Pentair 263038

Pentair 263038 1-1/2-Inch 2-Way PVC Diverter Valve: Installation and Operation Manual

Model: 263038

Introduction Safety Information Product Overview Setup & Installation Operation Maintenance Troubleshooting Specifications Warranty & Support

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Pentair 263038 1-1/2-Inch 2-Way PVC Diverter Valve. This valve is designed for diverting, shut-off, or mixing applications in various plumbing systems, particularly in pool and spa environments. Please read these instructions thoroughly before installation and use.

2. Safety Information

WARNING: Always disconnect power to pumps and other equipment before working on any plumbing system. Failure to do so may result in serious injury or death.
CAUTION: This valve is designed for specific applications. Ensure it is compatible with your system's pressure and chemical requirements. Maximum pressure rating is 150 PSI.

- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- Ensure all connections are properly sealed to prevent leaks.
- Do not overtighten fittings, as this can damage the valve body.
- Keep out of reach of children.

3. Product Overview

The Pentair 263038 is a robust 1-1/2-inch 2-way diverter valve constructed from durable PVC or CPVC material. It features a high flow rate design and a fiberglass-reinforced handle for reliable operation. The valve is equipped with a maintenance-free Teflon coated diverter seal, ensuring optimum positive sealing and longevity.

Key Features:

- Available in PVC or CPVC construction.
- Maintenance-free Teflon coated diverter seal for reliable performance.
- Optimum positive-seal mechanism.
- Designed for high flow rate applications.
- Features a fiberglass reinforced handle for durability.
- Withstands pressure up to 150 PSI.
- Chemical-resistant for various applications.
- Field-adjustable stop positions for precise control.
- Can be plumbed with the inlet at any port.

Component Identification:

Figure 3.1: Top-down view of the Pentair 263038 diverter valve, showing the handle and port markings. The handle allows for selection of flow direction or shut-off.

Figure 3.2: Direct top view of the valve, highlighting the "OFF" position indicator and the various port settings around the handle base. This view clearly shows the rotational mechanism.

Figure 3.3: Side view of the diverter valve, illustrating the main body and the two primary ports for plumbing connections. The robust construction is visible.

Figure 3.4: End view of the valve, showing one of the 1-1/2 inch connection ports. This port is designed for solvent welding to standard PVC or CPVC piping.

4. Setup and Installation

Proper installation is crucial for the optimal performance and longevity of your diverter valve. This valve is designed for 1-1/2-inch plumbing connections.

4.1 Pre-Installation Checklist:

- Verify that the valve material (PVC or CPVC) is compatible with your existing plumbing and the chemicals used in your system.
- Ensure you have all necessary tools and materials, including PVC/CPVC cement, primer, measuring tape, and pipe cutters.

- Confirm that the installation location allows for easy access to the valve handle for operation and future maintenance.

4.2 Installation Steps:

1. **Plan Plumbing Layout:** Determine the desired flow path for diverting, mixing, or shut-off applications. The valve can be plumbed with the inlet at any port.
2. **Prepare Pipes:** Cut the existing or new pipes to the correct length, ensuring clean, straight cuts. Deburr the edges of the pipes.
3. **Dry Fit:** Temporarily fit the valve and pipes together without cement to ensure proper alignment and fit. Mark the pipes and valve for correct orientation.
4. **Apply Primer and Cement:** Apply PVC/CPVC primer to both the outside of the pipe and the inside of the valve port. Follow immediately with a generous, even coat of PVC/CPVC cement to both surfaces.
5. **Join Connections:** Quickly insert the pipe into the valve port with a quarter-turn twist until it bottoms out. Hold firmly for 30 seconds to allow the cement to set.
6. **Repeat for all Ports:** Connect all necessary pipes to the valve ports using the same priming and cementing procedure.
7. **Cure Time:** Allow adequate cure time for the cement as recommended by the cement manufacturer before pressurizing the system.
8. **Adjust Stop Positions (Optional):** The valve features field-adjustable stop positions. If specific flow limits are required, consult the markings on the valve top and adjust the internal stops as needed using a screwdriver.

