IPEX VKR DUAL BLOCK®
REGULATING BALL VALVES

NEW PRODUCT SHOWCASE

Designed to meet the requirements of the most severe industrial applications, IPEX is pleased to introduce the VKR Dual Block® Regulating Ball Valve. The new VKR combines the reliability and safety features of the IPEX VKD ball valve with a newly designed profiled ball. The patented ball design provides linear flow regulation throughout its full range of operation even when the valve is open just a few degrees. Like a traditional shut-off ball valve, the VKR has a 90° operating angle which allows the use of a standard quarter-turn actuator, ensuring perfect alignment and reducing the torque required for actuation. The patented Dual Block® mechanism locks the union nuts in place preventing back-off during severe service conditions.

VKR Regulating Ball Valves are part of our complete system of IPEX pipe, valves and fittings, engineered and manufactured to our strict quality, performance and dimensional standards.

### VALVE AVAILABILITY

<table>
<thead>
<tr>
<th>Feature</th>
<th>VKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Material</td>
<td>PVC, PP, PVDF</td>
</tr>
<tr>
<td>Size Range</td>
<td>1/2&quot; through 2&quot;</td>
</tr>
<tr>
<td>Pressure</td>
<td>up to 232 psi</td>
</tr>
<tr>
<td>Seats</td>
<td>Teflon® (PTFE)</td>
</tr>
<tr>
<td>Seals</td>
<td>EPDM or Fluoropolymer (FPM)</td>
</tr>
<tr>
<td>End Connections</td>
<td>Socket (IPS), Threaded (FNPT), Socket (Metric), Flanged (ANSI 150)</td>
</tr>
</tbody>
</table>

### APPLICATIONS

- Precise Flow Regulation ✓
- Acid Products Handling for Refineries, Metal Works, etc. ✓
- Alum and Ferric Chloride Handling ✓
- Bleach, Dye and Acid Lines ✓
- Chlorine injection, chlorine dioxide and chloralkali plant piping ✓
- Pharmaceutical ✓
- Plant chemical distribution lines ✓
- Water and wastewater treatment ✓
HIGH FINISHING STEM & FLOATING BALL
The VKR valve stem and ball are fully machined after molding, achieving a high surface finishing, removing surface imperfections and giving accurate dimensional tolerances. This reduces wear on both the Teflon® seats and elastomer o-rings resulting in an improved service life before any maintenance is required.

SAFETY STEM
The VKR valve stem is held in place by the valve body, preventing the possibility of “blowout” from excessive pressure. The stem also has a predetermined shear point (notched groove) above the double o-ring seal. Any breakage from excessive torque will occur only at this point, maintaining system integrity.

DUAL BLOCK® MECHANISM
The VKR’s patented Dual Block mechanism locks the union nuts in place, preventing back-off during severe service conditions such as heavy vibration or constant thermal cycling.

POSITION INDICATION PLATE
The VKR is available with a position indication plate that has a graduated scale of 5° detail. This feature gives a clear and accurate reading of the valve position.

SAFE BLOCKED CARRIER
The VKR ball valve is equipped with a safe blocked and adjustable ball seat carrier. During maintenance in depressurized pipelines, it is possible to unscrew one single union nut and disconnect the downstream pipe end from the valve body with the valve in the closed position, without fluid leakage.
**PATENTED REGULATING BALL**
The patented VKR ball design provides linear flow regulation throughout its full 90° range of operation, even when the valve is open just a few degrees. This makes the VKR Regulating ball valve ideal for applications that require precise flow control.

**ACTUATION MODULE**
Combined with the mounting bracket integrally molded into the VKR valve body, the optional ISO actuation module allows the VKR to be equipped with an electric modulating actuator. IPEX offers a full line of VKR regulating ball valves with electric modulating actuators for precise flow control.

**INTEGRALLY MOLDED MOUNTING BRACKET**
The VKR features a mounting bracket that is integrally molded into the base of the valve, allowing the valve to be mounted to a wall or panel.

**TRUE UNION DESIGN**
The VKR true union design allows for simple installation and removal without disturbing the rest of the pipe assembly. The VKR lay length is identical to a VKD ball valve and both valves share the same union nuts and end connectors. This means the VKR regulating ball valve can replace an existing VKD ball valve.
VKR Flow Performance Graph

% of Flow Coefficient, Cv

Angle of Opening (Degree)

Cv Values

<table>
<thead>
<tr>
<th>Size</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1-1/2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cv</td>
<td>6.1</td>
<td>9.4</td>
<td>17.8</td>
<td>41.1</td>
<td>74.1</td>
</tr>
</tbody>
</table>

VKR Options & Accessories

Wall/Panel Mounting Kit

Stem Extension Kit

Flanging Kit