

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series 007DCDA

Double Check Detector Assembly

2½" – 3"

Series 007DCDA Double Check Detector assembly is designed exclusively for use in accordance with water utility authority on non-health hazard containment requirements. This type of assembly is mandatory to prevent the reverse flow of fire protection system substances, such as glycerin wetting agents, stagnant water, and water of non-potable quality from being pumped or siphoned into the potable water line.

This series is able to detect leaks with emphasis on the cost of unaccountable water as well as incorporate a meter that allows the water utility to both detect underground leaks that historically create great annual cost due to waste and provide a detection point for unauthorized use. It can help locate illegal taps.

The iron components of the backflow preventer are coated with ArmorTek®, a patented three-part advanced epoxy system engineered to reduce microbial-induced corrosion (MIC) and protect exposed metal substrate. 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" meter.

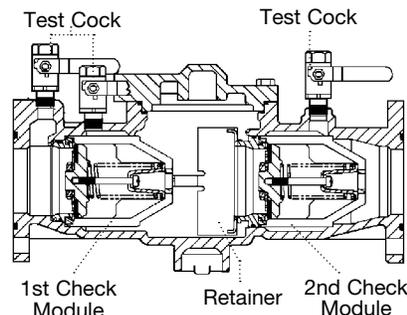
Features

- Fused epoxy coated cast iron unibody
- Replaceable seats
- Maximum flow at low pressure drop
- Compact for ease of installation
- Design simplicity for easy maintenance
- No special tools required for servicing
- Bronze body ball valve test cocks
- ArmorTek® coating technology to resist corrosion of internals
- Modular spring loaded checks
- Furnished with bronze 5/8" x 3/4" meter

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.

Inquire with governing authorities for local installation requirements.



Specification

A Double Check Detector assembly shall be installed on fire protection systems when connected to a potable water supply. Degree of hazard present is determined by the local authority having jurisdiction. The backflow preventer shall be a complete assembly including UL Classified resilient seated OSY shutoff valves and four test cocks. The test cocks shall be mounted at the top of the valve to reduce clearance problems and to assist in the evacuation of air from the assembly. The assembly shall consist of two independently operating modular poppet-type check valves. The check valves shall utilize captured springs and shall have replaceable seats. The checks shall be double-guided, both along the outside edge of the check module and through the center stem assembly.

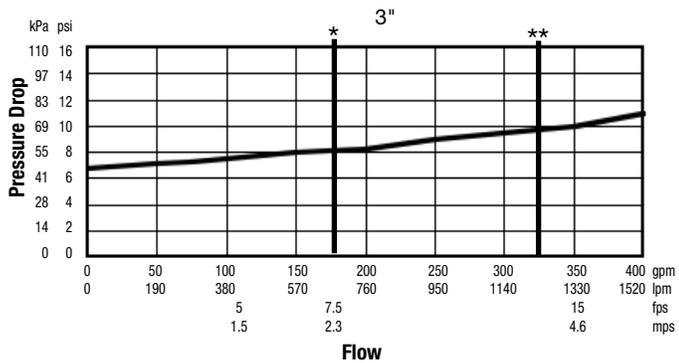
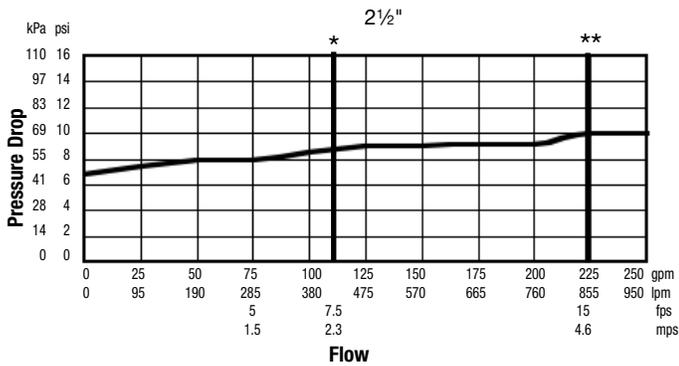
The seats shall be replaceable without the use of special tools. Seat retention shall be done by the use of an interlocking bayonet-style cage and the use of threaded seats or seat screws is prohibited. Access to the internal check assemblies shall be through a single top entry cover. The cover shall be securely held in place by stainless steel bolts. Where applicable, the unit shall be assembled with FM Approved OSY resilient seated shutoff valves. The assembly shall include an auxiliary bypass line consisting of an approved backflow preventer and water meter.

The assembly shall be listed or approved under the requirements of ASSE Std. 1048, AWWA Std. C510-92 and CSA B64.5. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Iron components of the backflow preventer shall incorporate ArmorTek coating technology, delivering integrated protection against electrochemical corrosion and microbial-induced corrosion. The assembly shall be Watts Series 007DCDA.

Capacity

*Typical maximum system flow rate (7.5 ft/s)

**UL rated flow



Model/Option

CFM – cubic feet per minute meter

GPM – gallons per minute meter

Materials

Body: 2 1/2" & 3" epoxy coated cast iron
 Coating: ArmorTek powder coating, applied to internal and external surfaces
 Seats: Bronze or stainless steel
 Discs: Silicone
 Springs: Stainless steel
 Meter: Bronze 5/8" x 3/4"

Pressure – Temperature

Temperature Range: 33° F – 110° F (0.5° C – 43° C) continuous, 140° F (60° C) intermittent.

Maximum Working Pressure: 175 psi (12.1 bar)

Standards

AWWA Standard C510

CSA B64.5

IAPMO PS 31

Approvals



1048



(OSY only)

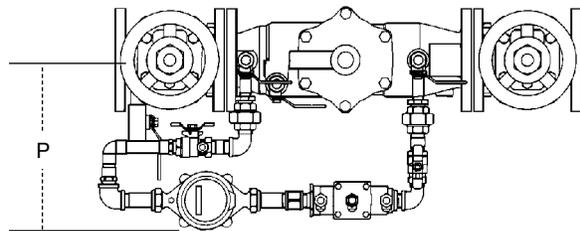
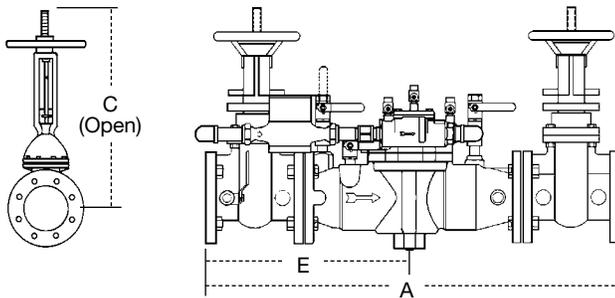
Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

- 2 1/2" 007DCDA horizontal or vertical upward flow position
- 3" 007DCDA horizontal only

Insulated Enclosure

The WattsBox insulated enclosure is available for Series 007DCDA. For more information download ES-WB at Watts.com.

Dimensions – Weights



SIZE	DIMENSIONS								WEIGHT	
	A		C		E		P		lb	kg
2 1/2	in.	mm	in.	mm	in.	mm	in.	mm		
	33 1/4	845	16 3/8	416	16 3/8	416	12 9/16	313	164	74
3	in.	mm	in.	mm	in.	mm	in.	mm	196	89
	34 1/4	870	18 7/8	479	16 5/8	422	12 5/16	313		

