

## For Non-Health Hazard Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series 709DCDA

## Double Check Detector Assemblies

Sizes: 3" – 10" (80 – 250mm)

Series 709DCDA Double Check Detector Assemblies are designed exclusively for use in accordance with water authority containment requirements. It is mandatory to prevent the reverse flow of fire protection system substances, i.e. glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water line.

**Benefits:** Detects leaks . . . with emphasis on the cost of unaccountable water; incorporates a meter which allows the water utility to:

- detect leaks underground that historically create great annual cost due to waste.
- provide a detection point for unauthorized use. It can help locate illegal taps.

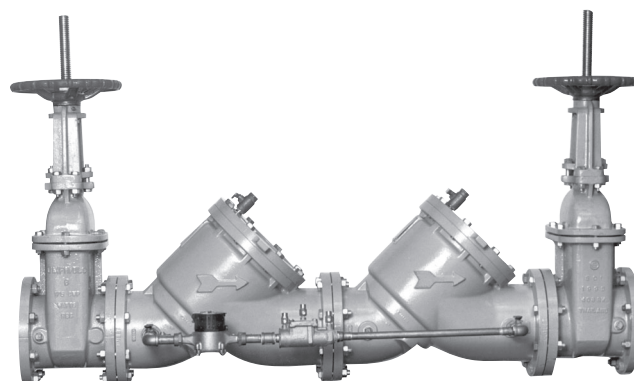
Modular check design concept facilitates maintenance and assembly access. All sizes are standardly equipped with resilient seated OSY shutoff valves,  $\frac{5}{8}$ " x  $\frac{3}{4}$ " (16 x 19mm) meter and ball type test cocks.

### Features

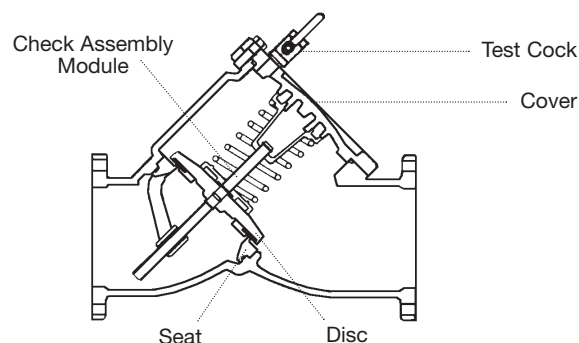
- Body construction fused epoxy coated cast iron
- Replaceable bronze seats
- Maximum flow at low pressure drop
- Compact for economy combined with performance
- Design simplicity for easy maintenance
- Furnished with  $\frac{5}{8}$ " x  $\frac{3}{4}$ " (16 x 19mm) bronze meter
- No special tools required for servicing

### Specifications

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 unit shall be a complete assembly including UL listed resilient seated OSY shutoff valves and test cocks. The unit shall be UL/FM approved with UL/FM approved OSY shutoff valves. The auxiliary line shall consist of an approved backflow preventer and water meter. The assembly shall meet the basic requirements of ASSE 1048; AWWA Std. C510 for Double Check Valves. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Assembly shall be a Watts Regulator Company Series 709DCDA.



709DCDAOSY



### Check Assembly Module

Features a modular design concept which facilitates complete maintenance and assembly by retaining the spring load.

First and second check valve spring modules are not interchangeable.

### Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

**IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES  
FOR LOCAL INSTALLATION REQUIREMENTS**

## Materials

Body:	Epoxy coated cast iron
Seat:	Bronze
Disc Holder:	Bronze
Trim:	Stainless steel
Check Valve Discs:	Rubber
Test Cocks:	Bronze

## Models

### Suffix:

OSY - UL/FM outside stem and yoke resilient seated gate valves

CFM - cubic feet per minute meter

GPM - gallons per minute meter

LF - 4" - 10" (100 - 250mm) without shutoff valves

## Dimensions – Weights

## Pressure – Temperature

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

Maximum Working Pressure: 175psi (12.1bar)

