Engineering Specification

Job Name _____ Contractor _____

Job Location _____ Approval _____

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

Approval _____ Representative _____

LEAD FREE*

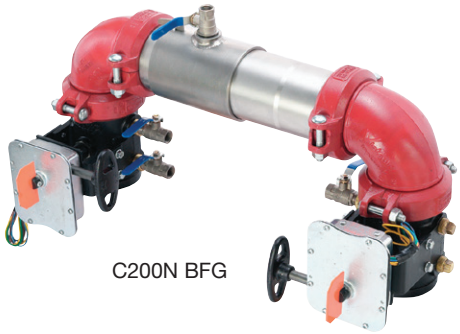
Colt™ Series C200, C200N

Double Check Valve Assemblies

Sizes: 2½" – 10"

The Colt C200 and C200N Double Check Valve Assemblies are used to prevent backflow of pollutants, objectionable but not toxic, from entering the potable water supply system. The Colt C200 and C200N may be installed under continuous pressure service and may be subjected to backpressure. Both assemblies consist of two independently operating check valves, two shutoff valves, and four test cocks, and are designed for use in non-health hazard applications. The Colt C200 and C200N feature Lead Free* construction to comply with Lead Free* installation requirements.

C200-OSY-TS



C200N BFG

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
- 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.

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

Specification

The Colt C200, C200N 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 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 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.

Lead Free* Double Check Valve Assembly shall be constructed using Lead Free* materials. It shall comply with state codes and standards, where applicable, requiring reduced lead content. Assembly shall be an Ames Fire & Waterworks Colt C200, C200N.

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:

NRS – Non-rising stem resilient seated gate valves

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:

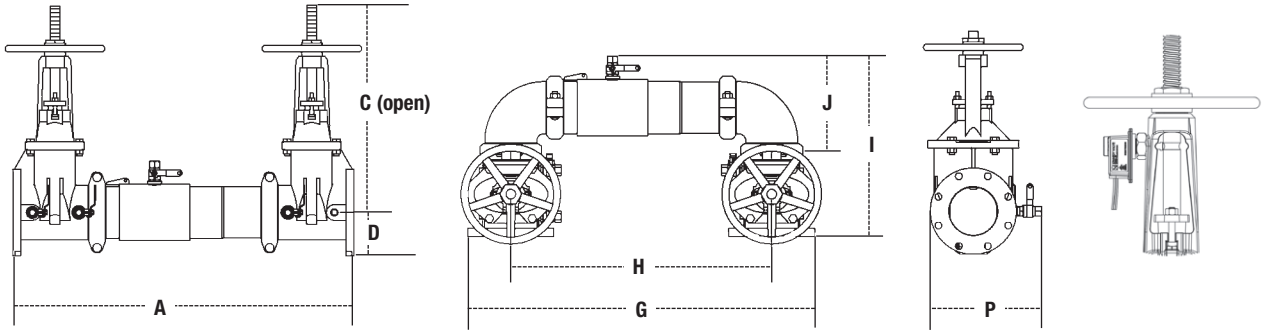
– Grooved NRS gate valves
– Post-indicator plate and operating nut
– Dimensions

Pressure – Temperature

Temperature Range: 33°F – 140°F (0.5°C – 60°C)

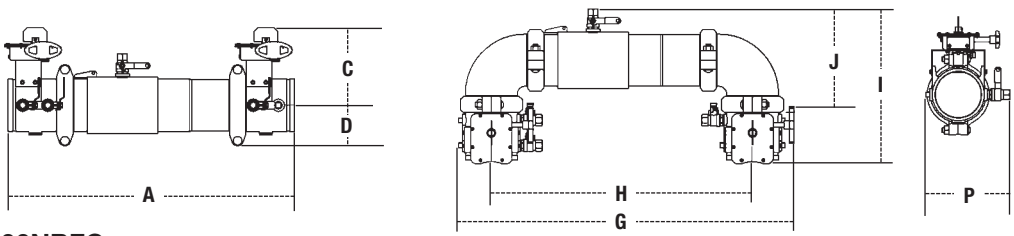
Maximum Working Pressure: 175 psi (12.1 bar)

