MP^2

Micro Peristaltic Pumps

The ESI micro peristaltic pumps offer advantages over standard peristaltic pumps due to precision machining and a roller configuration that minimizes the gaps between rollers, resulting in more even pressure points along the pump tubing.

This pump offers less pulsation in sample delivery, smaller relative standard deviations in signal, and consequently improved detection limits.

BENEFITS:

- Pump Design Extends Tubing Lifetime
- Drop in replacement hardware and software
- Precision
- Low Pulsation
- Chemically Resistant
 - Ceramic pins and PTFE-coated metal components are resistant to acids and organic solvents
- Optimized for Low Flow Rates
 - Accurate pumping across a wide range of rates from low 0.2µL/min to 10 mL/min

SPECIFICATIONS:

Power:

18 watts

Channels:

1-8 Channels

Flow Rates:

 $0.2~\mu L/min$ to 10~mL/min per channel

Tubing:

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

| Description | Part Number |
|--|-------------|
| 4-channel MP ² Integrated micro peristaltic pump for Thermo Scientific iCAP Q ICPMS | MP2-4-73 |



Integrated MP² micro peristaltic pump for Thermo Scientific iCAP Q ICPMS



Integrated MP² micro peristaltic pump installed on the Thermo Scientific iCAP Q ICPMS

Elemental Scientific

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

| | | | | Non-Flared | | | | Flared* | |
|---------|---------------|--------|---------------------------------------|---------------|----------------------|-----------------|-----------------|---------------|-----------------|
| i.d. | . Stop Colors | | Calibration Slope (µL/min per RPM) | 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 |

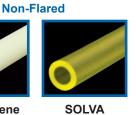
^{*}For easy insertion of capillaries MPP-idd idd = internal diameter



PVC



Santoprene

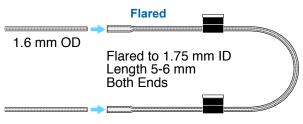


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