The PMP Plus Series is Knight’s newest line of variable speed metering pumps built on the industry’s most reliable and consistent platform. The high performance chemical metering system is designed to offer a wide array of flow rates and multi-functional controls to meet your pumping application needs. With the choice of peristaltic or electric diaphragm metering pumps, the PMP Plus offers the versatility to dispense a variety of process fluids or chemicals for food & beverage cleaning and sanitation, dairy farms, industrial process, and large laundry.

- New multi-function electronics with high resolution variable speed control (manual adjustment or 4–20 mA input) to vary pump delivery volume depending on the application
- One pump can serve a variety of your applications and reduce the need to stock multiple flow rates
- Optimize delivery speed for more efficient cleaning and reduced cycle time
- “All in One” control with selectable operating modes (limit timer, repeat cycle, relay input)
- PMP Plus Series offers the choice of Electric Diaphragm Pumps (2.8 gpm, 1.2 gpm, .6 gpm) [10.6 lit/min, 4.5 lit/min, 2.3 lit/min] or Peristaltic Metering Pumps (.6 gpm, .25 gpm) [2.3 lit/min, 1 lit/min]
- Simple dip switch and push button programming
- Watertight, secure locking enclosure with powder coated IP-65 rated stainless steel
- Case mounted manual start activation or remote switch
- Delay on and lock out functions
PMP Plus Electric Diaphragm Pump (PMPE)

The PMP Plus Electric Diaphragm Pump is a highly reliable and simple design with few moving parts that features a heavy duty, long life motor that produces high pressure yet, low pulsation pumping action. These field proven pumps are engineered for aggressive chemical, high duty cycle applications.

- High resolution variable speed controls allow you to “dial in” the precise flow rate required for a wide variety of metering applications
- Flow Rates: 3.1, 2.8, 1.2 and .6 gal/min (11.6, 10.6, 4.5 and 2.3 lit/min)
- Long lasting EPDM or Viton seals for a variety of chemicals
- More consistent dosing as flow rates “hold” for life of the valves
- No squeeze tubes to change or service
- Quick connect “bayonet” style inlet/outlet fittings
- Engineered for aggressive chemical, high duty cycle applications
- 70 PSI (4.83 bar) pressure switch option

PMP Plus Peristaltic Metering Pump (PMPP)

The PMP Plus Peristaltic Metering Pump System features Knight’s industry best peristaltic pump design that has become the benchmark for reliability and quality for the chemical dispensing industry.

- High resolution variable speed control allows you to “dial in” the precise flow rate required for a wide variety of metering applications
- Flow Rates: .6 and .25 gal/min (2.3 and 1 lit/min)
- Long lasting squeeze tubes
- Self Priming, Easy to Service
- Watertight, secure locking enclosure with powder coated IP-65 rated stainless steel
- Only the tube gets wet
- Max Pressure: 30 PSI (2.1 bar)

Pump Activator Options

Pump activators are available for all PMP Plus models

- Single Product Remote Activator
  P/N 7640616-25

- Case Mounted Manual Start Button
  P/N 1900452

Note: All models include suction and discharge fittings (barb type), gear clamps, suction stand pipe and 6 ft. (1.8 meter) power cord.

Recommended Applications

- Food & Beverage Processing Facilities
  CIP Sanitizer Injection
  COP Dosing
  Bucket/Bottle Fill
  Conveyor Lube Injection
  Bottle Warmer

- Machine Shops
  Cutting Fluids

- Life Sciences
  Cart Washer
  Tunnel Washer
  Bucket Fill

- Dairy Farm
  Pipeline Cleaning/Sanitizing
  Teat Dip Chemical Dispensing
  Wash Pen Chemical Injection
  Foot Bath

- Laundry Operations
  CBW/Tunnel Machines
  Washer Extractors

- Water/Waste Water
  Cooling Tower Biocide
  Caustic Injection
  Chlorine Metering
  Lift Station Dosing
PMP Plus Control Board

The PMP Plus chemical metering systems come standard with a unique microcontroller that provides extreme versatility of use. The multi-function pump controller varies the speed of the pump to provide accurate, precise injections for almost any chemical batch feed application, repeat cycle injection, pumped misting applications and direct closed loop injection. The circuit board has dual dip switch program/mode selectors to set the PMP Plus speed control and timer programming.

- 4-20 mA signal input
- 24/240 Volts signal input
- External start input
- Programming/Start/Stop button
- Speed Adjustment Potentiometer
- Snap-On Mounting Clips and Plug-On Barrier Strips Provide Quick and Easy Service of Circuit Board
- Pump Input Power
- Pump Output
- Power 24 VAC
- Run/Delay LED Indicator
- Pump lockout/off time select switches

### Programming Settings

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Signal Input</th>
<th>Pump “On” Time</th>
<th>Pump “Off” Time</th>
<th>Delay On Time</th>
<th>On First</th>
<th>Off First</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTM</td>
<td>14—240 VAC/VDC</td>
<td>0-12 min 42 Sec</td>
<td>0-12 min 45 sec</td>
<td></td>
<td>Select</td>
<td>Select</td>
</tr>
<tr>
<td>CT</td>
<td>14—240 VAC/VDC</td>
<td>0-12 min 42 Sec</td>
<td>0-255 min.</td>
<td>0-12 min 45 sec</td>
<td>Select</td>
<td>Select</td>
</tr>
<tr>
<td>Relay</td>
<td>14—240 VAC/VDC</td>
<td>I second to continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-20 mA</td>
<td>External Input from PLC</td>
<td></td>
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</tr>
</tbody>
</table>

### PMP Plus MFSC Flow Chart

Variable Flow Rates based on 4-20 ma current input at 0 PSI head pressure
ORDERING INFORMATION