Dimensions – Weights



C200, C200N

SIZE	DIMENSIONS																WEIGHT							
	A		C (OSY)		C (NRS)		D		G		H		I		J		P		C200NRS		C200OSY		C200N NRS		C200N OSY	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lb*	*kg*	*lb*	*kg*	*lb*	*kg*	*lb*	*kg*
2½	30¾	781	16⅜	416	9⅜	238	3½	89	29^{1}⁄$_{16}$	738	21½	546	15½	393	8^{13}⁄$_{16}$	223	9^{3}⁄$_{16}$	234	115	52	130	59	123	56	138	62
3	31¾	806	18⅞	479	10¼	260	3^{11}⁄$_{16}$	94	30¼	768	22¼	565	17⅛	435	9^{3}⁄$_{16}$	233	10½	267	131	59	150	68	144	65	163	74
4	33¾	857	22¾	578	12^{3}⁄$_{16}$	310	4	102	33	838	23½	597	18½	470	9^{15}⁄$_{16}$	252	11^{3}⁄$_{16}$	284	161	73	166	75	184	83	189	85
6	43½	1105	30⅛	765	16	406	5½	140	44¾	1137	33¼	845	23^{3}⁄$_{16}$	589	13^{1}⁄$_{16}$	332	15	381	273	124	300	136	314	142	341	154
8	49¾	1264	37¾	959	19^{15}⁄$_{16}$	506	6^{11}⁄$_{16}$	170	54⅛	1375	40⅛	1019	27^{7}⁄$_{16}$	697	15^{11}⁄$_{16}$	399	17^{3}⁄$_{16}$	437	438	199	485	220	513	233	560	254
10	57¾	1467	45¾	1162	23^{13}⁄$_{16}$	605	8^{3}⁄$_{16}$	208	66	1676	49½	1257	32½	826	17^{5}⁄$_{16}$	440	20	508	721	327	786	356	891	404	956	433



C200BFG, C200NBFG

SIZE	DIMENSIONS																WEIGHT			
	A		C		D		G		H		I		J		P		C200BFG		C200NBFG	
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	9	229	56	25	64	29
3	28¼	718	8^{5}⁄$_{16}$	211	3^{11}⁄$_{16}$	94	30^{1}⁄$_{16}$	779	22¼	565	15^{7}⁄$_{16}$	392	9^{3}⁄$_{16}$	233	9½	241	54	24	67	30
4	29	737	8^{15}⁄$_{16}$	227	3^{11}⁄$_{16}$	94	31^{15}⁄$_{16}$	811	23½	597	16¼	412	9^{15}⁄$_{16}$	252	10	254	61	28	84	38
6	36½	927	10	254	5	127	43^{3}⁄$_{16}$	1097	33¼	845	19^{1}⁄$_{16}$	500	13^{1}⁄$_{16}$	332	10½	267	117	53	157	71
8	42¾	1086	12¼	311	6½	165	51^{1}⁄$_{16}$	1297	40⅛	1019	23^{3}⁄$_{16}$	592	15^{11}⁄$_{16}$	399	14^{3}⁄$_{16}$	361	261	118	337	153

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

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.

1015 B64.5 (**BFG & OSY Only)

Certified to NSF/ANSI 61-G

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.

