | 180 x 294 x 235 (mm) | | |
| Power supply | AC220V±20%, 50Hz/60Hz / AC110V±20%, 50Hz/60Hz | | AC100V-240V, 50Hz/60Hz |
| Condition | temperature: 0°C-40°C relative humidity: <80% | | |
| IP rating | IP31 | | |
| Weight | 5.0KG | | |



PP-T-575



PP-T-575/1340/2300, Intelligent Flow Peristaltic Pump

PP-T-575/1340/2300 Intelligent flow peristaltic pump adopts color LCD and touch screen technology, the operator can input the flow rate directly. Simple operation, the operating interface is intuitive. This product mainly uses in controlling the flow transmission, the highest accuracy of controlling flow is 0.5%. Unique dispensing function realizes the repeat timing quantitative dispensing. 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 & keypad for operating.
- Reversible direction, start/stop and full speed, state memory (power-down memory).
- Speed resolution is above 0.1rpm.
- Display and control flow rate, accumulate dispensing volume automatically.
- Calibrating Flow function.
- Easy dispensing function, it realizes the repeat timing quantitative dispensing, without the time controller.
- 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 & 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 & moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment.
- Stainless steel housing, easy to clean, excellent resistance to the corrosion of the acid, alkali, sodium & organic solvents.
- Can drive multi-channels & various types of pump heads.
- Optional footswitch or timer for dispensing fluid.

| Technical parameters | PP-T-575 | PP-T-1340 | PP-T-2300 |
|-------------------------|---|------------|------------|
| Flow range (ml/min) | 0.00016-575 | 0.006-1340 | 0.006-2300 |
| Speed range (rpm) | 0.1-150 | 0.1-350 | 0.1-600 |
| Speed resolution(rpm) | 0.1rpm | | |
| Flow accuracy | <0.5% | | |
| Power supply | AC 220V ± 10% 50Hz/60Hz (standard); AC 110± 10% 50Hz/60Hz(optional) | | |
| Power consumption | <40W | <50W | <60W |
| External control | Input level 5V,12V (standard), 24V (optional) External control analog0-5V (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) | 223x150x195 (mm) | | |
| Weight | 4.7kg | 4.9kg | 5.2kg |

Applicable Pump Head And Tubing, Flow Rate Parameters

| Drive type | Pump head | Channel number | Tubing(mm) | Flow rate (ml/min) |
|------------|-----------------|----------------|-----------------------|--------------------|
| PP-T-575 | DG (6 rollers) | 1,2,4,8,12 | Wall 0.8~1, ID≤3.17 | 0.00016-49 |
| | DG (10 rollers) | 1,2,4,8,12 | Wall 0.8~1, ID≤3.17 | 0.00011-41 |
| | YZ15 | 1,2,4 | 13#14#16#19#25#17#18# | 0.006-575 |
| | YZ25 | 1,2,4 | 15#24# | 0.1667-425 |
| PP-T-1340 | YZ15 | 1,2 | 13#14#16#19#25#17#18# | 0.006-1340 |
| | YZ25 | 1,2 | 15#24# | 0.1667-990 |
| PP-T-2300 | YZ15 | 1,2 | 13#14#16#19#25#17#18# | 0.006-2300 |
| | YZ25 | 1,2 | 15#24# | 0.1667-1700 |

PERISTALTIC PUMPS Intelligent Dispensing



PP-TID-575

- Super anti interference feature, wide input voltage range, acceptable for the complex power environment.
- ABS plastic housing, creative streamlined appearance.
- Can drive multi channels & various types of pump heads.
- Optional footswitch or timer for dispensing fluid.



PP-TID-575/1340/2300, Intelligent Dispensing Peristaltic Pump

PP-TID-575/1340/2300 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 & 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).
- 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 & moisture proof.

| Technical parameters | PP-TID-575 | PP-TID-1340 | PP-TID-2300 |
|----------------------------|--|-------------|-------------|
| Flow range (ml/min) | 0.00016-575 | 0.006-1340 | 0.006-2300 |
| Speed range (rpm) | 0.1-150 | 0.1-350 | 0.1-600 |
| Speed resolution (rpm) | 0.1rpm | | |
| Flow accuracy/Power supply | <0.5% / AC 220V ± 10% 50Hz/60Hz (standard); AC 110± 10% 50Hz/60Hz(optional) | | |
| 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) | 223x150x195 (mm) | | |
| Weight | 4.5kg | 4.7kg | 4.9kg |

Applicable Pump Head And Tubing, Flow Rate Parameters

| Drive type | Pump head | Channel number | Tubing(mm) | Flow rate (ml/min) |
|-------------|-----------------|----------------|-----------------------|--------------------|
| PP-TID-575 | DG (6 rollers) | 1,2,4 | Wall 0.8~1, ID≤3.17 | 0.00016-49 |
| | DG (10 rollers) | 1,2,4 | Wall 0.8~1, ID≤3.17 | 0.00011-41 |
| | YZ15 | 1 | 13#14#16#19#25#17#18# | 0.006-575 |
| | YZ25 | 1 | 15#24# | 0.1667-425 |
| PP-TID-1340 | YZ15 | 1 | 13#14#16#19#25#17#18# | 0.006-1340 |
| | YZ25 | 1 | 15#24# | 0.1667-990 |
| PP-TID-2300 | YZ15 | 1 | 13#14#16#19#25#17#18# | 0.006-2300 |
| | YZ25 | 1 | 15#24# | 0.1667-1700 |



PP-XLE-1600, Intelligent Dispensing Peristaltic Pump

PP-XLE-1600 Intelligent dispensing peristaltic pump provides flow range from 0.006-1690 mL/min with variable pump heads and tubings. It's easy to operate with the intuitive and clear interface with color LCD touch screen. There are four operation modes available: Volume Dispense Mode, Time Dispense Mode, Copy Dispense Mode and Flow Mode. The system minimizes working noise due to the intelligent cooling fan control. With RS485 MODBUS interface, the pump is easy to communicate with external device, such as PC, HMI or PLC.

Functions and Features:

- Color LCD display, touch screen & keypad for operating.
- Reversible direction, start/stop control and adjustable speed.
- Precise motor control technology improves dispense accuracy compared to the traditional time dispense mode.
- Anti-drip function ensures dispense accuracy.
- Three dispense modes available. Time Dispense Mode: automatically dispense by setting the duration for each dose, lag time between doses and number of cycles.

Volume Dispense Mode: automatically dispense by setting the volume for each dose, lag time between doses and number of cycles. Copy Dispense Mode: automatically dispense by setting the total volume need to dispense, lag time between doses and number of cycles.

- Store five groups of working parameters for each dispense mode (power-off memory).
- Flow rate display and control; cumulative dispense volume display.
- Flow rate calibration.
- 0.2% high precision rotating speed control with 0.1 rpm speed resolution. Professional operating system. Configure system with setup wizard.
- Intelligent temperature control to minimize working noise.
- External logic level signal can control start/stop, direction and easy dispense functions; external analog signal can adjust the rotating speed. Signal is optically isolated.
- With RS485 MODBUS interface.
- Internal double-layer isolation structure, circuit board with conformal coating make the pump dust-proof and moisture proof.
- Anti-electromagnetic interference feature, wide input voltage range for complex power environment.
- Stainless steel enclosure, easy to clean, resistant to the corrosion of the acid, alkali, sodium and organic solvents.
- Drive multi-channels and variable pump heads.
- Optional footswitch and remote infrared control.

| | |
|--|---|
| Flow range | 0.006 ~ 1690ml/min |
| Speed range | 0.1 ~ 350rpm |
| Speed resolution | 0.1rpm |
| Speed accuracy | 0.2% |
| Power supply | AC100-240V 50Hz/60Hz |
| Power consumption | <50W |
| External logic level control signal | 0-5V (standard), 0-10v, 4-20mA (optional) |
| External analog control signal | 0-5V (standard), 0-10v, 4-20mA (optional) |
| Communication interface | RS485 MODBUS |
| Operating condition | Temperature 0~40°C; Relative humidity < 80% |
| IP grade | IP31 |
| Dimensions (LxWxH) / Weight | 226 x 150 x 238mm / 5.3kg |

| Model | Pump Head | Channel | Tubing Size (mm) | Flow rate per channel (ml/min) |
|-------------|-----------|---------|-----------------------|--------------------------------|
| PP-XLE-1600 | YZ15 | 1 | 13#14#19#16#25#17# | 0.006-990 |
| | YZ25 | 1 | 15# 24# | 0.16-990 |
| | 2 x YZ15 | 2 | 13#14#19#16#25#17# | 0.006-990 |
| | 2 x YZ25 | 2 | 15# 24# | 0.16-990 |
| | YT15 | 1 | 13#14#19#16#25#17#18# | 0.006-1300 |
| | YT25 | 1 | 15# 24# 35# 36# | 0.16-1690 |
| | 2 x YT15 | 2 | 13#14#19#16#25#17#18# | 0.006-1300 |
| | DT15-14 | 1 | 19#16#25#17# | 0.05-930 |
| | DT15-24 | 2 | 19#16#25#17# | 0.05-930 |
| | DT15-44 | 4 | 19#16#25# | 0.05-610 |

PERISTALTIC PUMPS Explosion-Proof

PP-EX-600S-A3



PP-EX-600S-A3, Frequency Conversion Explosion-Proof Motor Peristaltic Pump

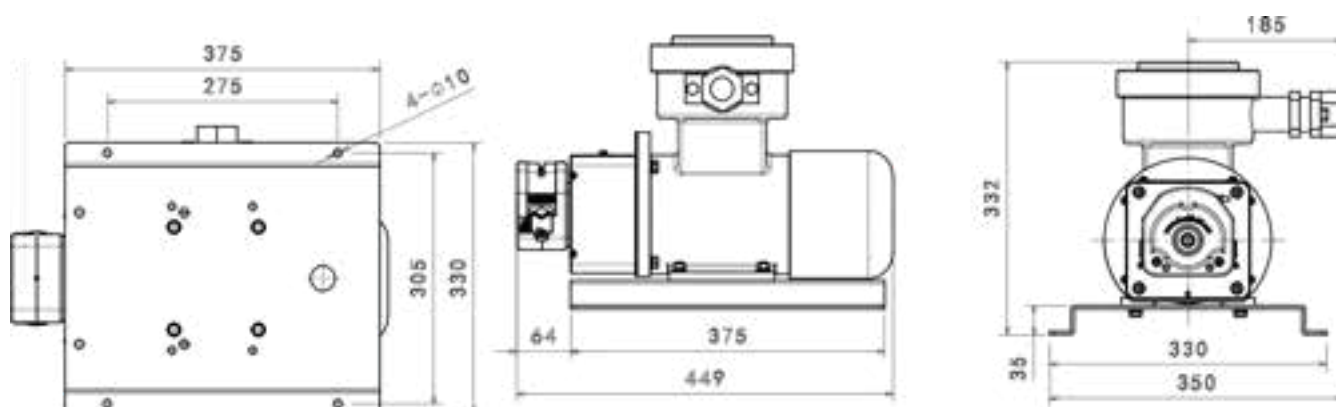
Function and Feature:

- Industrial grade AC frequency conversion explosion-proof motor (ExdIIBT4), with special pump head, safe & reliable.
- External frequency conversion control, with functions such as adjust speed, start-stop, reversible direction, analog adjust speed, RS485 communication.
- Stepless speed, speed range 72rpm~600rpm, speed resolution 2rpm.
- Split design, the driver is separated from the frequency conversion, suitable for a variety of working environment.
- Install a variety of pump heads and tubes.
- IP55, suitable for complex working environmen.
- The standard frequency conversion is not explosion-proof and cannot be placed in a flammable and explosive environment.

Remark: Industrial grade explosion-proof frequency conversion is optional ● Protective shell can be installed ● Customizable all-in-one model.

| | |
|-----------------------------|---|
| Pump head | YZ15, YZ25, YT15, YT25, KZ25, KZ25-L |
| Display function | Frequency converter display the Hz or flow rate (analogue) |
| Flow range | 4 ~ 6000ml/min |
| Speed range | 72 ~ 600rpm |
| Adjust speed | Stepless speed (standard frequency converter motor without connection cable) |
| Speed resolution | 0.1HZ (corresponding speed 2rpm) |
| Control function | Adjust speed, start/stop, reversible direction, analog speed control, RS485 communication |
| Accuracy | <±3% |
| Power supply | 3 phase 380V 50Hz |
| Power consumption | 0.55KW |
| Working condition | Temperature 0 ~ 40°C, relative humidity <80% |
| Anti-explosion grade | ExdIIBT4 |
| IP grade | IP55 (only drive) |
| Dimensions (LxWxH) | 449×350×332 mm |
| Weight | 37kg |

| Model | Pump Head | Channel | Tubing (mm) | Single Channel Flow Rate (ml/min) |
|---------------|-------------|---------|-----------------------|-----------------------------------|
| PP-EX-600S-A3 | YZ15 | 1 ~ 4 | 13#14#19#16#25#17# | 4 ~ 1700 |
| | YT15 | 1 ~ 4 | 13#14#19#16#25#17#18# | 4 ~ 2300 |
| | YZ25 | 1 ~ 4 | 15# 24# | 120 ~ 1700 |
| | YT25 | 1 ~ 4 | 15# 24#35#36# | 120 ~ 2900 |
| | KZ25/KZ25-L | 1 ~ 2 | 15# 24#35#36# | 177 ~ 6000 |



PP-X-2900, Basic Speed-Variable Peristaltic Pump introduction

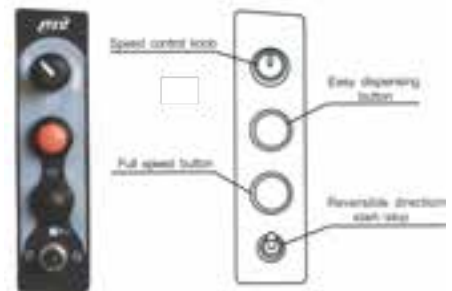
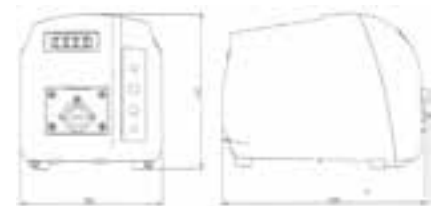
This Pump has basic functions such as reversible direction, start/s-top full speed (fast cleaning, empty), and speed-variable. Dispensing function can realize the repeat timing quantitative dispensing. RS485 inter face, as adopting the MODBUS communication protocol, the pump is easier to be connected with other equipments, such as computer, human Machine interface and PLC.



| | |
|--------------------------------|--|
| Flow range (ml/min) | 0.006 ~ 2900 |
| Speed range (rpm) | 0.1-600 |
| Speed resolution (rpm) | When running speed is 0.1-100rpm, the resolution is 0.1rpm When running speed is 100-600rpm, the resolution is 1rpm |
| Flow accuracy | <0.5% |
| Power supply | AC 220V ±10%, 50Hz/60Hz (standard), AC 110V ±10%, 50Hz/60Hz (optional) |
| Power consumption | <50W |
| External control | Input electrical level 5V, 12V (standard), 24V (optional) External control analog 0-5V (standard), 0-10V, 4-20mA (optional) |
| Communication interface | RS485 communication interface support the MODBUS protocol. |
| Ambient temp. | 0 ~ 40°C |
| Relative humidity | <80% |
| IP grade | IP31 |
| Dimensions (LxWxH) | 260mmx181mmx198mm |
| Weight | 4.9KG |

Functions and Features:

- Four-figure digital LED indicator displays working speed.
- The LED indicator displays the internal, external control mode.
- Mask keypad operation.
- Reversible direction, start/stop, full speed, state memory (power-down memory).
- Easy dispensing function, it realizes the repeat timing quantitative dispensing.
- 0.1-100 rpm, the speed resolution is 0.1 rpm. 100-150 rpm, the speed resolution is 1 rpm.
- ABS plastic housing, creative streamlined appearance.
- Can drive multi-channels and various types of pump heads.
- Internal double-deck isolation structure. circuit board with conformal coating makes it dust-proof & moisture-proof.
- Super anti-interference feature, wide input voltage range, acceptable for the complex power environment.
- 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 protocols available, easy to connect other equipments.
- Optional foot switch or timer for dispensing fluid.



YZ15 (25)



YZ15



YZ25

Specifications:

| Model | Pump Head | Channel number | Tubing (mm) | One channel flow rate (ml/min) |
|-----------|-----------|----------------|-----------------------|--------------------------------|
| PP-X-2900 | 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 |

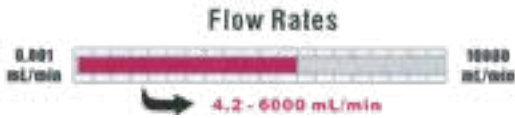
PERISTALTIC PUMPS

Basic, Flow 4.2-6000ml/min



PP-X-6000

PP-X-6000, Basic Peristaltic Pump



PP-X-6000 peristaltic pump adopts brushless DC motor. It has features of high output torque, low vibration, high efficiency and free maintenance. It can drive double pump heads. It accepts many pump heads and delivers flow rates from 4.2 to 6000mL/min. The speed can be adjusted manually or automatically through external control.

LAB

INDUSTRIAL



Standard External Control Interface-Order Separately

Specifications:

| | |
|-------------------------|---|
| Speed | 60 to 600rpm, reversible |
| Speed accuracy | ±1.0% |
| Speed resolution | 1.0rpm |
| Output torque | ≥1.50 N-M |
| External control | Start/stop & cw/ccw control, 0.5 to 5V, 1 to 10V, 4 to 20mA and 1-10kHz speed control |
| Communication interface | RS485 |
| Power supply | AC 176 - 264V 50Hz/60Hz |
| Power consumption | ≤200W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Dimensions (LxWxH) | 285x207x180 (mm) |
| Drive weight | 5.2kg |
| IP rating | IP 31 |

Functions and Features:

- Prime button for fast filling and emptying
- Memory function: Store the speed and the address of the pump
- Communication function: Realize the computer control through RS485 interface
- Display: 3 digits LED displays the speed of the pump
- External control input: Control the speed, start/stop and direction of the pump
- Suitable for different pump heads and tubing for multiple application
- High output torque which can drive double pump heads
- Brushless DC motor, high output torque and free maintenance
- Operation mode: SWitch, button and knob. Easy to operate.

