Description
Compact one piece body, fully retained O-ring seal, poppet type check valve. Available in 1/4" and 1/2" NPT in brass or 316 stainless steel. Suitable for working pressures to 3000 Psig. A wide selection of seal materials and crack pressures make the Series OPC a quality and cost effective solution. All valves are 100% factory tested and available cleaned and packaged for oxygen service.

Features and Benefits
- Compact One Piece Body Construction
- Working Pressures to 3000 Psig (206 bar)
- Full Back Pressure Rating
- Fully Retained O-Ring Seal
- Cracking Pressures from .3 to 25 Psig (0.02 – 1.7 bar)
- 100% Factory tested for crack, leakage and reseal performance

Technical Data
- Nominal Crack Pressures: .3, 1, 10, & 25 Psig (0.02, 0.07, 0.7, & 1.7 bar)
- Maximum Pressure: 3000 Psig @ 70°F (206 bar @ 21°C)
- Temperature Rating: -80°F to 450°F (-62°C to 232°C) (based on seal selection, see ordering information)

Materials of Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Valve Body Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body, Poppet, Seat Insert, Locking Screw¹</td>
<td>Brass, ASTM B16</td>
</tr>
<tr>
<td>Spring</td>
<td>302 SS, ASTM A313</td>
</tr>
<tr>
<td>O-Ring Seal²</td>
<td>Buna-N</td>
</tr>
</tbody>
</table>

¹ 1/4" Brass valves have 316 SS locking screw
² Lubricated with Krytox™
SERIES OPC  
ONE PIECE CHECK VALVE

**Dimensional/Flow Data**

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Port Configuration</th>
<th>A (inches)</th>
<th>Hex</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPC-4P</td>
<td>1/4&quot; Male x 1/4&quot; Male</td>
<td>1.62</td>
<td>9/16&quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>OPC-4MF</td>
<td>1/4&quot; Male x 1/4&quot; Female</td>
<td>1.75</td>
<td>3/4&quot;</td>
<td>-</td>
</tr>
<tr>
<td>OPC-4FF</td>
<td>1/4&quot; Female x 1/4&quot; Female</td>
<td>2.41</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OPC-8P</td>
<td>1/2&quot; Male x 1/2&quot; Male</td>
<td>2.28</td>
<td>7/8&quot;</td>
<td>1.20</td>
</tr>
<tr>
<td>OPC-8MF</td>
<td>1/2&quot; Male x 1/2&quot; Female</td>
<td>2.83</td>
<td>1 – 1/16&quot;</td>
<td>-</td>
</tr>
</tbody>
</table>

Flow tested in accordance with ISA S75.21 with air. Restrictions in the inlet or outlet piping may reduce flow.

**Ordering Information**

**SERIES**  
OPC - One Piece Check Valve

**PORT CONFIGURATION**  
4P - 1/4" Male x 1/4" Male  
4MF - 1/4" Male x 1/4" Female  
4FF - 1/4" Female x 1/4" Female  
8P - 1/2" Male x 1/2" Male  
8MF - 1/2" Male x 1/2" Female

**MATERIAL CODE**  
B - Brass  
SS - 316 SS

**CRACK PRESSURE**  
0.3 – (0.1 – 0.4 Psig) (0.02 bar)  
1 – (0.5 – 1 Psig) (0.07 bar)  
10 – (8 – 12 Psig) (0.7 bar)  
25 – (22 – 27 Psig) (1.7 bar)

**SEAL MATERIAL**  
V - Viton™, 10°F to 375°F (-23°C to 190°C)  
B - Buna-N, -40°F to 250°F (-40°C to 121°C)  
N - Neoprene, -40°F to 300°F (-40°C to 148°C)  
EP - Ethylene Propylene, -65°F to 300°F (-54°C to 148°C)  
FS - Fluoroelastomer, -80°F to 350°F (-62°C to 176°C)  
S - Silicone, -70°F to 450°F (-56°C to 232°C)  
T - PTFE, -50°F to 350°F (-46°C to 176°C)

PTFE Seal may require back pressure to seal leak tight

**OPTIONS**  
Oxygen cleaning, alternative seals and other thread configurations, consult factory

**Note:** Viton™ and Krytox™ are trademarks of DuPont.