## For Non-Health Hazard Applications

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

# Series 757DCDA, 757NDCDA Double Check Detector Assemblies

Sizes: 21/2" - 10" (65 - 250mm)

Series 757DCDA, 757NDCDA Double Check Detector Assemblies are used to prevent backflow of non-health hazard pollutants that are objectionable but not toxic, from entering the potable water supply system. The 757DCDA, 757NDCDA may be installed under continuous pressure service and may be subjected to backpressure and backsiphonage. Series 757DCDA, 757NDCDA is used primarily on fire line sprinkler systems when it is necessary to monitor unauthorized use of water.

#### Features

- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) stainless steel housing & sleeve
- · Groove fittings allow integral pipeline adjustment
- Patented tri-link spring check provides lowest pressure loss
- Unmatched ease of serviceability
- Available with grooved butterfly valve shutoffs
- May be used for horizontal, vertical or N pattern installations
- Replaceable check disc rubber

### **Specifications**

The Double Check Detector Assembly shall consist of two independent tri-link check modules within a single housing, sleeve access port, four test cocks and two drip tight shutoff valves. Tri-link checks shall be removable and serviceable, without the use of special tools. The housing shall be constructed of 304 Schedule 40 stainless steel pipe with groove end connections. Tri-link checks shall have reversible elastomer discs and in operation shall produce drip tight closure against reverse flow caused by backpressure or backsiphonage. The bypass assembly shall consist of a meter, which registers in either gallon or cubic measurement, a double check backflow assembly and required test cocks. Assembly shall be a Watts Series 757DCDA, 757NDCDA.



757DCDAOSY



757DCDABFG



757NDCDAOSY

#### 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.



## **Available Models**

Suffix:

- OSY UL/FM outside stem and yoke resilient seated gate valves
- BFG UL/FM grooved gear operated butterfly valves with tamper switch
- \*OSY FxG Flanged inlet gate connection and grooved outlet gate connection
- \*OSY GxF Grooved inlet gate connection and flanged outlet gate connection
- \*OSY GxG Grooved inlet gate connection and grooved outlet gate connection

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

## Dimensions - Weight

Materials

Housing & Sleeve: 304 (Schedule 40) Stainless Steel Elastomers: EPDM, Silicone and Buna-N Tri-link Checks: Noryl<sup>®</sup>, Stainless Steel Check Discs: Reversible Silicone or EPDM Test Cocks: Bronze Body Nickel Plated Pins & Fasteners: 300 Series Stainless Steel Springs: Stainless Steel

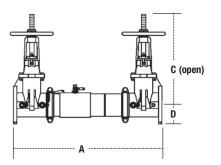
## Pressure - Temperature

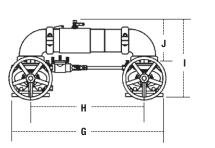
Temperature Range: 33°F – 140°F (0.5°C – 60°C) Maximum Working Pressure: 175psi (12.1 bar)

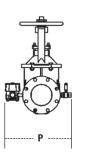
### Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The Unversity of Southern California (FCCCHR-USC)
- AWWA C551-92

1048 B64.5 C (\*\*BFG & OSY Only)

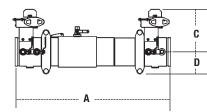


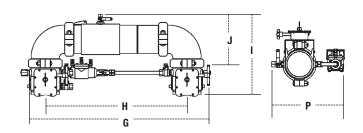




#### 757DCDA, 757NDCDA

SIZ	e (DN)		WEIGHT																		
		A		C (OSY)		D		G		Н		I		J		Р		757DCDA		757N	DCDA
in.	mm	n in. mm		in.	mm	in.	тт	in.	тт	in.	mm	in.	тт	in.	тт	in.	тт	lbs.	kgs.	lbs.	kgs.
<b>2</b> <sup>1</sup> / <sub>2</sub>	65	<b>30</b> <sup>3</sup> ⁄4	781	16¾	416	<b>3</b> <sup>1</sup> / <sub>2</sub>	89	<b>29</b> <sup>1</sup> / <sub>16</sub>	738	<b>21</b> <sup>1</sup> / <sub>2</sub>	546	15½	393	8 <sup>13</sup> ⁄16	223	<b>13</b> <sup>3</sup> ⁄16	335	139	63	147	67
3	80	<b>31</b> <sup>3</sup> ⁄4	806	181/8	479	<b>3</b> <sup>11</sup> / <sub>16</sub>	94	301/4	768	22 <sup>1</sup> /4	565	171/8	435	<b>9</b> <sup>3</sup> ⁄16	233	141/2	368	159	72	172	78
4	100	<b>33</b> ¾	857	223/4	578	4	102	33	838	<b>23</b> ½	597	18½	470	<b>9</b> <sup>15</sup> /16	252	<b>15</b> <sup>3</sup> ⁄16	386	175	79	198	90
6	150	<b>43</b> <sup>1</sup> / <sub>2</sub>	1105	<b>30</b> <sup>1</sup> / <sub>8</sub>	765	5½	140	44 <sup>3</sup> / <sub>4</sub>	1137	33 <sup>1</sup> /4	845	<b>23</b> <sup>3</sup> ⁄16	589	<b>13</b> <sup>1</sup> ⁄16	332	19	483	309	140	350	159
8	200	49¾	1264	37¾	959	<b>6</b> <sup>11</sup> /16	170	54½	1375	40 <sup>1</sup> / <sub>8</sub>	1019	<b>27</b> <sup>7</sup> /16	697	<b>15</b> <sup>11</sup> /16	399	<b>21</b> <sup>3</sup> ⁄16	538	494	224	569	258
10	250	57¾	1467	<b>45</b> ¾	1162	<b>8</b> <sup>3</sup> ⁄16	208	66	1676	<b>49</b> ½	1257	<b>32</b> ½	826	175/16	440	24	610	795	361	965	438





