Engineering Specification

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

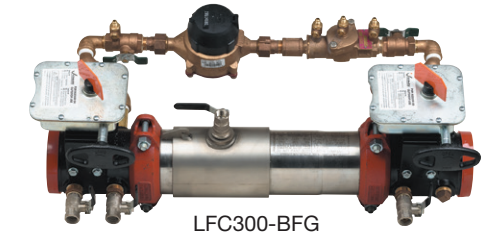
LEAD FREE*

Colt™ Series LFC300, LFC300N

Double Check Detector Assemblies

Sizes: 2½" – 10"

Colt™ LFC300 and LFC300N Double Check Detector Assemblies are used to prevent backflow of pollutants that are objectionable, but not toxic, from entering the potable water supply system. Both assemblies may be installed under continuous pressure service and may be subjected to backpressure. Colt LFC300 and LFC300N are used primarily on fire line sprinkler systems when it is necessary to monitor unauthorized use of water, and for use in non-health hazard applications.



LFC300-BFG

LFC300-OSY-TS

Features

- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) stainless steel housing and 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 tamper switch on each gate valve of the OSY model

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.

Specification

The Colt LFC300 and LFC300N 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 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 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 on the OSY 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 LFC300 or LFC300N as manufactured by Ames Fire & Waterworks.

This product is produced with ASME/ANSI flanged end connections.

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

AMES FIRE & WATERWORKS

A WATTS Brand

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

Available Models

Suffix:

OSY-TS – UL/FM outside stem and yoke resilient seated gate valves with integrated tamper switch

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

** Consult factory for the following:

– Grooved NRS gate valves

– Post-indicator plate and operating nut

– Dimensions

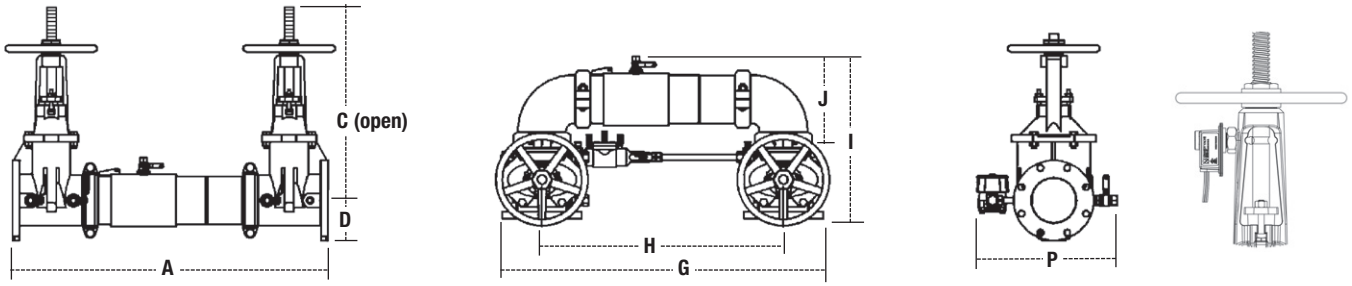
Dimensions — Weights

Metric dimensions are nominal pipe diameter. This product is produced with ASME/ANSI flanged end connections.

Pressure — Temperature

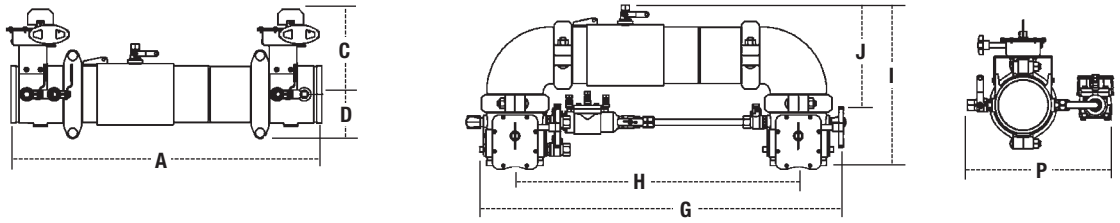
Temperature Range: 33°F – 110°F (5°C – 43°C)