Applicable pump heads:



YZ1515x/YZ2515x

YZII15/YZII25

DMD25

KZ25

DG15-24

| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|-----------|-----------------|---------------------|-----------------------------|-------------|
| PP-X-6000 | (1,2) xYZ1515x | 4.2 - 2200 | 13# 14# 19# 16# 25# 17# 18# | 5.6-6.0 |
| | (1,2) xYZII15 | | | |
| | (1,2) xYZ2515x | 100 - 1600 | 15# 24# | |
| | (1,2) xYZII25 | 100 - 3000 | 15# 24# 35# 36# | 6.0 |
| | KZ25 | 200 - 6000 | | |
| | DG15 - 24 | 50 - 1800 | 16# 25# 17# | 6.0 |
| | DMD25 (≤350rpm) | 30 - 4000 | 119# 120# 15# 24# 35# 36# | 7.7 |



PP-W-6000

0.5-5V
4-20mA
1-10V
1-10kHz

Specifications:

| | |
|--------------------------------|--|
| Speed | 60 to 600rpm |
| Speed accuracy | ±1.0% |
| Speed resolution | 1.0rpm |
| Output torque | ≥1.50 N-M |
| Display | 3 digits LED displays current speed; 4 digits LED display the working state |
| Memory function | Storing the running parameters automatically |
| External control | 0.5 - 5V, 1 -10V, 4 - 20mA or 1 - 10kHz are corresponding to 60 - 600 rpm |
| Communication interface | RS485 |
| Power supply | AC 176 - 264V 50Hz/60Hz |
| Power consumption | ≤200W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Drive Dimensions(LxWxH) | 273x190x272 (mm) |
| Drive weight | 7.3kg |
| IP rating | IP 31 |

Applicable pump heads:



YZ1515x/YZ2515x

YZ1115/YZ1125

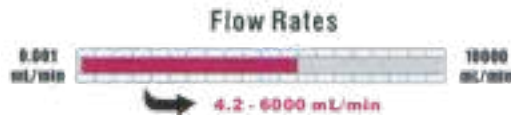
DMD25

KZ25

DG15-24

| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|-----------------|----------------|---------------------------|-----------------------------|-------------|
| PP-W-6000 | (1,2) xYZ1515x | 4.2 - 2200 | 13# 14# 19# 16# 25# 17# 18# | 7.7-8.1 |
| | (1,2) xYZ1115 | | | |
| | (1,2) xYZ2515x | 100 - 1600 | 15# 24# | |
| | (1,2) xYZ1125 | 100 - 3000 | 15# 24# 35# 36# | 8.1 |
| | KZ25 | 200 - 6000 | | |
| | DG15 - 24 | 50 - 1800 | 16# 25# 17# | 8.1 |
| DMD25 (≤350rpm) | 30 - 4000 | 119# 120# 15# 24# 35# 36# | 9.8 | |

PP-W-6000, Basic Peristaltic Pump



PP-W-6000 peristaltic pump is high IP rating and high efficiency. It adopts brushless DC motor and speed closed loop control. It has features of high output torque, low vibration and free maintenance. It accepts multiple pump heads and delivers flow rates from 4.2 to 6000 mL/min (single channel).

Functions and Features:

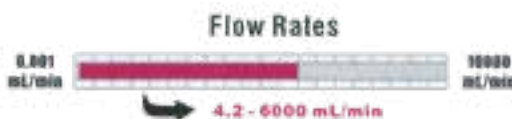
- High IP rating: Suitable for moist and dust working condition
- Prime key: For fast filling and emptying
- Memory function: Storing the running parameters automatically
- Communication function: Realize the computer control through RS485 interface
- Display: 3 digits LED displays the speed of the pump
- External control input: Control the speed, start/stop and direction of the pump
- Suitable for different pump heads and tubing
- High output torque which can drive double pump heads
- Brushless DC motor, high output torque, free maintenance
- Operation mode: Switch and membrane keypad. Easy to operate.

PERISTALTIC PUMPS Flow Rates, Flow 0.005–380ml/min



PP-F-380

PP-F-380, Flow Rates Peristaltic Pump



The acceptable pump heads for PP-F-380 are Lead15-48, Lead15-88, Lead15-24, Lead15-44 and max. 8 channels are available. The pump delivers flow rates from 0.005 to 380 mL/min. It has flow rates display and flow rates calibration functions. It also has functions of speed adjustment, start/stop, cw/ccw, prime (rinsing), tubing selection, RS485 communication, analog control, etc.

LAB

Standard External Control Interface - Order Separately

FLOW-RATE

Specifications:

| | |
|--------------------------------|---|
| Speed | 1.0 to 100.0 rpm, reversible |
| Speed resolution | 0.1rpm |
| Speed Control | Rotary encoded switch coupled with membrane keypad |
| Display | 128x32 graphic LCD displays current running status |
| External control | Start/stop & cw/ccw control, 0 to 5V, 0 to 10V, 4 to 20mA and 0-10kHz speed control |
| Communication interface | RS485 |
| Power supply | AC 90 - 260V 50Hz/60Hz |
| Power consumption | ≤50W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Dimensions (LxWxH) | 190x162x275 (mm) |
| Drive weight | 3.5kg |
| IP rating | IP 31 |

Functions and Features:

- Vertical structure
- Accept 4 special pump heads
- Display can switch between flow rates and speed
- Calibration function for the flow rates
- Computer control available through RS485 communication
- Prime key for fast filling and emptying.

Applicable pump heads:



LEAD15-24
(2 channels, 4 rollers)



LEAD15-44
(4 channels, 4 rollers)



LEAD15-48
(4 channels, 8 rollers)



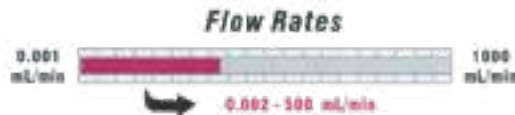
LEAD15-88
(8 channels, 8 rollers)

| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|----------|-----------|---------------------|---|-------------|
| PP-F-380 | LEAD15-24 | 1 - 380 | 16# 25# 17# | 4.36 |
| | LEAD15-44 | | | 4.42 |
| | LEAD15-48 | 0.005 - 75 | Inner Diameter ≤3.17mm, Wall Thickness 0.8 -1.0mm | 4.48 |
| | | 0.07 - 20 | | |
| | LEAD15-88 | 0.005 - 75 | Inner Diameter ≤3.17mm, Wall Thickness 0.8 -1.0mm | 4.48 |
| | | 0.07 - 20 | | |



PP-L-500

PP-L-500, Flow Rates Peristaltic Pump



The max. output torque of PP-L-500 drive is 1.65 N·M. Multiple pump heads are available. The pump delivers flow rates from 0.002 to 500 mL/min. 128 x 64 graphic LCD displays running menus and parameter setting menus. The flow rates and the speed (rpm) can be displayed in the same screen. The display interfaces are friendly. It has flow rates calibration function. It has many control modes. The external control can be realized through standard external interface or RS485 communication interface.

LAB

Standard External Control Interface—Order Separately

FLOW-RATE

Functions and Features:

- Display can switch between flow rates and rpm
- Calibration capability for the flow rates
- Graphic LCD together with rotary encoded switch make the pump easy to use
- Higher torque to accept more pump heads and more channels
- RS485 communication interface available. Offering communication protocol to customer and customizing software according to customer's requirements.

Specifications:

| | |
|-------------------------|---|
| Speed | 1.0 to 100rpm, reversible |
| Speed resolution | 0.1rpm |
| Speed control | Rotary encoded switch coupled with membrane keypad |
| Display | 128x64 graphic LCD displays current running status |
| External control | start/stop & cw/ccw control, 0 to 5V, 0 to 10V, & 4 to 20mA speed control |
| Communication interface | RS485 |
| Power supply | AC 220V ± 10% 50Hz/60Hz(standard) AC 110 V ± 10% 50Hz/60Hz(optional) |
| Power consumption | <50W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Drive Dimensions(LxWxH) | 202x160x239 (mm) |
| Drive weight | 5.34kg |
| IP rating | IP 31 |

Applicable pump heads:



DG-2 to DG-24 YZ1515x/YZ2515x

YZ115/YZ1125 DG15-24/28/48

| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|----------|---|--|--|-------------|
| PP-L-500 | DG15 - 24 | 1 - 380 | 16# 25# 17# | 6.16 |
| | DG15 - 28/DG15-48 | 0.005 - 75 | Wall Thickness: 0.8 -1.0 (mm) Inner Diameter: ≤3.17mm 13# 14# | 6.01 |
| | DG - (2,4,6,8,12,16,24) (6,10 rollers) | 0.0025 - 48 (6 rollers) 0.002 - 32 (10 rollers) | Wall Thickness: 0.8 -1.0 (mm) Inner Diameter: ≤3.17mm | 5.82 - 8.70 |
| | (1,2,3,4) xYZ1515x (1,2,3,4) xYZ115 | 0.07 - 380 | 13# 14# 19# 16# 25# 17# 18# | 5.76 - 7.02 |
| | (1,2,3,4) xYZ2515x | 1.7 - 270 | 15# 24# | 5.76 - 7.02 |
| | (1,2) xYZ1125 | 1.7 - 500 | 15# 24# 35# 36# | 5.70 - 6.04 |

PERISTALTIC PUMPS Dispensing, Flow 0.17–6000ml/min



PP-F-500

PP-F-500/PP-F-6000, Dispensing Peristaltic Pump



These two kinds of Dispensing Peristaltic Pump can dispense liquid precisely and have calibration function. They can be controlled through standard external interface or RS485 communication interface.

LAB

Standard External Control Interface-Order Separately

FLOW-RATE

DISPENSING

| Model | PP-F-500 | PP-F-6000 |
|------------------------------------|--|------------------------|
| Speed | 0.1-100rpm, reversible | 10-600rpm, reversible |
| Dispensing volume | 0.01 mL to 9.99L | 0.1 mL to 9.99L |
| Speed resolution | 0.1rpm | 1rpm |
| Copy number | 0 to 9999, 0 means unlimited c cle. | |
| Pause time | 0.1 see to 99.9 min | |
| Flow rates calibrating time | 0.5-30min | |
| External Control | Start/stop & cw/ccw control, 0 to 5V, 0 to 10V, 4-20mA and 0 to 10Hz speed control | |
| Output interface | Start/Stop, direction output & 0-10 kHz frequency output, OC gate output | |
| Operating condition | Temperature 0-40 °C, relative humidity <80% | |
| Drive DIM. | 285x207x180 (mm) | |
| Power Supply | AC100-240V, 50/60Hz | AC176-264V±10%,50/60Hz |
| Power consumption | <40W | <140W |
| Drive weight | 3.8kg | 5.2kg |
| IP rating | IP 31 | |

Functions and Features:

- Small liquid volume dispensing: PP-F-6000 can dispense liquid volume in mL unit, and PP-F-500 can dispense liquid volume in µL and mL unit
- Back suction function: In dispensing mode, the pump runs reversely after finishing on filling operation to prevent the liquid from dripping
- Operating mode: Membrane keypad and rotary encoded switch
- Control mode: Pumps can be controlled by membrane on it or through external control
- Display: LCD displays current running status and parameters
- Prime Key: For fast filling and emptying
- Memory function: Storing the running parameters automatically
- Calibration function: The flow rates and dispensing volume can be calibrated
- Communication interface: RS485, MRC company can provide relative protocol.

Applicable pump heads:



| Model | Pump Head | Flow Rates (* /min) | Tubing | Weight (Kg) |
|-------------------------------|------------------------------|---------------------|--|-------------|
| PP-F-500 | YZ1515x, YZII15 | 7µL - 380mL | 13# 14# 19# 16# 25# 17# 18# | 4.2 |
| | YZ2515x | 0.17mL - 270mL | 15# 24# | |
| | YZ II 25 | 0.17mL - 500mL | 15# 24# 35# 36# | |
| | DG-1, DG-2, DG-4 (6 rollers) | 0.25mL - 48mL | Wall Thickness: 0.8 - 1.0 (mm) Inner Diameter: ≤3.17 mm | 4.0 - 4.2 |
| DG-1, DG-2, DG-4 (10 rollers) | 0.2mL - 32mL | | | |
| PP-F-6000 | (1,2) xYZII25 | 0.7 - 2200 | 13# 14# 19# 16# 25# 17# 18# | 5.6 - 6.0 |
| | (1,2) xYZII15 | | | |
| | (1,2) xYZ2515x | 17 - 1600 | 15# 24# | |
| | (1,2) xYZII25 | 17 - 3000 | 15# 24# 35# 36# | 6.0 |
| | KZ25 | 34 - 6000 | | |
| | DG15 - 24 | 8.2 - 1800 | 16# 25# 17# | 6.0 |
| | DMD25 (≤350rpm) | 5 - 4000 | 119# 120# 15# 24# 35# 36# | 7.7 |

* Max. speed for DMD25 is 350 rpm

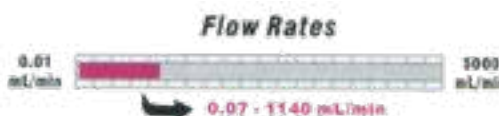


PP-F-1140

Specifications:

| | |
|--------------------------------|---|
| Speed | 1.0 to 300rpm, reversible |
| Speed resolution | 1rpm |
| Speed control | Rotary encoded switch coupled with membrane keypad |
| Display | 128x64 graphic LCD displays flow rates, speed or dispensing mode |
| Copy number | 1 to 999 |
| Dispense volume | 0.1mL to 99.9L |
| Pause time | 1 to 999 s |
| Back suction angle | 0 to 360, 18° increments |
| External control | Start/stop and cw/ccw control, 0 to 5V, 0 to 10V, and 4 to 20mA speed control |
| Output interface | Start/Stop, direction output and 0–10 kHz frequency output, OC gate output |
| Communication interface | RS485 |
| Power supply | AC 220V ± 10% 50Hz/60Hz(standard) AC 110 V ± 10% 50Hz/60Hz(optional) |
| Power consumption | <50W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Drive Dimensions(LxWxH) | 202x160x239 (mm) |
| Drive weight | 4.3kg |
| IP rating | IP 31 |

PP-F-1140, Dispensing Peristaltic Pump



Applicable pump heads for PP-F-1140 are YZ1515x, YZ2515x, YZ1115, YZ1125. The pump delivers flow rates from 0.07 to 1140 mL/min. 128 x 64 graphic LCD displays running menus and parameters setting menus. The display interfaces are friendly. It has many control modes. The external control can be realized through standard external control interface or RS485 communication interface.

LAB

Standard External Control Interface—Order Separately

FLOW-RATE

DISPENSING

Functions and Features:

- Acceptable pump heads: YZ1515x, YZ2515x, YZ1115, YZ1125
- Set pause time to realize dispensing and filling automatically
- Display can switch between flow rates and rpm
- Calibration function for the flow rates
- RS485 communication interface available. Offering communication protocol to customer and customizing software according to customer's requirements.

Applicable pump heads:



| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|-----------|----------------|---------------------|-----------------------------|-------------|
| PP-F-1140 | YZ1515x YZ1115 | 0.07 – 1140 | 13# 14# 19# 16# 25# 17# 18# | 4.7 |
| | YZ2515x YZ1125 | 1.7 – 870 | 15# 24# | 4.7 |

INDUSTRIAL

IP55

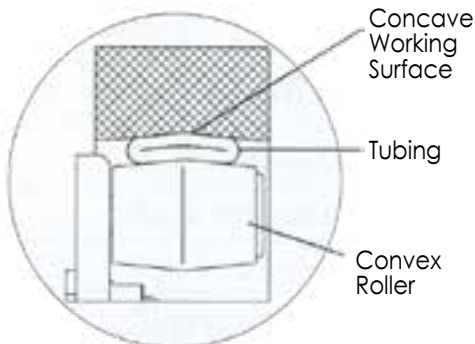
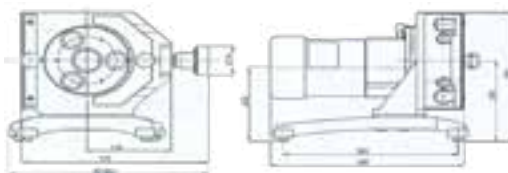


PP-B-35L, Batch Transferring Pump



Functions and Features:

- High-power pumps, and the maximum flow rates can reach 35L/min
- The structure of concave working surface and convex roller realizes the tubing self-position function. It reduces abrasion and prolongs tubing life
- Variable frequency speed control to AC motor with creeper gear
- Adjustable occlusion
- Strong drive
- Pump head operation is visible through transparent front cover.

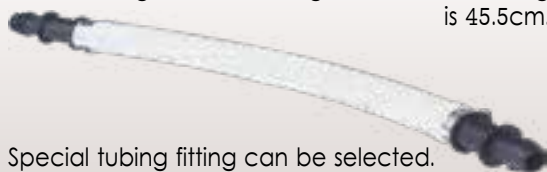


Specifications:

| Model | PP-B-35L |
|---------------------|--|
| Speed | 30-350rpm, reversible |
| Speed resolution | 0.6rpm |
| Power Supply | AC220V ± 10%, 50/60Hz |
| Power consumption | <400W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| Dimensions (LxWxH) | 417x401x321 (mm) |
| Pump weight | 32kg |
| IP rating | IP 55 |

Tubing Fitting Structure:

The length of the tubing between two fitting is 45.5cm.



Special tubing fitting can be selected. Low cost tubing can be used outside of the pump head if using tubing fitting. Suitable for industrial application.

Tubing Loading:



1. Turn the knob -1- -2- counter clockwise
2. Turn the hand wheel to loose the compression block
3. Pull the knob -3- and take out the front cover.



4. Select suitable tubing slots. Place the tubing between the roller and the compression block, then put the tubing in the corresponding tubing slots.



5. Pull the knob -3-, insert the front cover, tighten the knob -1-
6. Turn the hand wheel and adjust the occlusion between the roller and the compression block
7. Tighten the knob -2- and fix the compression block.

| Model | Pump Head | Flow Rates (L/min) | Tubing | Weight (Kg) |
|----------|-----------|--------------------|--------|-------------|
| PP-B-35L | KZ48/63 | 1.3 - 15 | 88# | 32 |
| | | 3 - 35 | 92# | |



PP-X-11L

PP-X-11L, Industrial Peristaltic Pump

INDUSTRIAL

IP54

WATER PROOF



The pump delivers flow rates from 600 to 11000 mL/min. The speed can be adjusted manually or automatically through external control interface. Driven by DC motor YT6001J has higher torque and can drive double pump heads. Suitable for industrial applications which need high pressure and flow rates.