PMP Plus Peristaltic Pump

PMPP-8110V
Power: 115VAC/60hz, 230 VAC/50Hz
Dimensions: 9.3” H x 5.8” W x 5” D (23.6 cm x 14.7 cm x 12.7 cm)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Electrical</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>8457773-01</td>
<td>PMPP-8110V w/ peristaltic pump and EPDM squeeze tube, 30 PSI (2 bar)</td>
<td>110V</td>
<td>.25 gpm (0-1 LPM)</td>
</tr>
<tr>
<td>8457773-02</td>
<td>PMPP-8110V w/ peristaltic pump and EPDM squeeze tube, 30 PSI (2 bar)</td>
<td>230V</td>
<td>.25 gpm (0-1 LPM)</td>
</tr>
<tr>
<td>8457774-01</td>
<td>PMPP-8110V w/ peristaltic pump and Viton squeeze tube, 30 PSI (2 bar)</td>
<td>110V</td>
<td>.25 gpm (0-1 LPM)</td>
</tr>
<tr>
<td>8457774-02</td>
<td>PMPP-8110V w/ peristaltic pump and Viton squeeze tube, 30 PSI (2 bar)</td>
<td>230V</td>
<td>.25 gpm (0-1 LPM)</td>
</tr>
<tr>
<td>7600775</td>
<td>PMPP-8100V Accessory Kit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PMPP-9100V
Power: 115VAC/60hz, 230 VAC/50Hz
Dimensions: 13.6” H x 8” W x 7.5” D (34.5cm x 20.3cm x 19.1 cm)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Electrical</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>8457783-01</td>
<td>PMPP-9100V w/ peristaltic pump and EPDM squeeze tube, 30 PSI (2 bar)</td>
<td>110V</td>
<td>.6 gpm (0-2.3 LPM)</td>
</tr>
<tr>
<td>8457783-02</td>
<td>PMPP-9100V w/ peristaltic pump and EPDM squeeze tube, 30 PSI (2 bar)</td>
<td>230V</td>
<td>.6 gpm (0-2.3 LPM)</td>
</tr>
<tr>
<td>P7600776</td>
<td>PMPP-9100V Accessory Kit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PMP Plus Electric Diaphragm Pump

PMPE-770V
Power: 115VAC/60hz, 230 VAC/50Hz
Dimensions: 13.6” H x 8” W x 7.5” D (34.5cm x 20.3cm x 19.1 cm)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Electrical</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>8457768-01</td>
<td>PMPE-770V w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>.6 gpm(0-2.3 LPM)</td>
</tr>
<tr>
<td>8457768-02</td>
<td>PMPE-770V w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>.8 gpm(0-3.0 LPM)</td>
</tr>
<tr>
<td>8457769-01</td>
<td>PMPE-770V w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>.6 gpm(0-2.3 LPM)</td>
</tr>
<tr>
<td>8457769-02</td>
<td>PMPE-770V w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>.8 gpm(0-3.0 LPM)</td>
</tr>
<tr>
<td>8457766-01</td>
<td>PMPE-770V1.5 w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>0-1.2 gpm (0-4.5 LPM)</td>
</tr>
<tr>
<td>8457766-02</td>
<td>PMPE-770V1.5 w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>1-2.5 gpm (0-4.8 LPM)</td>
</tr>
<tr>
<td>8457770-01</td>
<td>PMPE-770V1.5 w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>0-1.2 gpm (0-4.5 LPM)</td>
</tr>
<tr>
<td>8457770-02</td>
<td>PMPE-770V1.5 w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>1-2.5 gpm (0-4.8 LPM)</td>
</tr>
<tr>
<td>8457771-01</td>
<td>PMPE-770V1.5 w/ EDP and EPDM valve seals/diaphragm, w/ 70 PSI (4.8 Bar) pressure switch</td>
<td>110V</td>
<td>0-1.2 gpm (0-4.5 LPM)</td>
</tr>
<tr>
<td>8457772-01</td>
<td>PMPE-770V1.5 w/ EDP and Viton valve seals/diaphragm, w/ 70 PSI (4.8 Bar) pressure switch</td>
<td>110V</td>
<td>0-1.2 gpm (0-4.5 LPM)</td>
</tr>
<tr>
<td>P7600775</td>
<td>PMPE-770V Accessory Kit, EDP 1.5 / 0.4, EPDM</td>
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<tr>
<td>P7600770</td>
<td>PMPE-770V Accessory Kit, EDP 1.5 / 0.4, Viton</td>
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<td></td>
</tr>
</tbody>
</table>

PMPE-550V

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Electrical</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>8457764-01</td>
<td>PMPE-550V w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>0-2.8 gpm (0-10.6 LPM)</td>
</tr>
<tr>
<td>8457764-02</td>
<td>PMPE-550V3.2 w/ EDP and EPDM valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>0-3.1 gpm (0-11.6 LPM)</td>
</tr>
<tr>
<td>8457767-01</td>
<td>PMPE-550V w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>110V</td>
<td>0-2.8 gpm (0-10.6 LPM)</td>
</tr>
<tr>
<td>8457767-02</td>
<td>PMPE-550V3.2 w/ EDP and Viton valve seals/diaphragm w/ bypass at 100 PSI (6.9 bar)</td>
<td>230V</td>
<td>0-3.1 gpm (0-11.6 LPM)</td>
</tr>
<tr>
<td>P7600770</td>
<td>PMPE-550V Accessory Kit, EDP 3.2, EPDM</td>
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</tr>
<tr>
<td>P7600778</td>
<td>PMPE-550V Accessory Kit, EDP 3.2, Viton</td>
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</tbody>
</table>

Pump Activator Options

1900452      | Case Mounted Manual Start Button |
7640616-25   | Single Product Remote Activator |