## **Engineering Specification**

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



## Sizes: 21/2" - 10"

Series 757, 757N Double Check Valve Assemblies are used to prevent backflow of non-health hazard pollutants that are objectionable but not toxic, from entering the potable water supply system. Series 757, 757N may be installed under continuous pressure service and may be subjected to backpressure and backsiphonage. Series 757, 757N consists of two independently operating check valves, two shutoff valves, and four test cocks.

#### 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 check provides lowest pressure loss
- Unmatched ease of serviceability
- Available with grooved butterfly valve shutoffs
- Available for horizontal, vertical or N pattern installations
- Replaceable check disc rubber
- $\bullet$  Sizes 21/2", 3" and 4" available with quarter-turn ball valve shutoffs

## Specifications

The Double Check Valve Assembly shall consist of two independent tri-link check modules within a single housing, sleeve access port, four test cocks and two drip tight shut-off 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. Assembly shall be a Watts Series 757, 757N.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



#### 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:

NRS –	non-rising stem resilient seated gate valves
OSY –	UL/FM outside stem and yoke, resilient seated gate valves
BFG –	UL/FM grooved gear operated butterfly valves with tamper switch
QT –	21/2", 3" and 4" quarter-turn ball valves
**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: Lead Free\* Bronze Body 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 C510-97





SIZE		DIMENSIONS															WEIGHT											
	Α		A C (OSY		C (0SY)		C (NF	RS)	D		G		Н		I		J		Р		757NRS		7570SY		757N	757N NRS		N OSY
in.	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.		
<b>2</b> <sup>1</sup> / <sub>2</sub>	30¾	781	16%	416	<b>9</b> <sup>3</sup> / <sub>8</sub>	238	31/2	89	<b>29</b> <sup>1</sup> /16	738	<b>21</b> ½	546	15½	393	<b>8</b> <sup>13</sup> ⁄16	223	<b>9</b> ¾16	234	115	52	125	57	123	56	133	60		
3	31¾	806	181%	479	101/4	260	311/16	94	301/4	768	221/4	565	171//8	435	<b>9</b> ¾16	233	10½	267	131	59	145	66	144	65	158	72		
4	33¾	857	223⁄4	578	<b>12</b> <sup>3</sup> ⁄16	310	4	102	33	838	231/2	597	18½	470	<b>9</b> <sup>15</sup> / <sub>16</sub>	252	<b>11</b> <sup>3</sup> ⁄16	284	161	73	161	73	184	83	184	83		
6	<b>43</b> ½	1105	301/8	765	16	406	5½	140	44¾	1137	<b>33</b> ½	851	<b>23</b> <sup>3</sup> ⁄16	589	<b>13</b> <sup>1</sup> ⁄16	332	15	381	273	124	295	134	314	142	336	152		
8	<b>49</b> ¾	1264	37¾	959	<b>19</b> <sup>15</sup> ⁄16	506	<b>6</b> <sup>11</sup> /16	170	54½	1375	401/%	1019	<b>27</b> <sup>7</sup> /16	697	<b>15</b> <sup>1</sup> / <sub>16</sub>	399	<b>17</b> <sup>3</sup> ⁄16	437	438	199	480	218	513	233	555	252		
10	57¾	1467	45¾	1162	<b>23</b> <sup>13</sup> ⁄16	605	<b>8</b> ¾16	208	66	1676	<b>49</b> ½	1257	<b>32</b> ½	826	175/16	440	20	508	721	327	781	354	891	404	951	431		





#### 757BFG, 757NBFG

SIZE		DIMENSIONS															WEI	GHT		
	A		С		D		G		Н		I		J		Р		757BFG		7571	I BFG
in.	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lbs.	kgs.
<b>2</b> <sup>1</sup> / <sub>2</sub>	273⁄4	705	8	203	31/2	89	297/8	759	<b>21</b> ½	546	<b>14</b> <sup>15</sup> / <sub>16</sub>	379	<b>8</b> <sup>13</sup> ⁄16	223	9	229	56	25	64	29
3	281/4	718	85/16	211	311/16	94	<b>30</b> <sup>11</sup> / <sub>16</sub>	779	221/4	565	157/16	392	<b>9</b> <sup>3</sup> ⁄16	233	<b>9</b> ½	241	54	24	67	30
4	29	737	<b>8</b> <sup>15</sup> ⁄16	227	311/16	94	<b>31</b> <sup>15</sup> ⁄16	811	231/2	597	16¼	412	<b>9</b> <sup>15</sup> /16	252	10	254	61	28	84	38
6	361/2	927	10	254	5	127	<b>43</b> <sup>3</sup> ⁄16	1097	331/4	845	<b>19</b> <sup>11</sup> /16	500	131/16	332	101/2	267	117	53	157	71
8	423/4	1086	121⁄4	311	6½	165	<b>51</b> <sup>1</sup> ⁄16	1297	401/%	1019	235/16	592	<b>15</b> <sup>11</sup> /16	399	<b>14</b> <sup>3</sup> ⁄16	361	261	118	337	153

Noryl® is a registered trademark of SHPP Global Technologies B.V.

# Dimensions - Weight continued



757QT

SIZE															WEI	GHT									
	A		A C		C		D		G		Н			I		J		Р		P1		QT		QTN	
in.	in.	mm	in.	тт	in.	тт	in.	mm	in.	mm	in.	тт	in.	тт	in.	тт	in.	mm	lbs.	kgs.	lbs.	kgs.			
<b>2</b> <sup>1</sup> / <sub>2</sub>	271/4	692	41/8	124	61/8	175	301/4	768	<b>24</b> <sup>1</sup> / <sub>2</sub>	622	<b>16</b> <sup>1</sup> / <sub>16</sub>	407	113/8	289	115/16	287	115/16	287	40	18	50	23			
3	281/4	718	41/8	124	61/8	175	301/4	768	<b>24</b> <sup>1</sup> / <sub>2</sub>	622	16%16	420	113/8	289	115/16	287	115/16	287	50	23	60	27			
4	<b>31</b> ½	800	41/8	124	61/8	175	301/4	768	<b>24</b> ½	622	<b>18</b> <sup>5</sup> ⁄16	465	11%	289	115/16	287	115/16	287	70	32	80	36			

## Capacity

Series 757, 757N flow curves as tested by Underwriters Laboratory. Flow characteristics collected using butterfly shutoff valves



#### 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.



fps

NOTICE Inquire with governing authorities for local installation requirements

7.5



15

fps