Applicable pump heads:



Specifications:

| | |
|---------------------|---|
| Speed | 60-600 (rpm) , reversible |
| Speed control | 10 turn potentiometer |
| Power supply | AC 220V ± 1 0% 50/60Hz |
| Power consumption | <400W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 80% |
| External control | Start/stop control, speed control (0 - 10kHz, 0 - 10V, 4 - 20mA optional, 4 - 20mA is standard configuration) |
| Dimensions (LxWxH) | 325x236x193 (mm) |
| Drive weight | 20kg |
| IP rating | IP 54 |

Functions and Features:

- Acceptable pump heads: YZ35-13, KZ35
- Suitable for industrial applications
- Can be equipped with MRC Dispensing Controller for filling function when connecting single channel pump head.

| Model | Pump Head | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|----------|-----------|---------------------|---------|-------------|
| PP-X-11L | YZ35-13 | 600 - 11000 | 73# 82# | 21.65 |
| | KZ35 | 600 - 11000 | | 23.7 |
| | 2xYZ35-13 | 600 - 11000 | | 23.3 |
| | 2xKZ35 | 600 - 11000 | | 27.4 |



PP-XIP-500, Industrial Peristaltic Pump

Product Instruction:

- With aluminium alloy housing, the pump has good corrosive resistance and could be used in corrosive environment.
- With the powerful electro magnetic compatibility, the pump will not behave unacceptably in the EMI environment and will not interfere with other electronic equipment.
- With high IP rating, the pump could be used in wet and dusty environment.
- Using high quality electronic components, optimizing software design and circuit design, the pump provides long-term reliable and stable operation.
- LCD displays parameters and running state, which provides enough information for correct operation.
- Applications: Suitable for laboratorial and industrial application.

| | |
|------------------------------------|---|
| Speed | 0rpm-100rpm, CW/CCW |
| Speed resolution | 0.1rpm |
| Display | LCD |
| Control mode | Keypad, external signal control and communication control are available |
| External control | Start/stop control, direction control: voltage level signal or switch signal are optional |
| Speed control | 0-5V,0-10V,4-20mA,0-10kHz are optional with uniform interface, max speed can be changed within 100rpm |
| Communication control | RS485 interface, MRC protocol, the communication parameters (baud rate, parity, stop bit) can be set through keypad |
| Parameter memory | Running parameters & system parameters will be saved automatically |
| Running state when power on | The running state when power on can be set as stop or as previous state |
| Prime | Fast filling or emptying at full speed |
| EMC | Comply with EMC Directive 2014/30/EU |
| Keypad lock function | Keypad can be locked to prevent the misoperation. The locking delay time can be set. |
| Operating temperature | 0 ~ 40°C |
| Relative humidity | 10-900% |
| IP grade | IP65 |
| Dimensions (LxWxH) | 235mmx142mmx152mm |
| Power supply | AC90V-260V/20W, 50-60Hz |
| Weight | 3.64KG |

| Model | Pump Head | Tubing (mm) | Max. Flow Rate (ml/min) | Weight (kg) |
|------------|-------------------------|---|-------------------------|-------------|
| PP-XIP-500 | YZ1515X,YZ1115 | 13#14#19#16#25#17#18# | 380 | 4.04 |
| | YZ2515X | 15# 24# | 270 | |
| | YZ1125 | 15# 24#35#36# | 500 | |
| | FG15-13 | 13#14#19#16#25#17#18# | 430 | 3.92 |
| | FG25-13 | 15# 24# | 320 | |
| | DMD15-13-B | 2*13# 2*14# 2*19# 2*16# 2*25# | 375 | 4.07 |
| | BZ15-13-A | 14# | 22 | 3.95 |
| | BZ15-13-B | 16# | 80 | |
| | BZ15-13-C | 25# | 150 | |
| | BZ15-13-D | 17# | 270 | |
| | BZ25-13-B | 24# | 250 | |
| | DG15-24 | 16# 25# 17# | 300 (Single Channel) | 4.46 |
| | DG15-28 | 13# 14# ID≤3.17mm Wall Thickness 0.8-1mm | 75 (Single Channel) | 4.31 |
| | DG-(1, 2, 4) 6 Rollers | ID≤3.17mm Wall Thickness 0.8-1mm | 48 (Single Channel) | 3.84-3.91 |
| | DG-(1, 2, 4) 10 Rollers | | 32 (Single Channel) | |



PP-XIP-1500, Industrial Peristaltic Pump

Product Instruction:

- Compact structure, small size, the max flowrate of single channel is 1100mL/min.
- Adopting aluminium alloy housing with anti-corrosion paint treatment, the pump has good corrosive resistance and MRC life time in corrosive environment.
- With good electromagnetic compatibility, the pump will not behave unacceptably in the EMI environment and will not interfere with other electronic equipment.
- With high IP rating, the pump could be used in wet and dusty environment.
- Adopting high quality electronic components, optimizing software design and circuit design, the pump provides long-term reliable and stable operation.
- LCD with specially designed run screen displays parameters and running status, which provides enough information for correct operation.

Applications: The pump could be used in wet and dusty environment with severe electromagnetic interference.

| | |
|----------------------------------|--|
| Speed | 0rpm-300rpm, CW/CCW |
| Speed resolution | 1rpm |
| Display | LCD |
| Control mode | Keypad, external signal control and communication control are available |
| External control | Start/stop control, direction control: voltage level signal or switch signal are optional |
| Speed control | 0-5V,0-10V,4-20mA,0-10kHz are optional with uniform interface, max speed can be set between 30rpm and 300rpm |
| Communication control | RS485 interface, MRC protocol, or Modbus protocol, the communication parameters (address, baud rate, parity, stop bit) can be set through keypad |
| Parameter memory | Operating parameters will be saved automatically |
| Pump status when power up | The pump status when power up could be set as stop or as the status before power loss |
| Prime | Fast filling or emptying at full speed |
| EMC | Comply with EMC Directive 2014/30/EU |
| Keypad lock function | Keypad can be locked to prevent the misoperation. The delay time before lock is settable |
| Operating temperature | 0 ~ 40°C |
| Relative humidity | 10-90% |
| IP grade | IP65 |
| Dimensions (LxWxH) | 235mmx142mmx152mm |
| Power supply | AC90V-260V/20W, 50-60Hz |
| Weight | 3.64KG |

| Model | Pump Head | Tubing (mm) | Max. Flow Rate (ml/min) | Weight (kg) | |
|------------|---------------|-----------------------|-------------------------|-------------|------|
| PP-XIP-500 | YZ1515X,YZ115 | 13#14#19#16#25#17#18# | 1100 | 4.04 | |
| | YZ2515X | 15# 24# | 800 | | |
| | YZ1125 | 15# 24#35#36# | 1500 | | |
| | FG15-13 | 13#14#19#16#25#17#18# | 1200 | 3.92 | |
| | FG25-13 | 15# 24# | 1100 | | |
| | DMD15-13-B | 2*13# 2*14# 2*19# | 1035 | 4.07 | |
| | DMD15-13-D | 2*16# 2*25# | | | |
| | BZ15-13-A | 14# | 75 | 3.95 | |
| | BZ15-13-B | 16# | 230 | | |
| | BZ15-13-C | 25# | 480 | | |
| | BZ15-13-D | 17# | 800 | | |
| | BZ25-13-B | 24# | 800 | | |
| | DG15-24 | 16# 25# 17# | 900 (Single Channel) | | 4.46 |



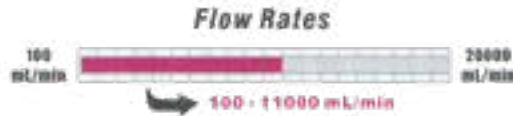
4–20mA
1–10kHz
0–10V
0–5V

PP-F-11L

Specifications:

| Model | PP-F-11L |
|-------------------------|--|
| Flow Rates | 100 to 1100ml/min |
| Dispensing volume | 100ml to 999 Liters |
| Speed | 10–600rpm |
| Copy Number | 0 to 9999, "0" means running continuously |
| Pause time | 1s to 99.9min |
| Back suction | a to 9.9 revolutions, (precision is 0.1 revolution) |
| Calibration time | 30 to 1800 seconds |
| External control input | Start/stop control, direction control, flow rates control (0–5V, 0–10V, 4 – 20mA , 0–10kHz optional) |
| External control output | Start/stop output, direction output, 0–7.5kHz frequency output corresponding to 0 to 600rpm |
| Communication interface | RS485 |
| Power | AC 176 – 264V, 50/60Hz |
| Power consumption | <300W |
| Operating condition | Temperature 0 to 40°C Relative humidity < 100% |
| DIM. (LxWxH) | 360 x 215 x 243 (mm) |
| Drive weight | 12Kg |
| IP Rating | IP 65 |

PP-F-11L, Industrial Peristaltic Pump



PP-F-11L is a high IP rating and high efficient pump with high-power DC brushless motor, it is suitable for working in dust and damp industrial environment. It delivers flow rates from 100 to 11000 ml/min and dispensing volume from 100ml to 999 Liters when loading YZ35 or KZ35 pump head. WT6004F adopts 128 x 32 LCD to display all the running information and parameters and membrane keypad to set parameters. It is easy to operate. This pump can be controlled manually or externally through standard external control module and RS485.

Functions and Features:

- Acceptable pump head: YZ35–13, KZ35
- Back suction: Prevent dripping of liquid when dispensing a certain liquid volume
- Operating mode: Membrane keypad to set parameters and operation
- Control mode: Pump can be controlled internally through membrane keypad or externally through external control modules
- Display: LCD displays all the running information and parameters
- Prime function: Fast filling or emptying the tubing
- Memory function: Save the parameters and working status automatically
- Calibration: The flow rates and dispensing volume can be calibrated.

Adopting water-proof aviation plug as external control interface to transmit external control signal.

INDUSTRIAL

IP65

FLOW-RATE

DISPENSING

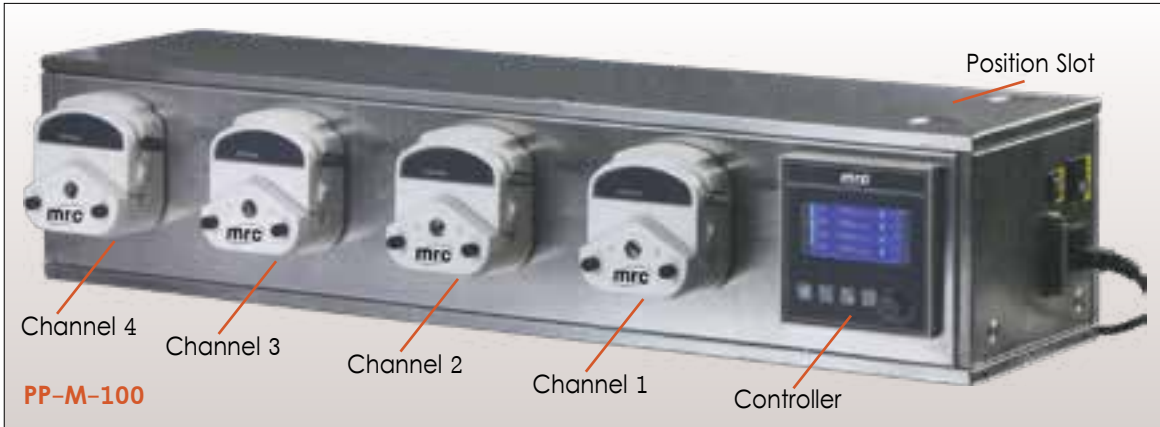
WATER PROOF

| Model | Pump Head | Housing Material | Flow Rates (mL/min) | Tubing | Weight (Kg) |
|----------|--------------|---------------------|------------------------------|---------|--------------|
| PP-F-11L | YZ35-13(1,2) | PSU | 100 – 11000 (Single Channel) | 73# 82# | 13.65 – 15.3 |
| | KZ35 (1 ,2) | 304 Stainless Steel | | | 15.7 – 19.4 |

PP-M-100, Dispensing & Filling System

FLOW-RATE

DISPENSING



Specifications:

| | |
|---|---|
| Dispensing volume | 0.5 – 100mL |
| Dispensing time | 0.5 – 30s |
| Time precision | 0.01s |
| Max. speed | 600rpm |
| Back suction time | 0.00 – 1.00s |
| External control | Filling-start, filling-stop without bottles (Contact closure) |
| Filling unit dimensions (LxWxH) for 4 channels | 800x200x174(mm) |
| Filling unit weight for 4 channels | 18.7kg |
| IP rating | IP 31 |



Dispensing and Filling System is the peristaltic pump system with auto control function. It consists of 3, 4 or 5 units peristaltic pumps of autonomous working and a dispensing and filling controller. It can be mounted on the dispensing and filling acquirments to realize non-contaminated and accurate dispensing and filling for medicine or fluids. It adopts stacking structure. Different combinations are available to meet the requirements of the customers.

Functions and Features:

- One unit has 3, 4 or 5 channels. Max. 12, 16 or 20 channels (4 units) are available
- Each channel is controlled separately. Easy to use
- Back suction function is available. Avoid liquid spillage
- Control parts adopt plug in structure. Easy to maintain
- Flow rates calibration function for the dispensing volume
- Realize the function of filling stop without bottles
- 128 x 64 graphic LCD display and friendly user interface
- Computer control is available through RS485 communication.

| Model | Pump Head | Dispensing (mL) | Tubing | Dispensing Time (s) | Speed (rpm) | Accuracy ±% | Productivity (pcs/min) |
|----------|--------------------|-----------------|---------|---------------------|-------------|-------------|------------------------|
| PP-M-100 | YZ1515x YZ2515x | 0.5 | 13# | 1.2 | 350 | 2 | 25 |
| | | 1 | 13# | 2 | 425 | 1 | 15 |
| | | 2 | 14# | 1 | 450 | 2 | 30 |
| | | 3 | 14# | 1 | 450 | 2 | 20 |
| | | 5 | 19# | 1.2 | 500 | 2 | 25 |
| | | 7 | 16# | 1.2 | 428 | 2 | 25 |
| | | 10 | 25# 15# | 1 | 360 | 2 | 30 |
| | | 20 | 17# 24# | 1.2 | 375 | 2 | 30 |
| | | 50 | 17# 24# | 2 | 550 | 1 | 15 |
| | | 100 | 17# 24# | 4 | 550 | 0.5 | 15 |

OEM, Products

OEM Applications:

- Fluids sampling of inspection or testing instruments
- Dispensing and filling fluids equipment
- Feeding of fluids equipment
- Other fluids transfer

| Type | Introduction | Functions and Features | Specifications |
|---|---|---|---|
|  <p>BTM10/TH15</p> | <p>OEM10 has eleven kinds of optional fixed speed which can deliver max. flow rates of 167 ml/rmin, it is one of ideal OEM product and has been widely used in environment monitoring, ferment, and filling industry, etc.</p> | <p>OEM10 adopts AC synchronous motor which has stable speed and high repeatability. Pump head with two spring rollers can reduce the abrasion of tubing and prolong the tubing life.</p> | <p>Speed: Eleven kinds of fixed speed Power supply: AC220V 50-60Hz Power consumption: 15W Dimension: 105.5 x 110 x 80 (mm) Weight: 0.7kg</p> |
|  <p>BTMBJ60-01/WX10</p> | <p>The pump delivers flow rates from 0.001 to 24 mL/min. The speed can be adjusted by BCD dial switch which is divided into 15 levels, or controlled by external pulse.</p> | <p>Suitable for tubing which the inner diameter is less than 3.17 mm and wall thickness is from 0.8 to 1.0 mm. Reasonable and fine shape, compact size, DC power supply, ideal for OEM.</p> | <p>Speed: 0-60rpm, reversible Speed precision: 1 rpm Speed control: BCD dial switch Power supply: DC12V/1A Power consumption: ≤10W Dimension: 116x60x73(mm) Weight: 0.55 kg</p> |
|  <p>BTMBJ100-01/JY15-12</p> | <p>The pump delivers flow rates from 0.7 to 170 mL/min. The speed can be adjusted by BCD dial switch which is divided into 15 levels, or controlled by external pulse.</p> | <p>Suitable for tubing with wall thickness of 1.6mm. Low speed, high flow rates, long life. Reasonable and fine shape, compact size, DC power supply, ideal for OEM</p> | <p>Speed: 0 - 100 rpm, reversible Speed precision: 1 rpm Speed control: BCD switch, the increment is 5 rpm when the speed is less than 50 rpm and the increment is 10 rpm when the speed is more than 50 rpm Power supply: DC12V/2A Power consumption: Less than 25W Dimension: 118x60x86(mm) Weight: 0.58 kg</p> |
|  <p>BTM103/DG-2</p> | <p>OEM103 adopts step motor with bracket and shock absorption parts which reduce the vibration and make it easy to load pump head. It has been widely used in flow injection analysis instrument and ultraviolet radiation analysis instrument.</p> | <p>Driver need to be designed or selected to drive the step motor. Acceptable pump heads are VZ and DG Series pump heads.</p> | <p>Max. Speed: 100 rpm COG pump heads) 300 rpm (VZ pump heads) Dimension: 130x120x115(mm) Weight: 1.2 kg</p> |
|  <p>BTMDC12-02/WX15-12</p> | <p>OEMDC12-02/WX15-12 delivers the maximum flow rates of 22ml/rmln, small size; it is suitable to be built in customers equipment.</p> | <p>OEMWX15-12 adopts DC gear motor and 16# silicon tubing, user can control flow rates by adjusting voltage of motor.</p> | <p>Speed: 0-100 rpm, reversible Power supply: DC12V Dimension: 70x60x50(mm) Weight: 0.2kg</p> |
|  <p>BTMT1 00-S1/JY15-24</p> | <p>OEMT100-S1 is one kind of small & medium flow rates, dual-channel OEM peristaltic pump; it has compact structure and provides flow rates from 0.1 to 43ml/min with various tubing. Easy to operate, user can use BCD dial switch to adjust speed manually or use 4-20mA external control module to a adjust speed.</p> | <p>Acceptable pump head: JV15-24 Suitable tubing: 13#, 14#, 19#, 16# External control: Start/stop, direction control, speed control (4-20mA corresponding to 0.1-100rpm) Manual control: BCD dial switch to adjust speed 5 to 100 rpm.</p> | <p>Manual control speed range: 5-100rpm External control speed range: 0.1-100rpm, speed precision is 0.1rpm. Power supply: DC11.4-25.2V Power consumption: ≤10W Dimensions (LxWxH): 134x82x90 mm Weight: 0.86kg</p> |

Tubing selection factors:

● **Chemical Compatibility –**

When transfer different fluids, the tubing should have good chemical characteristics, which is chemical compatibility. Such as: low absorption, good temperature resistance, not easy to aging, not swelling, anti-corrosion, fewer extractable Chemical resistance decreases as temperature increases. Chemicals that have no effect on the tubing at room temperature could attack the tubing at elevated temperatures.

Chemical compatibility test method:

When the chemical compatibility of the tubing is uncertain, an immersion test is needed.

In an immersion test, a small piece of tubing is weighed, and its diameter and length are measured. The tubing then is immersed in a closed vessel with the chemical in question for a minimum of 48 hours. Afterward, the test piece of tubing is rinsed, dried, weighed and measured, and any changes are recorded. The tubing also should be examined for signs of softening or embrittlements, which indicate the chemical has attacked the tubing.

● **Pressure –**

Peristaltic pump applications typically have been limited by the pressure capabilities of the tubing. If the pressure is too high, the tubing could swell, resulting in an improper fit through the pump head, which causes excessive wear and tubing failure. The factors which affect the pressure are material, the proportion of diameter and wall thickness, etc.

● **Temperature –**

The working temperature range of a tubing material is another important consideration. Different materials have different temperature range.

● **Dimension –**

The size of the tubing has a direct effect on the amount of fluid delivered. Well-designed pumps are engineered to work with an optimum tubing size or range of tubing sizes, taking into account the tubing's inner diameter and wall thickness. The inner diameter determines the amount of fluid delivered with each turn of the rotor. The wall thickness affects the tubing's ability to spring back to its original shape

Features of peristaltic pump tubing:

- Good flexibility. Spring back after pressed radially
- Good wear abrasion resistance
- A certain extent pressure bearing capabilities
- Lower gas permeability
- Low absorption, good temperature resistance, not easy to aging, not swelling, anti-corrosion, fewer extractable.

Tubing parameters:

Inner diameter and wall thickness are the main parameters of the tubing. Different manufacturers have different notations. Such as: specification codes or inner diameter x wall thickness.

Tubing materials:

Silicon rubber, rubber, plastic, synthetic material, etc. Different materials have different characteristics and different applications.

after each compression, which has a great influence on the overall life of the tubing.

● **Dimension –**

The size of the tubing has a direct effect on the amount of fluid delivered. Well-designed pumps are engineered to work with an optimum tubing size or range of tubing sizes, taking into account the tubing's inner diameter and wall thickness. The inner diameter determines the amount of fluid delivered with each turn of the rotor. The wall thickness affects the tubing's ability to spring back to its original shape after each compression, which has a great influence on the overall life of the tubing.

