Pulsafeeder Expertise

Since 1936, Pulsafeeder has been the global leader in fluids handling technology and innovation in chemical dosing. Pulsafeeder has built a foundation of success with thousands of installations in fluid handling applications. Our extensive product breadth enables us to provide the convenience and efficiency of single-source solutions across various industries.

OMNI Series Pumps

The OMNI series is designed to be an economical, compact, rugged, simple, and reliable diaphragm metering pump. It features an industrial design to work in just about any application. OMNI series pumps are an outstanding choice for the customer looking for a simple and compact diaphragm metering pump. These reliable metering pumps are designed to perform in the widest range of chemical dosing applications.

Product Specifications

- Flows to 3600 l/h (951 GPH) at 60 Hz
- Pressures to 10.3 Bar, (150 PSI)
- Accuracy +/- 2% of flow
- Temperatures to 65°C (150°F)
- Viscosity up to 1000 CPS
- Maximum 3m (10ft) NPSH
- Maximum Suction Pressure 5 PSI or 0.4 bar less than design pressure

Materials of Construction

- Head materials- PVDF, 316SS, or PP
- Ball Valves - Ceramic or 316SS
- Diaphragm - PTFE faced Hypalon on DC 2-4, solid PTFE on DC7

Typical Applications

- Acids
- Caustics
- Polymers
- Bleaches
- pH Control
- Solvents
- Dyes/Inks
- Catalysts
- Cleaning agents
- And many more

OMNI Performance 50Hz

<table>
<thead>
<tr>
<th>Model</th>
<th>50 Hz Flow LPH (GPH)</th>
<th>Pressure Bar</th>
<th>SPM@ 50 Hz</th>
<th>Power KW</th>
<th>HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC 2A</td>
<td>22 (5.8) 14 (3.8)</td>
<td>10.3 150</td>
<td>37 (24)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2B</td>
<td>44(1.6) 28(7.5)</td>
<td>10.3 150</td>
<td>73 (47)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2C</td>
<td>75(2.7) 49(13.0)</td>
<td>10.3 150</td>
<td>125 (81)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2B</td>
<td>102(26.9) 66(17.4)</td>
<td>10.3 150</td>
<td>73 (47)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2C</td>
<td>175(46.2) 113(30)</td>
<td>10.3 150</td>
<td>125 (81)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2B</td>
<td>128 (33.4) 83 (21.9)</td>
<td>10.3 150</td>
<td>98 (64)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 2C</td>
<td>195(51.5) 126(33.4)</td>
<td>10.3 150</td>
<td>146 (95)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 40</td>
<td>249 (65.8) 161(42.7)</td>
<td>10.3 150</td>
<td>186 (121)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 7C</td>
<td>1300 (343) 843(222.6)</td>
<td>4 60</td>
<td>146 (95)</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>DC 7D</td>
<td>1600 (433) 1027(274.2)</td>
<td>4 60</td>
<td>186 (121)</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>DC 7J Dpx</td>
<td>2600 (687)</td>
<td>1686 (445.3)</td>
<td>4 60</td>
<td>146 (95)</td>
<td>1.1</td>
</tr>
<tr>
<td>DC 7K Dpx</td>
<td>3200 (845)</td>
<td>2074 (548.0)</td>
<td>4 60</td>
<td>186 (121)</td>
<td>1.1</td>
</tr>
</tbody>
</table>

OMNI Performance 60Hz

<table>
<thead>
<tr>
<th>Model</th>
<th>60 Hz Flow LPH (GPH)</th>
<th>Pressure Bar</th>
<th>SPM@ 50 Hz</th>
<th>Power KW</th>
<th>HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC 2A</td>
<td>26.5 (7.1) 17.5 (4.6)</td>
<td>10.3 150</td>
<td>44 (29)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2B</td>
<td>53 (14) 35 (8.3)</td>
<td>10.3 150</td>
<td>89 (58)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2C</td>
<td>91 (24) 60 (16)</td>
<td>10.3 150</td>
<td>150 (99)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2B</td>
<td>123 (32.4) 81 (21.4)</td>
<td>10.3 150</td>
<td>88 (58)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 2C</td>
<td>212 (56) 140 (37)</td>
<td>10.3 150</td>
<td>150 (99)</td>
<td>0.18</td>
<td>0.25</td>
</tr>
<tr>
<td>DC 4B</td>
<td>159 (42) 105 (27.7)</td>
<td>10.3 150</td>
<td>117 (77)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 4C</td>
<td>246 (65) 163 (43)</td>
<td>10.3 150</td>
<td>175 (116)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 4D</td>
<td>313 (83) 207 (55)</td>
<td>10.3 150</td>
<td>223 (147)</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>DC 7C</td>
<td>1440 (380) 952 (251)</td>
<td>4 60</td>
<td>175 (116)</td>
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<td>1.5</td>
</tr>
<tr>
<td>DC 7D</td>
<td>1800 (476) 1190 (314)</td>
<td>4 60</td>
<td>223 (147)</td>
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<td>1.5</td>
</tr>
<tr>
<td>DC 7J Dpx</td>
<td>2880 (761)</td>
<td>1903 (503)</td>
<td>4 60</td>
<td>175 (116)</td>
<td>1.1</td>
</tr>
<tr>
<td>DC 7K Dpx</td>
<td>3600 (951)</td>
<td>2379 (638)</td>
<td>4 60</td>
<td>223 (147)</td>
<td>1.1</td>
</tr>
</tbody>
</table>

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- Acids
- Caustics
- Polymers
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- Dyes/Inks
- Catalysts
- Cleaning agents
- And many more
OMNI Configurations
OMNI Series pumps are available in several configurations to meet any pumping challenge. Shown below: DC3, DC7 and DC7 Duplex.

