

# Installation, Operation and Maintenance Manual

## Series W5000

Sanitary Check Valve with Tri Clamp Connections

Model: W5400



W5400



## Important Safety Information



Verify system is fully depressurized and drained prior to installation or service.



Use appropriate personal protective equipment (PPE). Do not exceed valve pressure, temperature, or media compatibility limits.



Follow all applicable local safety and sanitary regulations.

### ⚠ WARNING



Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure.



Keep this Manual for future reference.

### ⚠ WARNING

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

### NOTICE

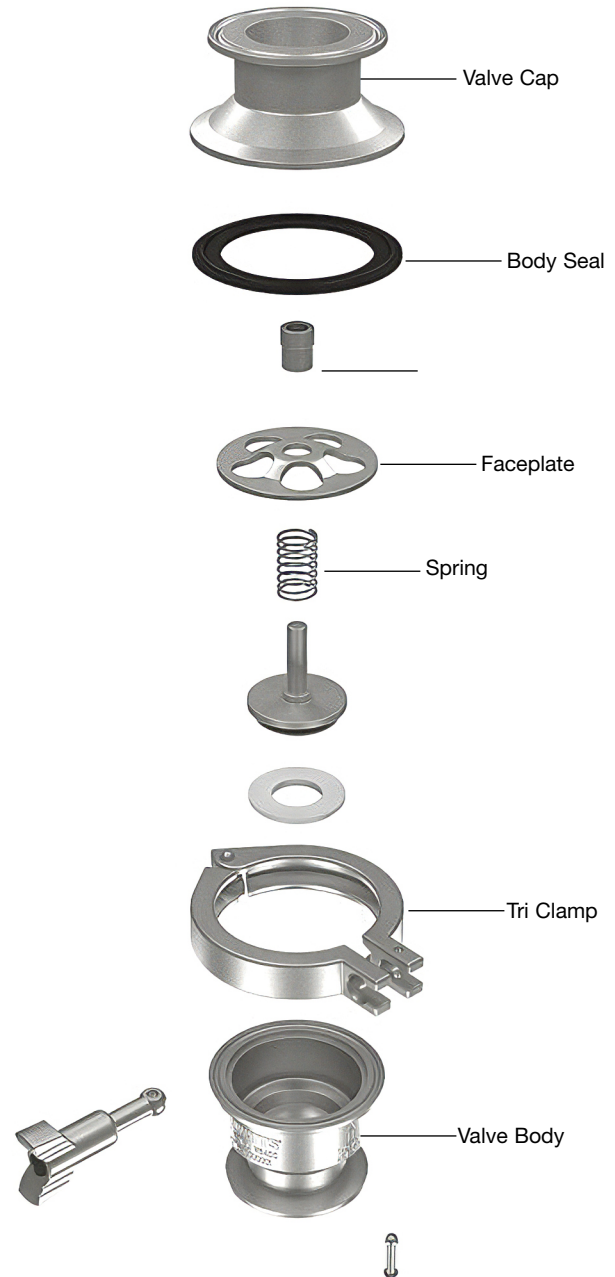
Follow the guidelines listed here for proper installation, operation, and maintenance.

### NOTICE

Inquire with governing authorities for local installation requirements

## General Information

Watts Sanitary poppet-style (spring-loaded) check valves are designed to prevent reverse flow in hygienic systems while maintaining cleanability and product integrity.



\* See Watts.com for available repair kits.

# Installation Instructions

## Pre-Installation

1. Inspect valve for damage, debris, or contamination.
2. Verify materials compatibility with process media and cleaning agents
3. Ensure all connections, gaskets, and ferrules are clean and undamaged.

## Orientation

1. Install valve in the correct flow direction as indicated by the arrow on the body.
2. Valve may be installed in horizontal or vertical piping, unless otherwise specified.
3. For vertical installations, ensure flow is upward to allow proper operation of the spring-loaded poppet.

## Connection

1. Install using appropriate sanitary connections (tri-clamp, tube weld end, etc.).
2. Use properly sized sanitary gaskets and tighten clamps evenly to avoid leakage.

## Startup

1. During startup, slowly introduce flow to avoid pressure shock.
2. Verify valve opens and closes properly under system conditions.
3. Check all connections for leakage.

## Operation

1. Designed for automatic operation, the valve opens with forward flow and closes when flow stops or reverses.
2. The spring-loaded poppet provides rapid, reliable shutoff to minimize backflow.
3. Ensure operating conditions meet minimum flow requirements to fully open the valve and avoid chatter.
4. Avoid operating outside specified pressure and temperature limits.

# Maintenance

### **⚠ WARNING**

**Need for Periodic Inspection/Maintenance:** This product must be tested periodically in compliance with local codes, but at least once per year or more as service conditions warrant. All products must be retested once maintenance has been performed. Corrosive water conditions and/or unauthorized adjustments or repair could render the product ineffective for the service intended. Regular checking and cleaning of the product's internal and external components helps assure maximum life and proper product function.

## Disassembly and Cleaning

1. Isolate and depressurize the system before opening.
2. Remove clamps and separate body.
3. Remove poppet, spring and seals.
4. Inspect for damage or deformation.
5. Replace worn seals.
6. Reassemble in reverse order ensuring proper alignment and cleanliness.
7. Verify smooth operation.

## Routine Inspection

1. Inspect for leakage, wear or performance issues
2. Monitor for chatter or backflow.
3. Check for buildup or fouling.

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