● **Tubing Flex Life –**

Different tubing materials have differing abilities to withstand the repeated squeezing action of the rollers. In general, each tubing size, tubing material, pump head style, and operating speed in combination has its own life characteristics. Service life, or flex life in the pump, is the primary concern in a new application. Pump performance is very consistent in a specific application. Maximize the life of a pump system by selecting a tubing material that offers long flex life, using thicker wall tubing, and/or by operating a larger pump at slower speed.

Tubing Types which MRC Company Can Provide:

Domestic silicone tubing – Platinum-cured silicone tubing: Ultra-smooth inner liner with extremely low leachables, good flexibility, translucent and wide temperature range of -60 to 238°C.












Imported tubing – Tygon®, PharMed®BPT, Viton®, Fluran®, Norprene®, etc.

Note:












- Specific types of above tubing refer to "Peristaltic Pump Configuration Table".
- Please contact Lonner Company to know all the specification of above tubing.

PERISTALTIC PUMPS Tubing







Tubing Specifications: Micro & small flow tubing

| Tubing Sizes | | 0.13x0.86 | 0.5x0.86 | 0.86x0.86 | 1.52x0.86 | 2.06x0.86 | 2.4x0.86 | 2.79x0.86 | 3.17x0.86 | 1x1 | 2x1 | 3x1 |
|-----------------------------|--------------|---|---|---|---|---|---|---|---|---|---|---|
| Tubing cross sections (1:1) | |  |  |  |  |  |  |  |  |  |  |  |
| Wall thickness(mm) | | 0.86 | | | | | | | | 1.0 | | |
| Inner diameter(mm) | | 0.13 | 0.5 | 0.86 | 1.52 | 2.06 | 2.4 | 2.79 | 3.17 | 1.0 | 2.0 | 3.0 |
| Max. pressure (Mpa) | Continuous | 0.1 | | | | | | | | | | |
| | Intermittent | 0.1 | | | | | | | | | | |

Medium flow tubing

| Tubing Sizes | | 13# | 14# | 19# | 16# | 25# | 17# | 18# | 15# | 24# | 35# | 36# | |
|---|--------------|---|---|---|---|---|---|---|---|---|---|---|--|
| Tubing cross sections (1:1) | |  |  |  |  |  |  |  |  |  |  |  | |
| Wall thickness of domestic tubing(mm) | | 1.6 | | | | | | 2.4 | | | | | |
| Inner diameter of imported tubing(inch) | | 1/16" | | | | | | 3/32" | | | | | |
| Inner diameter of domestic tubing(mm) | | 0.8 | 1.6 | 2.4 | 3.1 | 4.8 | 6.4 | 7.9 | 4.8 | 6.4 | 7.9 | 9.6 | |
| Inner diameter of imported tubing(inch) | | 1/32" | 1/16" | 3/32" | 1/8" | 3/16" | 1/4" | 5/16" | 3/16" | 1/4" | 5/16" | 3/8" | |
| Max. pressure (Mpa) | Continuous | 0.17 | | | 0.14 | 0.10 | 0.07 | 0.17 | | | 0.14 | | |
| | Intermittent | 0.27 | | | 0.24 | 0.14 | 0.10 | 0.27 | | | 0.24 | | |

Industrial tubing

| Tubing Sizes | | 73# | 82# | 86# | 90# | 88# | 92# |
|---|--------------|---|---|---|---|--|---|
| Tubing cross sections (1:1) | |  |  |  |  |  |  |
| Wall thickness of domestic tubing(mm) | | 3.3 | | 6.3 | | | 4.8 |
| Wall thickness of imported tubing(inch) | | 1/8" | | 1/4" | | | 3/16" |
| Inner diameter of domestic tubing(mm) | | 9.6 | 12.7 | 9.6 | 19 | 12.6 | 25.4 |
| Inner diameter of imported tubing(inch) | | 3/8" | 1/2" | 3/8" | 3/4" | 1/2" | 1" |
| Max. pressure (Mpa) | Continuous | 0.17 | 0.07 | 0.14 | | | |
| | Intermittent | 0.27 | 0.14 | 0.14 | | | |

Pumps Tubing:

| Model | Inner Dia. (mm) | Wall Thickness (mm) | Suitable Pump Head | Specifications | Standard Package |
|-----------------------|-----------------|---------------------|----------------------------------|-------------------|------------------|
| Tube-S-13# | 0.8 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-19# | 2.4 | 1.6 | YZ1515X YZII15 TH15 | Silicon Tubing | 15M |
| Tube-S-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Silicon Tubing | 15M |
| Tube-S-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Silicon Tubing | 15M |
| Tube-S-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Silicon Tubing | 15M |
| Tube-S-18# | 7.9 | 1.6 | YZ1515X YZII15 | Silicon Tubing | 15M |
| Tube-S-15# | 4.8 | 2.5 | YZ2515X YZII25 KZ25 | Silicon Tubing | 15M |
| Tube-S-24# | 6.4 | 2.5 | YZ2515X YZII25 BZ25 KZ25 | Silicon Tubing | 15M |
| Tube-S-35# | 7.9 | 2.5 | KZ25 YZII25 | Silicon Tubing | 15M |
| Tube-S-36# | 9.6 | 2.5 | KZ25 YZII25 | Silicon Tubing | 15M |
| Tube-S-73# | 9.5 | 3.3 | YZ35 YZ35-13 | Silicon Tubing | 15M |
| Tube-S-82# | 12.7 | 3.3 | YZ35 YZ35-13 | Silicon Tubing | 15M |
| Tube-S-86# | 9.5 | 6.3 | KZ48/63 | Silicon Tubing | 15M |
| Tube-S-88# | 12.7 | 4.7 | KZ48/63 | Silicon Tubing | 15M |
| Tube-S-90# | 19 | 6.35 | KZ48/63 | Silicon Tubing | 15M |
| Tube-S-92# | 25.4 | 4.76 | KZ48/63 | Silicon Tubing | 15M |
| Tube-S-0.5×0.8 | 0.5 | 0.8 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-1×1 | 1 | 1 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-2×1 | 2 | 1 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-2.4×0.8 | 2.4 | 0.8 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-3×1 | 3 | 1 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 15M |
| Tube-S-1×1sss | 1 | 1 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 12pc |
| Tube-S-2×1sss | 2 | 1 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 12pc |
| Tube-S-2.4×0.8sss | 2.4 | 0.8 | DG JY10 WX10 DG15-28(48) | Silicon Tubing | 12pc |
| Tube-NA-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28 (48) | Norprene®A-60-G | 15M |
| Tube-NA-16# | 3.1 | 1.6 | YZ1515X YZII15 TH15 DG15-28 (48) | Norprene®A-60-G | 15M |
| Tube-NA-73# | 9.5 | 3.3 | YZ35 YZ35-13 | Norprene®A-60-G | 15M |
| Tube-NA-16# | 3.1 | 1.6 | YZ1515X YZII15 TH15 DG15-28 (48) | Norprene®A-60-G | 15M |
| Tube-NC-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Norprene®CHEMICAL | 15M |
| Tube-NC-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Norprene®CHEMICAL | 15M |
| Tube-NC-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Norprene®CHEMICAL | 15M |
| Tube-NC-82# | 12.7 | 3.3 | YZ35 YZ35-13 | Norprene®CHEMICAL | 15M |
| Tube-TF4-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28 (48) | Tygon®F-4040-A | 15M |
| Tube-TF4-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®F-4040-A | 15M |
| Tube-TF4-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®F-4040-A | 15M |
| Tube-TF4-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Tygon®F-4040-A | 15M |
| Tube-TF4-18# | 7.9 | 1.6 | YZ1515X YZII15 | Tygon®F-4040-A | 15M |
| Tube-TF4-0.76×0.86 | 0.76 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®F-4040-A | 3M |
| Tube-TF4-1.65×0.86 | 1.65 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®F-4040-A | 3M |
| Tube-TF4-2.06×0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®F-4040-A | 15M |
| Tube-TF4sss-2.06×0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®F-4040-A | 12pc |
| Tube-TF5-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28 (48) | Fluran®F-5500-A | 15M |
| Tube-TF5-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Fluran®F-5500-A | 15M |
| Tube-TF5-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Fluran®F-5500-A | 15M |
| Tube-TF5-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Fluran®F-5500-A | 15M |
| Tube-TF5-18# | 7.9 | 1.6 | YZ1515X YZII15 | Fluran®F-5500-A | 15M |
| Tube-TF5-1.6×0.8 | 1.6 | 0.8 | DG JY10 WX10 DG15-28(48) | Fluran®F-5500-A | 15M |
| Tube-TF5-2.06×0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Fluran®F-5500-A | 10M |

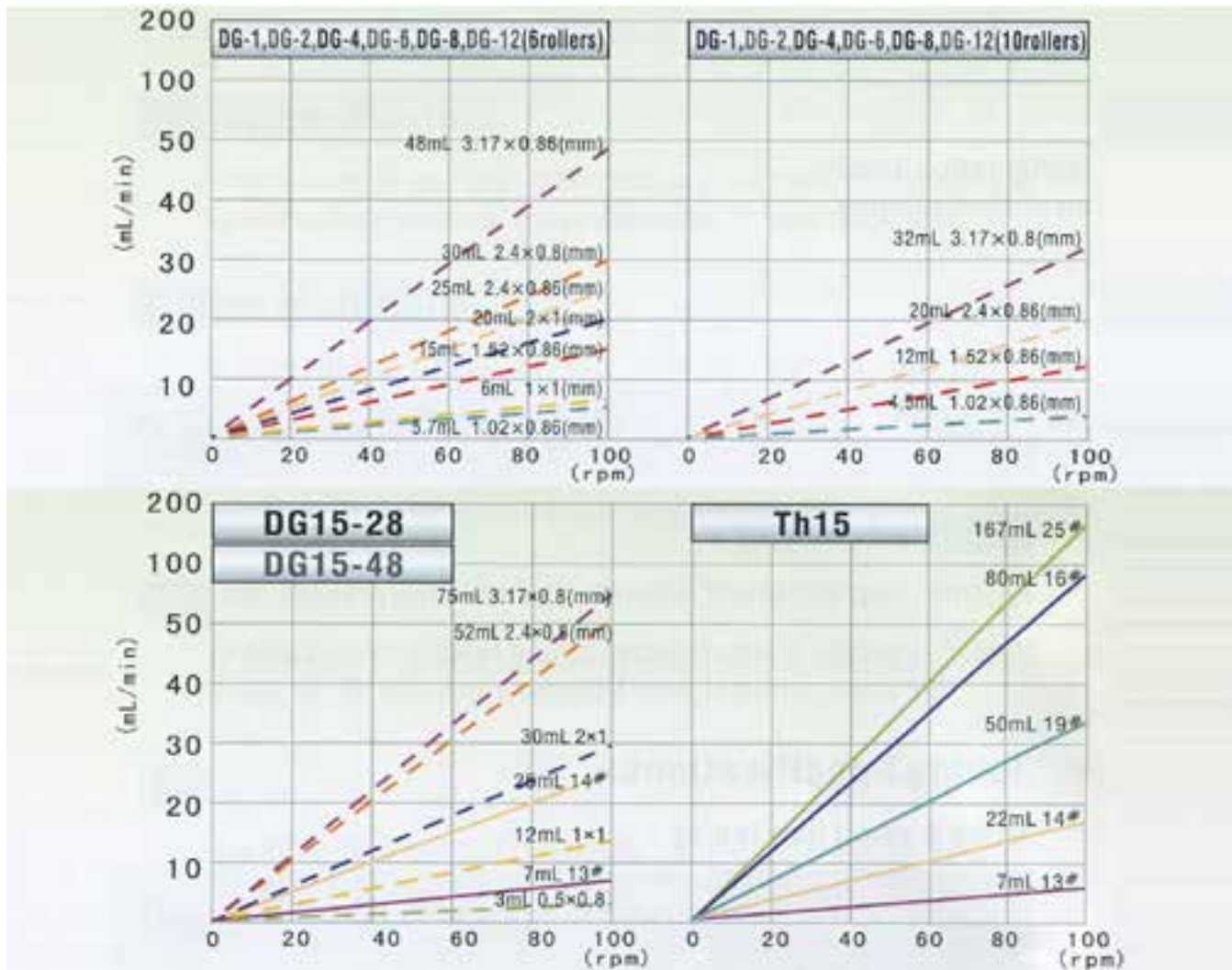
| Model | Inner Dia. (mm) | Wall Thickness (mm) | Suitable Pump Head | Specifications | Standard Package |
|---------------------|-----------------|---------------------|---------------------------------|----------------|------------------|
| Tube-V-1.6x0.8 | 1.6 | 0.8 | DG JY10 WX10 DG15-28(48) | viton | 7.6M |
| Tube-V-2x1 | 2 | 1 | DG JY10 WX10 DG15-28(48) | viton | 5M |
| Tube-V-13# | 0.8 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | viton | 7.6M |
| Tube-V-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | viton | 7.6M |
| Tube-V-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | viton | 7.6M |
| Tube-V-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | viton | 7.6M |
| Tube-V-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | viton | 7.6M |
| Tube-V-18# | 7.9 | 1.6 | YZ1515X YZII15 | viton | 7.6M |
| Tube-V-15# | 4.8 | 2.5 | YZ2515X YZII25 KZ25 | viton | 7.6M |
| Tube-V-24# | 6.4 | 2.5 | YZ2515X YZII25 BZ25 KZ25 | viton | 7.6M |
| Tube-V-35# | 7.9 | 2.5 | KZ25 YZII25 | viton | 7.6M |
| Tube-V-36# | 9.6 | 2.5 | KZ25 YZII25 | viton | 7.6M |
| Tube-V-73# | 9.5 | 3.3 | KZ35 YZ35 YZ35-13 | viton | 7.6M |
| Tube-P-13# | 0.8 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Pharmed® | 7.6M |
| Tube-P-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Pharmed® | 7.6M |
| Tube-P-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Pharmed® | 7.6M |
| Tube-P-19# | 2.4 | 1.6 | YZ1515X YZII15 TH15 | Pharmed® | 7.6M |
| Tube-P-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Pharmed® | 7.6M |
| Tube-P-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Pharmed® | 7.6M |
| Tube-P-18# | 7.9 | 1.6 | YZ1515X YZII15 | Pharmed® | 7.6M |
| Tube-P-15# | 4.8 | 2.4 | YZ2515X YZII25 KZ25 DMD25 | Pharmed® | 7.6M |
| Tube-P-24# | 6.4 | 2.4 | YZ2515X YZII25 BZ25 KZ25 DMD25 | Pharmed® | 7.6M |
| Tube-P-35# | 7.9 | 2.5 | KZ25 YZII25 DMD25 | Pharmed® | 7.6M |
| Tube-P-36# | 9.6 | 2.5 | KZ25 YZII25 DMD25 | Pharmed® | 7.6M |
| Tube-P-73# | 9.5 | 3.3 | KZ35 YZ35 YZ35-13 | Pharmed® | 7.6M |
| Tube-P-82# | 12.7 | 3.3 | KZ35 YZ35 YZ35-13 | Pharmed® | 7.6M |
| Tube-P-86# | 9.5 | 6.3 | KZ48/63 | Pharmed® | 7.6M |
| Tube-P-88# | 12.7 | 4.7 | KZ48/63 | Pharmed® | 7.6M |
| Tube-P-90# | 19 | 6.35 | KZ48/63 | Pharmed® | 7.6M |
| Tube-P-92# | 25.4 | 4.76 | KZ48/63 | Pharmed® | 7.6M |
| Tube-P-0.38x0.86 | 0.38 | 0.86 | DG | Pharmed® | 3M |
| Tube-P-0.51x1.6 | 0.51 | 1.6 | YZ1515X YZII15 | Pharmed® | 7.6M |
| Tube-P-0.76x0.86 | 0.76 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-P-1.02x0.86 | 1.02 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-P-1.6x0.8 | 1.6 | 0.8 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-P-1.65x0.86 | 1.65 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-P-2.06x0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-P-2.79x0.86 | 2.79 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed® | 3M |
| Tube-Psss-0.38x0.9 | 0.38 | 0.9 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-0.76x0.86 | 0.76 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-1.02x0.86 | 1.02 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-1.52x0.86 | 1.52 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-1.65x0.86 | 1.65 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-2.06x0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-2.54x0.86 | 2.54 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |
| Tube-Psss-2.79x0.86 | 2.79 | 0.86 | DG JY10 WX10 DG15-28(48) | Pharmed®sss | 6pc |

| Model | Inner Dia. (mm) | Wall Thickness (mm) | Suitable Pump Head | Specifications | Standard Package |
|------------------------------|-----------------|---------------------|---------------------------------|-----------------|------------------|
| Tube-TR3-13# | 0.8 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Tygon®R-3603 | 15M |
| Tube-TR3-14# | 1.6 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Tygon®R-3603 | 15M |
| Tube-TR3-16# | 3.1 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Tygon®R-3603 | 15M |
| Tube-TR3-25# | 4.8 | 1.6 | YZ1515X YZII15 TH15 DG15-28(48) | Tygon®R-3603 | 15M |
| Tube-TR3-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Tygon®R-3603 | 15M |
| Tube-TR3-18# | 7.9 | 1.6 | YZ1515X YZII15 | Tygon®R-3603 | 15M |
| Tube-TR3-15# | 4.8 | 2.5 | YZ2515X YZII25 KZ25 | Tygon®R-3603 | 15M |
| Tube-TR3-24# | 6.4 | 2.5 | YZ2515X YZII25 BZ25 KZ25 | Tygon®R-3603 | 15M |
| Tube-TR3-0.76×0.86 | 0.76 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3603 | 10M |
| Tube-TR3-1.6×0.8 | 1.6 | 0.8 | DG JY10 WX10 DG15-28(48) | Tygon®R-3603 | 10M |
| Tube-TR3-2.4×0.8 | 2.4 | 0.8 | DG JY10 WX10 DG15-28(48) | Tygon®R-3603 | 10M |
| Tube-TR3ss-0.13×0.9 | 0.13 | 0.9 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-0.25×0.9 | 0.25 | 0.9 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-0.51×0.9 | 0.51 | 0.9 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-0.76×0.9 | 0.76 | 0.9 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-1.52×0.86 | 1.52 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-1.65×0.86 | 1.65 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3ss-1.85×0.86 | 1.85 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3sss-0.76×0.9 | 0.76 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3sss-1.52×0.86 | 2.54 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3sss-1.85×0.86 | 1.85 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-TR3sss-2.06×0.86 | 2.06 | 0.86 | DG JY10 WX10 DG15-28(48) | Tygon®R-3607ss | 12pc |
| Tube-T3-19# | 2.4 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®3350 | 15M |
| Tube-T3-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®3350 | 15M |
| Tube-T3-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®3350 | 15M |
| Tube-T3-18# | 7.9 | 1.6 | YZ1515X YZII15 | Tygon®3350 | 15M |
| Tube-T3-15# | 4.8 | 2.5 | YZ2515X YZII25 KZ25 | Tygon®3350 | 15M |
| Tube-T3-24# | 6.4 | 2.5 | YZ2515X YZII25 BZ25 KZ25 | Tygon®3350 | 15M |
| Tube-T2-16# | 3.1 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®2275 | 15M |
| Tube-T2-25# | 4.8 | 1.6 | YZ1515X YZII15 DG15-24 TH15 | Tygon®2275 | 15M |
| Tube-T2-17# | 6.4 | 1.6 | YZ1515X YZII15 DG15-24 | Tygon®2275 | 15M |
| Tube-T2-82# | 12.7 | 3.3 | KZ35 YZ35 YZ35-13 | Tygon®2275 | 15M |
| Tube-DM-24# | 6.4 | 2.5 | YZ2515X YZII25 BZ25 KZ25 DMD25 | Double Marprene | 5pc |
| Tube-MHLLss-2.79×0.86 | 2.79 | 0.86 | DG JY10 WX10 DG15-28(48) | MHLLss | 6pc |