Maximum Working Pressure: 175psi (12.06 bar)



LFC300, LFC300N

SIZE	DIMENSIONS																WEIGHT			
	A		C (OSY)		D		G		H		I		J		P		LFC300		LFC300N	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lb*	*kg*	*lb*	*kg*
2½	30¾	781	16⅜	416	3½	89	29 1/16	738	21½	546	15½	393	8 13/16	223	13 3/16	335	144	65	152	69
3	31¾	806	18⅞	479	3 11/16	94	30¼	768	22¼	565	17⅛	435	9 3/16	233	14½	368	164	74	177	80
4	33¾	857	22¾	578	4	102	33	838	23½	597	18½	470	9 15/16	252	15 3/16	386	180	81	203	92
6	43½	1105	30⅛	765	5½	140	44¾	1137	33¼	845	23 3/16	589	13 1/16	332	19	483	314	142	355	161
8	49¾	1264	37¾	959	6 11/16	170	54⅛	1375	40⅛	1019	27 7/16	697	15 11/16	399	21 3/16	538	499	226	574	260
10	57¾	1467	45¾	1162	8 3/16	208	66	1676	49½	1257	32½	826	17 5/16	440	24	610	800	363	970	440



LFC300BFG, LFC300NBFG

SIZE	DIMENSIONS																WEIGHT			
	A		C		D		G		H		I		J		P		LFC300BFG		LFC300NBFG	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lb*	*kg*	*lb*	*kg*
2½	27¾	705	8	203	3½	89	29⅞	759	21½	546	14 15/16	379	8 13/16	223	13	330	70	32	78	35
3	28¼	718	8 5/16	211	3 11/16	94	30 11/16	779	22¼	565	15 7/16	392	9 3/16	233	13½	343	68	31	81	37
4	29	737	8 15/16	227	3 11/16	94	31 15/16	811	23½	597	16¼	412	9 15/16	252	14	356	75	34	98	44
6	36½	927	10	254	5	127	43 3/16	1097	33¼	845	19 11/16	500	13 1/16	332	14½	368	131	59	171	78
8	42¾	1086	12¼	311	6½	165	51 1/16	1297	40⅛	1019	23 5/16	592	15 11/16	399	18 3/16	462	275	125	351	159

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Approvals

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

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

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

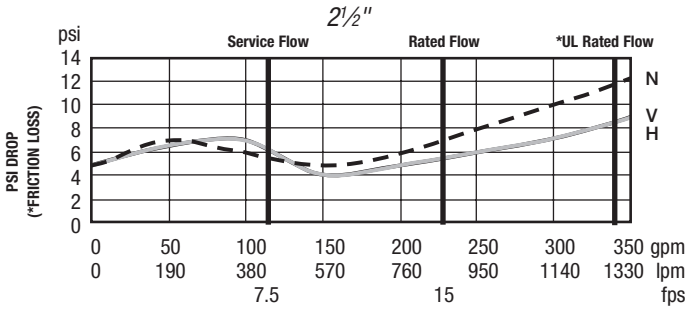
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps.

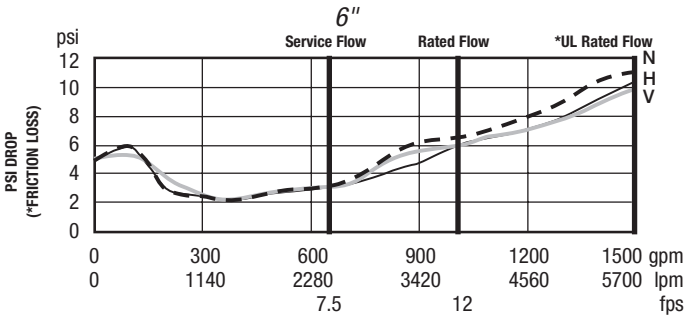
- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends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

