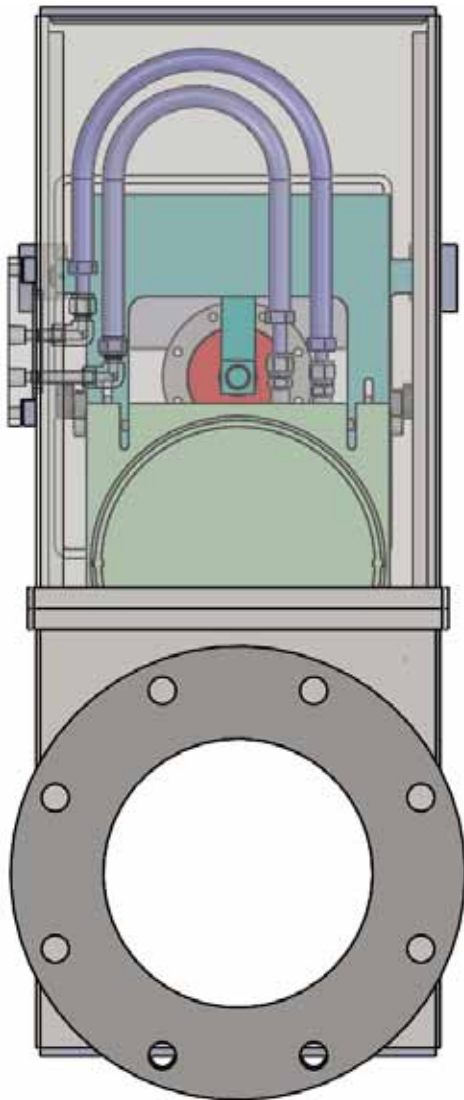




Gate valve with water cooled gate on the left.
Poppet valve with water cooled shroud on the right.



- Port Sizes from 2 to 32 Inch, 63 to 800 mm
- ANSI, ISO, JIS, Conflat or Custom Flanges
- Electric Motor or Electro-Pneumatic Actuator
- Available for DIV. 1, grp., B, C, D, E, F, Environments
- All Aluminum For Maximum Thermal Exchange
- High Efficiency Internal Coolant Channels
- Helium Leak Tight to Better Than 10^{-10} scc/sec
- Vacuum From 10^{-9} Torr To 10 Atmosphere
- Water Cooled Gate and Body Flanges Available

As a leading supplier of vacuum valves and weldments Vacuum Research can provide either aluminum or mild steel valves with water cooled gates, bodies or flanges.

We have more than 50 years experience with vacuum valves on systems that include temperature, pressure, hazardous environments and of course, high vacuum.

Water cooled valves in both gate and poppet styles are available with ANSI flanges up to 32 inches and with ISO flanges up to 800 mm. Highly efficient cooling water circuits with low ΔP and high overall 'u' maximize thermal transfer and minimize cooling water consumption. In addition to water cooling all valve styles can be provided with thermal radiation shields on the Gate.

Ordering Information

Water Cooled Valves are always custom-built to provide the features required for each application, however the starting place is our standard LPWA, End-Operated, or Poppet Valves described in this valve catalog and on our web site: www.vacuumresearch.com.

Select the valve style and size that fits your needs and we will send a SolidWorks drawing showing the water cooling and radiation shield needed.

Also available are the many standard options described in the accessories section of this catalog. The most popular of these options are position indicators for remote indication of the valve position, and gauge or roughing ports with NW style flanges. Special solenoids and position indicators for hazardous areas and combinations of ISO, ANSI and Conflat® flanges are also available.



Valve on left is fully open with protective ring in place. Particles are directed through the port instead of into the valve body.

Although Vacuum Research valves are not affected by small amounts of dust and dirt some processes are so dirty that frequent cleaning is required. For such processes our Protective Ring Valve with the Dirt Sump can substantially reduce your costs by increasing the time between cleanouts. The Protective Ring and Dirt Sump are available on valves with port sizes from 2 inch to 24 inch (50 to 600 mm ISO). Other Vacuum Research options such as Position Indicators and ports for gauges and roughing can also be provided on these valves.