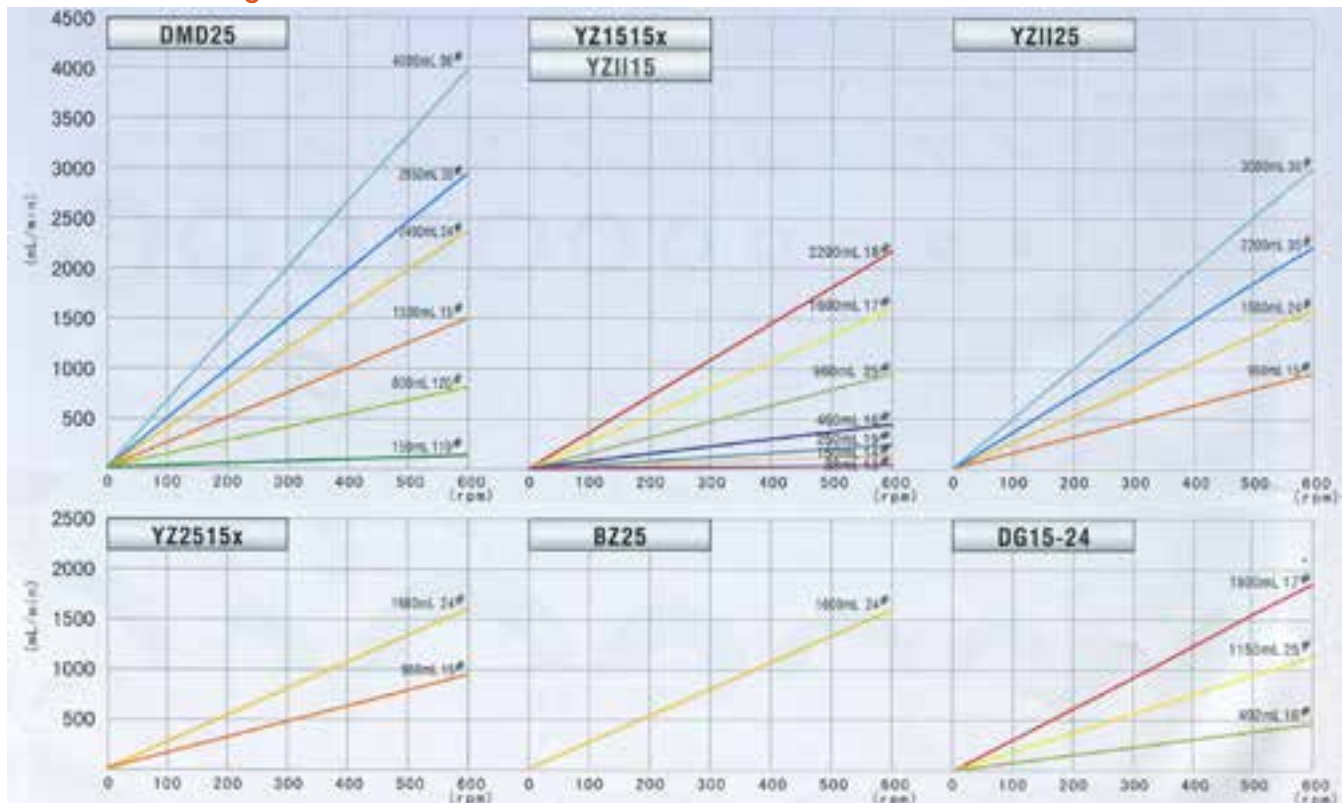
PERISTALTIC PUMPS

Tubing Ref. Flow Rates Curve

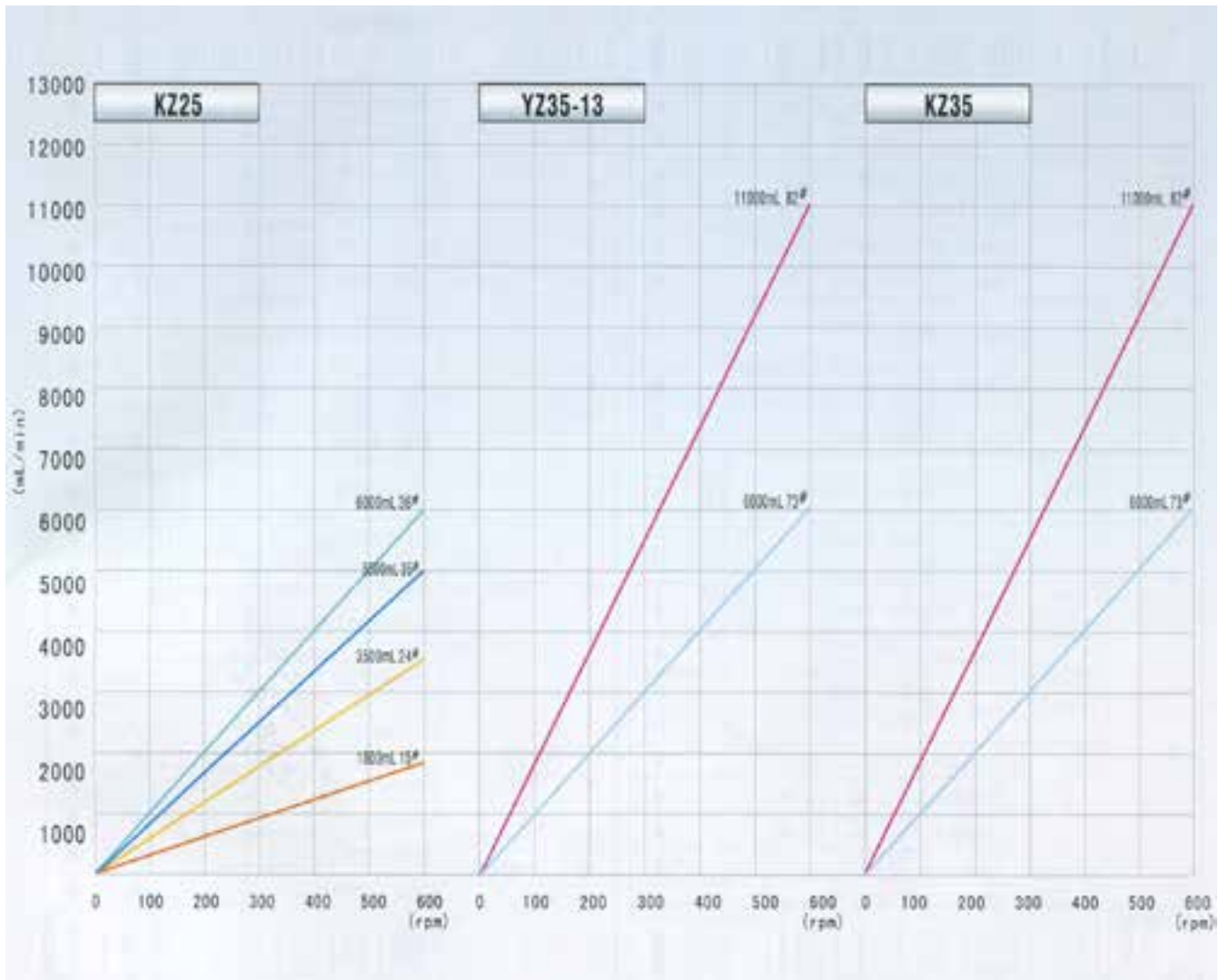
Micro & Small Flow Tubing:



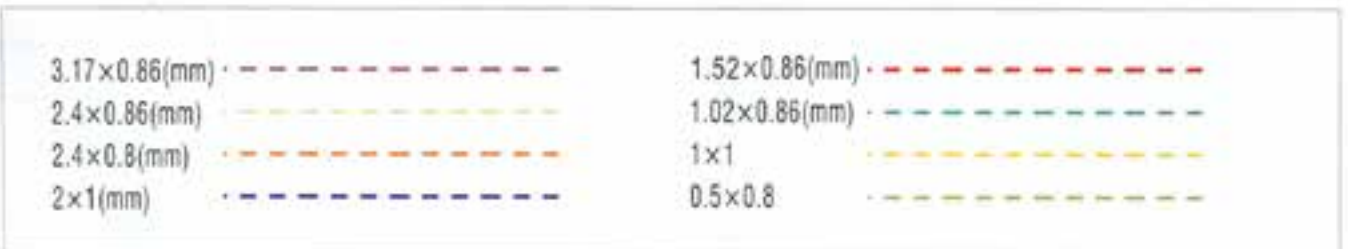
Medium Flow Tubing:



Industrial Tubing:



Note: Different colorful lines represent different type of tubing



PERISTALTIC PUMPS

Configuration Table

| Drive | Pump Head | Tubing | | | | | |
|-----------|-----------------------|-----------------|---------------------|--------------------------------------|--------------------------------------|--------|---|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark | |
| PP-X-20 | YZ1014 | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● | |
| | | Tygon F-4040-A | 0.86 | ≤2.06 | | ● | |
| | | Fluran F-5500-A | 0.86 | ≤2.06 | | ● | |
| | | Viton | 1.0 | ≤2 | | ● | |
| | | Pharmed | 0.86 | ≤2.79 | | ● | |
| | | Tygon R-3603 | 0.8 | ≤2.4 | | ● | |
| | | Tygon R-3607 | 0.86 | ≤2.06 | | ● | |
| | | MHLlss | 0.86 | ≤2.79 | | ● | |
| PP-X-380 | YZ1515x YZ1115 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| | | Norprene A-60-G | | | 14# | ● | |
| | | Fluran F-5500-A | | | 14# | ● | |
| | | Pharmed | | | 16# | ○ | |
| | | | | | 13# 14# | ● | |
| | | | | | 19# 16# | ○ | |
| | | Tygon R-3603 | | | 13# 14# | ○ | |
| | YZ2515x YZ1125 | Silicone tubing | | | 19# 16# 25# 18# | ● | |
| | | Tygon 3350 | | | 15# 24# | ● | |
| | | | | | 15# | ○ | |
| | DG-1 (6) DG-1 (10) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● | |
| | | | F-4040-A | 0.86 | ≤2.06 | | ● |
| | | F-5500-A | 0.86 | ≤2.06 | | ● | |
| | | Viton | 0.8-1.0 | ≤2 | | ● | |
| | | Pharmed | 0.86 | ≤2.79 | | ● | |
| | | Tygon R-3603 | 0.8 | ≤2.4 | | ● | |
| | | Tygon R-3607 | 0.9 | ≤2.06 | | ● | |
| | | MHLlss | 0.86 | ≤2.79 | | ● | |
| | | DG-2 (6) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | | | F-4040-A | 0.86 | ≤2.06 | | ○ |
| | | | F-5500-A | 0.86 | ≤2.06 | | ● |
| | | | Viton | 0.8-1.0 | ≤2 | | ● |
| | | | Pharmed | 0.86 | ≤2.79 | | ● |
| | | | Tygon R-3603 | 0.8 | ≤2.4 | | ● |
| DG-2 (10) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● | | |
| | F-5500-A | 0.86 | ≤2.06 | | ● | | |
| | Viton | 0.8-1.0 | ≤2 | | ● | | |
| | Pharmed | 0.86 | ≤2.79 | | ● | | |
| | Tygon R-3603 | 0.8 | ≤2.4 | | ● | | |
| | Tygon R-3607 | 0.9 | ≤2.06 | | ● | | |
| PP-X-2200 | YZ1515x YZ1115 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| | | Norprene A-60-G | | | 14# | ● | |
| | | Fluran F-5500-A | | | 14# | ● | |
| | | Pharmed | | | 16# | ○ | |
| | | Pharmed | | | 13# 14# | ● | |
| | | Tygon R-3603 | | | 19# 16# | ○ | |
| | | Tygon 3350 | | | 13# 14# | ○ | |
| | YZ2515x YZ1125 | Silicone tubing | | | 19# 16# 25# 18# | ● | |
| | | Tygon 3350 | | | 15# 24# | ● | |
| | | Tygon 3350 | | | 15# | ● | |
| | | Tygon 3350 | | | 24# | ○ | |
| PP-X-1600 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● | | |

| Drive | Pump Head | Tubing | | | | | |
|----------------------|----------------------|-------------------|---------------------|--------------------------------|--------------------------------|---------|---|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark | |
| PP-X-1600 | YZ1515x YZ1115 | Norprene A-60-G | | | 14# | ● | |
| | | Norprene A-60-G | | | 16# | ○ | |
| | | Norprene A-60-F | | | 16# | ○ | |
| | | Norprene CHEMICAL | | | 16# | ● | |
| | | Fluran F-5500-A | | | 14# 16# | ● | |
| | | Fluran F-5500-A | | | 25# 17# 18# | ○ | |
| | | Viton | | | 16# | ○ | |
| | | Pharmed | | | 13# 14# 19# 16# | ● | |
| | | Pharmed | | | 25# 17# 18# | ○ | |
| | | Tygon R-3603 | | | 14# | ● | |
| | Tygon 3350 | | | 19# 16# 25# 18# | ● | | |
| | YZ2515x | Silicone tubing | | | 15# 24# | ● | |
| | | Tygon 3350 | | | 15# 24# | ● | |
| | | YZ1125 | Silicone tubing | | | 15# 24# | ● |
| | | | | | | 35# 36# | ○ |
| | | | Tygon 3350 | | | 15# 24# | ● |
| | | | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| YZ1515x X1 YZ1115 X1 | Silicone tubing | | | 14# 16# | ● | | |
| | Norprene A-60-G | | | 16# | ● | | |
| | Norprene CHEMICAL | | | 16# 25# 17# | ● | | |
| | Fluran F-4040-A | | | 14# 16# 25# 17# 18# | ● | | |
| | Fluran F-5000-A | | | 17# 18# | ● | | |
| | Viton | | | 13# 14# 19# 16# 25# 17# 18# | ● | | |
| | YZ1515x X2 YZ1115 X2 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| | | Norprene A-60-G | | | 14# 16# | ● | |
| | | Norprene A-60-F | | | 16# | ● | |
| | | Norprene CHEMICAL | | | 16# | ● | |
| Norprene CHEMICAL | | | | 25# | ○ | | |
| Fluran F-4040-A | | | | 14# | ● | | |
| Fluran F-4040-A | | | | 16# | ○ | | |
| Fluran F-5500-A | | | | 14# 16# 25# 17# 18# | ● | | |
| Viton | | | | 13# 14# 16# | ● | | |
| Viton | | | | 25# 17# 18# | ○ | | |
| PP-X-6000 | YZ1515x X2 YZ1115 X2 | Pharmed | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| | | Tygon R-3603 | | | 13# 14# 16# | ● | |
| | | Tygon R-3603 | | | 16# | ● | |
| | | Norprene CHEMICAL | | | 16# | ● | |
| | | Norprene CHEMICAL | | | 25# | ○ | |
| | | Fluran F-4040-A | | | 14# | ● | |
| | | Fluran F-4040-A | | | 16# | ○ | |
| | | Fluran F-5500-A | | | 14# 16# 25# 17# 18# | ● | |
| | | Viton | | | 13# 14# 16# | ● | |
| | | Viton | | | 25# 17# 18# | ○ | |
| | YZ2515x X1 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● | |
| | | Pharmed | | | 15# 24# | ● | |
| | | Tygon R-3603 | | | 15# 24# | ● | |
| | | Tygon 3350 | | | 15# 24# | ● | |
| YZ1125 X1 | Silicone tubing | | | 15# 24# | ● | | |
| | Pharmed | | | 15# 24# 35# 36# | ● | | |
| | Tygon R-3603 | | | 15# 24# | ● | | |
| | Tygon 3350 | | | 15# 24# | ● | | |
| | Tygon 3350 | | | 15# 24# | ● | | |
| | Tygon 3350 | | | 15# 24# | ● | | |
| YZ2515x X2 | Silicone tubing | | | 15# 24# | ● | | |
| | Pharmed | | | 15# 24# | ○ | | |
| | Tygon R-3603 | | | 15# 24# | ○ | | |
| | Tygon 3350 | | | 15# 24# | ● | | |
| YZ1125 X2 | Silicone tubing | | | 15# 24# 35# 36# | ● | | |
| | Pharmed | | | 15# 24# | ○ | | |
| | Tygon R-3603 | | | 15# 24# | ○ | | |
| | Tygon 3350 | | | 15# 24# | ● | | |

