Shutoff Valve
- Ball valve designed for positive shutoff operation.
- Handle is easily moved, even under maximum pressure.
- Straight handle available order Part No. 00-1070-00.

Precision, steel components and molded spherical seats provide a positive seal to isolate your fixture. Use with hydraulic junction manifolds on page I-1 and I-2 for secure fixture mounting.

NOTE: Maximum system flow rate is 1.5 gpm (346.5 cu. in./minute) for all VectorFlo® special function valves unless otherwise noted.

Excess flow voids warranty.

“A” Pilot Operated Check Valve
- Sealed pilot piston eliminates cross circuit leakage.
- 5:1 Ratio of Pilot to Check pressure for release.
- Filters on each port location.
- Unclamp device sequencer, provides a way to sequence single circuit unclamp timing.
- Requires a “B” pilot to open “A” line check valve (requires a double acting control valve to operate single acting systems)
- Stainless steel inner valve construction.
- Maximum operating pressure 5,000 psi

For proper sealing, mating surface must be flat to 0.003 in. with a maximum 63 μ in. Ra surface finish.

NOTE: Field repair requires a special Check Valve Installation Tool. Please order Model No. 65-6000-00.
Pilot Operated
Check Valve

- Cartridge and Manifold Mount versions.
- Sealed pilot piston eliminates cross circuit leakage.
- 5:1 Ratio of Pilot to Check pressure for release.
- Unclamp device sequencer manages single circuit unclamp timing.
- Flows up to 1.5 gal/min at 5,000 psi maximum pressure.
- Stainless steel cartridge construction.

Assembly Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-3311-13</td>
<td>2.00</td>
<td>1.63</td>
<td>1.00</td>
<td>1.66</td>
<td>1.56</td>
<td>0.34</td>
<td>SAE 6</td>
<td>N/A</td>
<td>1.06</td>
<td>1.13</td>
<td>0.28</td>
<td>0.44</td>
</tr>
<tr>
<td>70-3317-70</td>
<td>1.75</td>
<td>1.50</td>
<td>0.88</td>
<td>1.53</td>
<td>1.44</td>
<td>0.22</td>
<td>N/A</td>
<td>N/A</td>
<td>0.94</td>
<td>N/A</td>
<td>0.28</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Mounting Dimensions for Pilot Operated Check Valve Assemblies
70-3311-13 and 70-3317-70

For proper sealing, mating surface must be flat to 0.003 in. with a maximum 63 μ in. R₉ surface finish.
Pilot Operated Check Valve

Cartridge Mount Pilot Operated Check Valve Cavity Dimensions

- **PO Cartridge**
  - Model No.: 70-3337-71

**Cartridge Mount Pilot Operated Check Valve Cavity Dimensions**

- **Inlet Port**
  - Diameter: 0.688 ± 0.001
  - Maximum: 2.064 ± 0.005

- **Outlet Port**
  - Diameter: 0.531

- **PILOT PORT**
  - Diameter: 0.860 ± 0.001
  - Minimum: 0.701

- **Bottom of Ø 0.813 Bore**
  - Diameter: 0.813 ± 0.001
  - Maximum: 0.857

- **Thread**
  - Diameter: M20 x 1.5-6H

- **Contact Vektek for details.**
**Note:** Pressure applied to the “A” inlet port flows to the “A” outlet port and unlocks check on the “B” side allowing pressure on “B” to return to tank. Pressure applied to “B” inlet flows to “B” outlet and unlocks check on “A” side allowing pressure on “A” to return to tank.

Field repair requires a special Check Valve Installation Tool. Please order Model No. 65-6000-00.

### Check Valves

Permits flow in one direction only. Can not be adjusted for reverse flow.

### Check Valve Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-3400-01</td>
<td>2.17</td>
<td>0.75</td>
<td>SAE 4</td>
</tr>
<tr>
<td>70-3400-06</td>
<td>2.60</td>
<td>1.00</td>
<td>SAE 6</td>
</tr>
</tbody>
</table>

**Note:** Maximum system flow rate is 1.5 gpm (346.5 cu. in. per minute) for all VektorFlo® special function valves.

Excess flow voids warranty.
In-line Filter
- Available in two port sizes and two filter ratings.
- Filters at 5,000 psi in either direction.
- Compact in-line design for maximum flexibility.
- Protects sensitive valves and devices from contamination.
- Serviceable for cleaning or filter replacement.
- Maximum flow 3 gpm.
- Maximum ambient temperature of 200° F.
- Can also be used for in-line application.

In-line Filter Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-0400-60</td>
<td>SAE 4</td>
<td>SAE 4</td>
<td>10 Micron</td>
<td>0.63</td>
<td>0.75</td>
<td>0.63</td>
<td>0.88</td>
<td>0.35</td>
</tr>
<tr>
<td>70-0400-61</td>
<td>SAE 4</td>
<td>SAE 4</td>
<td>25 Micron</td>
<td>0.63</td>
<td>0.75</td>
<td>0.63</td>
<td>0.88</td>
<td>0.35</td>
</tr>
<tr>
<td>70-0401-70</td>
<td>SAE 6</td>
<td>SAE 6</td>
<td>10 Micron</td>
<td>0.75</td>
<td>0.88</td>
<td>0.75</td>
<td>1.00</td>
<td>0.39</td>
</tr>
<tr>
<td>70-0401-71</td>
<td>SAE 6</td>
<td>SAE 6</td>
<td>25 Micron</td>
<td>0.75</td>
<td>0.88</td>
<td>0.75</td>
<td>1.00</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Screen replacement kits available. Call factory for details.

Adapter Filter
- Installs easily into SAE 6 Quick Disconnect.
- Installs into Quick Disconnects of Pallet Decouplers providing extra filtration.

In-port Filter
- Installs easily into SAE 6 Quick Disconnect.
- Installs in manifold ports of Pallet Decouplers providing extra filtration.
Accessory Valves

Check Valves

Basic Filter
- Keeps chips and debris from reaching valves or other sensitive devices.
- Traps contaminants which may have been missed when cleaning tubing or blind holes prior to fixture startup.
- Easily cleaned or changed filter should be checked when devices become sluggish.

### Basic Filter Pressure Drop

<table>
<thead>
<tr>
<th>Gal/Min</th>
<th>25 Micron</th>
<th>10 Micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>7.7</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>16.5</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>28.6</td>
</tr>
<tr>
<td>7</td>
<td>33</td>
<td>36.3</td>
</tr>
</tbody>
</table>

Basic Filter Model No. | Filtration
---|---
70-3401-15 | 10 Micron
70-3401-12 | 25 Micron

Screen replacement kits available.
Call factory for details

In-line Filter Screens

**SAE 4 Filter Screen**
- Protects valves and devices installed at pump.
- Catches damage causing chips.
- Can be used in in-port applications.

In-line Filter Screens Model No. | Port
---|---
70-3405-44 | SAE 4
70-3405-66 | SAE 6

**SAE 6 Filter Screen**
- Protects devices and individual valves.
- Catches damage causing chips.
- Can be used in in-port applications.

In-line Filter Screens Model No. | Port
---|---
70-3405-44 | SAE 4

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