## Standards

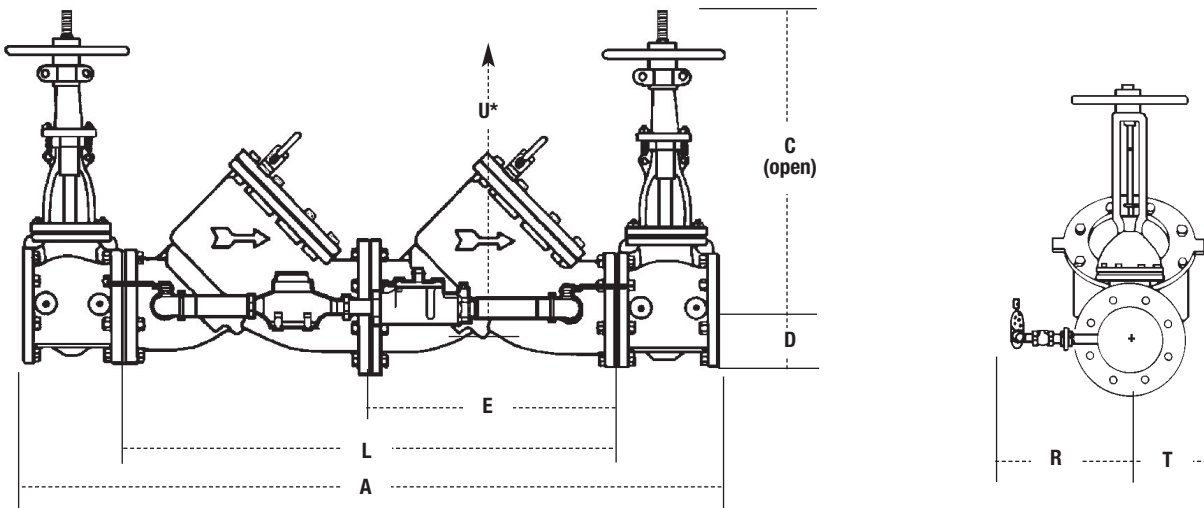
AWWA Standard C510

## Approvals



Approved by the foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Sizes 4" - 10" (100 - 250mm) approved for horizontal and vertical "flow up". Size 3" (76mm) approved for horizontal only.

Factory Mutual approved 4" - 10" (100-250mm) vertical "flow up".



SIZE (DN)		DIMENSIONS										WEIGHT							
<i>in.</i>	<i>mm</i>	<i>A</i>		<i>C</i>		<i>D</i>		<i>E</i>		<i>L</i>		<i>R</i>		<i>T</i>		<i>U*</i>		<i>W/OSY† gates</i>	
		<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>lbs.</i>	<i>kgs.</i>
3	80	40	1016	18 <sup>7</sup> / <sub>8</sub>	479	3 <sup>1</sup> / <sub>2</sub>	89	12	305	24	610	14	356	3	76	14	356	190	86
4	100	52	1321	22 <sup>3</sup> / <sub>4</sub>	578	3 <sup>3</sup> / <sub>4</sub>	95	17	432	34	864	15	381	6	152	14	356	403	183
6	150	62 <sup>1</sup> / <sub>2</sub>	1588	30 <sup>1</sup> / <sub>8</sub>	765	4 <sup>1</sup> / <sub>2</sub>	114	21	533	41 <sup>1</sup> / <sub>2</sub>	1054	16	406	7 <sup>1</sup> / <sub>2</sub>	191	16	406	727	330
8	200	75	1905	37 <sup>3</sup> / <sub>4</sub>	959	5 <sup>1</sup> / <sub>2</sub>	140	26	660	52	1321	17	432	9	229	21	533	1327	602
10	250	90	2286	45 <sup>3</sup> / <sub>4</sub>	1162	6 <sup>1</sup> / <sub>2</sub>	165	32	813	64	1626	18	457	10 <sup>1</sup> / <sub>4</sub>	260	25	635	2093	949

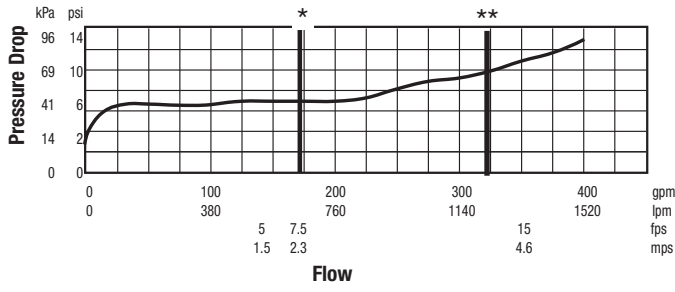
\* Service clearance for check assembly from center.

