Parker Autoclave Engineers series DBNV double block and bleed valve is a three system manifold valve providing an economical and convenient method of blocking and bleeding in applications such as pressure monitoring and test, chemical injection and drain line isolation. The valve utilizes our standard valve packing and stem design to make it compact and easy to use. Manifold style valves reduce the number of fittings and space required for installation.

**Block and Bleed Features:**

- 20DBNV Series valve design provides large valve performance in a small package.
- Tubing sizes: 1/4” to 1”.
- Rising stem/barstock body design.
- Metal-to-metal seating achieves bubble-tight shut-off, longer stem/seat life in abrasive flow, greater durability for repeated on/off cycles and excellent corrosion resistance.
- PTFE encapsulated packing provides dependable stem and body sealing.
- Stem and packing gland design have been selected to achieve extended thread cycle life and reduced handle torque.
- Temperatures from -100°F (-73°C) to 600°F (316°C)

Parker Autoclave Engineers’ valves are complemented by a complete line of fittings, tubings and accessories. The 20DBNV Series uses Parker Autoclave Engineers’ pressure connections. This coned and threaded connection provides a reliable bubble-tight seal for dependable performance in gas or liquid service.
Needle Valves - 20DBNV Series

Pressures to 20,000 psi (1379 bar)

<table>
<thead>
<tr>
<th>Tube Outside Diameter</th>
<th>Connection Type</th>
<th>Orifice Size Inches (mm)</th>
<th>Rated CV</th>
<th>Pressure Rating psi (bar)</th>
<th>@ Room Temperature**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>SF250CX</td>
<td>0.093 (2.36)</td>
<td>0.10</td>
<td>20,000 (1379)</td>
<td></td>
</tr>
<tr>
<td>3/8</td>
<td>SF375CX</td>
<td>0.093 (2.36)</td>
<td>0.27</td>
<td>20,000 (1379)</td>
<td></td>
</tr>
<tr>
<td>9/16</td>
<td>F562C</td>
<td>0.093 (2.36)</td>
<td>0.27</td>
<td>20,000 (1379)</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

** For complete temperature ratings see pressure/temperature rating guide in Technical Information section.

Extreme Temperatures

Standard Parker Autoclave Engineers’ valves with PTFE packing may be operated to 450°F (232°C). High temperature packing is available for service from 0°F (-17.8°C) to 800°F (427°C) by adding the following suffixes to catalog order number.

- TG standard valve with PTFE glass packing to 600°F (316°C).
- B standard valve with cryogenic trim material and PTFE packing to -100°F (-73°C).

For additional valve options, contact your Sales Representative.

Note: Refer to the Tools, Installation, Operation and Maintenance section for proper maintenance procedures.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.
For complete information on available end connections, see end connections options below. 20DBNV valves are furnished complete with tube connections.

**Typical catalog number:** **20DBNV M4 M4 XXX**

<table>
<thead>
<tr>
<th>Valve Series</th>
<th>Tube Connection Number</th>
<th>Connection</th>
<th>MAWP @ Room Temperature</th>
<th>Vent Connection Number</th>
<th>Vent Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20DBNVM4M4</strong></td>
<td>M4</td>
<td>SF250CX20</td>
<td>20,000 psi (1379 bar)</td>
<td>M4</td>
<td>SF250CX20</td>
</tr>
<tr>
<td><strong>20DBNVM6M4</strong></td>
<td>M6</td>
<td>SF375CX20</td>
<td>20,000 psi (1379 bar)</td>
<td>M4</td>
<td>SF250CX20</td>
</tr>
<tr>
<td><strong>20DBNVH9M4</strong></td>
<td>H9</td>
<td>F562C</td>
<td>20,000 psi (1379 bar)</td>
<td>M4</td>
<td>SF250CX20</td>
</tr>
</tbody>
</table>

**MAWP:** Maximum Allowable Working Pressure

**Valve Options**

See needle valve options for complete information on available stem types, optional connections and additional valve options. For material options consult factory.

**Valve Maintenance**

Consult your Parker Autoclave Engineers representative for pricing on repair kits. Refer to the Operation and Maintenance manual for proper maintenance procedures.

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.
For complete information on available options, contact your Sales representative. 20DBNV Series valves are furnished with connection components unless otherwise specified.

For prompt service, Parker Autoclave Engineers stocks select products. Consult factory.

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Stem Type</th>
<th>Pipe Size</th>
<th>Orifice Dia.</th>
<th>Dimensions - inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20DBNV4M4</td>
<td>VEE</td>
<td>1/4</td>
<td>0.094</td>
<td>A: 2.25 B: 1.00 C: 1.38 D: 4.00 D1: 1.13 E: 2.13 F: 1.50 G: 2.50 H: 3.00 M: 1.50 N: 0.69 O: 0.50 P: 0.75 Q: 1.50 V: 1.43 X: 0.50</td>
</tr>
<tr>
<td>20DBNV6M4</td>
<td>VEE</td>
<td>3/8</td>
<td>0.094</td>
<td>A: 2.25 B: 1.00 C: 1.38 D: 4.00 D1: 1.13 E: 2.13 F: 1.50 G: 2.50 H: 3.00 M: 1.50 N: 0.69 O: 0.50 P: 0.75 Q: 1.50 V: 1.43 X: 0.50</td>
</tr>
<tr>
<td>20DBNVHM4</td>
<td>VEE</td>
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<td>A: 2.25 B: 1.00 C: 1.38 D: 4.00 D1: 1.13 E: 2.13 F: 1.50 G: 2.50 H: 3.00 M: 1.50 N: 0.69 O: 0.50 P: 0.75 Q: 1.50 V: 1.43 X: 0.50</td>
</tr>
</tbody>
</table>

G - Packing gland mounting hole drill size
H Dimension is with stem in closed position.
All dimensions for reference only and subject to change

**WARNING**

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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