

Furon[®] MDP Pump

Mini-Dispense Pump 0–0.5 mL 0–10 mL

Description

The Furon[®] Mini-Dispense Pumps provide an efficient solution for accurately dispensing small amounts of liquids. Designed with a 100% fluoropolymer wetted flow path, Furon[®] Mini-Dispense Pumps are suitable for use with highly corrosive media, or in applications where ultra-high purity media is a must.

Furon[®] Mini-Dispense Pumps are pneumatically driven. When pilot air is applied to the actuator, the pump dispenses the desired volume. Manual adjustment knobs allow for easy setting of dispense volume (shot size) and dispense speed. Patented PTFE rolling diaphragm technology assures high dispense accuracy and repeatability.

Compact and efficient design makes Furon[®] Mini-Dispense Pumps an ideal solution for dosing of liquids in Semiconductor wet processes, accurate dispensing of liquids into containers or vials (filling line equipment), industrial chemical processing, or any other application requiring accurate dispensing of small doses of liquid.

Applications

- Dosing of liquids in Semiconductor wet processes
- Blending of abrasive slurries in CMP systems
- Spiking chemicals into DI water streams
- Dispensing of liquids into containers (Fill and Finish)
- Injection of colors, flavors, or other chemicals in a manufacturing process
- Laboratory equipment

Features and Benefits

- Efficiently dispenses small amounts of liquid (up to 10 mL)
- Ideal alternative to peristaltic pumps
- Virgin PTFE and PFA wetted flow path suitable for ultrapure applications
- Suitable for use with corrosive and aggressive media
- Dispense accuracy and repeatability $\pm 1\%$
- Fine adjustable dispense volume and speed
- Compact design

Pump Ordering Information

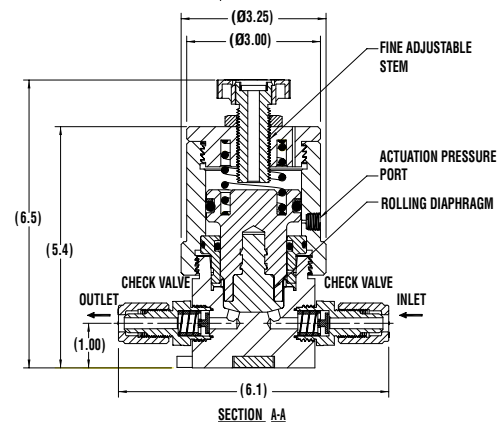
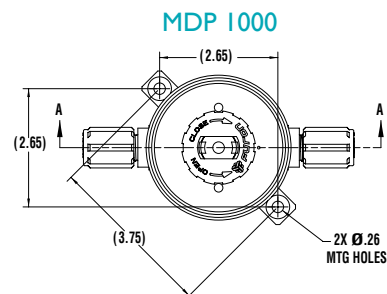
Part Number	Max Dispense Volume	End Connection	Orifice	Port Size
MDPI000	10 mL	FlareGrip® II	1/4" (6.35 mm)	1/4" (6.35 mm)
MDP50	0.5 mL	FlareGrip® II	1/4" (6.35 mm)	1/4" (6.35 mm)

Operating Specifications

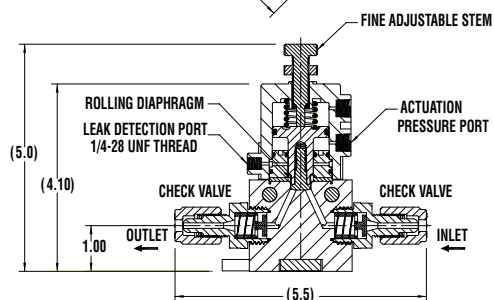
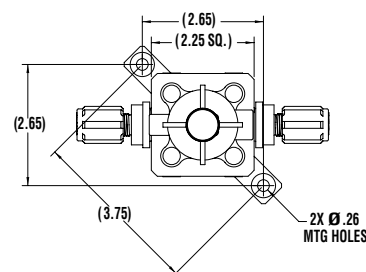
Ambient Operating Temperature	32° F to 122° F (0° C to 50° C)
Media Operating Temperature	41° F to 122° F (5° C to 50° C)
Single Dispense Capacity (shot size)	0–10 mL (MDP 1000) 0–0.5 mL (MDP 50)
Dispense Speed	Full dispense adjustable from 1 to 3 seconds with water More viscous fluids will increase dispense times
Maximum Fluid Viscosity	10,000 cps
Dispense Accuracy	±1%
Dispense Repeatability	±1%
Maximum Suction Lift	2 feet (0.6m)
Actuation Air Pressure	50 – 70 PSIG (3.4 – 4.8 bar)
Maximum Discharge Pressure	MDP 1000: 55 PSIG (3.8 bar) MDP 50: 4.55 PSIG (0.3 bar)

Standard Options

- Alternate end connections
- Other sizes of flare ends
 - Nipon Pillar Super 300®
 - Grab Seal
 - Others not listed



MDP 50



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