†UL/FM approved backflow preventers must include UL/FM approved OSY.

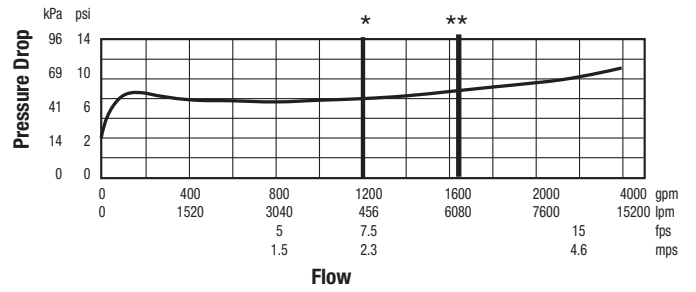
# Capacity

\*Typical maximum system flow rate (7.5 ft./Sec.) \*\*UL rated flow

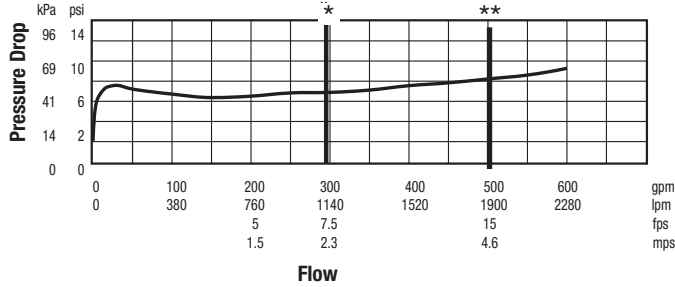
### 3" (80mm)



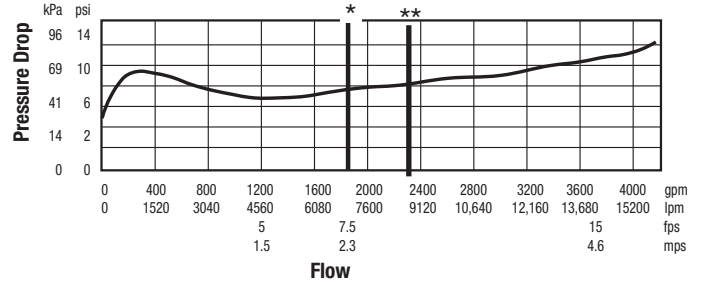
### 8" (200mm)



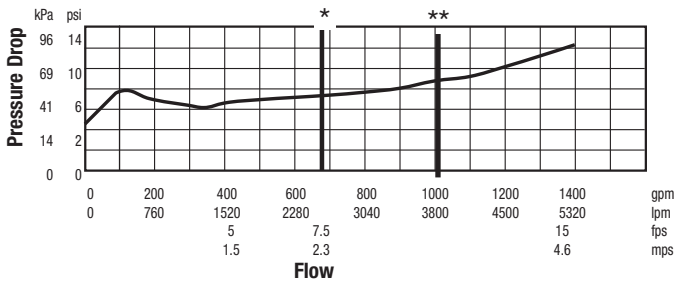
### 4" (100mm)



### 10" (250mm)



### 6" (150mm)



For additional information, visit our web site at: [www.watts.com](http://www.watts.com)



A Watts Water Technologies Company

ES-709DCDA 0638



**USA:** 815 Chestnut St., No. Andover, MA 01845-6098; [www.watts.com](http://www.watts.com)  
**Canada:** 5435 North Service Rd., Burlington, ONT. L7L 5H7; [www.wattscanada.ca](http://www.wattscanada.ca)

© 2009 Watts