POSITIVE DISPLACEMENT PISTON PUMPS

FUS and FKS Filling Units are designed for dispensing free flowing to semi viscous liquids in a continuous controlled flow from the beginning of the fill to the end of the fill ensuring quick fills, as compared to peristaltic systems. Fill range from .05mL to 1100mL with fill accuracy to 0.5%. Using servos to drive the Filling Units enables the flow rate to be increased and decreased at different times during dispensing to allow all shapes of containers to be filled with ease and precision.

Adjustable Teflon piston rings take all of the wear to provide many years of dispensing with no need to replace the stainless steel components due to wear. O-Ring piston seals are also available. Adjustable suck back feature provides sharp clean cut-off even with stringy material.

### APPLICATIONS
- Water thin Reagents
- Perfumes
- Alcohol
- Shampoos
- Lotions
- Light Creams + Oils

### BENEFITS
- Fast fill rates
- Proven Reliability
- Autoclavable
- High Repetitive Accuracy
- Easy to maintain

### FEATURES
- Fill Range: .05mL to 1100mL
- Self priming
- Fills from floor level drum, overhead supply, or pressurized reservoir
- Optional sanitary design

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### FUS Part Guide

<table>
<thead>
<tr>
<th>PUMP SIZE</th>
<th>FUS-1</th>
<th>FUS-10</th>
<th>FUS-60</th>
<th>FUS/XL-140</th>
<th>FUS/XL-560</th>
<th>FUS/XL-1100</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILL RANGE</td>
<td>0.1mL to 1mL</td>
<td>1mL to 10mL</td>
<td>6mL to 60mL</td>
<td>6mL to 140mL</td>
<td>26mL to 560mL</td>
<td>50mL to 1100mL</td>
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<tr>
<td>PART NUMBER</td>
<td>1025-4</td>
<td>1065-2</td>
<td>1125</td>
<td>2301</td>
<td>2303</td>
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</table>

### FKS Part Guide

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<th>PUMP SIZE</th>
<th>FKS-3</th>
<th>FKS-10</th>
<th>FKS-60</th>
<th>FKS/XL-140</th>
<th>FKS/XL-560</th>
<th>FKS/XL-1100</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILL RANGE</td>
<td>0.3mL to 3mL</td>
<td>1mL to 10mL</td>
<td>6mL to 60mL</td>
<td>6mL to 140mL</td>
<td>26mL to 560mL</td>
<td>50mL to 1100mL</td>
</tr>
<tr>
<td>PART NUMBER</td>
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<td>1260-2</td>
<td>1262</td>
<td>2305</td>
<td>2309</td>
<td>1225</td>
</tr>
</tbody>
</table>
FUS - FKS PISTON PUMP OPERATION DESCRIPTION

Step 1: Downward motion of the piston creates a vacuum in the pump chamber, thus opening the intake valve.

Step 2: A preset volume of liquid then flows from the supply source into the pump chamber.

Step 3: Upward motion of the piston closes the intake valve and opens the discharge valve.

Step 4: Liquid is then discharged from the nozzle.

A graduated micrometer volume or a servo pump drive determines the piston travel, and thus the volume of liquid product dispensed from the filling nozzle.

PISTON PUMP VALVING OPTIONS

- **WEIGHT/BALL CHECK VALVE**: General purpose valve for use with water thin liquids.
- **SPRING/BALL CHECK VALVE**: General purpose valve for use with semi-viscous liquids.
- **DUCK-BILL VALVE**: Special purpose valve for sheer sensitive liquids.

PISTON SEAL OPTIONS

- **TEFLON CHEVRON**: The most versatile and durable piston seal. Normal wear is compensated by tightening an adjustment stem.
- **O-RING ADAPTER**: Replaces chevron style and offers a more sanitary design.

Specialists In Liquid Filling Systems

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