- Protective Ring Keeps Dirt Out of Valve
- Easy to Clean Dirt Sump Bonnet
- All Valves (RoHS) 2002/95/EC Compliant
- Air Purge Connection for Blow Down
- Helium Leak Rate Less Than 5×10^{-10} scc/sec
- Port Sizes From 2 to 24 Inch, 50 to 600 mm
- ANSI, ISO, JIS or Special Flanges
- Gauge & Roughing Ports Anywhere on Body
- 250,000 Cycle Rotary Shaft Seal
- Fail Safe Design, Close on Power Loss
- All Welded 6061 Aluminum Body

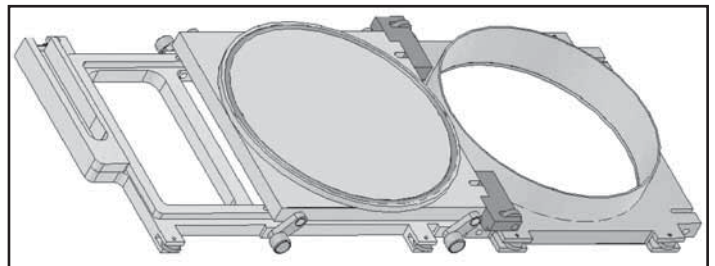
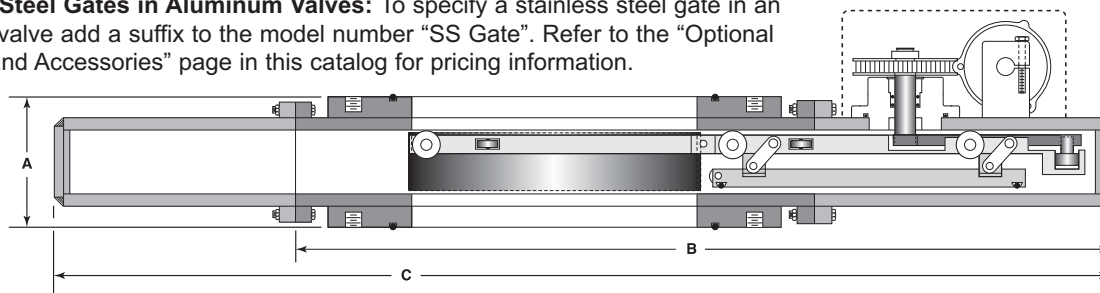


Photo shows a fully open valve with the protective ring in place. In the foreground is the gate/carriage assembly showing the protective ring assembly, also shown in 3-D drawing.

