

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Model 007M1DCDA

Residential Fire Sprinkler

Double Check Detector Backflow Prevention Assembly

Sizes: 2"

The Model 007M1DCDA Double Check Detector Assembly is specifically designed to protect against possible backpressure and backsiphonage conditions for non-health hazard (i.e., pollutant) application in accordance with Local Governing Water Utility Code. This assembly is primarily used on commercial fire sprinkler systems where Local Governing Code mandates protection from non-potable quality water being pumped or siphoned back into the potable water system.

Typical Installation

The Model 007M1DCDA 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 shut-off 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.

Features

Main Valve

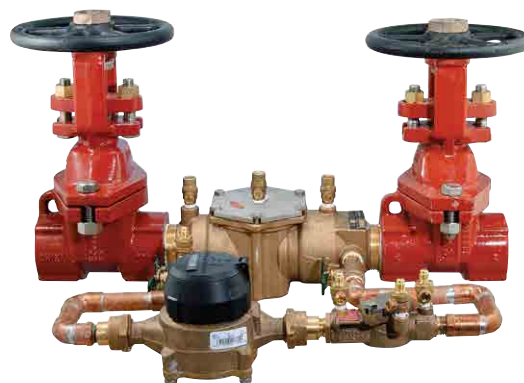
- Compact Design for Ease of Installation
- Inline Serviceable Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Loaded Checks
- Field Replaceable Seats & Discs
- Field Replaceable Auxiliary Bypass Line & Components

Auxiliary Bypass

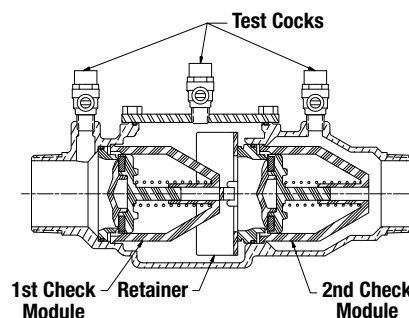
- Compact Bypass Design; Remains within Main Valve Assembly Profile
- Inline Serviceable 1/2" Backflow Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Loaded Checks
- Field Replaceable Seats & Discs
- Detect Potential Underground Water Leaks
- Detect Unauthorized Water Usage

NOTICE

Inquire with governing authorities for local installation requirements.



2" 007M1DCDA-OSY-GPM



Product Specifications

The Model 007M1DCDA consists 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. This device is fitted with approved UL Listed OS&Y Gate 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 water system while protecting against possible backpressure and backsiphonage conditions for non-health hazard (i.e., pollutant) application.

Now Available WattsBox Insulated Enclosures.

For more information, refer to literature ES-WB.

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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts 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 Watts 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

NFPA 13, 14, 15, 16, 20, 22 & 24 Compliant

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

Materials

Body: Cast Bronze ASTM B584

Elastomers: Silicone

O-Rings: EPDM

Check Modules: Engineered Plastics

Pressure Specification

Max. Working Pressure: 175psi

Min. Working Pressure: 10psi

Hydrostatic Test Pressure: 350psi

Hydrostatic Safety Pressure Rating: 700psi

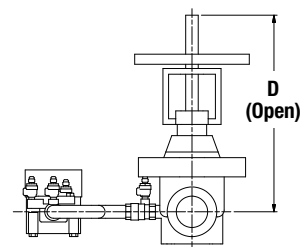
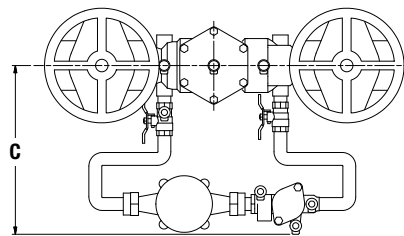
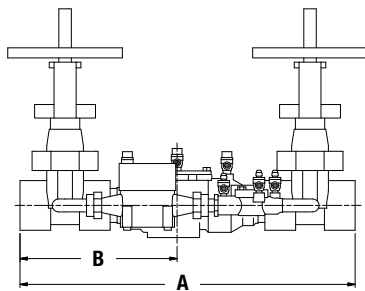
Temperature Specifications

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	DIMENSIONS								WEIGHT	
		A		B		C		D		lbs.	kgs
	in.	in.	mm	in.	mm	in.	mm	in.	mm		
007M1DCDA-OSY	2	22 ⁵ / ₈	575	10 ¹ / ₁₆	268	11 ¹³ / ₁₆	300	13 ¹ / ₂	343	85	38.6

Configurable Options (Prefix – Suffix)

Suffix

OSY	UL/FM Approved OS&Y Gate Valves (ANSI/AWWA C515 Compliant)
CFM	Totalizing Cubic Feet/Minute 5/8" x 3/4" Water Meter (ANSI/AWWA C700 Compliant)
GPM	Totalizing Gallons/Minute 5/8" x 3/4" Water Meter (ANSI/AWWA C700 Compliant)
LF	Less Shutoff valves; This is NOT an APPROVED ASSEMBLY

Example Ordering Descriptions

2" 007M1DCDA-OSY-GPM - Valve Fitted with OS&Y Shutoff & Gallon per Minute Water Meter

2" 007M1DCDA-LF-CFM – Non-Approved Device with Cubic Feet per Minute Water Meter & No Shutoff Valves

Performance

Flow capacity 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.

