



# 2016 Catalogue

 **major  
science**

*Innovative Life Sciences Tools*

**Peristaltic Pump**



# Peristaltic Pump

The MS Peristaltic Pump series offers several digitally-controlled versions of the peristaltic pump for a variety of applications, which provide high accuracy of rpm performance. The MU-D series is the single pump head version, controlled by a microprocessor. The MFU series features a dual or tetrad pump heads, which perfectly fulfill high-volume demands with multi-tubing purposes.



# Peristaltic Pump

Peristaltic Pump

120-121

- ❖ Digital Peristaltic Pump
- ❖ Dual and Tetrad Peristaltic Pump

\*All images are for reference only, actual products might differ from the images.  
\*Please visit our website at [www.majorsci.com](http://www.majorsci.com) for more product selection and detailed information.  
\*Technical specification subject to change without notice.





# Digital Peristaltic Pump

## MU-D series / MFU series

For MU-D series

MU-D Peristaltic Pump series is ideal for a variety of applications, which include filtration, circulation, sampling, chemical spraying, dispensing, transferring, feeding and filling. The easy-to-use pump head design accommodates several different silicon tubing sizes. This provides a great flexibility for a wide range of flow rates to be utilized when connecting with different sizes of tubings.

The MU-D series is also reversible providing better convenience and flexibility to the user. The digital control provides high accurate rpm performance.

MU-D01 pump is a digital controlled mode with a solid 50W brushless motor, and MU-D02 is designed with a higher horsepower, 100W for higher volume demands required.

MU-D03 pump is the most powerful pump in this series which packs with powerful pump head, allows the flow rate to up to 3.3 litre/min with thicker tubing (1.6mm).

Select the appropriate model for your lab with economical yet powerful enough peristaltic pump.

For MFU series

The Dual and Tetrad Peristaltic Pump are equipped with two and four peristaltic pumps respectively, and can be controlled separately. Digital microprocessor provides precise speed control; individual timer and alarm function are equipped with all standard pumps. The Dual and Tetrad Peristaltic Pump can be used for various applications such as filtration, circulation, sampling, chemical spraying, dispensing transferring, feeding and filling. The easy-to-use pump head design is also conveniently reversible for purging, allowing further flexibility in any experiment.

### Features:(for MU-D series)

- Digital microprocessor control for precise speed control
- Compact size provides high portability
- High quality Masterflex and Watson Marlow easy load pump head
- Reversible for purging purposes
- Flow rate range from 1.2 to 1,140ml/min for MU-D01
- Flow rate range from 0.3 to 2,280ml/min for MU-D02
- Flow rate range from 0.8 to 3,300ml/min for MU-D03
- 2-step programmable operation mode available

### Features:(for MFU series)

- Compact size provides high portability
- Precise digital control for individual pump head
- High quality Verderflex Easy Load pump head
- Two or four pump head models available
- Allow individual control for each pump head
- Wide applications
- Reversible for purging purposes usage
- 2-step programmable operation mode available
- Expandable pump head for wider range of applications



MU-D01/MU-D02

MU-D03



Easy load pump head



Expandable pump head



MFU-01



MFU-02



Easy load pump head



## Specifications

Cat. No	MU-D01	MU-D02	MU-D03	MFU-01	MFU-02
Controller	Digital microprocessor controller				
Motor	Brushless motor			Stepping motor	
Power	50W	100W			
Pump speed increment	20 - 300rpm / 1rpm	5 - 600rpm / 1rpm	20 - 300rpm /1rpm	Approx. 1 - 100rpm / 1rpm	
Max. pump speed	300rpm	600rpm	300rpm	Approx. 100rpm	
Variable flow rate	1.2 - 1,140ml/min	0.3 - 2,280ml/min	0.8 - 3,300ml/min	0.6 - 380ml/min	
Number of rollers	3		2	3	
Number of peristaltic Pumps	1(max. 2)		1	2	4
Operating temperature	Ambient to 40 °C				
Dimension (WxLxH)	7.87"x13.39"x5.12" (200x340x130mm)		9.45"x13.39"x 6.69" (240x340x170mm)	10.43"x13.39"x7.09" (265x340x180mm)	
Construction	Painted iron metal				
Weight	Approx. 12.5lb ( 5.7kg )		Approx. 13.4lb (6.2kg)	Approx. 12.6lb (5.7kg)	
Rated voltage	110V/220V	100V-240V	100V-240V	110V-240V	
Program	2-step Program (running & ceasing); Max. of timer: 99 (hr) : 59 (min) : 59 (sec)				

## Ordering Information







Cat. No	Product Description
MU-D01	Digital Peristaltic Pump, 110 / 220V
MU-D02	Superior Digital Peristaltic Pump, 100V-240V
MU-D03	Supreme Digital Peristaltic Pump, 100V-240V

Cat. No	Product Description
MFU-01	Dual Peristaltic Pump
MFU-02	Tetrad Peristaltic pump
PWI-FS-01-00000000	Digital Peristaltic Pump connection cable for FS-01/02
PWI-FS-05-00000000	Digital Peristaltic Pump connection cable for FS-05
PWI-FS-06-00000000	Digital Peristaltic Pump connection cable for FS-06, FS-07

## Accessories

Cat. No	Product Description
MU-PU1	Easy Load pump head for MU-D01 / MU-D02
MU-S13	Silicon tube I.D. 0.03 inch (0.8mm), 25ft
MU-S14	Silicon tube I.D. 0.06 inch (1.6mm), 25ft
MU-S16	Silicon tube I.D. 0.12 inch (3.1mm), 25ft
MU-S25	Silicon tube I.D. 0.19 inch (4.8mm), 25ft
MU-S17	Silicon tube I.D. 0.25 inch (6.4mm), 25ft
MU-S18	Silicon tube I.D. 0.31 inch (7.9mm), 25ft

## Tubing Order Information

Silicon tubing specifications						
Cat. No.	MU-S13	MU-S14	MU-S16	MU-S25	MU-S17	MU-S18
Inner diameter inches. (mm)	0.03(0.8)	0.06(1.6)	0.12(3.1)	0.19(4.8)	0.25(6.4)	0.31(7.9)
Hose barb size inches. (mm)	1/16(1.6)	1/16(1.6)	1/8(3.2)	3/16(4.8)	1/4(6.4)	3/8(9.5)
Flow range with 6 to 600rpm drive ml/min	0.36 to 36	1.3 to 130	4.8 to 480	10 to 1000	17 to 1700	23 to 2300
Maximum pressure, continuous	25psig (1.7bar)			20psig (1.4bar)	15psig (1.0bar)	10psig (0.7bar)
Maximum pressure, intermittent	40psig (2.7bar)			35psig (2.4bar)	20psig (1.4bar)	15psig (1.0bar)
Maximum vacuum	26" Hg (660mm Hg)				20" Hg (510mm Hg)	
Suction lift	29ft H <sub>2</sub> O (8.8m H <sub>2</sub> O )				22ft H <sub>2</sub> O (6.7m H <sub>2</sub> O )	



\*Dual Pump Head available accommodate two silicon tubings with the same pump speed at the same time.

\*To achieve maximum performance for MU-D03, please use tube size ID from 0.5mm to 8.0mm.



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