

MP²

High Precision Micro Peristaltic Pumps

The ESI MP² peristaltic pumps offer high precision and accurate sample delivery over a wide range of flow rates. The small design uses inert, chemically resistant and closely-spaced rollers, providing very low pulsation. These features result in improved signal stability, leading to improved detection limits. The MP² pumps are ideal for a wide range of applications and are easily setup.

MP² pumps are available with both software control through PC and push-button manual speed control (MP²-S).

BENEFITS:

- High Precision
- Low Pulsation
 - Closely-spaced rollers improve signal stability
- Small Size
- Suitable for a wide range of applications
- Accurate pumping at flow rates from 0.2µL/min to 10mL/min
- High chemical resistance
 - Ceramic pins and PTFE-coated metal components are resistant to acids and organic solvents
- Stand alone or integrated versions
- Long tubing lifetime
- Pump Network Software: Control of one or multiple MP² pumps & optional valves
- MP²-S pump: Manual push-button variable speed control

SPECIFICATIONS:

Dimensions / Weight:

12.5 cm (H) x 5.8 cm (W) x 6.4 cm (D) / 2.15 kg

Power:

18 watts (MP²)

24 VDC Power supply (MP²-S)

Channels:

1-8 Channels (MP²)

1-4 Channels (MP²-S)

Flow Rates:

0.2 µL/min to 10 mL/min per channel

Tubing:

Tubing available from 0.13 mm i.d. to 3.17 mm i.d.



MP² Micro Peristaltic Pump (Pump Network Software Control)



MP²-S Micro Peristaltic Pump with Manual Speed Control

MP ² Precision Micro Peristaltic Pumps		
Number of Channels	MP ²	MP ² -S
1	MP2-1-PC	MP2-1-S
2	MP2-2-PC	MP2-2-S
3	MP2-3-PC	MP2-3-S
4	MP2-4-PC	MP2-4-S
5	MP2-5-PC	MP2-5-S
6	MP2-6-PC	MP2-6-S
7	MP2-7-PC	MP2-7-S
8	MP2-8-PC	MP2-8-S

MP² Precision Pump Tubing

Our products are used for a wide range of applications for fairly high concentrations of mineral acids, organic solvents and biological fluids. The pump tubing is the limiting factor. We currently offer PVC, Solvent Resistant (e.g. kerosene/oil applications) and Santoprene.

Pumping viscous fluids is limited by the elasticity of the pump tubing and tubing dimensions leading into and out of the pump. We also have a syringe pump for pumping extremely viscous materials.

MP² Pump Tubing Sizes

i.d.	Stop Colors		Calibration Slope ($\mu\text{L}/\text{min}$ per RPM)	Non-Flared				Flared*	
				PVC 2-stop	Santoprene 2-stop	Solva 2-stop	Viton 2-stop	PVC 2-stop	Solva 2-stop
0.13 mm	Orange	Black	0.6	MPP-013-PVC				MPP-013-F-PVC	MPP-013-F-S
0.19 mm	Orange	Red	1.3	MPP-019-PVC				MPP-019-F-PVC	MPP-019-F-S
0.27 mm	Orange	Blue	2.7	MPP-027-PVC				MPP-027-F-PVC	MPP-027-F-S
0.38 mm	Orange	Green	4.7	MPP-038-PVC	MPP-038-PHR			MPP-038-F-PVC	MPP-038-F-S
0.44 mm	Green	Yellow	7.6	MPP-044-PVC				MPP-044-F-PVC	MPP-044-F-S
0.51 mm	Orange	Yellow	9.5	MPP-051-PVC			MPP-051-V	MPP-051-F-PVC	MPP-051-F-S
0.57 mm	White	Yellow	11	MPP-057-PVC				MPP-057-F-PVC	MPP-057-F-S
0.64 mm	Orange	White	14	MPP-064-PVC			MPP-064-V	MPP-064-F-PVC	MPP-064-F-S
0.76 mm	Black	Black	19	MPP-076-PVC	MPP-076-PHR	MPP-076-S	MPP-076-V	MPP-076-F-PVC	MPP-076-F-S
0.89 mm	Orange	Orange	24	MPP-089-PVC		MPP-089-S	MPP-089-V	MPP-089-F-PVC	MPP-089-F-S
0.95 mm	White	Black	28	MPP-095-PVC		MPP-095-S		MPP-095-F-PVC	MPP-095-F-S
1.02 mm	White	White	31	MPP-102-PVC		MPP-102-S	MPP-102-V	MPP-102-F-PVC	MPP-102-F-S
1.09 mm	White	Red	33	MPP-109-PVC		MPP-109-S		MPP-109-F-PVC	MPP-109-F-S
1.14 mm	Red	Red	35	MPP-114-PVC		MPP-114-S	MPP-114-V	MPP-114-F-PVC	
1.22 mm	Red	Grey	46	MPP-122-PVC		MPP-122-S			
1.30 mm	Grey	Grey	47	MPP-130-PVC	MPP-130-PHR	MPP-130-S	MPP-130-V		
1.42 mm	Yellow	Yellow	50	MPP-142-PVC		MPP-142-S	MPP-142-V		
1.52 mm	Yellow	Blue	51	MPP-152-PVC	MPP-152-PHR	MPP-152-S	MPP-152-V		
1.65 mm	Blue	Blue	55	MPP-165-PVC		MPP-165-S	MPP-165-V		
1.75 mm	Blue	Green	58	MPP-175-PVC		MPP-175-S			
1.85 mm	Green	Green	61	MPP-185-PVC		MPP-185-S	MPP-185-V		
2.06 mm	Purple	Purple	64	MPP-206-PVC		MPP-206-S	MPP-206-V		
2.29 mm	Purple	Black	65	MPP-220-PVC		MPP-220-S	MPP-220-V		
2.54 mm	Purple	Orange	67	MPP-254-PVC		MPP-254-S	MPP-254-V		
2.79 mm	Purple	White	69	MPP-279-PVC		MPP-279-S	MPP-279-V		
3.17 mm	Black	White	70	MPP-317-PVC	MPP-317-PHR	MPP-317-S			
Bridge Length				72 mm	72 mm	72 mm	65 mm	72 mm	72 mm

*For easy insertion of capillaries **MPP-idd** **idd = internal diameter**