PERISTALTIC PUMPS

| Drive | Pump Head | Tubing | | | | |
|------------------------|-----------------|------------------------|---------------------|--------------------|--------------------------------------|--------------------------------------|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark |
| PP-X-6000 | KZ25 | Silicone tubing | | | 15# 24# 35# 36# | • |
| | | Tygon R-3603 | | | 15# 24# | • |
| | | Tygon 3350 | | | 15# 24# | • |
| | | | | | | |
| | DG15-24 | Silicone tubing | | | 16# 25# 17# | • |
| | | Norprene CHEMICAL | | | | |
| | | Fluran F-4040-A | | | | |
| | | Fluran F-5500-A | | | | |
| | | Viton | | | | |
| | | Pharmed | | | | |
| | | Tygon R-3603 | | | | |
| | | Tygon 3350 | | | | |
| | Tygon 2275 | | | | | |
| | PP-W-6000 | YZ1515x X1 YZ115 X1 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# |
| Norprene A-60-G | | | | | 14# 16# | • |
| Norprene A-60-F | | | | | 16# | • |
| Norprene CHEMICAL | | | | | 16# 25# 17# | • |
| Fluran F-4040-A | | | | | 13# 14# 19# 16# 25# 17# 18# | • |
| Fluran F-5500-A | | | | | | |
| Viton | | | | | | |
| Pharmed | | | | | | |
| Tygon R-3603 | | | | | | • |
| Tygon 3350 | | | | | 19# 16# 25# 18# | • |
| Tygon 2275 | | | | 16# 25# 17# | • | |
| YZ1515x X2 YZ115 X2 | | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | • |
| | | Norprene A-60-G | | | 14# 16# | • |
| | | Norprene A-60-F | | | 16# | • |
| | | Norprene CHEMICAL | | | 16# | • |
| | | Fluran F-4040-A | | | 25# | ○ |
| | | Fluran F-4040-A | | | 14# | • |
| | | Fluran F-4040-A | | | 16# | ○ |
| | | Fluran F-5500-A | | | 14# 16# 25# 17# 18# | • |
| | | Viton | | | 13# 14# 16# | • |
| | | Viton | | | 25# 17# 18# | ○ |
| | | Pharmed | | | 13# 14# 19# 16# 25# 17# 18# | • |
| | | Tygon R-3603 | | | 13# 14# 16# | • |
| | | Tygon R-3603 | | | 25# 17# 18# | ○ |
| | Tygon 3350 | | | 19# 16# 25# 18# | • | |
| Tygon 2275 | | | 16# 25# 17# | ○ | | |
| YZ2515x X1 | Silicone tubing | | | 15# 24# | • | |
| | Pharmed | | | 15# 24# | • | |
| | Tygon R-3603 | | | 15# 24# | • | |
| | Tygon 3350 | | | 15# 24# | • | |
| | | | | | | |
| | | | | | | |

| Drive | Pump Head | Tubing | | | | | |
|--------------|-------------------------|-------------------|---------------------|---------|--------------------------------|---------|---|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark | |
| PP-W-6000 | YZ1125 X1 | Silicone tubing | | | 15# 24# 35# 36# | • | |
| | | Pharmed | | | 15# 24# | • | |
| | | Tygon R-3603 | | | 15# 24# | • | |
| | | Tygon 3350 | | | 15# 24# | • | |
| | YZ2515x X2 YZ1125 X2 | Silicone tubing | | | 15# 24# | • | |
| | | Pharmed | | | 15# 24# | ○ | |
| | | Tygon R-3603 | | | 15# 24# | ○ | |
| | | Tygon 3350 | | | 15# 24# | • | |
| | YZ2515x X2 YZ1125 X2 | Silicone tubing | | | 15# 24# 35# 36# | • | |
| | | Pharmed | | | 15# 24# | ○ | |
| | | Tygon R-3603 | | | 15# 24# | ○ | |
| | | Tygon 3350 | | | 15# 24# | • | |
| | KZ25 | Silicone tubing | | | 15# 24# 35# 36# | • | |
| | | Tygon R-3603 | | | 15# 24# | • | |
| | | Tygon 3350 | | | 15# 24# | • | |
| | | | | | | | |
| | DG15-24 | Silicone tubing | | | 16# 25# 17# | • | |
| | | Norprene CHEMICAL | | | | | |
| | | Fluran F-4040-A | | | | | |
| | | Fluran F-5500-A | | | | | |
| | | Viton | | | | | |
| | | Pharmed | | | | | |
| | | Tygon R-3603 | | | | | |
| | | Tygon 3350 | | | | | |
| Tygon 2275 | | | | | | | |
| | | | | | | | |
| PP-F-500 | YZ1515x YZ115 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | • | |
| | | Norprene A-60-G | | | 14# | • | |
| | | Norprene A-60-G | | | 16# | ○ | |
| | | Norprene A-60-F | | | 16# | ○ | |
| | | Norprene CHEMICAL | | | 16# | ○ | |
| | | Fluran F-5500-A | | | 14# 16# | • | |
| | | Fluran F-5500-A | | | 25# 17# 18# | ○ | |
| | | Viton | | | 16# | ○ | |
| | | Pharmed | | | 13# 14# 19# 16# | • | |
| | | Pharmed | | | 25# 17# 18# | ○ | |
| | | Tygon R-3603 | | | 14# | • | |
| | | Tygon 3350 | | | 19# 16# 25# 18# | • | |
| | | YZ2515x | Silicone tubing | | | 15# 24# | • |
| | | | Tygon 3350 | | | 15# 24# | • |
| | YZ1125 | | Silicone tubing | | | 15# 24# | • |
| | | | Tygon 3350 | | | 15# 24# | • |
| | DG-1 (6) DG-1 (10) | Silicone tubing | 0.8-1.0 | ≤3.17 | | • | |
| | | F-4040-A | 0.86 | ≤2.06 | | • | |
| | | F-5500-A | 0.86 | ≤2.06 | | • | |
| | | Viton | 0.8-1.0 | ≤2 | | • | |
| | | Pharmed | 0.86 | 2.79 | | • | |
| | | Tygon R-3603 | 0.8 | ≤2.4 | | • | |
| | | Tygon R-3607 | 0.9 | ≤2.06 | | • | |
| | | MHLLSs | 0.86 | 2.79 | | • | |
| DG-2 (6) | | Silicone tubing | 0.8-1.0 | ≤3.17 | | • | |
| | | F-4040-A | 0.86 | ≤2.06 | | ○ | |
| | F-5500-A | 0.86 | ≤2.06 | | • | | |
| | Viton | 0.8-1.0 | ≤2 | | • | | |
| | Pharmed | 0.86 | 2.79 | | • | | |
| | Tygon R-3603 | 0.8 | ≤2.4 | | • | | |
| Tygon R-3607 | 0.9 | ≤2.06 | | • | | | |

PERISTALTIC PUMPS

Configuration Table

| Drive | Pump Head | Tubing | | | | |
|-----------------|---------------------|---------------------|---------------------|---------|--|--|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark |
| PP-F-500 | DG-2 (10) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | | F-4040-A | 0.86 | ≤2.06 | | ○ |
| | | F-5500-A | 0.86 | ≤2.06 | | ● |
| | | Viton | 0.8-1.0 | ≤2 | | ● |
| | | Pharmed | 0.86 | 2.79 | | ● |
| | | Tygon R-3603 | 0.8 | 2.79 | | ● |
| | Tygon R-3607 | 0.9 | ≤2.06 | | ● | |
| | DG-4 (6) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | | F-5500-A | 0.86 | ≤2.06 | | ● |
| | | Pharmed | 0.86 | ≤2.06 | | ● |
| | | Pharmed | 0.86 | 2.79 | | ○ |
| | | Tygon R-3603 | 0.8 | ≤1.6 | | ● |
| | | Tygon R-3603 | 0.8 | 2.4 | | ○ |
| | Tygon R-3607 | 0.9 | ≤2.06 | | ● | |
| | DG-4 (10) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | | Pharmed | 0.86 | ≤2.06 | | ● |
| | | Pharmed | 0.86 | 2.79 | | ○ |
| | | Tygon R-3603 | 0.8 | ≤1.6 | | ● |
| | | Tygon R-3603 | 0.8 | 2.4 | | ○ |
| | | Tygon R-3607 | 0.9 | ≤2.06 | | ● |
| | PP-F-1140 | YZ1515x YZ115 | Silicone tubing | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] |
| Norprene A-60-G | | | | | 14 [#] | ● |
| Fluran F-5500-A | | | | | 14 [#] | ● |
| Fluran F-5500-A | | | | | 16 [#] | ○ |
| Pharmed | | | | | 13 [#] 14 [#] | ● |
| Pharmed | | | | | 19 [#] 16 [#] | ○ |
| YZ2515x YZ125 | | Tygon R-3603 | | | 13 [#] 14 [#] | ○ |
| | | Tygon 3350 | | | 19 [#] 16 [#] 25 [#] 18 [#] | ● |
| | | Silicone tubing | | | 15 [#] 24 [#] | ● |
| | | Tygon 3350 | | | 15 [#] | ● |
| | | Tygon 3350 | | | 24 [#] | ○ |
| | | | | | | |
| PP-F-6000 | YZ1515x X1 YZ115 X1 | Silicone tubing | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Norprene A-60-G | | | 14 [#] 16 [#] | ● |
| | | Norprene A-60-F | | | 16 [#] | ● |
| | | Norprene CHEMICAL | | | 16 [#] 25 [#] | ● |
| | | Fluran F-4040-A | | | 14 [#] 16 [#] 25 [#] 17 [#] | ● |
| | | Fluran F-5500-A | | | 18 [#] | ● |
| | | Viton | | | 13 [#] 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Pharmed | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Tygon R-3603 | | | 13 [#] 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Tygon 3350 | | | 19 [#] 16 [#] 25 [#] 18 [#] | ● |
| | | Tygon 2275 | | | 16 [#] 25 [#] 18 [#] | ● |
| | | YZ1515x X2 YZ115 X2 | Silicone tubing | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] |
| | Norprene A-60-G | | | | 14 [#] | ● |
| | Fluran F-5500-A | | | | 14 [#] | ● |
| | Fluran F-5500-A | | | | 16 [#] 25 [#] | ○ |
| | Pharmed | | | | 13 [#] 14 [#] | ● |
| | Pharmed | | | | 19 [#] 16 [#] | ○ |
| | Tygon R-3603 | | | | 13 [#] 14 [#] | ○ |
| | Tygon 3350 | | | | 19 [#] 16 [#] 25 [#] 18 [#] | ● |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Drive | Pump Head | Tubing | | | | |
|-----------------|----------------------|-------------------|--|---------------------------------|--|--------|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark |
| PP-F-6000 | YZ2515x X1 | Silicone tubing | | | 15 [#] 24 [#] | ● |
| | | Pharmed | | | 15 [#] 24 [#] | ● |
| | | Tygon R-3603 | | | 15 [#] 24 [#] | ● |
| | | Tygon 3350 | | | 15 [#] 24 [#] | ● |
| | | | | | | |
| | YZ1125x X1 | Silicone tubing | | | 15 [#] 24 [#] 35 [#] 36 [#] | ● |
| | | Pharmed | | | 15 [#] 24 [#] | ● |
| | | Tygon R-3603 | | | 15 [#] 24 [#] | ● |
| | | Tygon 3350 | | | 15 [#] 24 [#] | ● |
| | | | | | | |
| | YZ2515x X2 YZ1125 X2 | Silicone tubing | | | 15 [#] 24 [#] | ● |
| | | Tygon 3350 | | | 15 [#] 24 [#] | ● |
| | | | | | | |
| | KZ25 | Silicone tubing | | | 15 [#] 24 [#] | ● |
| | | Silicone tubing | | | 35 [#] 36 [#] | ○ |
| Pharmed | | | | 15 [#] 24 [#] | ○ | |
| PP-F-111L | YZ35-13 KZ35 | Silicone tubing | | | 73 [#] 82 [#] | ● |
| | | Pharmed | | | 73 [#] 82 [#] | ○ |
| | YZ35-13 X2 KZ35 X2 | Silicone tubing | | | 73 [#] | ● |
| | | Silicone tubing | | | 82 [#] | ○ |
| PP-X-111 | YZ35-13 KZ35 | Silicone tubing | | | 73 [#] 82 [#] | ● |
| | | Pharmed | | | 73 [#] 82 [#] | ○ |
| | YZ35-13 X2 KZ35 X2 | Silicone tubing | | | 73 [#] | ● |
| | | Silicone tubing | | | 82 [#] | ○ |
| PP-L-500 | YZ1515x X1 YZ115x X1 | Silicone tubing | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Norprene A-60-G | | | 14 [#] 16 [#] | ● |
| | | Norprene A-60-F | | | 16 [#] | ● |
| | | Norprene CHEMICAL | | | 16 [#] 25 [#] 17 [#] | ● |
| | | Fluran F-4040-A | | | 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Fluran F-5500-A | | | | ● |
| | | Viton | | | 13 [#] 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Pharmed | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Tygon 3350 | | | 19 [#] 16 [#] 25 [#] 18 [#] | ● |
| | | Tygon 2275 | | | 16 [#] 25 [#] 17 [#] | ● |
| | YZ1515x X2 YZ115x X2 | Silicone tubing | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| | | Norprene A-60-G | | | 14 [#] 16 [#] | ● |
| | | Norprene A-60-F | | | 16 [#] | ● |
| | | Norprene CHEMICAL | | | 16 [#] 25 [#] 17 [#] | ○ |
| | | Fluran F-4040-A | | | 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● |
| Fluran F-5500-A | | | | ● | | |
| Viton | | | 13 [#] 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● | | |
| Pharmed | | | 13 [#] 14 [#] 19 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● | | |
| Tygon R-3603 | | | 13 [#] 14 [#] 16 [#] 25 [#] 17 [#] 18 [#] | ● | | |
| Tygon 3350 | | | 19 [#] 16 [#] 25 [#] 18 [#] | ● | | |
| Tygon 2275 | | | 16 [#] 25 [#] 17 [#] | ● | | |

Configuration Table

PERISTALTIC PUMPS

| Drive | Pump Head | Tubing | | | | |
|--------------|------------------------|-------------------|---------------------|---------|--------------------------------------|--------|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Remark |
| PP-L-500 | YZ1515x X3 YZ115 X3 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● |
| | | Norprene A-60-G | | | 14# | ● |
| | | Norprene A-60-G | | | 16# | ○ |
| | | Norprene A-60-F | | | 16# | ○ |
| | | Norprene CHEMICAL | | | 16# | ○ |
| | | Fluran F-4040-A | | | 14# 16# | ● |
| | | Fluran F-5500-A | | | 25# 17# 36# | ○ |
| | | Viton | | | 13# | ● |
| | | Viton | | | 14# | ○ |
| | | Pharmed | | | 13# 14# 19# 16# | ● |
| | | Tygon R-3603 | | | 13# 14# | ● |
| | | Tygon 3350 | | | 19# 16# 25# 18# | ● |
| | YZ1515x X4 YZ115 X4 | Silicone tubing | | | 13# 14# 19# 16# 25# 17# 18# | ● |
| | | Norprene A-60-G | | | 14# | ● |
| | | Fluran F-5500-A | | | 14# 16# | ○ |
| | | Viton | | | 13# | ● |
| | | Pharmed | | | 13# 14# | ● |
| | | Tygon R-3603 | | | 13# | ● |
| | YZ2515x X1 | Silicone tubing | | | 15# 24# | ● |
| | | Pharmed | | | 15# 24# | ● |
| | | Tygon R-3603 | | | 15# 24# | ● |
| | | Tygon 3350 | | | 15# 24# | ● |
| | YZ1125 X1 | Silicone tubing | | | 15# 24# 35# 36# | ● |
| | | Pharmed | | | 15# 24# | ● |
| | | Tygon R-3603 | | | 15# 24# | ● |
| | YZ2515x X2 | Silicone tubing | | | 15# 24# | ● |
| | | Pharmed | | | 15# 24# | ○ |
| | | Tygon R-3603 | | | 15# 24# | ○ |
| | YZ2515x X3 | Silicone tubing | | | 15# 24# | ● |
| | | Tygon 3350 | | | 15# 24# | ● |
| | | Silicone tubing | | | 15# 24# | ● |
| | YZ2515x X4 | Silicone tubing | | | 15# 24# | ● |
| | | Tygon 3350 | | | 15# 24# | ○ |
| | | Silicone tubing | | | 15# 24# 35# 36# | ● |
| | YZ1125x X2 | Pharmed | | | 15# 24# | ○ |
| | | Tygon R-3603 | | | 15# 24# | ○ |
| | | Tygon 3350 | | | 15# 24# | ● |
| | DG15-24 | Silicone tubing | | | 16# 25# 17# | ● |
| | | Norprene CHEMICAL | | | | ● |
| | | Fluran F-4040-A | | | | ● |
| | | Fluran F-5500-A | | | | ● |
| | | Viton | | | | ● |
| Pharmed | | | | | ○ | |
| Tygon R-3603 | | | | | ● | |
| Tygon 3350 | | | | | ○ | |
| Tygon 2275 | | | | ● | | |

| Drive | Pump Head | Tubing | | | | | |
|------------|--|-----------------|---------------------|--------------|---------------|------------|--------|
| | | Type | Wall Thickness (mm) | ID (mm) | Tubing Number | Re-mark | |
| PP-L-500 | DG15-28 | Silicone tubing | 0.8-1.0 | ≤3.17 | 13# 14# | ● | |
| | | Norprene A-60-G | | | 14# | ● | |
| | | Norprene A-60-G | | | 17# | ○ | |
| | | Pharmed | 0.86 | ≤2.79 | 13# 14# | ● | |
| | | Tygon R-3603 | 0.8 | ≤2.4 | 13# 14# | ● | |
| | | F-4040-A | 0.86 | ≤2.06 | | ● | |
| | | F-5500-A | 0.86 | ≤2.06 | | ● | |
| | | Viton | 0.8-1.0 | ≤2 | | ● | |
| | | Tygon R-3607 | 0.9 | ≤2.06 | | ● | |
| | | DG15-48 | Silicone tubing | 0.8-1.0 | ≤2 | 13# 14# | ● ○ |
| | | | F-4040-A | 0.86 | ≤1.65 | | ● |
| | | | F-5500-A | 0.86 | ≤1.6 | | ● |
| | Viton | | 0.8-1.0 | ≤2 | | ○ | |
| | Pharmed | | 0.86 | <2.54 | | ● | |
| | Pharmed | | 0.86 | 2.54 2.79 | | ○ | |
| | Tygon R-3603 | | 0.8 | ≤2.4 | | ● | |
| | Tygon R-3607 | | 0.9 | <2.06 | | ● | |
| | DG-2/4/ 6/8/12 (6/10 rollers) | | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | | | F-4040-A | 0.86 | ≤2.06 | | ● |
| | | F-5500-A | 0.86 | ≤2.06 | | ● | |
| | | Viton | 0.8-1.0 | ≤2 | | ● | |
| | | Pharmed | 0.86 | ≤2.79 | | ● | |
| | | Tygon R-3603 | 0.8 | ≤2.4 | | ● | |
| | | Tygon R-3607 | 0.9 | ≤2.06 | | ● | |
| | | DG-16 (6) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| | F-5500-A | | 0.86 | 1.6 | | ● | |
| | Pharmed | | 0.86 | ≤2.06 | | ● | |
| | Pharmed | | 0.86 | 2.54 | | ○ | |
| | Tygon R-3603 | | 0.8 | ≤0.76 | | ● | |
| | Tygon R-3603 | | 0.8 | ≥0.76 | | ○ | |
| | Tygon R-3607 | | 0.9 | ≤1.85 | | ● | |
| | Tygon R-3607 | | 0.9 | 2.06 | | ○ | |
| | DG-16 (10) | Silicone tubing | 0.8-1.0 | <3 | | ● | |
| | | Silicone tubing | 1.0 | 3 | | ○ | |
| | | F-5500-A | 0.86 | 1.6 | | ○ | |
| | | Pharmed | 0.86 | ≤1.65 | | ● | |
| | | Pharmed | 0.86 | >1.65 | | ○ | |
| | | Tygon R-3603 | 0.8 | ≥0.76 | | ○ | |
| | | Tygon R-3603 | 0.8 | <0.76 | | ● | |
| | | Tygon R-3607 | 0.9 | <1.85 | | ● | |
| | | Tygon R-3607 | 0.9 | ≥1.85 | | ○ | |
| | | DG-24 (6) | Silicone tubing | 0.8-1.0 | ≤3.17 | | ● |
| Pharmed | 0.86 | | ≤1.65 | | ● | | |
| DG-24 (10) | Silicone tubing | 0.8-1.0 | <2 | | ● | | |
| | Pharmed | 0.86 | ≤1.65 | | ○ | | |
| PP-F-380 | LEAD15-24 | | | 16# 25# 17# | ● | | |
| | LEAD15-44 | | | 16# | ● | | |
| | LEAD15-48 | Silicone tubing | | 13# 14# | ● | | |
| | LEAD15-88 | | | 13# 14# | ● ○ | | |

Note: ● Means Good
○ Means Fair

Dispensing Controller

Function and Feature:

Dispensing controller can be equipped with many peristaltic pumps to realize dispensing automatically.