Note: For detailed instructions on solvent welding, refer to the specific PVC/CPVC cement manufacturer's guidelines.

5. Operating Instructions

The Pentair 263038 diverter valve allows for easy control of water flow. The fiberglass-reinforced handle is used to select the desired flow path.

5.1 Understanding Valve Positions:

The top of the valve features markings and a rotating handle. The handle's position indicates the active flow path. Common positions include:

- **Diverting:** Directs water from one inlet to one of two outlets, or from two inlets to one outlet.
- **Shut-off:** Completely stops flow through the valve. This is typically indicated by an "OFF" marking on the valve body.
- **Mixing:** Combines flow from two inlets into a single outlet.

Rotate the handle to align with the desired port or function indicated on the valve body. The field-adjustable stops can be set to limit the handle's rotation to specific positions if needed.

5.2 General Operation:

1. Ensure the system is not under excessive pressure before adjusting the valve, especially if making significant changes to flow.
2. Grasp the fiberglass-reinforced handle firmly.
3. Rotate the handle to the desired position. The handle should move smoothly.
4. Verify the flow change in your system.

Note: If the handle feels stiff, do not force it. Refer to the Maintenance section for lubrication or inspection.

6. Maintenance

The Pentair 263038 diverter valve is designed for minimal maintenance due to its maintenance-free Teflon coated diverter seal. However, periodic inspection and occasional servicing can extend its lifespan.

6.1 Routine Inspection:

- Periodically check for any signs of leaks around the valve body or connections.
- Inspect the handle for any damage or excessive wear.
- Ensure the handle rotates smoothly between positions.

6.2 Servicing (If Required):

While the Teflon seal is maintenance-free, if the valve becomes stiff to operate or develops a leak from the stem, it may be serviceable. The valve can typically be disassembled by removing the screws on the top cover. This allows access to the diverter and seals for cleaning or replacement if necessary. Use only manufacturer-approved lubricants for O-rings and seals if reassembly is performed.

CAUTION: Disassemble the valve only if you are comfortable with plumbing repairs. Ensure the system is depressurized and drained before attempting any servicing.

7. Troubleshooting

This section addresses common issues you might encounter with your diverter valve.

Problem	Possible Cause	Solution
Valve Leaks at Connections	Improper solvent welding; cracked pipe or fitting.	Ensure proper application of primer and cement during installation. If leaking persists, the connection may need to be cut out and re-plumbed.
Valve Leaks from Handle/Stem Area	Worn or damaged internal seals (O-rings).	The valve may require disassembly to inspect and replace internal seals. Contact a qualified technician if unsure.
Handle is Stiff or Hard to Turn	Accumulation of debris; lack of lubrication on internal seals; overtightened components.	Disassemble the valve (if comfortable) to clean out debris and apply a silicone-based lubricant to the diverter and O-rings. Ensure screws are tightened appropriately, not excessively.
Incomplete Flow Diversion	Handle not fully seated in position; internal debris obstructing flow.	Ensure the handle is rotated completely to the desired stop position. If the issue persists, inspect the internal mechanism for obstructions.

8. Specifications

Detailed technical specifications for the Pentair 263038 1-1/2-Inch 2-Way PVC Diverter Valve.

Attribute	Detail
Model Number	263038

Attribute	Detail
Brand	Pentair
Material	PVC or CPVC
Exterior Finish	PVC or CPVC
Number of Ports	2
Inlet Connection Size	1.5 Inches
Outlet Connection Size	1.5 Inches
Maximum Pressure	150 PSI
Item Dimensions (L x W x H)	7 x 7 x 6 inches
Item Weight	1.5 pounds
Manufacturer	PENTAIR WATER POOL AND SPA, IN
UPC	788379644352, 797267286857, 718472683019, 797267790163

9. Warranty and Support

For specific warranty information regarding your Pentair 263038 diverter valve, please refer to the documentation included with your purchase or visit the official Pentair website. Warranty terms and conditions may vary.

For technical support, replacement parts, or further assistance, please contact Pentair customer service directly. Contact information can typically be found on the Pentair website or on your product packaging.

Pentair Official Website: www.pentair.com