### For Non-Health Hazard Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

# Series 774DCDA Double Check Detector Assemblies

### Sizes 21/2" - 12" (65 - 300mm)

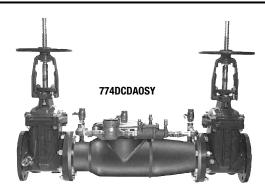
Series 774DCDA Double Check Detector Assemblies are designed for use in accordance with water utility non-health hazard containment requirements. It is mandatory to prevent the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water supply.

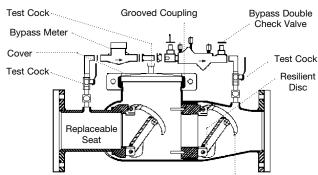
### **Features**

- Torsion spring check valve provides low head loss
- Short lav length is ideally suited for retrofit installations
- Stainless steel body is half the weight of competitive designs reducing installation and shipping cost
- Stainless steel construction provides long term corrosion protection and maximum strength
- Single top access cover with two-bolt grooved style coupling for ease of maintenance
- Thermoplastic and stainless steel check valves for trouble-free operation
- No special tools required for servicing
- Compact construction allows for smaller vaults and enclosures
- Furnished with \( \frac{5}{8}\)" x \( \frac{3}{4}\)" (16x19mm) bronze meter (gpm or cfm)
- Detects underground leaks and unauthorized water use
- May be installed horizontal or vertical "flow up" position

### **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 assembly shall consist of two positive seating check valves located between two resilient seated shutoffs with a hydraulically balanced bypass line and four test cocks. The main valve body shall be manufactured from 300 Series stainless steel to provide corrosion resistance. The check valves shall be of thermoplastic construction with stainless steel hinge pins, cam arm and cam bearing. The check valves shall utilize a single torsion spring design to minimize pressure drop through the assembly. The check valves shall be modular and shall seal to the main valve body by the use of an O-ring. There shall be no brass or bronze parts used within the check valve assembly. The check valve seats shall be of molded thermoplastic construction. The use of seat screws as a retention method is prohibited. All internal parts shall be accessible through a single cover on the valve assembly. The valve cover shall be held in place through the use of a single grooved style two-bolt coupling. The bypass line shall be hydraulically sized to accurately measure low flow. The bypass line shall consist of a meter, a small diameter double check assembly with test cocks and isolation valves. The bypass line double check valve shall have two independently operating modular poppet check valves, and top mounted test cocks. The assembly shall be a Watts Series 774DCDA.





Laser Cut Polished Cam Arm

### **Available Models**

Suffix:

LF – without shutoff valves

OSY – UL/FM outside stem and yoke resilient seated gate valves \*OSY FxG – flanged inlet gate connection and grooved outlet gate con-

nection

\*OSY GxF - grooved inlet gate connection and flanged outlet gate

connection

\*OSY GxG - grooved inlet gate connection and grooved outlet gate

connection

CFM – cubic feet per minute meter
GPM – gallons per minute meter

Available with grooved NRS gate valves - consult factory\* Post indicator plate and operating nut available - consult factory\*

\*Consult factory for dimensions

## Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.



Inquire with governing authorities for local installation requirements



### **Materials**

All internal metal parts: 300 Series stainless steel, Main valve body: 300 Series stainless steel, Check assembly: Noryl® Flange dimensions in accordance with AWWA Class D.

### Pressure - Temperature

Temperature Range: 33°F - 110°F (0.5°C - 43°C) continuous

Pressure Range: 175psi (12.1 bar)

AWWA C510, CSA B64.5

### **Approvals**

**Standards** 

(2½" - 10" only) (65 - 250mm)

kPa psi

103 15

83 12

62

41

21 3

0

Pressure Drop



300 400 1140 1520

500 1900



6" (150mm)

800 3040 900 3420

1000 1100 3800 4180

1200 4560



1300 1400 1500 gpm 4940 5320 5700 lpm 15 fps 4.6 mps

### Capacity

83 12

69

55

41 28

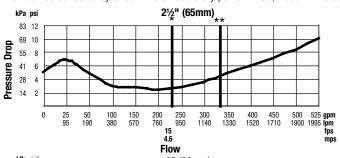
14

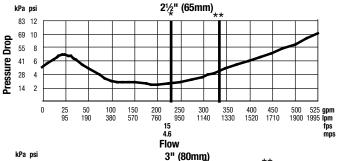
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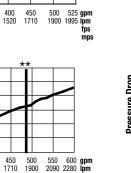
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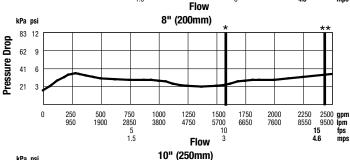
Pressure Drop

Flow curves as tested by Underwriters Laboratory per UL 1469, 1996 \* Rated flow \*\*UL Tested

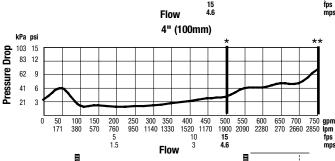




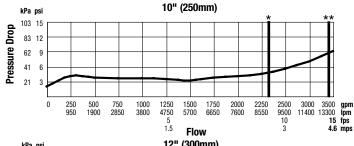


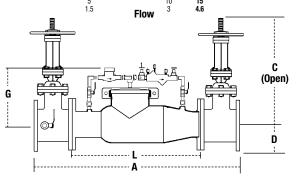


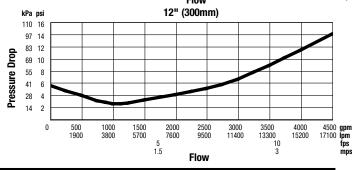
600 700 2280 2660



250 950 300 1140







Noryl® is a registered trademark of SABIC Innovative Plastics™.

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<del>-                                      </del>			Α		C (OSY)		D		G		L		Р		Г	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Ĺ	
	21/2	65	37	940	16%	416	31/2	89	10	250	22	559	121/2	318	Γ	
	3	80	38	965	181/8	479	33/4	95	10	250	22	559	13	330	ĺ	
$\bigcirc$ %	4	100	40	1016	223/4	578	41/2	114	10	250	22	559	141/2	368		
ا /و_ف	6	150	481/2	1232	301//8	765	51/2	140	15	381	<b>27</b> ½	699	15½	394		
Р	8	200	<b>52</b> ½	1334	37¾	959	63/4	171	15	381	291/2	749	181/4	464		
-	10	250	$55\frac{1}{2}$	1410	453/4	1162	8	200	15	381	291/2	749	19½	495	ĺ	
	12	300	571/2	1461	531/8	1349	91/2	241	15	381	291/2	749	21	533		



USA: Tel: (978) 689-6066 • Fax: (978) 975-8350 • Watts.com

Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca

w/Gates

kgs

70

104

109

177

259

351

474

lbs.

155

230

240

390

572

774

1044

w/o Gates

kgs.

31

32

33

54

82

86

100

lbs.

68

70

73

120

180

190

220

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