Standard External Control Interface

Applicable Drive Types:

- PP-X-20
- PP-X-380
- PP-X-2200
- PP-X-1600
- PP-F-380
- PP-L-500
- PP-F-500
- PP-F-1140
- PP-X-6000
- PP-F-6000

Five Kinds of Control Modes:

- 149-1-000011 - 0-5V analog input
- 149-1-000010 - 0-10V analog input
- 149-1-000009 - 4-20mA analog input
- 149-1-000012 - 0-10kHz Pulse Input
- 149-1-000008 - Communication control (RS485).

Note: Please see above picture for part numbers

Footswitch



| Model | Connector | Applicable Products |
|--------------|-----------|--|
| 149-1-000021 | DB-9 | Peristaltic Pump |
| 149-1-000022 | DB-9 | Dispensing Controller |
| 149-1-000023 | DB-15 | Peristaltic Pump |
| 149-1-000024 | DB-9 | LSP Series Syringe Pump (the PCB board of the pump needs to be modified) |
| 149-1-000025 | DB-15 | TJ Series Syringe Pump |
| 149-1-000026 | None | TS Series Syringe Pump |

Footswitch Working Modes:

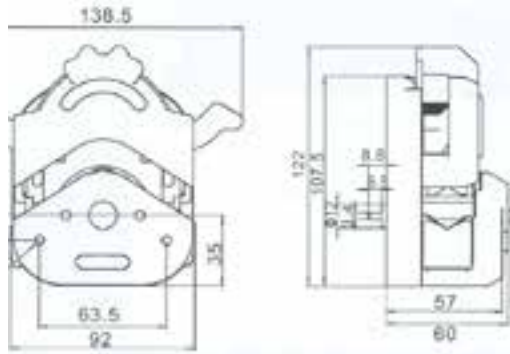
| Model | Applicable Products |
|--------------|---|
| 149-1-000021 | 1. Gated: Connect the footswitch to the pump. The pump stops after power up. The pump runs as long as the footswitch is pressed. 2. Trigger: Connect the footswitch to the pump. The pump stops after power up. Press footswitch, the pump starts running. Press footswitch again, the pump stops. |
| 149-1-000022 | Trigger: Press the footswitch one time, dispensing controller FK-1C starts running according to the set running time. When the set running time is out, FK-1 C stops. |
| 149-1-000023 | Gated: The ump runs as long as the footswitch is pressed. |
| 149-1-000024 | 1. Gated: Connect the footswitch to the pump. The pump stops after power up. The pump runs as long as the footswitch is pressed. 2. Trigger: Connect the footswitch to the pump. The pump stops after power up. Press footswitch, the pump starts running. Press footswitch again, the pump stops. |
| 149-1-000025 | Trigger: Connect the footswitch to the pump. The pump stops after power up. Press footswitch, the pump starts running. Press footswitch again, the pump stops. |
| 149-1-000026 | Trigger: Connect the footswitch to the pump. The pump stops after power up. Press footswitch, the pump starts running. Press footswitch again, the pump stops. |



PESU

YZII15/YZII25

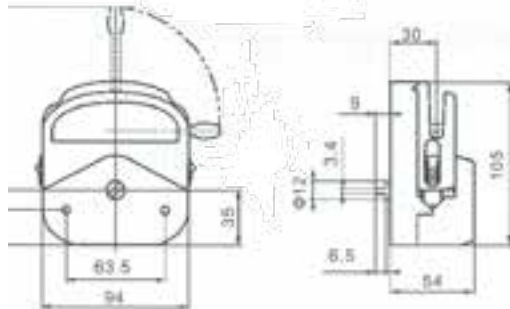
Change tubing easily and rapidly; Compact size. The tubing retention set is a linkage, It is convenient to load the tubing; Accept several tubing sizes for a wide flow range; The rollers adopt high quality materials and has good wearing property; The housing material is PESU. It has perfect rigidity and structure property. It is stable and autoclavable (200°C).



PESU

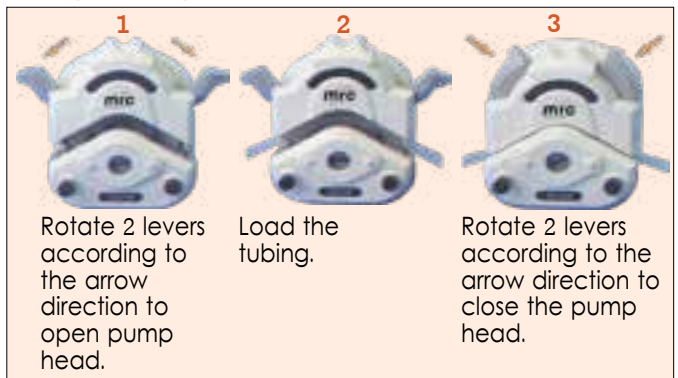
YZ1515x/YZ2515x

Change tubing easily and rapidly; Automatic tubing retention; Suitable for several tubing sizes; The rollers adopt high quality materials and has good wearing property; The housing of the pump head has perfect rigidity and structure property, and its materials are PESU or PPS which are stable and autoclavable (200°C).



PPS

Tubing Loading Procedure:



| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Housing Material | Rollers Material | Rollers Quantity | Tubing | Weight (Kg) |
|---------|--------------------------|-------------|------------------|------------------|------------------|-----------------------------|-------------|
| YZ1515x | 2200 | ≤600 | PESU/PPS | SS | 3 | 13# 14# 19# 16# 25# 17# 18# | 0.4 |
| YZ2515x | 1600 | | PESU/PPS | | | 15# 24# | |
| YZII15 | 2200 | | PESU | | | 13# 14# 19# 16# 25# 17# 18# | 0.35 |
| YZII25 | 3000 | | PESU | | | 15# 24# 35# 36# | |

050525x, Standard External Control Interface

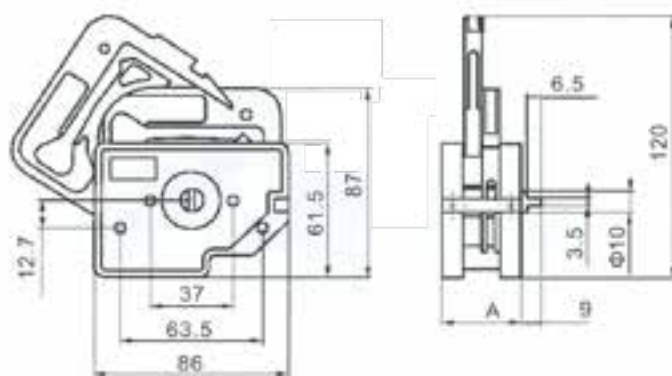


Introduction:

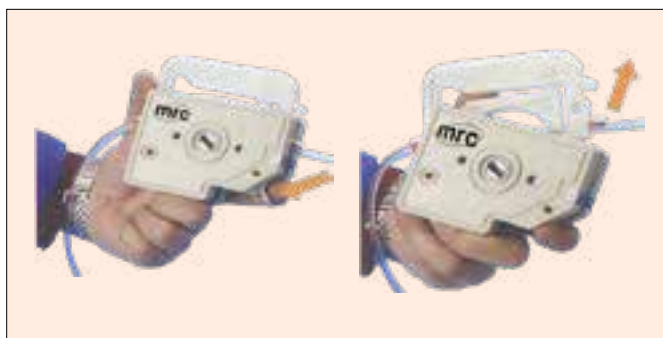
DG Series pump heads are designed for small flow rates, multi-channel fluids transfer. Easy to change and fix the tubing. Occlusion can be adjusted slightly. The rollers adopt high quality materials. The pump head consists of base, rotor assembly and easily dismantled cartridge.

Features:

- Multi-channel transfer
- Change tubing easily
- Fix tubing easily
- Occlusion can be adjusted slightly by ratchet wheel to meet different tubing wall thickness requirements
- 6-roller and 10-roller pump heads available
- More rollers reduce pulsation and flow rates slightly
- Skillful trigger design, convenient to open the cartridges (DG-1, DG-2)
- Rollers adopt 316 stainless steel which has chemical resistance to organic solution, acid and alkali.



DG-1, DG-2 Trigger Operation:



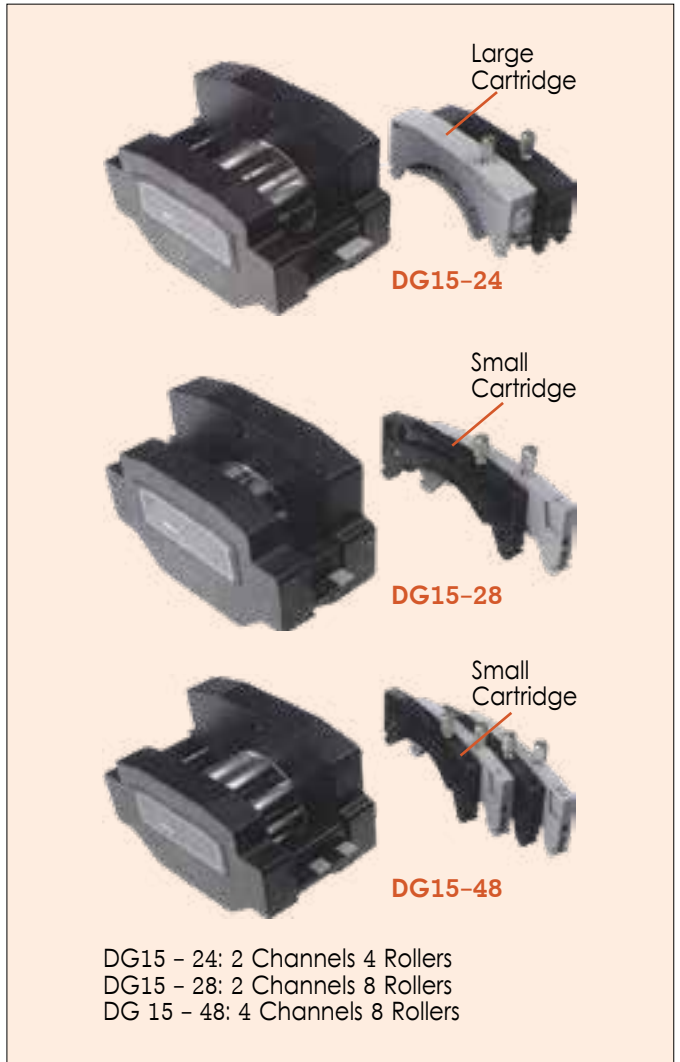
| Model | Max. Flow Rates (mL/min) | | Speed (rpm) | Cartridge Material | Tubing | Weight (Kg) | |
|-------|--------------------------|---------------|-------------|--------------------|--|-------------|------------|
| | 6 Rollers | 10 Rollers | | | | 6 Rollers | 10 Rollers |
| DG-1 | | | ≤100 | POM/ PVDF | Inner Diameter ≤3.17 mm Wall Thickness 0.8-1 (mm) | 0.21 | 0.20 |
| DG-2 | | | | | | 0.27 | 0.26 |
| DG-4 | 48 | 32 | | | | 0.40 | 0.39 |
| DG-6 | (per channel) | (per channel) | | | | 0.54 | 0.51 |
| DG-8 | | | | | | 0.67 | 0.63 |
| DG-12 | | | | | | 0.95 | 0.88 |



DG15-24/DG15-28/DG15-48, Multi-Channel

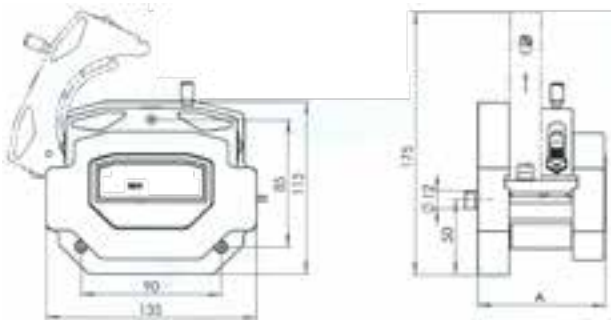
DG15 Series pump heads are designed for medium and small flow rates, multi-channel fluids transfer. Easy to change and fix the tubing. Occlusion can be adjusted slightly. The rollers adopt high quality materials. The pump head consists of base, rotor assembly and easy-to-load cartridges.

Pump Head Type:



Features:

- Cartridges and base can be separated. It's convenient to load the tubing
- Suitable for several tubing sizes for a wide flow range
- Occlusion can be adjusted slightly to meet different tubing wall thickness requirements
- The material of the roller is stainless steel
- The material of the cartridge working surface is POM. It has perfect self lubricating property to reduce tubing wear abrasion.



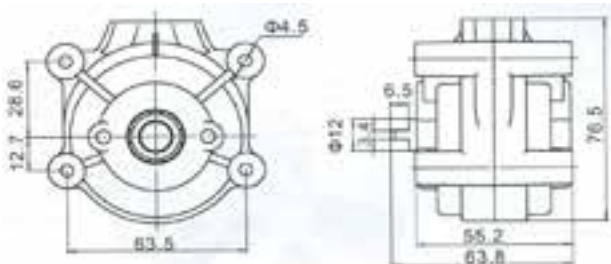
| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Cartridge Material | Rollers Material | Rollers Quantity | Tubing | Weight (Kg) |
|---------|--------------------------|-------------|--------------------|------------------|------------------|--|-------------|
| DG15-24 | 1800 | ≤600 | PESU/PPS | SS | 4 | 16# 25# 17# | 0.82 |
| DG15-28 | 75 | ≤100 | PESU/PPS | | 8 | Inner Diameter ≤3.17mm Wall Thickness 0.8 - 1 (mm) 13# 14# | 0.67 |
| DG15-48 | | | PESU | | | | 0.87 |

BZ25



Features:

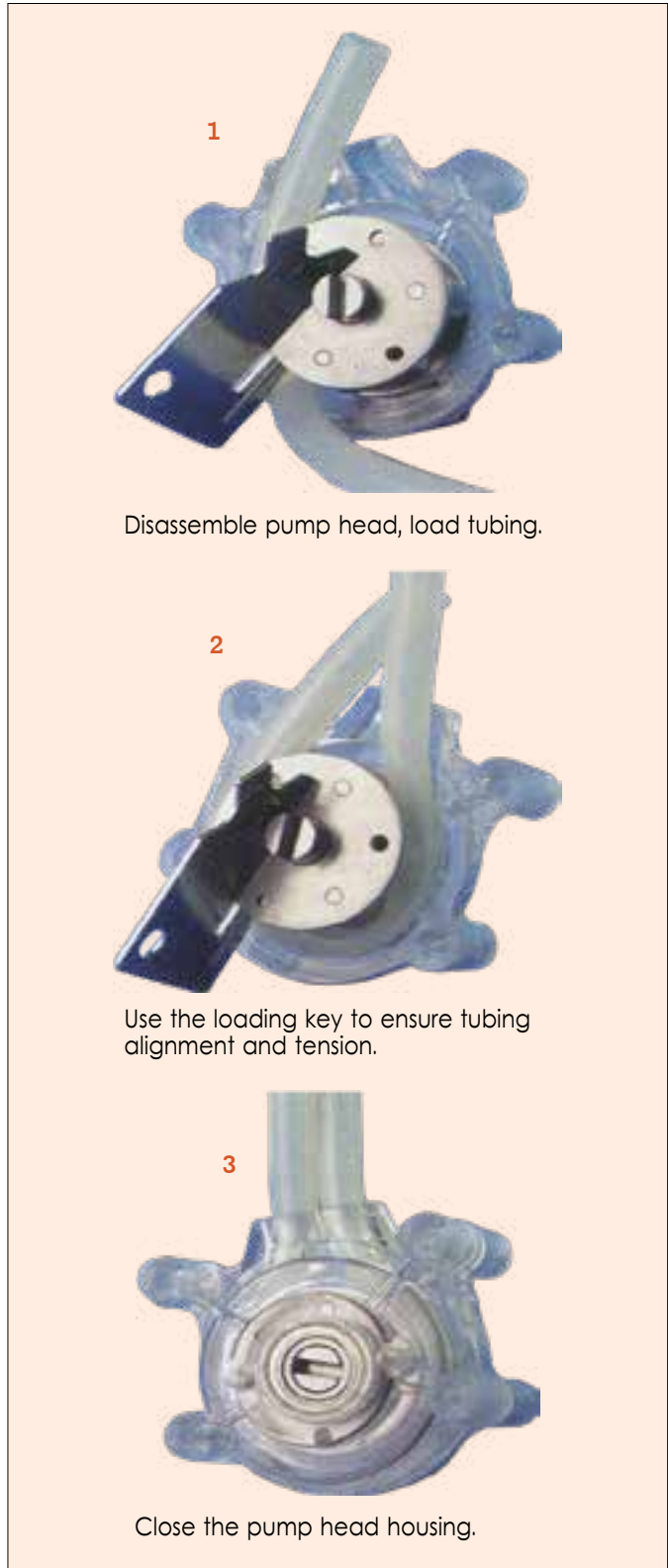
- Stable operation and stackable
- Compact size
- Dismounting the pump head from the drive is needed when loading the tubing
- Standard pump head, fixed occlusion
- Ideal for OEM.



BZ25,

Stainless steel or high performance plastic rollers available. Transparent PC housing, visible operation.

Tubing Loading Procedure:



1

Disassemble pump head, load tubing.

2

Use the loading key to ensure tubing alignment and tension.

3

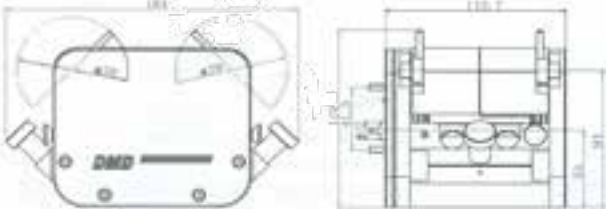
Close the pump head housing.

| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Housing Material | Rollers Quantity | Tubing | Weight (Kg) |
|-------------|--------------------------|-------------|------------------|------------------|--------|-------------|
| BZ25 | 1600 | ≤600 | PC | 3 | 24# | 0.31 |



Features:

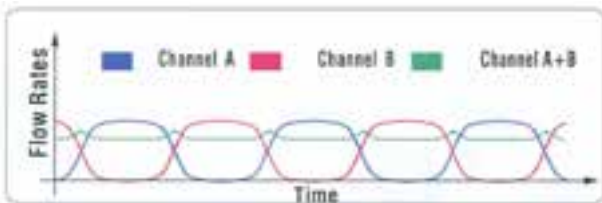
- Suitable for accurate liquid dispensing
- Track assembly and base are separated. Easy to load tubing
- Accept many sizes of tubing to realize wide range flow rates transferring
- Twin offset track combing with Double-Y tube elements reduce the pulsation successfully. The accuracy can reach $\pm 0.5\%$
- Hay cutter style fixing prevents the tubing from quick abrasion caused by shock
- Front rear support plate and the compression block adopt hard anodized aluminum alloy.



Shaft Type:

- Long Shaft (for single pump head)
- Long Shaft (for stack, connect drive directly)
- Short Shaft (for stack).

Pulsation Reducing:



DMD25, Low Pulse Pump Head

DMD25 pump head is designed for high accuracy dispensing. Twin offset track design and Double-Y tubing ensure the high dispensing accuracy. Hay cutter style retainer prevents the tubing from quick abrasion caused by shock. The pump head adopts stainless steel, aluminum and POM materials. The performance is reliable and stable. It is ideal for industry application.

