



Series 3000BM1

Residential Fire Sprinkler Double Check Detector Backflow Prevention Assembly

Sizes: 2" (50mm)



3000BM1-FP-GPM



3000BM1-OSY-GPM

Features

Main Valve:

- Gear Operated Ball Valve Shutoffs with Pre-Wired Tamper Switches (2)
- 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 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

⚠ 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.

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 as 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 5/8" x 3/4" (16 x 19mm) meter.

Typical Installation

The Series 3000BM1 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.

Specifications

The Series 3000BM1 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 5/8" x 3/4" (16 x 19mm) 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 backsiphonage conditions for non-health hazard (i.e., pollutant) application.

NOTICE

Inquire with governing authorities for local installation requirements

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

Ames product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Technical Service. Ames 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 products previously or subsequently sold.

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)
- FM Approved
- 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

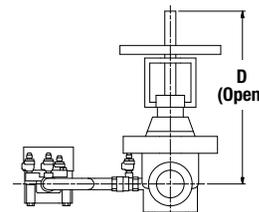
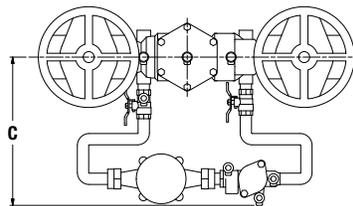
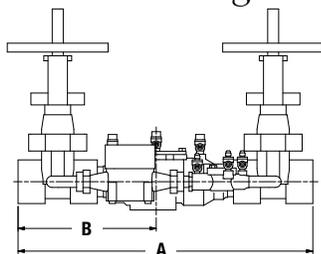
Pressure Specifications

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

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

Dimensions — Weights



MODEL	SIZE (DN)		DIMENSIONS								WEIGHT	
	in.	mm	A		B		C		D		lbs.	kgs.
3000BM1-OSY	2	50	22 ⁵ / ₈	575	10 ⁹ / ₁₆	268	11 ¹³ / ₁₆	300	13 ¹ / ₂	343	85	38.6
3000BM1-FP	2	50	18 ⁷ / ₈	479	8 ⁷ / ₈	225	11 ¹³ / ₁₆	300	4 ¹ / ₄	108	35	15.8

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 Shut-off valves; This is NOT an APPROVED ASSEMBLY
- LM: No Water Meter Installed in Auxiliary Bypass Line

Example Ordering Descriptions

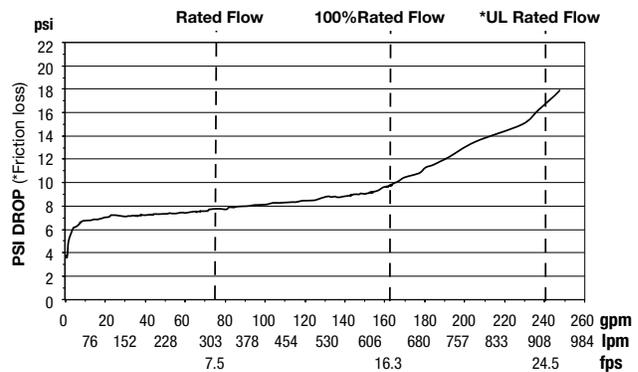
2" 3000BM1-OSY-GPM - Fitted with OS&Y Shutoff & Gallon per Minute Water Meter

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.



A Watts Water Technologies Company

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