WAFER-SPHERE®
BUTTERFLY VALVES
FOR STEAM SERVICE

WAFER-SPHERE high-performance butterfly valves are well suited for a wide range of steam applications. They are available in both lugged and wafer-style body designs. Sizes range from 2-1/2” – 60” (DN 65 – 1500) ANSI Class 150, 3” – 36” (DN 80 – 900) Class 300, and 3” – 24” (DN 80 – 600) Class 600.

WAFER-SPHERE valves offer a number of design features that make them the ideal choice for effective steam handling.

FEATURES
- New XTREME® seat provides longer life, expanded performance boundaries, and greater value.

Field-Proven Single-Piece Flexible PTFE Seat Design
- Lip-seal design compensates for temperature and pressure changes.
- No additional o-rings or metal parts required to maintain tightness.
- Tight shut-off in either direction.
- Longer service life with less maintenance.

Offset Shaft and Eccentric Disc
- No seat/disc contact in the open or intermediate position.
- Eliminates wear points at top and bottom of seats for higher cycle life.
- Reduces torque requirements, allowing for smaller operators.

Easy Seat Maintenance
- Simply remove body insert and replace seat – disassembly of disc and shaft is not required.

Saturated Steam Ratings

<table>
<thead>
<tr>
<th>Series</th>
<th>Seat</th>
<th>Maximum Differential Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>815W, 815L</td>
<td>Xtreme (X)</td>
<td>200 psi* 14 bar*</td>
</tr>
<tr>
<td>830W, 830L</td>
<td></td>
<td>450 psi 31 bar</td>
</tr>
<tr>
<td>860W, 860L</td>
<td></td>
<td>470 psi 32.4 bar</td>
</tr>
</tbody>
</table>

* Maximum rating of carbon steel body per ANSI B16.34 at corresponding saturated steam temperatures. Valves may be derated based on shaft material selection.

For throttling applications, WAFER-SPHERE valves with an XTREME seat are suitable for services with differential pressures as shown above, and throttling pressure drops as shown in Bulletin T150-3.

Seat Ratings
Seat ratings are based on differential pressure with the disc in the fully closed position and refer to seats only. Maximum body working pressures and test pressures of different materials are shown in the bulletins listed on the next page.

NOTE: 14” – 60” (DN 350 – 1500) valves equipped with 316 stainless or Alloy 20 shaft are rated for maximum differential pressure of 150 psi (10.3 bar).
Refer to the following bulletins for ordering information, dimensions, bill of materials, and other specifications of WAFER-SPHERE butterfly valves that are capable of filling a wide variety of steam service applications.

If WAFER-SPHERE valves are to be used in piping systems where steam hammer can be a problem, the valves should be equipped with manual gear actuators instead of operating handles for more gradual valve operation.

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Bulletin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>W101-6</td>
<td>2-1/2&quot; – 60&quot; (DN 65-1500) ANSI Class 150 valves</td>
</tr>
<tr>
<td>W101-6</td>
<td>3&quot; – 36&quot; (DN 80-900) ANSI Class 300 valves</td>
</tr>
<tr>
<td>W104-1</td>
<td>3&quot; – 36&quot; (DN 80-900) ANSI Class 600 valves</td>
</tr>
<tr>
<td>W105-1</td>
<td>30&quot; – 60&quot; (DN 750-1500) Series 835 Process-Rated Class 150 valves</td>
</tr>
</tbody>
</table>

Subject to change without prior notice.