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



# Colt<sup>™</sup> Series C400 (Colt 400), C400N (Colt 400N), C400Z (Colt 400Z)

# Reduced Pressure Zone Assemblies Sizes: 2½" – 10"

The Colt C400, C400N, C400Z Reduced Pressure Zone Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. The Colt C400, C400N, C400Z are normally used in health hazard applications for protection against backsiphonage, backpressure and the fouling of either check valve. The Colt C400, C400N, C400Z features Lead Free\* construction to comply with Lead Free\* installation requirements.

#### Features

- Extremely Compact Design
- 70% Lighter than Traditional Designs
- 304 (Schedule 40) Stainless Steel Housing & Sleeve
- Groove Fittings Allow Integral Pipeline Adjustment
- Patented Link Check Provides Lowest Pressure Loss
- Unmatched Ease of Serviceability
- Available with Grooved Butterfly Valve Shutoffs
- May be Used for Horizontal or N Pattern Installations
- Replaceable Check Disc Rubber

#### **Specifications**

The Colt C400, C400N, C400Z Reduced Pressure Zone Assemblies shall consist of two independent Link Check modules, a differential pressure relief valve located between and below the two modules, two drip tight shutoff valves, and required test cocks. Link Check modules and relief valve shall be contained within a sleeve accessible single housing constructed from 304 (Schedule 40) stainless steel pipe with groove end connections. Link Checks shall have reversible elastomer discs and in operation produce drip tight closure against the reverse flow of liquid caused by backpressure or backsiphonage. Lead Free\* Reduced Pressure Zone Assemblies shall be constructed using Lead Free\* materials. It shall comply with state codes and standards, where applicable, requiring reduced lead content. Assembly shall be Colt C400, C400N, C400Z as manufactured by the Ames Fire & Waterworks.



C400 OSY (Colt 400)



#### 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.



Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks 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 Ames Fire & Waterworks products previously or subsequently sold.

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### Configurations

- Horizontal
- "Z" pattern horizontal
- "N" pattern horizontal

#### Materials

Housing & Sleeve: 304 (Schedule 40) Stainless Steel

Elastomers: EPDM, Silicone and Buna 'N'

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

Noryl<sup>®</sup> is a registered trademark of SABIC Innovative Plastics<sup>™</sup>.

#### Approvals

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

Excluding 6" Z Pattern configuration AWWA C511-97

For additional approval information please contact the factory or visit our website at www.amesfirewater.com



#### Pressure – Temperature

Temperature Range:  $33^{\circ}F - 140^{\circ}F$  ( $0.5^{\circ}C - 60^{\circ}C$ ) Maximum Working Pressure: 175psi (12.1 bar)

Note: When installing a drain line on Series C400 backflow preventer use 400/500 air gap. See ES-A-AG/EL/TC for additional information.

#### **Available Models**

Suffix:

- NRS non-rising stem resilient seated gate valves
- OSY UL/FM outside stem and yoke resilient seated gate valves
- $\mathsf{BFG}-\mathsf{UL}/\mathsf{FM}$  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◊

Available with grooved NRS gate valves — consult factory<sup>†</sup> Post indicator plate and operating nut available — consult factory<sup>†</sup> †Consult factory for dimensions

#### **Dimensions – Weights**



#### C400, C400N, C400Z

SIZE	ZE DIMENSIONS												WEIGHT															
	A C (OSY)			SY)	C (NRS) D		G		I	H I			J	J		M P		C400			C400N							
																				RS	OSY		NRS		OSY			
in.	in.	тт	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> ½	30¾	781	163%	416	93/8	238	61/2	165	<b>29</b> <sup>1</sup> /16	738	211/2	546	151/2	393	<b>8</b> <sup>13</sup> ⁄16	223	211⁄4	540	<b>9</b> ¾16	234	118	54	128	58	126	57	136	62
3	31¾	806	181/8	479	101/4	260	<b>6</b> <sup>11</sup> /16	170	301/4	768	221/4	565	171//8	435	<b>9</b> <sup>3</sup> ⁄16	233	23	584	101/2	267	134	61	148	67	147	67	161	73
4	33¾	857	223/4	578	<b>12</b> <sup>3</sup> ⁄16	310	7	178	35%	905	231/2	597	181/2	470	<b>9</b> <sup>15</sup> /16	252	26¼	667	<b>11</b> <sup>3</sup> ⁄16	284	164	74	164	74	187	85	187	85
6	431/2	1105	301/8	765	16	406	81/2	216	44¾	1137	351/4	895	<b>23</b> <sup>3</sup> ⁄16	589	<b>13</b> <sup>1</sup> /16	332	34¼	870	15	381	276	125	298	135	317	144	339	154
8	49¾	1264	37¾	959	<b>19</b> <sup>15</sup> /16	506	<b>9</b> <sup>11</sup> / <sub>16</sub>	246	541/8	1375	401/8	1019	<b>27</b> <sup>7</sup> /16	697	<b>15</b> <sup>1</sup> / <sub>16</sub>	399	367/8	937	<b>17</b> <sup>3</sup> ⁄16	437	441	200	483	219	516	234	558	253
10	57¾	1467	45¾	1162	<b>23</b> <sup>13</sup> ⁄16	605	<b>11</b> <sup>3</sup> ⁄16	285	66	1676	491/2	1257	321/2	826	175/16	440	441/2	1124	20	508	723	328	783	355	893	405	950	431







#### C400NBFG/C400ZBFG

SIZE										WE	IGHT			
	(	3	Н				J		М		Р		C400N, C400Z	
in.	in.	mm	in.	mm	in.	тт	in.	тт	in.	тт	in.	mm	lbs.	kgs.
21/2	23	584	23	584	15½	394	91⁄2	241	19¾	502	<b>11</b> <sup>13</sup> ⁄16	300	67	30
3	24	610	24	610	<b>16</b> 5⁄16	414	<b>10</b> ½16	256	211/4	540	121/8	308	70	32
4	35%	905	35%	905	173/16	437	<b>10</b> <sup>15</sup> ⁄16	279	231/2	597	12%	321	87	39
6	351/4	895	351/4	895	201/2	521	13½	343	271/4	692	15	382	160	73





#### C400 BFG

SIZE	DIMENSIONS WEIGHT													
	ļ	A	(	5		D	ŀ	0						
in.	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.				
4	29	737	73⁄4	197	63%	162	<b>9</b> <sup>1</sup> / <sub>2</sub>	241	66	30				
6	361/2	927	<b>9</b> <sup>11</sup> / <sub>16</sub>	246	77/16	189	141/4	362	122	55				

## Capacity - C400 BFG





#### Capacity

UL/FM Certified Flow Characteristics

N&Z Flow characteristics collected using butterfly shutoff valves.

— Horizontal — N - Pattern ----- Z - Pattern

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

- Service Flow is typically determined by a rated velocity of 7.5 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 10fps.





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