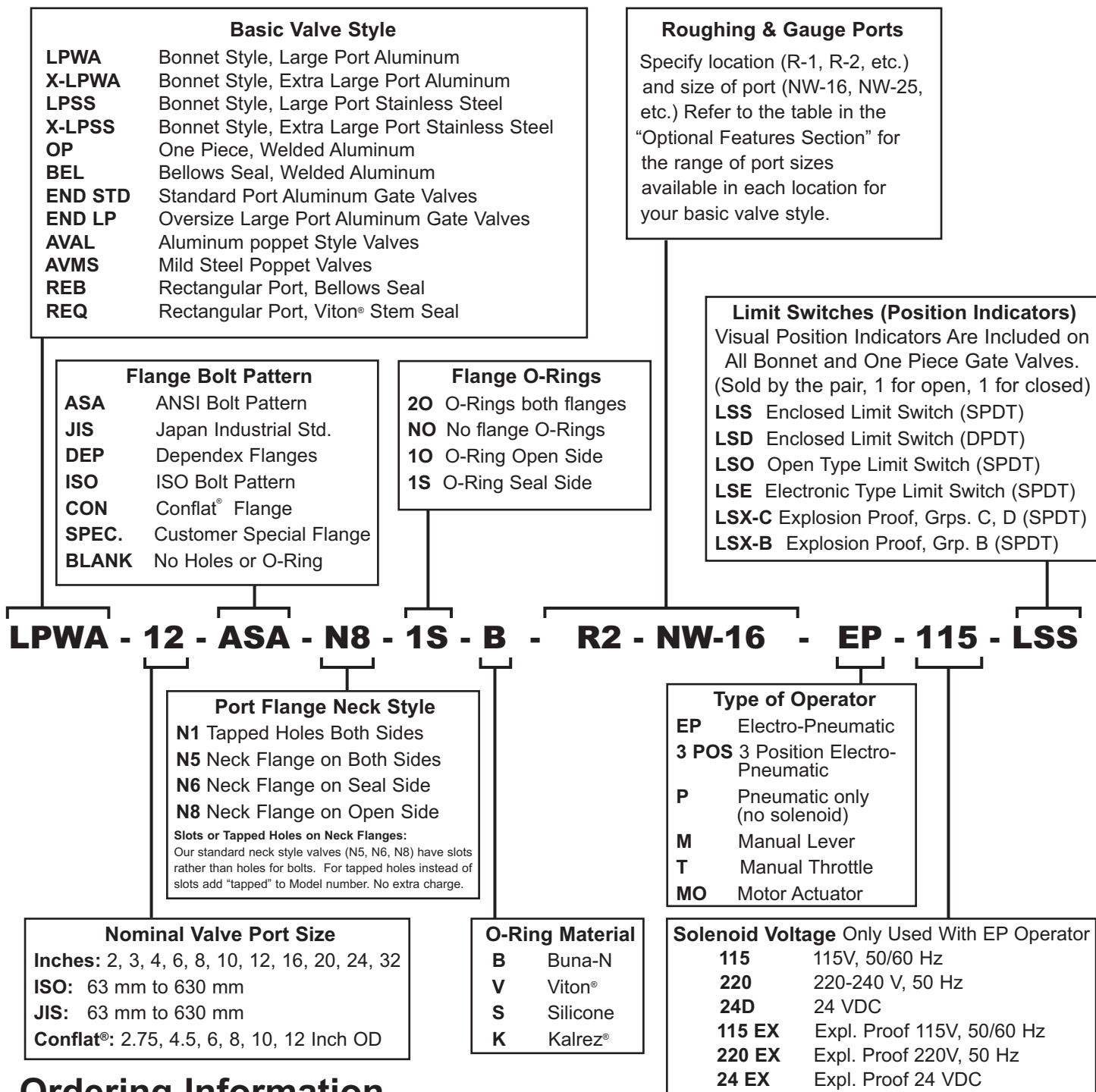
| ANSI Flange | Port Diameter | Flange O.D. | Bolt Circle | Bolts | Flange O-Rings | A Flange To Flange | B OAL w/o Sump | C OAL With Sump | Net Weight Pounds (kg) | Ship Weight Pounds (kg) | Price |
|-------------|---------------|-------------|-------------|------------|----------------|--------------------|----------------|-----------------|------------------------|-------------------------|---------|
| 4 Inch | 6.00 | 9.00 | 7.50 | (8) 5/8-11 | 5.75 x .139 | 4.125 | 21.19 | 27.00 | 50 (23) | 65 (30) | \$3200. |
| 6 Inch | 8.00 | 11.00 | 9.50 | (8) 3/4-10 | 7.5 x .139 | 5.25 | 23.00 | 32.00 | 70 (32) | 85 (39) | \$4713. |
| 8 Inch | 10.00 | 13.50 | 11.75 | (8) 3/4-10 | 9.0 x .275 | 5.25 | 23.00 | 32.00 | 74 (34) | 89 (40) | \$5207. |
| 10 Inch | 12.00 | 16.00 | 14.25 | (12) 7/8-9 | 12 x .275 | 5.50 | 34.00 | 44.00 | 150 (68) | 172 (78) | \$5953. |
| 12 Inch | 12.00 | 19.00 | 17.00 | (12) 7/8-9 | 13 x .275 | 5.50 | 34.00 | 44.00 | 163 (74) | 183 (83) | \$6447. |

Stainless Steel Gates in Aluminum Valves: To specify a stainless steel gate in an aluminum valve add a suffix to the model number "SS Gate". Refer to the "Optional Features and Accessories" page in this catalog for pricing information.





Vacuum Research valves are available with dozens of options to allow you to select exactly the features you need for your vacuum system. The model number system illustrated below will accurately describe most valves, but if you have any questions about the best way to specify what you need, just call or fax our customer service department and we will be happy to help you. All Valves (RoHS) 2002/95/EC Compliant.



Ordering Information



Call our toll free number (800) 426-9340, or (412) 261-7630 to place orders, or for customer service. Our FAX number is (412) 261-7220. Address orders by mail to Vacuum Research Corporation, 2419 Smallman Street, Pittsburgh, PA 15222 USA. Prices in this catalog are FOB factory. CIF or C&F prices available. Contact factory for pro forma invoice or price quotation. Terms are Net 30 Days.



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