Manifold headers are cleaned for use with oxygen in accordance with CGA G4.1, tested and built in accordance to Compressed Gas Association (CGA) and National Fire Protection Association (NFPA 99) guidelines.

**Specifications**

- **Five year parts and one year labor limited warranty**
- Manifold outlet is 1”-11-1/2 NPSM RH-INT
- High quality brass master shut-off valve included
- Rigid copper pigtail standard in oxygen service (single loop design) optional in all other gas services
- Flexible stainless steel Teflon lined pigtail standard with most gas services.
- Maximum pressure 3,000 PSIG
- Wall mounting brackets included
- Built to accommodate future expansion by adding optional header extensions
- Made in the U.S.A.

* See terms and Conditions, Document No. 99-0477, on our website at: [www.tri-techmedical.com](http://www.tri-techmedical.com) for complete details.

**Design**

Model CVC & CVF (Crossover) shown left

Model CSC & CSF (Staggered) shown right

**How to Order**

<table>
<thead>
<tr>
<th>H</th>
<th>H</th>
<th>H</th>
<th>G</th>
<th>G</th>
<th>G</th>
<th>N</th>
<th>N</th>
<th>2</th>
<th>X</th>
<th>X</th>
<th>T</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
</table>

- **T** = Pigtail Type
  - **C** = Copper
  - **F** = Stainless Steel Flexible
- **2** = Header Location (Set of Left & Right Headers)
- **N** = Number of Ports per side
  - 02 through 99
- **G** = Gas Service
  - 320 = Carbon Dioxide
  - 540 = Oxygen
  - 326 = Nitrous Oxide
  - 346 = Medical Air
  - 580 = Nitrogen, Argon & Helium
- **H** = Header Type
  - **CSC** = Staggered w/ Copper Pigtailed
  - **CSF** = Staggered w/ Stainless Steel Flex Braided Pigtails
  - **CVC** = Vertical Crossover w/ Copper Pigtailed
  - **CVF** = Vertical Crossover w/ Stainless Steel Flex Braided Pigtails
Dimensional Drawings

5” for staggered

5” for vertical crossover

1’

See chart below

1’

See chart below

Design Lengths per side

<table>
<thead>
<tr>
<th>Total Number of cylinders per side</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC &amp; CSF – staggered (5” centers)</td>
<td>18”</td>
<td>23”</td>
<td>28”</td>
<td>33”</td>
<td>38”</td>
<td>43”</td>
<td>48”</td>
<td>53”</td>
<td>58”</td>
</tr>
<tr>
<td>CVC &amp; CVF – vertical crossover (5” centers)</td>
<td>13”</td>
<td>N/A</td>
<td>18”</td>
<td>N/A</td>
<td>23”</td>
<td>N/A</td>
<td>28”</td>
<td>N/A</td>
<td>33”</td>
</tr>
</tbody>
</table>

Header Configurations

Vertical Crossover (5” centers)

Staggered (5” centers)

Ambient Temperature Limits

<table>
<thead>
<tr>
<th></th>
<th>Maximum Temperature</th>
<th>Minimum Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrous Oxide</td>
<td>20º F / -6 C</td>
<td></td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>20º F / -6 C</td>
<td></td>
</tr>
<tr>
<td>All other gases</td>
<td>0º F / -17 C</td>
<td></td>
</tr>
</tbody>
</table>

Note: N2O and CO2 limits are due to diminishing vaporization rates and vapor pressures of cylinders at colder ambient temperatures. Other limits are based on elastomer manufacturers’ working temperature limits.

Header Locations

Location 1

Location 2 (Right)

Location 3 (Left)