

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series C300, C300N

Double Check Detector Assemblies

2½" – 10"

Series C300 and C300N Double Check Detector assemblies are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for non-potable service applications such as irrigation, fire line, or industrial processing. These assemblies may be installed under continuous pressure service and may be subjected to backpressure for non-toxic applications. The series is used primarily on fire line sprinkler systems when it is necessary to monitor unauthorized use of water, and are for use in non-health hazard applications. The OS&Y model includes an option for an integrated supervisory switch on each gate valve.

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
- May be used for horizontal, vertical or N pattern installations
- Replaceable check disc rubber
- Includes an integrated supervisory switch as an option on each gate valve of the OS&Y model

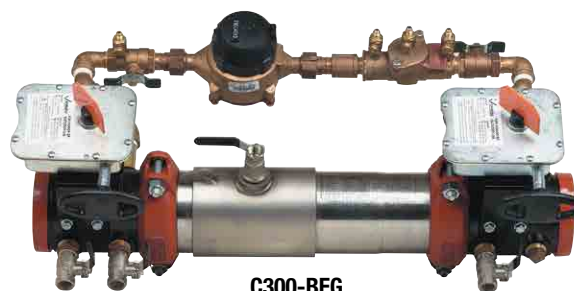
⚠ WARNING

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.

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.



C300-BFG



C300-OSY with supervisory switches

Specification

The Colt C300, C300N Double Check Detector assemblies 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 Check 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 the reverse flow of liquid caused by backpressure or backsiphonage. The bypass assembly shall consist of a meter, which registers in either gallon or cubic measurement, a double check valve assembly, and required test cocks.

The integrated supervisory tamper switch, an option on the OS&Y model, shall have continuity with the valve fully open and activate within two (2) turns from open. The device consists of two SPDT switches and is designed to send a tamper signal when the valve is closed and when the switch is removed from the valve. In the neutral position, the switch indicates the valve is fully open. Closing the valve causes the switch rod to come out of the valve stem groove, activating the switch. Removing the tamper switch also activates the switch. Assembly shall be a Colt C300, C300N as manufactured by Ames Fire & Waterworks.



Configurations

- Horizontal
- Vertical up
- “N” pattern horizontal

Materials

Housing & Sleeve	304 (Schedule 40) stainless steel
Elastomers	EPDM, silicone, and Buna ‘N’
Tri-Link Checks	Noryl®, stainless steel
Check Discs	Reversible silicone or EPDM
Test Cocks	Lead Free* bronze body
Pins & Fasteners	300 Series stainless steel
Springs	Stainless steel

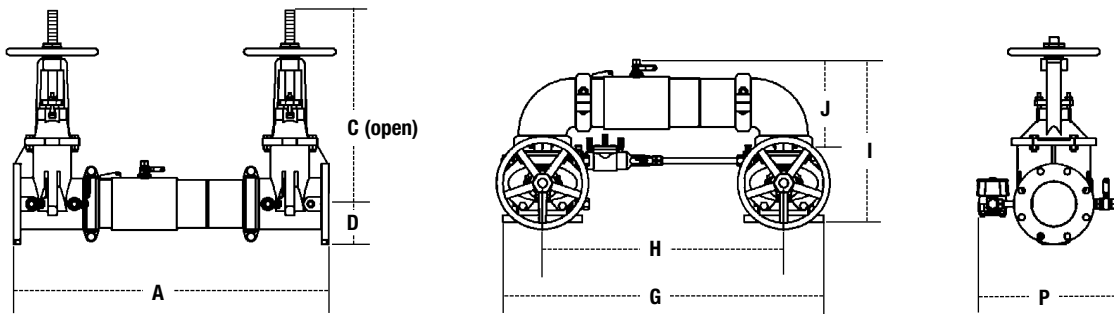
Model/Option

OSY	UL Classified and FM Approved outside stem and yoke resilient seated gate valves
TS-OSY	Integrated supervisory switch (UL Certified, Safety Signaling, Control No. 3L38) on outside stem and yoke resilient seated gate valve
BFG	UL Classified and FM Approved grooved gear operated butterfly valves with tamper switch
OSY FxG**	Flanged inlet gate connection and grooved outlet gate connection
OSY GxG**	Grooved inlet gate connection and flanged outlet gate connection
OSY GxG**	Grooved inlet gate connection and grooved outlet gate connection