#### 757DCDABFG, 757NDCDABFG

SIZE (DN) DIMENSIONS WEIGHT																					
		A		A C		D		G		Н		1		J		Р		757DCDABFG		757NDCDA BFG	
in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lbs.	kgs.	lbs.	kgs.
<b>2</b> <sup>1</sup> / <sub>2</sub>	65	<b>27</b> <sup>3</sup> ⁄4	705	8	203	<b>3</b> ½	89	297/8	759	<b>21</b> ½	546	<b>14</b> <sup>15</sup> /16	379	8 <sup>13</sup> /16	223	13	330	70	32	78	35
3	80	281/4	718	85/16	211	<b>3</b> <sup>11</sup> / <sub>16</sub>	94	<b>30</b> <sup>11</sup> /16	779	221/4	565	151/16	392	<b>9</b> <sup>3</sup> ⁄16	233	131⁄2	343	68	31	81	37
4	100	29	737	<b>8</b> <sup>15</sup> /16	227	<b>3</b> <sup>11</sup> / <sub>16</sub>	94	<b>31</b> <sup>15</sup> ⁄16	811	<b>23</b> ½	597	16¼	412	<b>9</b> <sup>15</sup> /16	252	14	356	75	34	98	44
6	150	36½	927	10	254	5	127	<b>43</b> <sup>3</sup> ⁄16	1097	33¼	845	<b>19</b> <sup>11</sup> / <sub>16</sub>	500	<b>13</b> <sup>1</sup> ⁄16	332	14½	368	131	59	171	78
8	200	42¾	1086	12¼	311	61/2	165	<b>51</b> <sup>1</sup> ⁄16	1297	401/8	1019	235/16	592	<b>15</b> <sup>11</sup> /16	399	<b>18</b> <sup>3</sup> ⁄16	462	275	125	351	159

Noryl<sup>®</sup> is a registered trademark of General Electric Company.

#### Capacity

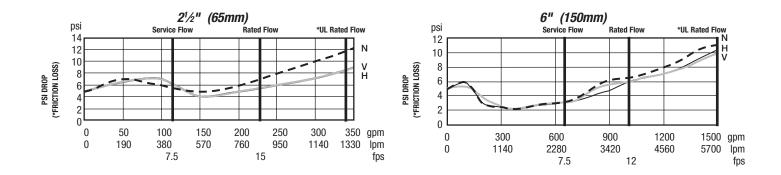
Series 757DCDA, 757NDCDA flow curves as tested by Underwriters Laboratory.

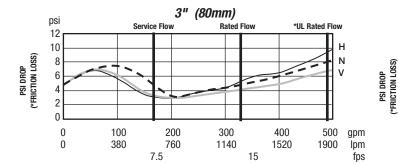
Flow characteristics collected using butterfly shutoff valves

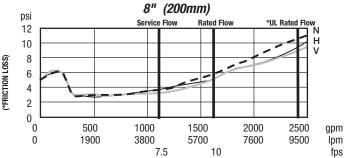
\_\_\_\_\_ Horizontal \_\_\_\_\_ Vertical \_\_\_\_\_ N - Pattern

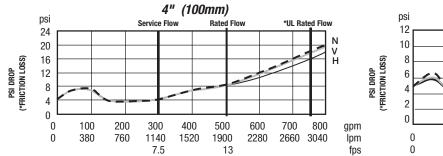
## Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be not more than 10fps.









10" (250mm) Service Flow Rated Flow \*UL Rated Flow Ν Η ν 500 1000 1500 3500 2000 2500 3000 gpm 13300 1900 3800 5700 7600 9500 11400 lpm 7.5 10 fps

NOTICE

Inquire with governing authorities for local installation requirements

#### A 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.

