

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Series C200, C200N

Double Check Valve Assemblies

2½" – 10"

Series C200 and C200N are used to prevent backflow of pollutants, objectionable but not toxic, from entering the potable water supply system. These assemblies may be installed under continuous pressure service and may be subjected to backpressure. Both 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 series feature Lead Free* construction to comply with Lead Free* installation requirements. The OS&Y model includes an option for an integrated supervisory switch on each gate valve.

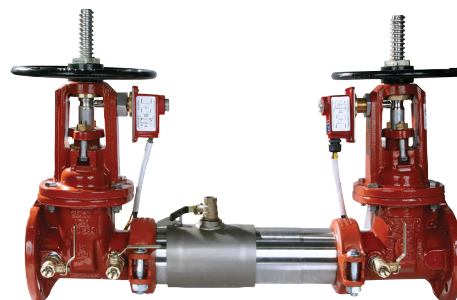
Features

- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) Stainless steel housing 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
- Available 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

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.



C200-OSY with supervisory switches



C200N BFG

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, 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.

The 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.

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

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

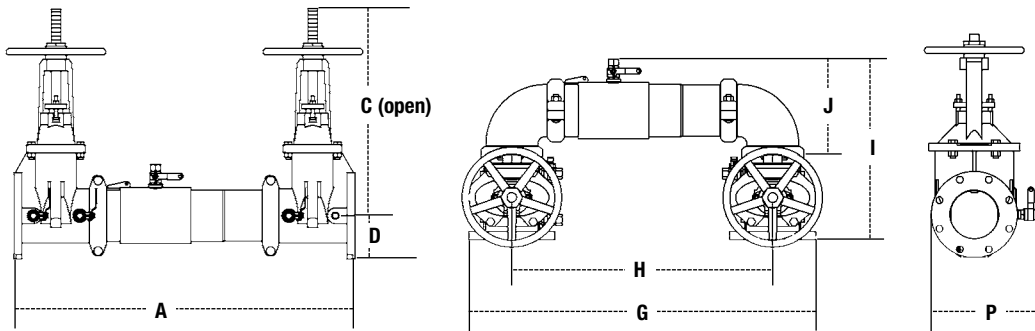
NRS	Non-rising stem resilient seated gate valves
OSY	UL Classified and FM Approved outside stem and yoke resilient seated gate valves
BFG	UL Classified and FM Approved grooved gear operated butterfly valves with tamper switch
TS-OSY	Integrated supervisory switch (UL Certified, Safety Signaling, Control No. 3L38) on outside stem and yoke resilient seated gate valve
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)

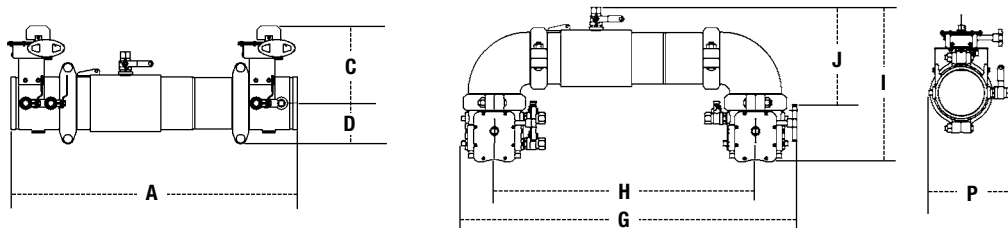
Maximum Working Pressure: 175 psi (12.1 bar)

Dimensions – Weights



C200, C200N

SIZE		DIMENSIONS										WEIGHT														
	A		C (OSY)		C (NRS)		D		G		H		I		J		P		C200NRS		C200OSY		C200N NRS		C200N OSY	
<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>	<i>lb</i>	<i>kg</i>	<i>lb</i>	<i>kg</i>
2½	30¾	781	16¾	416	9¾	238	3½	89	29⅞	738	21½	546	15½	393	8⅜	223	9⅞	234	115	52	130	59	123	56	138	62
3	31¾	806	18¾	479	10¼	260	3⅞	94	30¼	768	22¼	565	17¼	435	9⅞	233	10½	267	131	59	150	68	144	65	163	74
4	33¾	857	22¾	578	12¾	310	4	102	33	838	23½	597	18½	470	9⅞	252	11¾	284	161	73	166	75	184	83	189	85
6	43½	1105	30¾	765	16	406	5½	140	44¾	1137	33¾	845	23¾	589	13⅞	332	15	381	273	124	300	136	314	142	341	154
8	49¾	1264	37¾	959	19⅞	506	6⅞	170	54¾	1375	40¾	1019	27⅞	697	15⅞	399	17¾	437	438	199	485	220	513	233	560	254
10	57¾	1467	45¾	1162	23⅞	605	8¾	208	66	1676	49½	1257	32½	826	17¾	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	
<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	27¾	705	8	203	3½	89	29⅞	759	21½	546	14¹⁵⁄₁₆	379	8¹³⁄₁₆	223	9	229	56	25	64	29
3	28¼	718	8⅞₁₆	211	3⅞₁₆	94	30¹¹⁄₁₆	779	22¼	565	15¹⁄₁₆	392	9⅞₁₆	233	9½	241	54	24	67	30
4	29	737	8⅞₁₆	227	3⅞₁₆	94	31¹⁵⁄₁₆	811	23½	597	16¼	412	9¹⁵⁄₁₆	252	10	254	61	28	84	38
6	36½	927	10	254	5	127	43⅞₁₆	1097	33¾	845	19¹¹⁄₁₆	500	13¹⁄₁₆	332	10½	267	117	53	157	71
8	42¾	1086	12¼	311	6½	165	51¹⁄₁₆	1297	40⅞	1019	23⅞₁₆	592	15¹¹⁄₁₆	399	14¾₁₆	361	261	118	337	153

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.

