

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 3000B

## Double Check Detector Backflow Prevention Assembly

### Sizes: 2"

Series 3000B Double Check Detector Assembly are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority regulations for non-potable service applications such irrigation, fire line, or industrial processing. The Series 3000B is ideal for use on non-health hazard fire protection systems to detect leaks or unauthorized water usage.

Modular check design concept facilitates maintenance and assembly access. All sizes are standardly equipped with resilient seated OSY shutoff valves and  $\frac{5}{8}$ " x  $\frac{3}{4}$ " meter.

### Features

#### Main Valve:

- Gear Operated Ball Valve Shutoffs with Pre-Wired Tamper Switches (2, FP option only)
- Compact Design for Ease of Installation
- Inline Serviceable Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Loaded Checks
- Field Replaceable Seats & Discs
- Field Replaceable Auxiliary Bypass Line & Components Auxiliary Bypass:
- Compact Bypass Design; Remains within Main Valve Assembly Profile
- Inline Serviceable  $\frac{1}{2}$ " Backflow Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Loaded Checks
- Field Replaceable Seats & Discs
- Detect Potential Underground Water Leaks
- Detect Unauthorized Water Usage

### 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.

### NOTICE

Inquire with governing authorities for local installation requirements

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.



3000BM1-FP-GPM

3000BM1-FP-GPM-GV

### Specifications

The Series 3000B consist of a main line valve body composed of two (2) independently acting approved poppet-type check modules with replaceable seats and disc rubbers. Servicing of both check modules do not require any special tools and are accessed via a single top entry cover. The device can be fitted with either approved UL Listed OS&Y Gates or Slow-Turn Gear Operated Ball Valve Assemblies and contains properly located resilient seated test cocks along the main valve body.

The auxiliary bypass line contains a  $\frac{5}{8}$ " x  $\frac{3}{4}$ " Water Meter that complies with ANSI/AWWA Standard C700 coupled with an approved double check assembly (DC). The bypass line is design to detect leaks or unauthorized water usage of the fire system while protecting against possible backpressure and backsiphon-age conditions for non-health hazard (i.e., pollutant) application.

### Typical Installation

The Series 3000B is typically installed for service on commercial fire sprinkler systems. It is recommended this device is installed after a water meter and/or main line isolation shutoff valve with installation techniques that comply with the latest edition of the Uniform Plumbing Code. Please consult Local Governing Code for proper installation and agency code requirement.

This Engineering Sheet is not intended to replace the product installation and safety information available or the experience of a trained product installer. Please refer to the product installation and safety instructions for further information.

### WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.



## Approvals – Standards

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
- ASSE 1048 Listed
- UL Classified (US & Canada)
- IAPMO/cUPC
- AWWA Standard C510 Compliant
- CSA B64.5
- NFPA 13, 14, 15, 16, 20, 22 & 24 Compliant
- End Connections Gear-Operated Ball Valves – National Pipe Thread Taper ANSI/ASME B1.20.1
- End Connections OS&Y Gate Valves – Compliant to ASME B16.1 Class 125 & AWWA Class D Flange



## Assembly Flow Orientation

Horizontal - Approved by FCCCHR-USC, ASSE, UL, FM, IAPMO/cUPC

Vertical Up - Approved by FCCCHR-USC, ASSE, UL, FM, IAPMO/cUPC

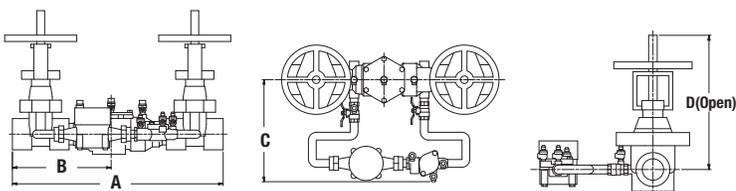
## Material Specifications

Body: Cast Bronze ASTM B584  
 Elastomers: Silicone  
 O-Rings: EPDM  
 Check Modules: Engineered Plastics

## Pressure Specifications

Max. Working Pressure: 175 psi  
 Min. Working Pressure: 10 psi  
 Hydrostatic Test Pressure: 350 psi  
 Hydrostatic Safety Pressure Rating: 700 psi

## Dimensions – Weights



MODEL	SIZE	DIMENSIONS						WEIGHT					
		FNPT		GROOVED		B		C		D		Lbs	Kg
	In	IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM		
3000BM1-OSY	2	22 <sup>3</sup> / <sub>8</sub>	575	N/A	N/A	10 <sup>9</sup> / <sub>16</sub>	268	11 <sup>13</sup> / <sub>16</sub>	300	13 <sup>1</sup> / <sub>2</sub>	343	85	38.6
3000BM1-FP	2	19 <sup>1</sup> / <sub>8</sub>	486	19 <sup>3</sup> / <sub>8</sub>	500	8 <sup>7</sup> / <sub>8</sub>	225	11 <sup>13</sup> / <sub>16</sub>	300	4 <sup>1</sup> / <sub>4</sub>	108	35	15.8



**A WATTS Brand**

## Temperature Specifications

Continuous Operating Range: 33°F-110°F (0.5°C-43°C)  
 Intermittent Operating Range up to 140°F (60°C) Must not exceed 12 hour duration

## Configurable Options (Prefix – Suffix)

### Suffix

- OSY UL/FM Approved OS&Y Gate Valves (ANSI/AWWA C515 Compliant)
- FP UL Approved Gear Operated Ball Valves
- CFM Cubic Feet per Minute 5/8" x 3/4" Water Meter (ANSI/AWWA C700 Compliant)
- GPM Gallon per Minute 5/8" x 3/4" Water Meter (ANSI/AWWA C700 Compliant)
- LF Less Shutoff valves; This is NOT an APPROVED ASSEMBLY
- LM No Water Meter Installed in Auxiliary Bypass Line
- GV Grooved End Connections

## Example Ordering Descriptions

2" 3000BM1-OSY-GPM - Fitted with OS&Y Shutoff & Gallon per Minute Water Meter

2" 3000BM1-FP-CFM - Fitted with Gear Operated Shutoff & Cubic Feet per Minute Water Meter

## Friction Loss

Friction loss chart identifies valve performance based upon rated water Velocity up to 20fps

- Maximum service flow rate is determined by maximum rated Velocity of 7.5fps.
- AWWA Manual M-22 (Appendix C) recommends that the maximum water Velocity in the services be not more than 10fps.
- UL flow rate is determined by typically rated Velocity of 15 fps.