Model Specific QR Code
Pulsafeeder assists everyone in the field with information for THAT SPECIFIC PRODUCT, quickly and easily. No dedicated app needed. Simply use your QR Reader on your smart phone or tablet and scan the QR Code located on the Pulsafeeder product label, either Pump or Controller.
- Identify - Model Number, Serial number, KOPkit (Repair Kit)
- View - Quickly find product information such as parts list, IOM, tech sheet and more
- Contact - Call or email Tech Support immediately to assist you
- Email - Send this information to yourself or someone else, to save or even view later

Mechanical Diaphragm Technology
Diaphragm is mechanically attached to the reciprocating piston. The reciprocating diaphragm displaces controlled volume of process fluid through the suction and discharge valve mechanism.

Benefits:
- Eliminates hydraulic fluid
- Simplifies commissioning and maintenance
- Minimizes power requirements
- Economical pumping solutions

Completely non-vented Gearbox Design (DC7) prevents condensation and ingress of water and other containments. This provides exceptional durability and protection from the most extreme environments.

Rugged Power Transmission Benefits:
- Heavy duty worm gear is hardened and polished steel for DC7
- DC2-DC4 worm gear is constructed of durable long life Bronze
- Double shielded greased for life bearings reduce your maintenance
Features & Benefits

**Easy to Install, Rugged Construction**
- Simple, intuitive design is easy to operate and maintain
- Oil free, greased for life bearing with no more oil to buy or change
  (DC 2-4, DC 7 has oil bath)
- Compact and lightweight
- Designed to withstand both indoor or outdoor rigors
  (when protected from precipitation and direct sunlight)
- Fan cooled motor design

**Patented Stroke Adjustment Mechanism** *(DC 7 only)*
- Metering accuracy to +/-2% of flow
- Provides full motion operation
- Easy to read adjustment knob

**Manual Stroke Adjustment Mechanism** *(DC 2-4 only)*
- Simple, click in place manual adjustment
- Lock mechanism to assure desired setting is maintained
- Turndown capacity adjustable up to 1000:1 with MPC controls

**Patented Quick Change Check Valve System** *(DC 7 only)*
- Unique ball valve design is easy to access and very accurate
- Stands up to wide range of acids, caustics and solvents
- Completely inline accessible. No need to remove piping to service
- Includes PVDF, PP & 316 SS materials

**Cartridge Check Valves** *(DC 2-4 only)*
- Guided ball check system reduces back flow and enhances priming characteristics
- Simple o-ring seals provide for reliable leak free performance and easy replacement

**Controller Ready**
- MPC controller option for DC 2-4
- Handheld remote controller on pump or wall mounted
- Display in LPH or GPH
DC2-4

- IEC & NEMA Motor capable
- Lightweight Aluminium Case
- Manual Stroke Adjustment with Lock Mechanism
- Mechanically Driven Hardened Steel Piston
- Durable Heavy Duty Diaphragm
  - Hypalon Backed TFE/Teflon Face
- Cartridge Check Valves

DC7

- IEC & NEMA Motor capable
- Lightweight Aluminium Case
- Patented Full Motion Stroke Adjustment Mechanism
- Mechanically Driven Hardened Steel Piston
- Durable Heavy Duty Diaphragm
  - PTFE Disk Diaphragm
- Patented Quick Change Check Valve System

OMNI Components
Control Options

For high technology in a simple to understand package at an economical price, add an MPC to the OMNI pump to take advantage of a complete system integration between metering pump and process.

Metering Pump Controller
(Model DC 2-4 only)

- Automatically controls and displays flow with a 4-20 mA input, handheld keypad, and manual stroke control
- Controls Pulsafeeder metering pumps up to 1000:1 turn down ratio
- The IP56 (NEMA 4X) Handheld user interface is attached to the pump with 4.5 feet (1.5 meters) of cable
- Optionally, the Handheld can be mounted up to 1000 feet (304 meters) away from the pump
- Handheld displays flow rate of the pump in LPH or GPH

Use digital inputs and outputs to monitor and control:
- Supply tank level
- Pump flow verification
- Remote status indication of pump (on/off)
- Pump alarm status
- Pump auto/manual status
When used in a system, the OMNI Pump can be used in applications such as:

- Water Conditioning Service-Chlorination
- Water Treatment Service-Odor Control
- Wastewater Service-Polymer Injection
- Process pH Treatment-Acids & Caustics
- Process Water-Corrosion Inhibitor
**Back Pressure Valves**

Provide positive back pressure for systems with less than the minimum required pressure difference between the discharge and suction side of the metering pump to assure best metering performance.

**Parts & Accessories**

**Calibration Columns**

These columns are constructed of clear PVC tubes with PVC end caps or an option for Borosilicate glass with Teflon end caps and should be sized for a 30-second draw down.

**Pressure Gauges**

Are relied on to measure pressure in the system. Proper pressure is necessary to insure flow. Pulsafeeder Pressure Gauges are accurate and reliable.

**A KOPkit (Keep On Pumping)**

Can help you cut downtime and put you back in business fast. Use KOPkits for preventive maintenance and to ensure continuous high performance from your Pulsafeeder metering pump.

**Pressure Relief Valves**

Prevent an overpressurization situation from ever damaging your pumps or pipes. Overpressurization can occur when a valve is closed or a blockage occurs. They are always recommended equipment for any pump or skid system.

**Pulsafeeder’s Pulsation Dampeners**

Improve pump system efficiency by removing pulsating flows from positive displacement pumps.

**PulsaLube**

Is the only oil Pulsafeeder recommends for use in metering and transfer pumps. PulsaLube is a superior blend of oils designed to provide optimal lubrication and extend equipment life.

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