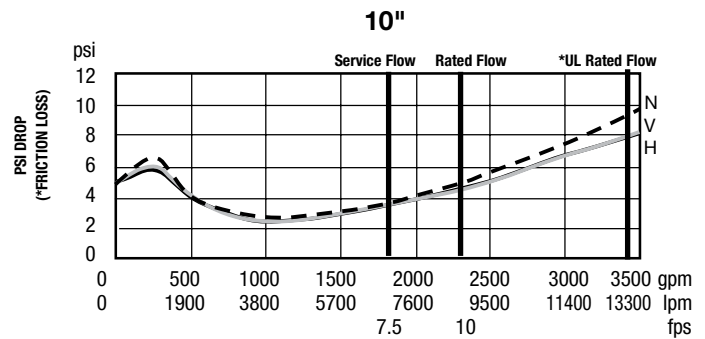
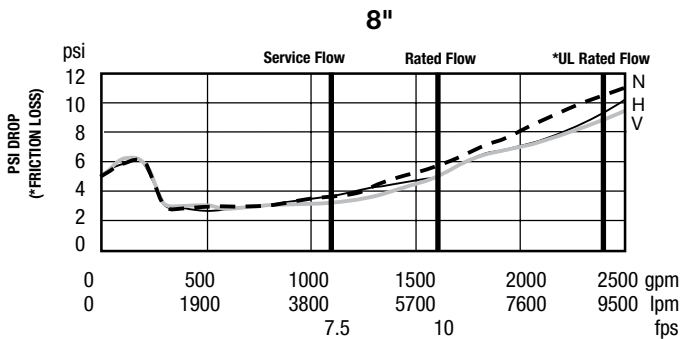
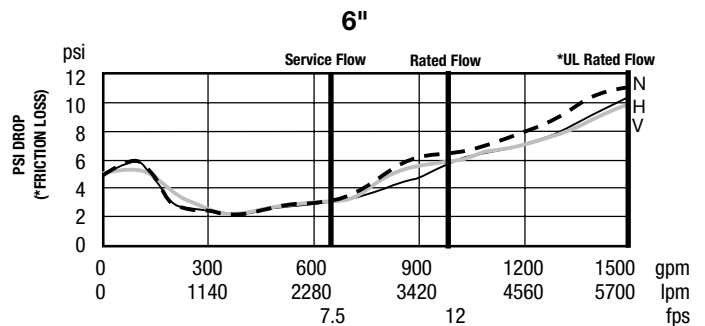
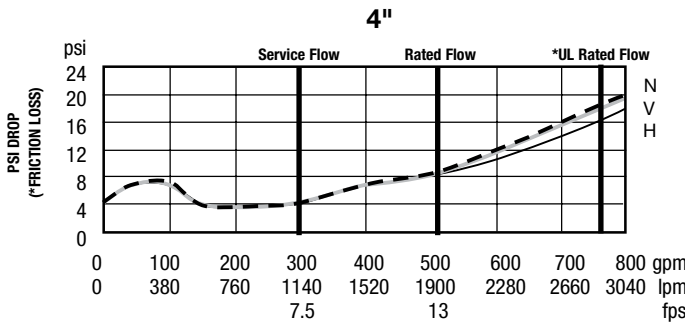
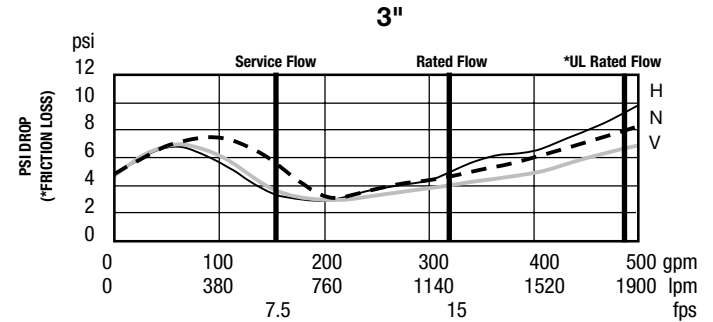
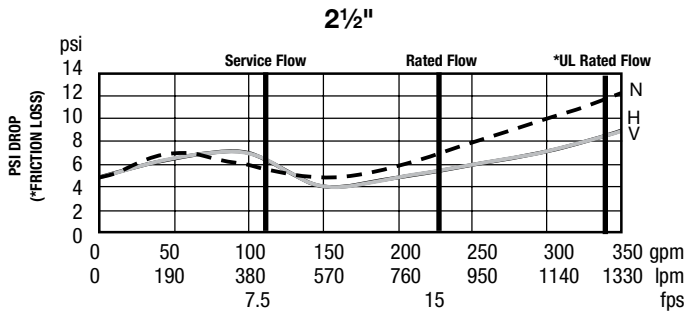
- Service Flow is typically determined by a rated velocity of 7.5 fps based upon Schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends 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

USA: Backflow T: (978) 689-6066 • AmesFireWater.com
 USA: Control Valves T: (713) 943-0688 • AmesFireWater.com
 Canada: T: (888) 208-8927 • AmesFireWater.ca
 Latin America: T: (52) 55-4122-0138 • AmesFireWater.com