

## For Non-Health Hazard Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Watts No. SD-3 Backflow Preventer for Carbonated Beverage Machines

Sizes: 1/4", 3/8" (8, 10mm)

Series SD3 is a dual check with atmospheric port designed for the protection of the water supply from carbon dioxide gas and carbonated water. These substances can flow from post-mix beverage systems and are very acidic. If the acidic water comes in contact with copper tubing or copper pipe, it will cause the leaching of copper salts into the water supply. The dissolved copper if ingested can cause nausea, abdominal pain, and in some cases vomiting. The SD3 prevents the reverse flow of potentially contaminated water into the potable water supply due to back pressure backflow and is used for continuous or intermittent pressure conditions. The SD3 atmospheric vent provides a visual indication of failure in the event that the downstream check fails and system backpressure exceeds the supply pressure.

The Watts SD3 is recommended for use on Post-Mix Carbonated Beverage Equipment and dispensing equipment for tea and coffee.

### Features

- Certified to ANSI/NSF Standard 18, Manual Food and Beverage Dispensing Equipment
- ASSE 1022 Approved Dual Check with Atmospheric Vent
- 316 stainless steel body for corrosion resistance
- All rubber compounds comply with FDA food additive regulations
- Streamlined body design minimizes pressure loss and cavitation
- A wide variety of custom end connections are available
- Endurance tested for more than 500,000 pumping cycle
- Atmospheric port provides visual indication of failure of the second check
- Wye pattern strainer model for water supply installations

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



### Available Models

- 1/4" (8mm) SD3-MN: Male NPT
- 3/8" (10mm) SD3-MN: Male NPT
- 1/4" (8mm) SD3-FN: Female NPT
- 3/8" (10mm) SD3-FN: Female NPT
- 1/4" (8mm) SD3-MF: SAE Male Flare
- 3/8" (10mm) SD3-MF: SAE Male Flare
- 3/8" (10mm) SD3-MF-LS: SAE Male Flare, less strainer

**Note:** The above connections are available as outlet connections only. Strainer inlet connection is always Female NPT.

### Specifications

Backflow preventer body and adapters are of 316 stainless steel construction and all rubber components comply with FDA food additive regulations. All materials in contact with the potable water are in compliance with the requirements of the Safe Drinking Water Act, Public Law 93-523, National Interim Primary Drinking Water Regulations. Strainer manufactured from NSF approved acetal plastic.

### 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.

# Standards

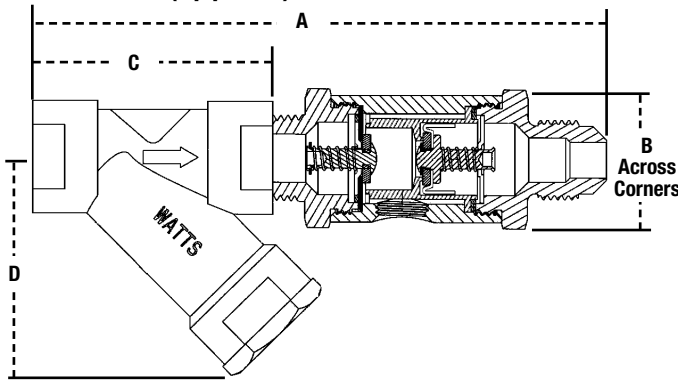
ASSE 1022

**Installation:** The valve can be installed horizontally or vertically (flow up or flow down). The valve should be installed so that the strainer and the valve are accessible for service and maintenance. In the event the second check valve becomes fouled, the vent port opens to atmosphere and water and CO2 Gas is discharged. Connect a vent discharge line to the vent outlet of the SD3 and vent to a safe place of disposal with adequate ventilation in order to prevent personal injury or damage. The valve should be installed such that water discharge from the vent will not cause damage to the surrounding equipment or property.

## NOTICE

The device should not be installed inside a wall or in a concealed location. Copper tubing shall not be used on the downstream side of the backflow preventer used in carbonated systems. Copper tubing can be used downstream for non carbonated systems such as coffee makers.

## Dimensions (approx.)

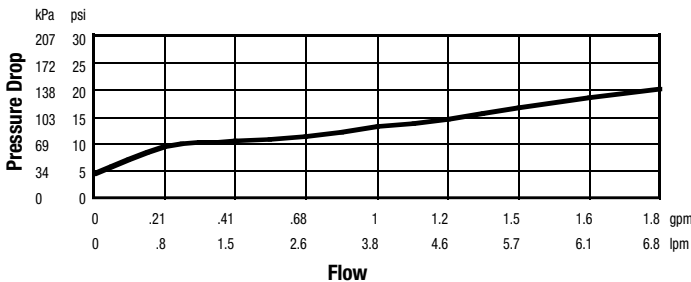


| SIZE (DN) |    | PART # ASSEMBLY | ORDER CODE | DIMENSIONS |     |        |    |       |    |       |    |
|-----------|----|-----------------|------------|------------|-----|--------|----|-------|----|-------|----|
|           |    |                 |            | A          |     | B      |    | C     |    | D     |    |
| in        | mm |                 |            | in.        | mm  | in     | mm | in    | mm | in    | mm |
| 1/4"      | 8  | SD3-MN          | 0061652    | 4 1/2      | 114 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 1/4"      | 8  | SD3-MF          | 0061653    | 4 3/8      | 111 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 3/8"      | 10 | SD3-MN          | 0061656    | 4 1/2      | 114 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 3/8"      | 10 | SD3-MF          | 0061657    | 4 1/2      | 114 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 1/4"      | 8  | SD3-FN          | 0061666    | 4 1/2      | 114 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 3/8"      | 10 | SD3-FN          | 0061667    | 4 1/2      | 114 | 1 1/16 | 27 | 1 7/8 | 48 | 1 3/4 | 44 |
| 1 3/8"    | 10 | SD3-MF-LS       | 0061671    | 2 5/8      | 67  | 1 1/16 | 27 | —     | —  | —     | —  |

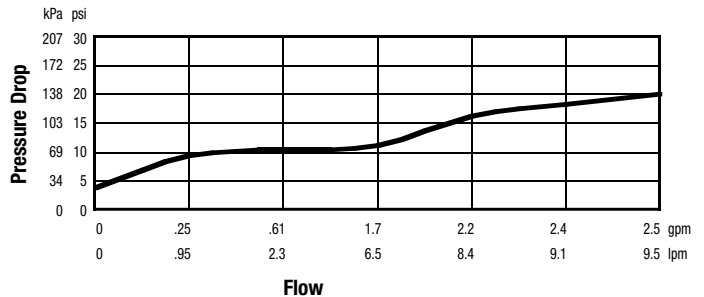
\*For use on post pumping installations only.

## Capacity

### 1/4" (8mm) SD-3



### 3/8" (10mm) SD-3



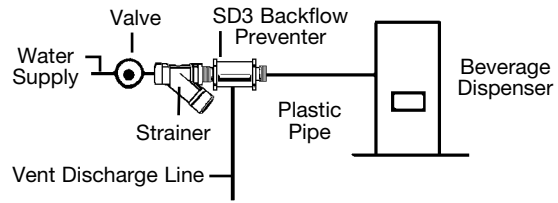
## Pressure/Temperature

Max. Pressure: 150psi (10 bar)

Max. Temperature: 130°F (54°C)

## Typical Installations

### Water Supply Installations



### Post Pumping Installations