Tubing Loading Procedure:

- 1** Lift the two levers at both sides of the pump head and remove the track.
- 2** Loose the knobs, open the hay cutter style fixing by turning it through one quarter turn. Put the Double-Y tubing on the rollers and locate it over the mushroom pegs on both sides of the pump head.
- 3** Close the hay cutter style fixing. Tighten the knobs on both sides of the pump head.
- 4** Replace the track and secure it by closing the two levers.



Twin offset tracks reduce the pulsation, increase the dispensing accuracy.

| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Rollers Quantity | Rollers Material | Track Material | Tubing | Weight (Kg) |
|-------|--------------------------|-------------|------------------|------------------|----------------|--------|-------------|
| DMD25 | 150 | ≤350 | 6 | SS | POM | 119# | 2.5 |
| | 800 | | | | | 120# | |
| | 1500 | | | | | 15# | |
| | 2400 | | | | Aluminum Alloy | 24# | 3.0 |
| | 2950 | | | | | 35# | |
| | 4000 | | | | | 36# | |

KZ25



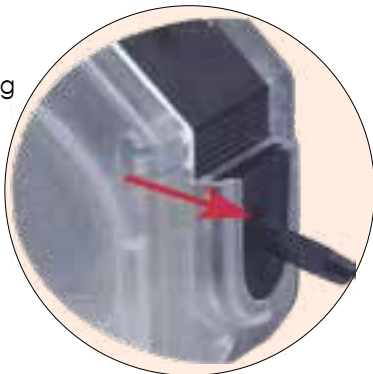
Features:

- Cartridges and base can be separated. It's convenient to load the tubing
- Pump heads can be stackable
- Compact size and a wide flow range
- Ideal for OEM.

Shaft Type:

- Long Shaft (for stack, connect drive directly)
- Short Shaft (for stack).

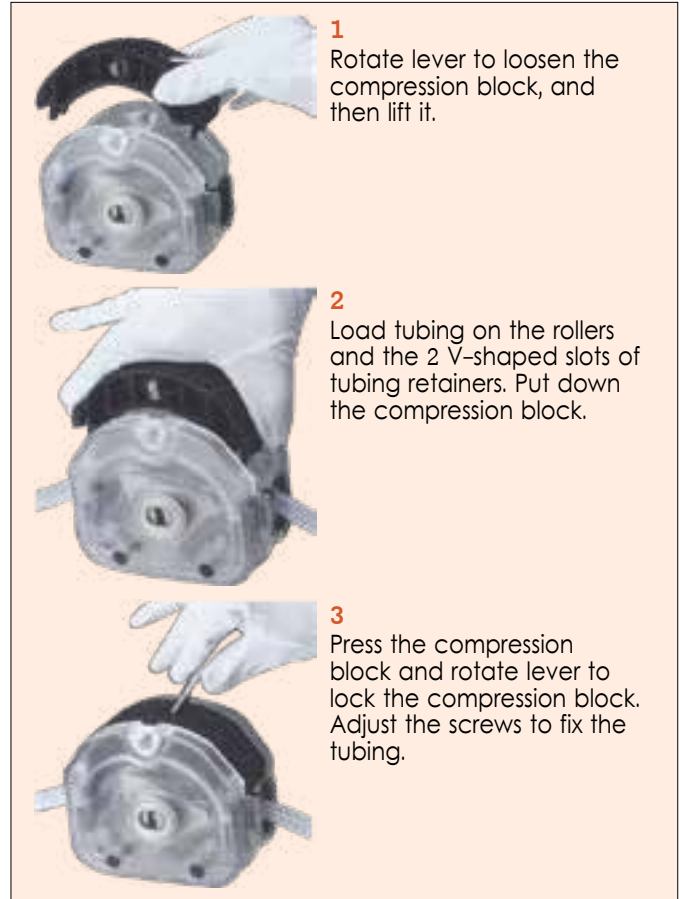
Upgraded
Tubing fitting
Structure



KZ25, Quick-load Pump Head

Stainless steel rollers available PPS compression block. Self-lubrication to reduce tubing wear. Good rigidity for stable size. Good chemical compatibility and high temperature resistance High quality materials form a perfect combination. That offers excellent technical and service performance.

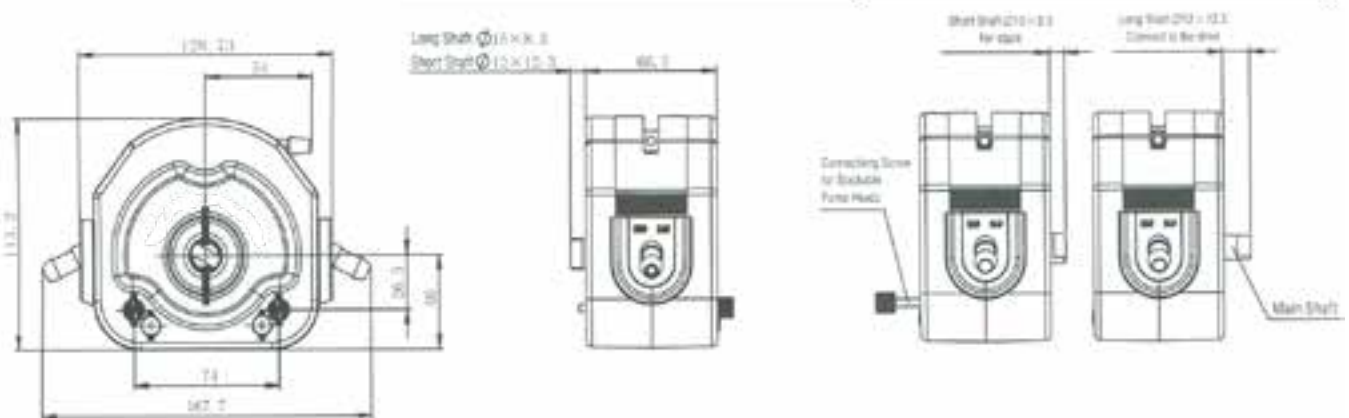
Tubing Loading Procedure:



1 Rotate lever to loosen the compression block, and then lift it.

2 Load tubing on the rollers and the 2 V-shaped slots of tubing retainers. Put down the compression block.

3 Press the compression block and rotate lever to lock the compression block. Adjust the screws to fix the tubing.



| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Rollers Material | Housing Material | Compression Block Material | Rollers Quantity | Tubing | Weight (Kg) |
|-------|--------------------------|-------------|------------------|------------------|----------------------------|------------------|--------|-------------|
| KZ25 | 1800 | ≤600 | SS | PC | PPS | 3 | 15# | 0.79 |
| | 3500 | | | | | | 24# | |
| | 5000 | | | | | | 35# | |
| | 6000 | | | | | | 36# | |



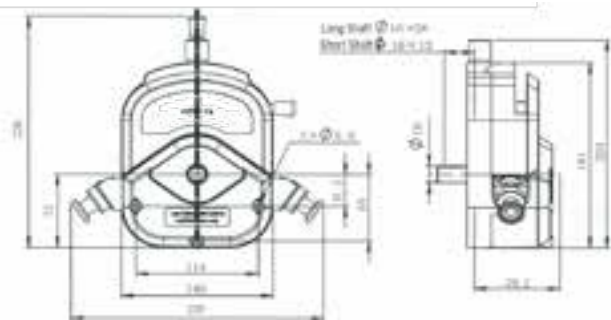
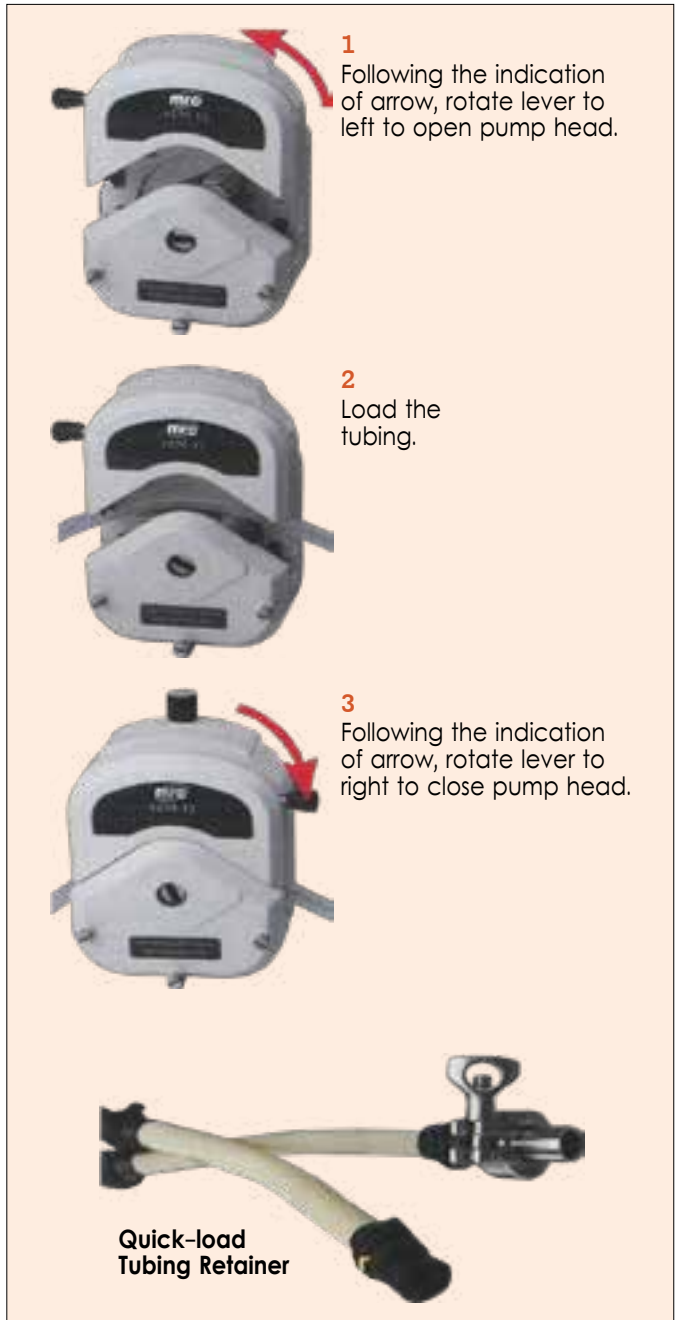
YZ35-13

YZ35-13, Industrial Easy-load Pump Head

Features:

- Pump heads can be stackable
- Change tubing easily and rapidly
- Automatic tubing retention
- Suitable for several tubing sizes
- The rollers adopt high quality materials and has good wearing property
- The housing of the pump head has perfect rigidity and structure property
- Its material is PSU which has stable performance and high temperature resistance (150°C).

Tubing Loading Procedure:



Tubing Clamp Mode



Tubing Fitting Mode

| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Rollers Quantity | Rollers Material | Housing Material | Tubing | Weight (Kg) |
|---------|--------------------------|-------------|------------------|------------------|------------------|---------|-------------|
| YZ35-13 | 11000 | ≤600 | 3 | SS | PSU | 73# 82# | 1.65 |

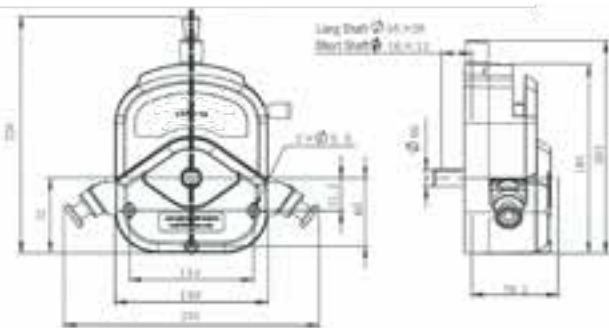


KZ35

KZ35, Industrial Quick-load Pump Head

Features:

- Key parts adopt 304 stainless steel. Suitable for pharmaceutical and food industry
- Compression block and base are separate. Easy to load the tubing
- Accept 73# and 82# tubing. The flow rate range is wide
- Two pump heads can be stacked
- The advantage of selecting tubing clamps: No residue fluids in the tubing
- The advantage of selecting tubing fitting: Save tubing cost. The low cost tubing can be connected outside of the pump head.



Tubing Fitting:
The length of the tubing between two fittings is 16.5cm.



Tubing Clamp:
The length of the tubing between two clamps is 18cm.



Quick-load Tubing Retainer:

Tubing Fittings/Clamps Installation Procedure:

- 1** Turn the left and right lever and take out the compression block.
- 2** Insert the tubing fittings/clamps with tubing into the slots on both sides.
- 3** Put the compression block on the tubing and turn the left and right levers to lock the compression block.

| Model | Max. Flow Rates (mL/min) | Speed (rpm) | Rollers Quantity | Tubing Clamp/Fitting Material | Pump Head Material | Tubing | Weight (Kg) |
|-------|--------------------------|-------------|------------------|-------------------------------|---------------------|---------|-------------|
| YZ35 | 11000 | <600 | 3 | PVDF | 304 Stainless steel | 73# 82# | 3.7 |



MGP30001JA

MGP30001JA/MGP30001FA, Micro Gear Pumps for High Temperature/ High Pressure Fluid

FLOW-RATE

DISPENSING



MGP30001FA micro gear pump has two work modes of flow mode and dispensing mode.

It delivers flow rates from 85.7 to 2571.4 ml/min and dispensing volume is from 0.1 mL to 999L.

128 X 32 LCD displays the parameters and information. The compact and precise gear pump heads are noiseless, pulsation-free and suitable to transfer high temperature and high pressure fluids.

MGP30001JA can install variable pump head to provide flow rates from 85.7 to 2571.4 ml/min, it adopts brushless DC motor and has features of high efficiency and free maintenance.

| Model | MGP30001FA | MGP30001JA |
|--|--|------------------------|
| Flow rates | 85.7 -2571.4 (mL/min) | |
| Speed | 300-3000rpm, | |
| Speed accuracy | ±1.0% | |
| Speed resolution | 1.0rpm | |
| Dispensing volume | 0.1 mL to 999L | No dispensing function |
| Copy number | 0-9999, 0 means unlimited cycle | |
| Pause time | 1 second to 999 hours, resolution is 0.1 s | |
| Calibration time | 30 to 1800 second, resolution is 1 s | |
| Communication interface | RS485 | |
| Diameter of particle in liquid | ≤ 10μm | |
| Max. Outlet pressure (Testing medium is water) | MG204: 0.8MPa MG209: 0.8MPa MG213: 0.3MPa | |
| Liquid temperature | -45 to 50°C with PTFE gear, -45 to 120°C with PEEK gear | |
| Viscosity of liquid | ≤ 200cSt | |
| Power supply | AC 176-264V/90-130V, 50/60Hz | |
| Power consumption | ≤50W | |
| Operating condition | Temperature 0 to 40°C Relative humidity <90% (non-condensing) | |
| Drive dimensions | 232x142x149(mm) (LxWxH) | |
| Weight | 2.83 kg | |
| IP rating | IP31 | |

Functions and Features:

- Acceptable pump head: MG204, MG209, MG213
- Suitable to transfer high temperature fluids or high pressured fluids
- Prime function for fast filling and emptying
- Flow rates and dispensing volume can be calibrated (MGP30001FA)
- Display: 128 x 32 LCD display all the running parameters (MGP30001FA)
- External control input functions: Control the flow rates and start/stop of the pump
- External control output functions: Output start/stop and speed signal (MGP30001FA)
- Dispensing function: Dispensing volume, copy number and pause time can be set (MGP30001FA)
- Footswitch: Control the start/stop of the pump
- Communication function: Realize computer control through RS485 interface
- Memory function: Store the running parameters automatically
- Cooling code: Heat-emitting fan
- Decoupling will occur when the pump load exceeds the maximum coupling torque provided by the alignment of the two magnets.

Applicable Pump Heads: MG204
MG209
MG213



| Model | Pump Head | Speed (rpm) | Flow Rates (mm) | Weight (Kg) |
|--------------------------|-----------|-------------|-----------------|-------------|
| MGP30001JA MGP30001FA | MG204 | 300-3000 | 85.7-857.1 | 3.25 |
| | MG209 | | 171.4-1714.3 | 3.26 |
| | MG213 | | 257.1-2571.4 | 3.28 |



**MGP30001JB/MGP30001FB,
Micro Gear Pumps for High
Temperature/High Pressure Fluid**

FLOW-RATE
DISPENSING



MGP30001FB gear pump has two work modes of flow mode and dispensing mode. It delivers flow rates from 85.7 to 2571.4ml/min and dispensing volume is from 0.1 mL to 999L. 128 X 32 LCD displays the parameters and information. The compact and precise gear pump heads are noiseless, pulsation-free and suitable to transfer high temperature and high pressure fluids.

MGP30001JB can install variable pump head to provide flow rates from 85.7 to 2571.4 ml/min, it adopts brushless DC motor and has features of high efficiency and free maintenance.

| Model | MGP30001FB | MGP30001JB |
|---|---|------------------------|
| Flow rates | 85.7 -2571.4 (mL/min) | |
| Speed | 300-3000rpm, | |
| Speed accuracy | ±1.0% | |
| Speed resolution | 1.0rpm | |
| Dispensing volume | 0.1 mL to 999L | No dispensing function |
| Copy number | 0-9999, 0 means unlimited cycle | |
| Pause time | 1 second to 999 hours, resolution is 0.1 s | |
| Calibration time | 30 to 1800 second, resolution is 1 s | |
| Communication interface | RS485 | |
| Diameter of particle in liquid | ≤ 10µm | |
| Max. Outlet pressure (Testing medium is water) | MG204: 1.4MPa MG209: 0.9MPa MG213: 0.8MPa | |
| Liquid temperature | -45 to 50°C with PTFE gear, -45 to 120°C with PEEK gear | |
| Viscosity of liquid | ≤ 200cSt | |
| Power supply | AC 220V/110V + 20%, 50Hz/60Hz | |
| Power consumption | ≤150W | |
| Operating condition | Temperature 0 to 40°C Relative humidity <90% (non-condensing) | |
| Drive dimensions | 290x207x180(mm) (LxWxH) | |
| Weight | 5.1 kg | |
| IP rating | IP31 | |

Features:

- Acceptable pump head: MS204, MS209, MS213
- Suitable to transfer high temperature fluids or high pressured fluids
- Prime function for fast filling and emptying
- Flow rates and dispensing volume can be calibrated (MGP30001FB)
- Display: 128 x 32 LCD display all the running parameters (MGP30001FB)
- External control input functions: Control the flow rates and start/stop of the pump
- External control output functions: Output start/stop and speed signal (MGP30001FB)
- Dispensing function: Dispensing volume, copy number and pause time can be set (MGP30001FB)
- Footswitch: Control the start/stop of the pump
- Communication function: Realize computer control through RS485 interface
- Memory function: Store the running parameters automatically
- Cooling code: Heat-emitting fan
- Decoupling will occur when the pump load exceeds the maximum coupling torque provided by the alignment of the two magnets.

Applicable Pump Heads: MG204
MG209
MG213



| Model | Pump Head | Speed (rpm) | Flow Rates (ml/min.) | Weight (Kg) |
|--------------------------|-----------|-------------|----------------------|-------------|
| MGP30001JB MGP30001FB | MG204 | 300-3000 | 85.7-857.1 | 5.39 |
| | MG209 | | 171.4-1714.3 | 5.40 |
| | MG213 | | 257.1-2571.4 | 5.42 |