Solution for Flow

ASKA Diverter Valves
PRODUCT CATALOG

www.bb-aska.co.jp
Diverter Valves Made in Japan with Total Dedication to Safety and Reliability

Aska diverter valves have been adopted by chemical plants worldwide due to the recognition of our total dedication to safety and reliability. To maintain the highest quality, all Aska valves, from body castings through to forged products, are manufactured in Japan. Manufacturing, welding, assembly, and inspection are all performed in-house.

Typical Flow Channel Switching Method
Because multiple gate valves and ball valves are installed, dead spaces can occur where the flow stops when controlling the fluid.

With One Valve, the Flow Can Be Sent in Multiple Directions

Aska Diverter Valves Eliminate Dead Space

Round Structure
The round structure, a rotary ram stem that is concave at the end, ensures smooth flows and high-quality polymer production. There is absolutely no dead space because the end of the ram rotates so that it aligns perfectly with the flow.
Hardfaced Seats Handle Vacuum to High Pressure

Stellite® is welded to the seats to provide superior abrasion and strength properties. Supports up to 35 MPa on the high-pressure side and 0.133 Pa (10⁻³ torr) on the vacuum side.

Aska Diverter Valve Strong Points

- Aska diverter valves are packed with proprietary know-how to control the flow of high-temperature, high-pressure, high-viscosity polymers.
- Aska diverter valves incorporate a patented round structure, a rotary ram stem with a concave end. This rotates when opening and closing to perfectly align the end with the flow and achieve a smooth and quiet flow with no dead space.

Number of Valves Supported: 3-way up to 7-way valves
Supported Pressures: 0.133 Pa (10⁻³ torr) on vacuum side to 35 MPa on high-pressure side
Leakage Tolerance: Zero
Leak: Zero leaks confirmed with total inspection
Production Range: No-jacket single valves can also be manufactured.
Cleaning: A flush valve can be attached near the seat to completely clean the inside.
Connection Methods: Welded connection, flange, Gray-Loc®
Drive Methods: Manual (with or without gears), electric, pneumatic, hydraulic

Also Supports High-Temperature Fluids due to Adoption of Jacket Structure

By introducing a heat medium such as oil or steam into the jacket, fluids can be transported without lowering the fluid temperature of the main pipe.

Residual Stress Removed by Heat Treatment

Since the welded jackets are heat treated to relieve stress, there are no leaks when heated to operating temperature.

Jacket

The heat-retaining tube fitted around the main pipe is called a jacket. This prevents polymer flow problems due to temperature drops and quality degradation due to solidification.

Fluids that are sensitive to temperature change need a uniform flow and uniform heating by the jacket. Aska products ensure a smooth flow of polymer even when flow channels are complex.
Types of Diverter Valve

High Reliability and Stable Plant Operation

Aska diverter valves are employed at branch points in polymerization lines where high temperature and pressure occur. Because of the jacket structure, there is no lowering of the polymer temperature and transport is smooth. In addition, the valves operate safely with no leaks even under high-pressure operation.

3-way diverter valve with one inlet and two outlets. The basic diverter valve model. Used at many plants in and outside Japan.

W3T type
2500psi-5"/3" BW
Jacketed manually operated diverter valve

W3H type
220K-10"/7"x8"/6" BW
Jacketed electrically operated control valve

W3A-H type
PN10-10"/8" BW
Jacketed manually operated diverter valve

W3Y type
300#-10"/8"x8"/6"
Jacketed manually operated diverter valve with 3 drain valves

Application
PET/PC/PP/PBT/PE/PS/PU/PVC/PTA/PLA/LCD/PA6/PA66/TONNER/RESINS/LDPE/HDPE
Types of Actuator

Actuators Can Be Selected According to the Operating Environment and Temperature.
Varied Lineup That Also Supports Explosion-Proof, High Power Output Types

Manual Hand Wheel
Low cost solution, for locations where valve operation is rare. Can be used for high-output control by using a gear reducer. May be changed to a motor after installation.

Hybrid
Actuator methods can be mixed depending on the process. ON-OFF types and control type combinations possible.

Electric Motor
Explosion-proof certification acquired from around the world. Can be installed easily and operation started with just electric cabling. The torque and extent of opening can be easily set by computer control.

Air Motor
Can be operated under completely explosion-proof requirements. No heat is generated from the motor during operation. A reserve tank ensures drive power even if there is an air supply failure.

Aska will propose actuation methods depending on the process.
Enables Simple & Smart Plant Design

The placement of pipes and instrumentation devices on production lines is complex. Aska diverter valves support space saving and intelligent plants. The design and specifications of the valves are optimized for the environment in which they are used.

**W3Z type**

150psi-30"/26"x18"/16" Flanged
Jacketed electrically operated isolation valve

**W3Z type**

150psi-34"/28"x28"/24" Flanged
Jacketed electrically operated isolation valve

**W3U type**

300#-10"
Manual changeover valve

Environmental Support
—Low Emission Certification Acquired

Fugitive Emissions Test: ISO 15848-1:2015(E)
Range: 150#-600#/15 A-200 A/0 °C to 200 °C

Compliance to environmental regulations in plants is increasingly being strengthened.
To reduce the risk of external fluid leakages, Aska Corporation acquired low emission certification (ISO 15848-1:2015 (E)).
"If Only There Were Such a Valve..." Aska Has It!

Aska's mission is taking up the challenge of developing and manufacturing new diverter valves.

- Isolation valve with large diameters exceeding 25 inches
- 7-way valve to split one flow into 6
- Diverter valve with outlets of different diameters
- Diverter valve that supports vacuum through to high pressure

We provide state-of-the-art valves that support ever evolving chemical and plant engineering needs.

**W4F120 type**

200K-10"/6" x 6"/4" BW

Jacketed electrically operated diverter valve

**W5F type**

250K-10"/8" x 8"/5" BW

Jacketed manually operated diverter valve

**W4F120 type**

200K-10"/6" x 6"/4" BW

Jacketed manually operated diverter valve

**W7H type**

2500psi-10"/8" BW x 8"/5" BW x 6-outletBW

Jacketed electrically operated diverter valve with 6 drain valves

Rapid Maintenance Support for Minimum Plant Downtime

Diverter valves used in harsh environments require regular maintenance. As well as replacing consumable parts, Aska’s experienced engineers respond quickly to repair seats and sliding parts that require high levels of technical skill.

<table>
<thead>
<tr>
<th>Sizes Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-way valves</td>
</tr>
<tr>
<td>2&quot; (50A) to 8&quot; (200A) FV-35MPaG</td>
</tr>
<tr>
<td>14&quot; (350mm) vacuum service or up to 30kg/cm²</td>
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<tr>
<td>4-way valves</td>
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<tr>
<td>2&quot; (50A) to 8&quot; (200A) FV-35MPaG</td>
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<tr>
<td>5-way valves</td>
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<tr>
<td>2&quot; (50A) to 6&quot; (150A) FV-35MPaG</td>
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<tr>
<td>U-shaped 3-way valves (Changeover)</td>
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<tr>
<td>2&quot; (50A) to 14&quot; (350A) FV-3MPaG</td>
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</tbody>
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Note: Please contact us for other sizes.