

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series W5000

## Sanitary Check Valve with Tri Clamp Connections

1" - 4"

Watts W5000 sanitary check valves are designed to provide reliable, automatic back-flow prevention in high purity and hygienic processing systems. Constructed from corrosion resistant stainless steel with smooth, crevice free internal surfaces, they minimize contamination risk and support CIP and SIP processes. Optimized flow paths reduce pressure drop while ensuring responsive closing to protect equipment and maintain process integrity.

Available in tri-clamp connections, these valves integrate seamlessly into hygienic systems. Ideal for food and beverage, liquid cooling and other industrial applications. These valves deliver dependable performance with minimal maintenance.

### Features

- Hygienic design compliant with 3-A standards
- 32 Ra internal surface finish to reduce contamination risk
- Spring-loaded poppet design to ensure reliable sealing with rapid closure
- Compact, lightweight design

### Standards and Specifications

- Designed and manufactured in accordance with GB/T 21387
- Inspected and tested in accordance with API 598
- End connections in accordance with 3-A standard

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.



W5400

Call customer service if you need assistance with technical details.

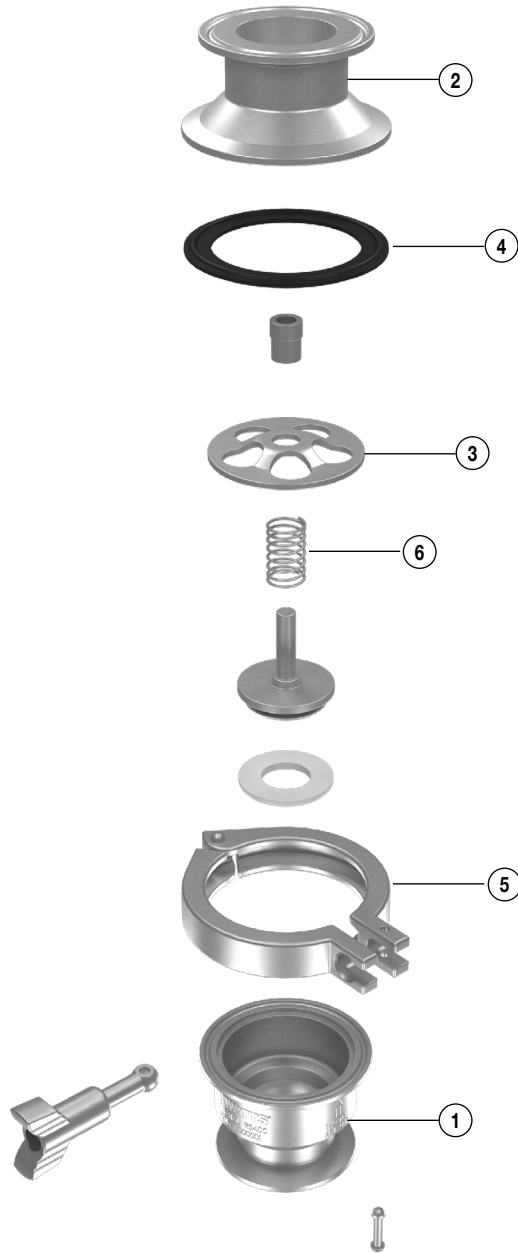
| PRESSURE/TEMPERATURE - NON-SHOCK |            |         |          |                  |                          |
|----------------------------------|------------|---------|----------|------------------|--------------------------|
| MODEL                            | CONNECTION | SIZE    | MATERIAL | PRESSURE         | TEMPERATURE              |
| W5400                            | Tri-Clamp  | 1" - 4" | 316L SS  | 145 psi (10 bar) | -4 - 275°F (-20 - 135°C) |

### Flow

| SIZE | Cv  | Kv  |
|------|-----|-----|
| 1"   | 13  | 11  |
| 1 ¼" | 16  | 14  |
| 1 ½" | 30  | 26  |
| 2"   | 55  | 48  |
| 2 ½" | 71  | 61  |
| 3"   | 100 | 87  |
| 4"   | 133 | 115 |