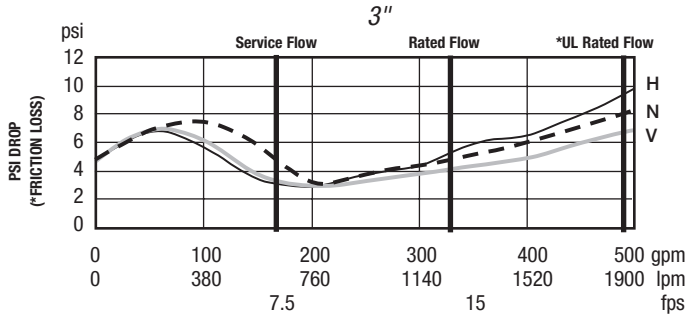
Capacity

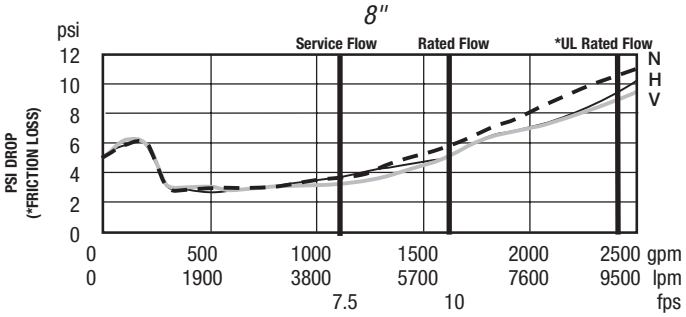
UL/FM Certified Flow Characteristics
Flow characteristics collected using butterfly shutoff valves

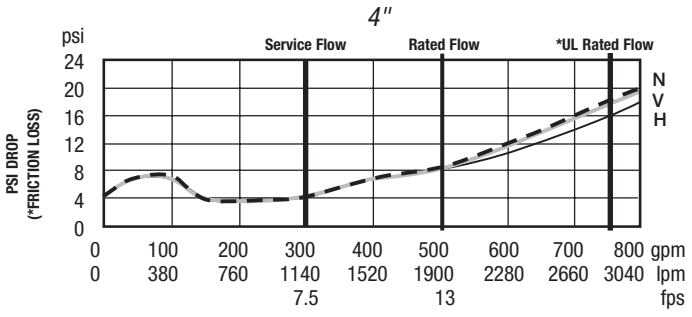
Horizontal N-Pattern Z-Pattern

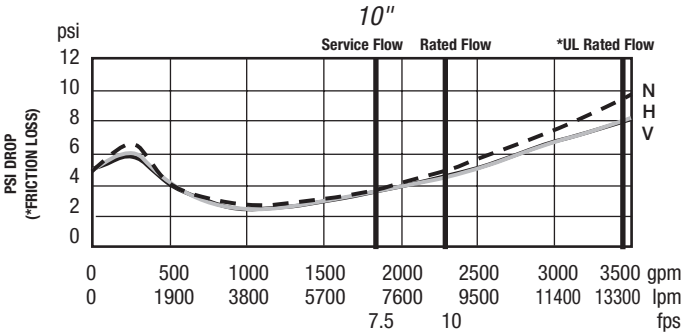












NOTICE

Inquire with governing authorities for local installation requirements.

AMES
FIRE & WATERWORKS

A **WATTS** *Brand*

USA: Backflow T: (978) 689-6066 • F: (978) 975-8350 • AmesFireWater.com
USA: Control Valves T: (713) 943-0688 • F: (713) 944-9445 • AmesFireWater.com
Canada: T: (888) 208-8927 • F: (905) 481-2316 • AmesFireWater.ca
Latin America: T: (52) 55-4122-0138 • AmesFireWater.com