Piston Seals
## Five decades of perfect fits.

You may be in a business with large manufacturing systems, but it can all come down to the quality of a little thing like a seal. In our business, seals are the biggest deal.

We’ve built a five decade reputation for precision, reliability and service, and our dedicated Original Equipment Manufacturers have made All Seals an industry leader in fluid power, chemical processing, agricultural, food & beverage, plumbing and numerous other markets.

We’re as demanding of our supplies as you are of yours. We source our products from around the world, and we’ve developed exceptionally strong relationships with a diverse supplier roster.

Custom needs? We can help you with engineering, prototyping, testing and industry certification, no matter how challenging your project. Our one-stop efficiencies also include JIT/Kanban programs, pre-production and kitting, special marking and packaging options and more.

For more information, quick quotations, expert consultation and responsive customer service call us at 800.553.5054, or visit our website at www.allsealsinc.com.

### PISTON SEALS

#### LOADED U-CUP

<table>
<thead>
<tr>
<th>PRESSURE</th>
<th>6,000 PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPERATURE RANGE</td>
<td>-50º – +250º F</td>
</tr>
<tr>
<td>VELOCITY</td>
<td>3.2 feet/sec</td>
</tr>
</tbody>
</table>

**MATERIALS**
- Urethane
- HP Urethane
- Hytrel™
- Nitrite
- Viton™
- EPDM

**FEATURES**
- Rectangular seal
- Scraper lip

**APPLICATIONS**
- Mobile hydraulic
- Agricultural
- General industrial
- Low pressure sealing

#### ASSYMETRICAL UNLOADED U-CUP

<table>
<thead>
<tr>
<th>PRESSURE</th>
<th>5,000 PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPERATURE RANGE</td>
<td>-50º – +250º F</td>
</tr>
<tr>
<td>VELOCITY</td>
<td>.07 feet/sec</td>
</tr>
</tbody>
</table>

**MATERIALS**
- Urethane
- HP Urethane
- Hytrel™
- Nitrite
- Viton™
- EPDM

**FEATURES**
- Improved seal stability
- Improved wear resistance

**APPLICATIONS**
- Agricultural
- General industrial

#### PTFE

<table>
<thead>
<tr>
<th>PRESSURE</th>
<th>5,000 PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPERATURE RANGE</td>
<td>-65º – +400º F</td>
</tr>
<tr>
<td>VELOCITY</td>
<td>3.2 feet/sec</td>
</tr>
</tbody>
</table>

**MATERIALS**
- Glass filled PTFE
- Moly PTFE
- Carbon Graphite PTFE
- Bronze PTFE

**FEATURES**
- Low friction
- Long service life

**APPLICATIONS**
- Mobile hydraulic
- Agricultural
- General industrial
- Heavy duty

#### T-SEAL

<table>
<thead>
<tr>
<th>PRESSURE</th>
<th>5,000 PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPERATURE RANGE</td>
<td>65º – +400º F</td>
</tr>
<tr>
<td>VELOCITY</td>
<td>0.4 feet/sec</td>
</tr>
</tbody>
</table>

**MATERIALS**
- Nitrite
- Viton™
- EPDM
- HNBR
- Backup: Nylon
- Backup: PTFE
- Backup: PEEK

**FEATURES**
- Square seal for stability
- Low pressure sealing
- Anti extrusion rings
- Dynamic sealing surface

**APPLICATIONS**
- Retrofit standard industrial
- O-Ring grooves
- Limited axial length
- Wide base available

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Viton™ is a trademark of The Chemours Company FC, LLC.
### O-RING LOADED PISTON SEAL
- **Pressure**: 5,000 PSI
- **Temperature Range**: -50º – +250º F
- **Velocity**: 0.3 feet/sec
- **Materials**: Urethane
- **Features**: Square seal, Back beveled lip, Energized seal, Retrofit Mil-G-5514F, D-Ring grooves, Low pressure seal ability
- **Applications**: Mobile hydraulic, Agricultural, Heavy duty, Vacuum, High pressure, Bi-directional sealing, Heavy duty hydraulic

### URETHANE PISTON SEAL
- **Pressure**: 6,000 PSI
- **Temperature Range**: -65º – +250º F
- **Velocity**: 0.7 feet/sec
- **Materials**: Urethane
- **Features**: Bi-directional sealing, Grooves prevent blow-by, Energized seal
- **Applications**: Earthmoving equipment, Forklift, Agricultural equipment, Stabilizer, Standard hydraulic cylinders, Cranes, Presses

### CAPPED T-SEAL
- **Pressure**: 10,000 PSI
- **Temperature Range**: -65º – +400º F
- **Velocity**: 3.2 feet/sec
- **Materials**: Nitrile, Viton®, EPDM, HNBR, Backup: Nylon, Backup: Delrin, Cap: PTFE, Cap: filled PTFE
- **Features**: Low pressure sealing, Long life, Low friction, Anti extrusion rings, Dynamic sealing surface
- **Applications**: Mobile hydraulic, Heavy duty

### GROOVED PISTON SEAL
- **Pressure**: 5,000 PSI
- **Temperature Range**: -65º – +400º F
- **Velocity**: 0.7 feet/sec
- **Materials**: Nitrile, Viton®, Bronze PTFE, Glass/Moly PTFE, Graphite PTFE, Carbon Graphite PTFE
- **Features**: Bi-directional sealing, Grooves prevent blow-by, Energized seal
- **Applications**: Piston accumulators, Medium duty hydraulic cylinders, General purpose, High temperature, High pressure, Low speed rotary

**NOTE**: Capabilities shown in this brochure are directly related to design tolerances. Please consult with All Seals for your specific application.
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