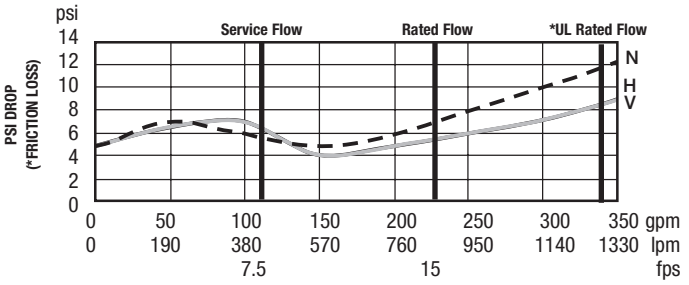
Capacity

UL/FM Certified Flow Characteristics

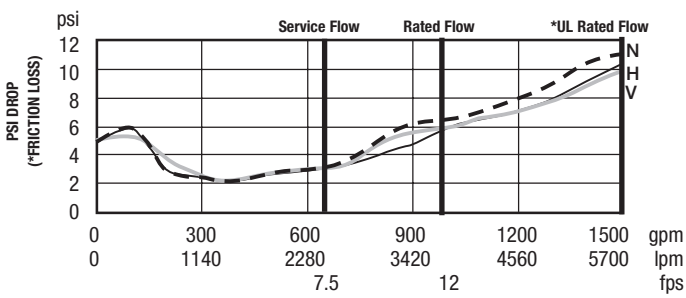
Flow characteristics collected using butterfly shutoff valves

Horizontal Vertical N - Pattern

2½"



6"



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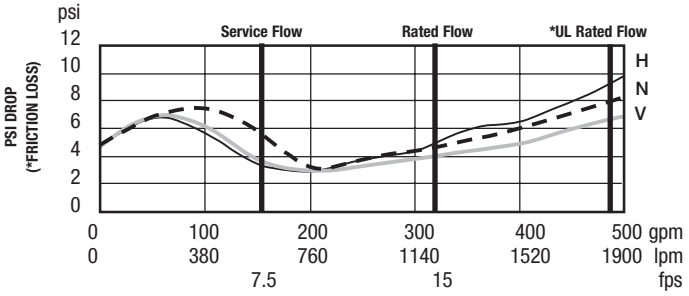

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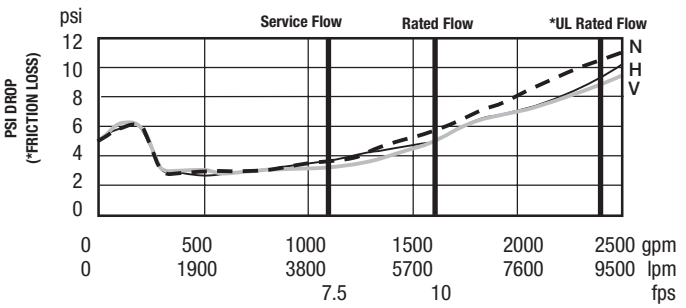

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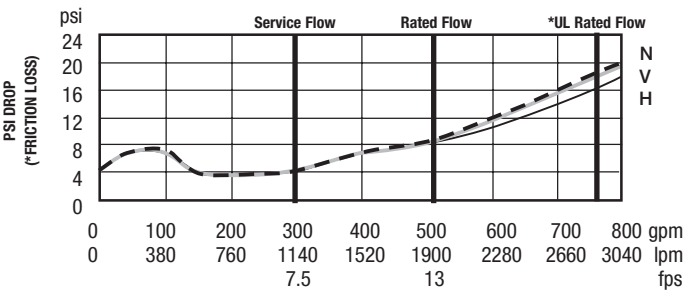
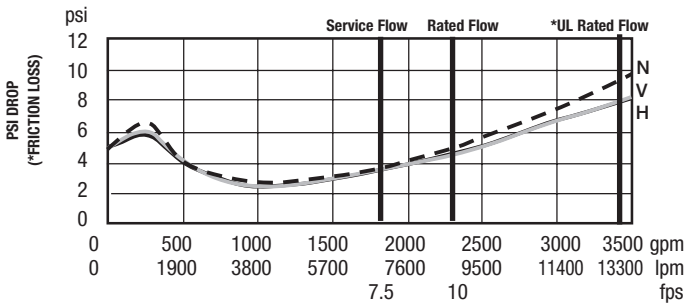


10"



NOTICE

Inquire with governing authorities for local installation requirements.

AMES
FIRE & WATERWORKS

A **WATTS** *Brand*

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