## PLUNGER SIZE

<table>
<thead>
<tr>
<th>Standard Model</th>
<th>3/16&quot;</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
<th>1/2&quot;</th>
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</thead>
<tbody>
<tr>
<td>Model Number</td>
<td>BR5104</td>
<td>BR5101</td>
<td>BR5103</td>
<td>BR5105</td>
</tr>
<tr>
<td>Maximum Discharge Pressure (psig)</td>
<td>3000</td>
<td>3000</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>Max. Recommended Speed (Strokes/Min) @ 0-1500 psig Discharge Pressure</td>
<td>30</td>
<td>30</td>
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<table>
<thead>
<tr>
<th>High Pressure Model</th>
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<tbody>
<tr>
<td>Model Number</td>
<td>BR5114</td>
<td>BR5111</td>
<td>BR5113</td>
<td>BR5115</td>
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<tr>
<td>Maximum Discharge Pressure (psig)</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>3500</td>
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<tr>
<td>Max. Recommended Speed (Strokes/Min) above 1500 psig Discharge Pressure</td>
<td>28</td>
<td>28</td>
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</table>

## Maximum Volume

### Daily @ 0 psig Discharge Pressure

<table>
<thead>
<tr>
<th></th>
<th>3/16&quot;</th>
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<th>3/8&quot;</th>
<th>1/2&quot;</th>
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</thead>
<tbody>
<tr>
<td>Maximum Volume (litres/day)</td>
<td>19.3</td>
<td>34.4</td>
<td>77.4</td>
<td>137.6</td>
</tr>
<tr>
<td>Maximum Volume (imp gal/day)</td>
<td>4.2</td>
<td>7.5</td>
<td>17.0</td>
<td>30.2</td>
</tr>
<tr>
<td>Maximum Volume (US gal/day)</td>
<td>5.1</td>
<td>9.1</td>
<td>20.4</td>
<td>36.3</td>
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### Daily @ 1000 psig Discharge Pressure

<table>
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<tr>
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<th>3/8&quot;</th>
<th>1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Volume (litres/day)</td>
<td>17.2</td>
<td>30.5</td>
<td>68.8</td>
<td>122.3</td>
</tr>
<tr>
<td>Maximum Volume (imp gal/day)</td>
<td>3.7</td>
<td>6.7</td>
<td>15.1</td>
<td>26.9</td>
</tr>
<tr>
<td>Maximum Volume (US gal/day)</td>
<td>4.5</td>
<td>8.0</td>
<td>18.1</td>
<td>32.3</td>
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</table>

### Daily @ 3000 psig Discharge Pressure

<table>
<thead>
<tr>
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<th>1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Volume (litres/day)</td>
<td>14.4</td>
<td>25.6</td>
<td>57.6</td>
<td>102.5</td>
</tr>
<tr>
<td>Maximum Volume (imp gal/day)</td>
<td>3.1</td>
<td>5.6</td>
<td>12.6</td>
<td>22.5</td>
</tr>
<tr>
<td>Maximum Volume (US gal/day)</td>
<td>3.8</td>
<td>6.7</td>
<td>15.2</td>
<td>27.0</td>
</tr>
</tbody>
</table>

1. Maximum Discharge Pressure above 3000 psig requires Buna Hard Packing.

**NOTE:** With an increase in discharge pressure, the volumetric pumping efficiency of the pump head decreases as shown in the graph.

**EXAMPLE:** A 3/8" plunger will provide approximately 17.0 imperial gallons per day (99% efficiency) maximum at 0 psig discharge pressure running at 30 spm. If the discharge pressure increases to 1000 psig, the pump runs at approximately 88% efficiency, so the maximum volume is reduced to 15.1 imperial gallons per day running at 30 spm.

**NOTE:** Discharge head efficiency is theoretically determined based on testing and may vary between applications and assemblies.
NOTE: Volumes based on 0 psig Discharge Pressure.

A - 1/2" Plunger, Full (1") Stroke
B - 1/2" Plunger, 1/3 Stroke
C - 3/8" Plunger, Full (1") Stroke
D - 3/8" Plunger, 1/3 Stroke
E - 1/4" Plunger, Full (1") Stroke
F - 1/4" Plunger, 1/3 Stroke
G - 3/16" Plunger, Full (1") Stroke
H - 3/16" Plunger, 1/3 Stroke