Pressure – Temperature

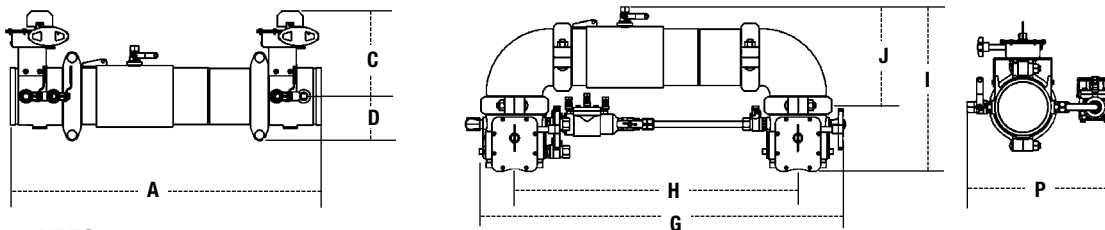
Temperature Range: 33°F – 140°F (0.5°C – 60°C)
Maximum Working Pressure: 175 psi (12.1 bar)

Dimensions — Weights



C300, C300N

SIZE		DIMENSIONS												WEIGHT							
		A		C (OSY)		D		G		H		I		J		P		C300		C300N	
<i>in.</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>lb</i>	<i>kg</i>	<i>lb</i>	<i>kg</i>	
2½	30¾	781	16⅞	416	3½	89	29⅞	738	21½	546	15½	393	8⅜	223	13⅜	335	144	65	152	69	
3	31¾	806	18⅞	479	3⅞	94	30¼	768	22¼	565	17⅞	435	9⅞	233	14½	368	164	74	177	80	
4	33¾	857	22¼	578	4	102	33	838	23½	597	18½	470	9⅝	252	15⅜	386	180	81	203	92	
6	43½	1105	30⅞	765	5½	140	44¾	1137	33¼	845	23⅞	589	13⅞	332	19	483	314	142	355	161	
8	49¾	1264	37¼	959	6⅞	170	54⅞	1375	40⅞	1019	27⅞	697	15⅞	399	21⅞	538	499	226	574	260	
10	57¾	1467	45¾	1162	8⅞	208	66	1676	49½	1257	32½	826	17⅞	440	24	610	800	363	970	440	



C300BFG, C300NBFG

SIZE			DIMENSIONS												WEIGHT							
			A		C		D		G		H		I		J		P		C300BFG		C300NBFG	
<i>in.</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>in.</i>	<i>mm</i>	<i>lb</i>	<i>kg</i>	<i>lb</i>	<i>kg</i>
2½	27¾	705	8	203	3½	89	29⅞	759	21½	546	14⅙	379	8⅓	223	13	330	70	32	78	35		
3	28¼	718	8⅙	211	3⅙	94	30⅙	779	22¼	565	15⅙	392	9⅜	233	13½	343	68	31	81	37		
4	29	737	8⅙	227	3⅙	94	31⅙	811	23½	597	16¼	412	9⅙	252	14	356	75	34	98	44		
6	36½	927	10	254	5	127	43⅞	1097	33¼	845	19⅙	500	13⅞	332	14½	368	131	59	171	78		
8	42¾	1086	12¼	311	6½	165	51⅞	1297	40⅞	1019	23⅞	592	15⅙	399	18⅞	462	275	125	351	159		

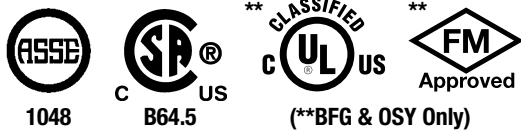
Noryl is a registered trademark of SHPP Global Technologies B.V.

** Consult factory for the following: Grooved NRS gate valves, post indicator plate and operating nut, dimensions

Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
- AWWA C510-97

For additional approval information, contact the factory or check Ames Fire & Waterworks at watts.com.