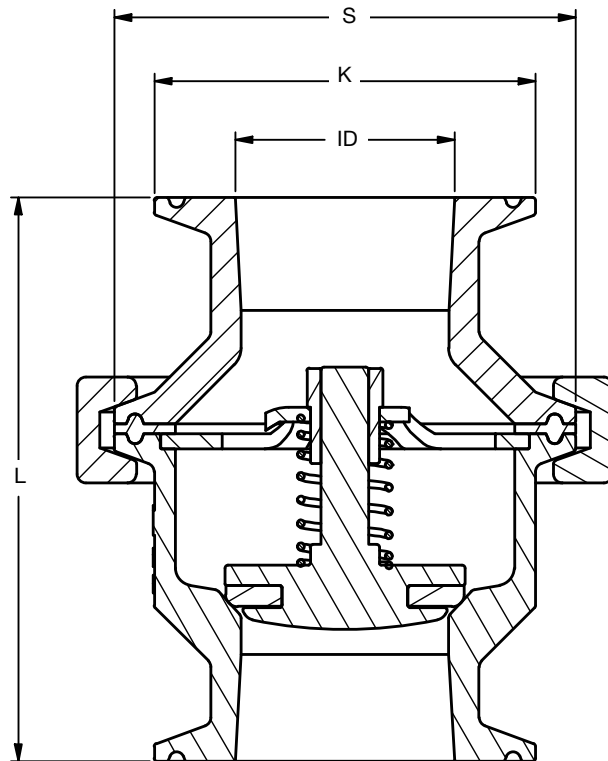
## Materials

| ITEM | NAME       | MATERIAL             |
|------|------------|----------------------|
| 1    | Valve Body | 316L Stainless Steel |
| 2    | Valve Cap  | 316L Stainless Steel |
| 3    | Faceplate  | 316L Stainless Steel |
| 4    | Body Seal  | EPDM                 |
| 5    | Tri-Clamp  | ASTM 351 Gr. CF8     |
| 6    | Spring     | 316L Stainless Steel |



\* See [Watts.com](http://Watts.com) for available repair kits.

## Dimensions



| MODEL | SIZE       |            | ID        | K          |           | S          |           | L          |           | WEIGHT      |            |
|-------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|-------------|------------|
|       | <i>in.</i> | <i>in.</i> | <i>mm</i> | <i>in.</i> | <i>mm</i> | <i>in.</i> | <i>mm</i> | <i>in.</i> | <i>mm</i> | <i>lbs.</i> | <i>kgs</i> |
| W5400 | 1"         | 7/8"       | 22        | 2"         | 51        | 2 1/2"     | 64        | 3 7/16"    | 88        | 1.98        | 0.9        |
|       | 1 1/4"     | 1 1/8"     | 29        | 2"         | 51        | 2 1/2"     | 64        | 3 7/16"    | 88        | 2.20        | 1.0        |
|       | 1 1/2"     | 1 3/8"     | 35        | 2"         | 51        | 3 1/16"    | 77.5      | 3 3/4"     | 95        | 2.42        | 1.1        |
|       | 2"         | 1 7/8"     | 48        | 2 1/2"     | 64        | 3 9/16"    | 91        | 4 1/8"     | 105       | 3.30        | 1.5        |
|       | 2 1/2"     | 2 3/8"     | 60        | 3 1/16"    | 78        | 4 3/16"    | 106       | 4 9/16"    | 116       | 4.18        | 1.9        |
|       | 3"         | 2 7/8"     | 73        | 3 9/16"    | 91        | 4 11/16"   | 119       | 4 13/16"   | 123       | 5.51        | 2.5        |
|       | 4"         | 3 13/16"   | 97        | 4 11/16"   | 119       | 5 11/16"   | 145       | 4 13/16"   | 123       | 7.71        | 3.5        |