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

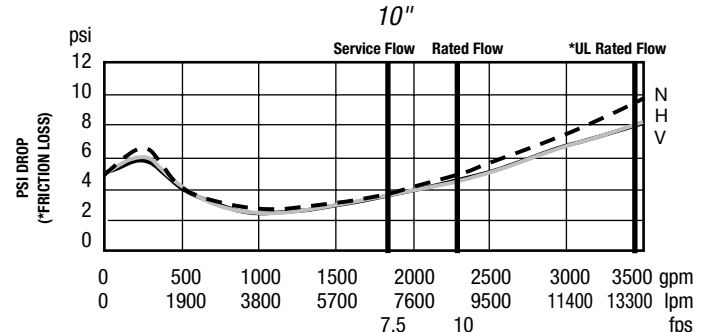
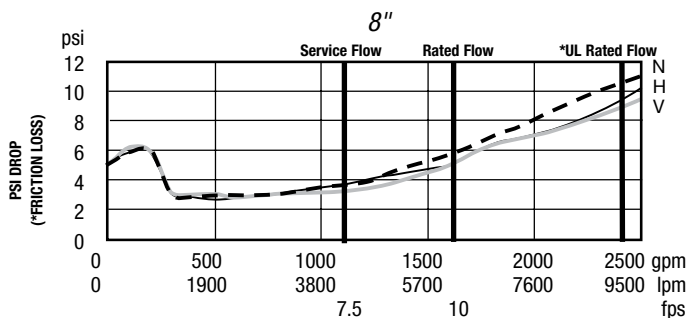
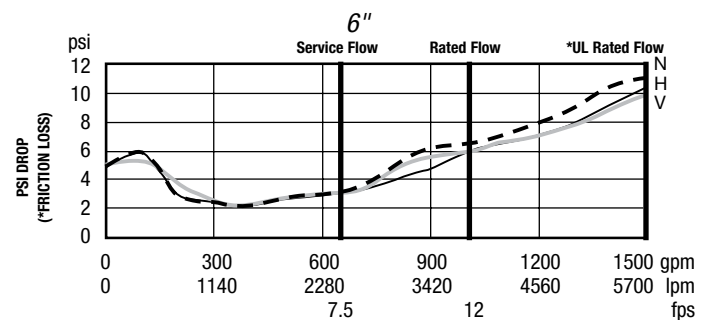
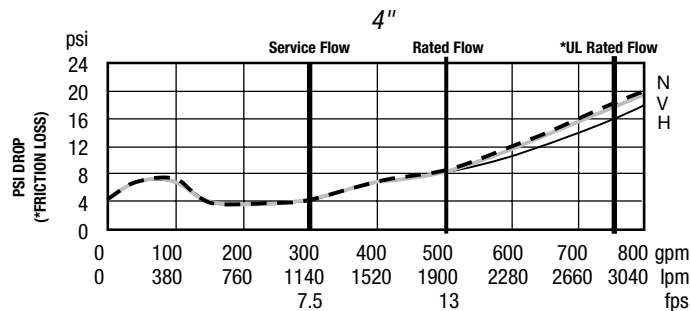
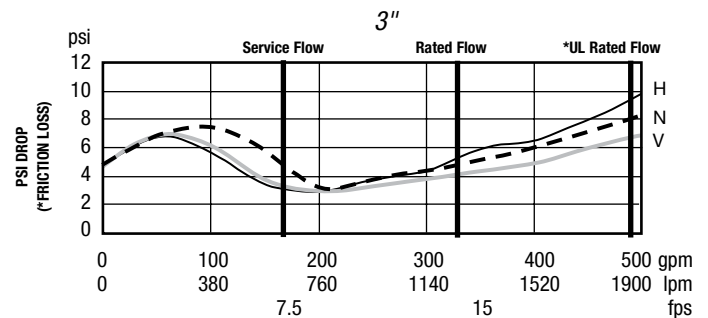
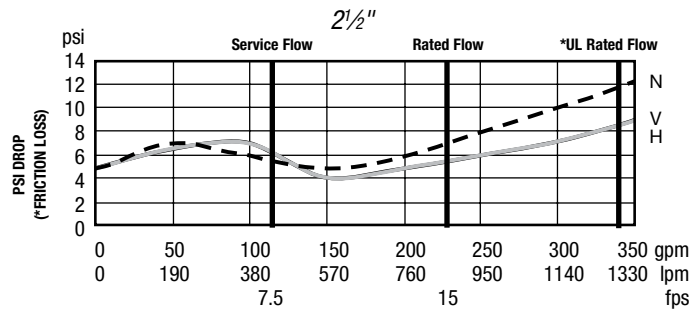
- Service Flow is typically determined by a rated velocity of 7.5 fps based upon Schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 (Appendix C) recommends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

Capacity

UL and FM Certified Flow Characteristics

Flow characteristics collected using butterfly shutoff valves

—— Horizontal —— Vertical - - - - - N-Pattern



A WATTS Brand

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 USA: Control Valves T: (713) 943-0688 • AmesFireWater.com
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