# Colt<sup>™</sup> Series C500, C500N, C500Z



## **Reduced Pressure Detector Assemblies**

Sizes: 21/2" - 10" (65 - 250mm)



#### **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
- Replaceable Check Disc Rubber
- Available with Grooved Butterfly Valve Shutoffs
- Bottom Mounted Cast Stainless Steel Relief Valve
- Metered Bypass to Detect Leakage or Theft of Water from the Fire Sprinkler System

#### **A** 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.

The Colt C500, C500N, C500Z Reduced Pressure Detector Assemblies are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for health-hazard non-potable service applications such as irrigation, fire line, or industrial processing. The Colt C500, C500N, C500Z are used to monitor unauthorized use of water from the fire protection system.

# **Specifications**

The Colt C500, C500N, C500Z Reduced Pressure Detector 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. The bypass assembly consists of a meter registering either gallon or cubic measurements, a reduced pressure zone assembly and required test cocks. Assembly shall be Colt C500, C500N, C500Z as manufactured by the Ames Company.

#### 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.

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

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.

# **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: Bronze Body Nickel Plated
- Pins & Fasteners: 300 Series Stainless Steel
- Springs: Stainless Steel

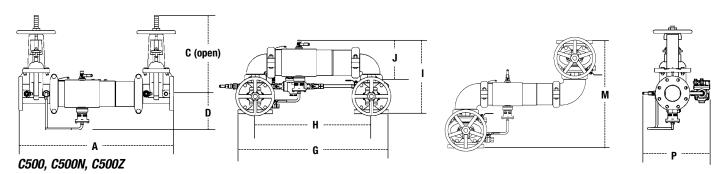
Pressure — Temperature Temperature Range: 33°F – 140°F (0.5°C – 60°C) Maximum Working Pressure: 175psi (12.1 bar)

### **Available Models**

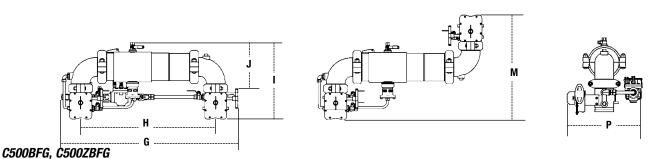
- OSY UL/FM outside stem and yoke resilient seated gate valves
- BFG UL/FM grooved gear operated butterfly valves w/tamper switch
- \*OSY FxG Flanged inlet gate connection and grooved outlet gate connection
- \*OSY GxF Grooved inlet gate connection and flanged outlet gate connection
- \*OSY GxG Grooved inlet gate connection and grooved outlet gate connection

Available with grooved NRS gate valves - consult factory\* Post indicator plate and operating nut available - consult factory\* \*Consult factory for dimensions

# Dimensions — Weights



SIZE (DN) DIMENSIONS															WEIGHT								
		Α		C (OSY) D G H		Н	I		J		M		P		C500		C500N						
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
21/2	65	303/4	781	16¾	416	61/2	165	291/16	738	21½	546	15½	393	813/16	223	211/4	540	13¾16	335	142	64	150	68
3	80	31¾	806	187//8	479	611/16	170	301/4	768	221/4	565	171//8	435	93/16	233	23	584	141/2	368	162	73	175	79
4	100	33¾	857	223/4	578	7	178	33	838	23½	597	18½	470	915/16	252	261/4	667	15¾16	386	178	81	201	91
6	150	431/2	1105	301//8	765	81/2	216	443/4	1137	331/4	845	233/16	589	131/16	332	321/4	819	19	483	312	142	353	160
8	200	49¾	1264	37¾	959	911/16	246	541//8	1375	401//8	1019	277/16	697	<b>15</b> <sup>11</sup> / <sub>16</sub>	399	367//8	937	213/16	538	497	225	572	259
10	250	573/4	1467	45¾	1162	113/16	285	66	1676	491/2	1257	321/2	826	175/16	440	441/2	1124	24	610	797	362	964	437



SIZE	SIZE (DN) DIMENSIONS													WE	IGHT
		(	G	Н		I		J		M		P		C500BFG	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
21/2	65	32½	826	23	584	15½	394	91/2	241	19¾	502	15 <sup>13</sup> / <sub>16</sub>	402	81	37
3	80	34	864	24	610	<b>16</b> 5⁄16	414	101/16	256	211/4	540	161//8	410	84	38
4	100	35%	905	25½	648	173/16	437	10 <sup>15</sup> ⁄16	279	231/2	597	165%	422	101	46
6	150	461/2	1181	351/4	895	201/2	521	13½	343	271/4	692	19	483	174	79

# **Approvals**



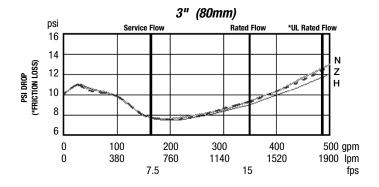
For additional approval information please contact the factory or visit our website at www.amesfirewater.com

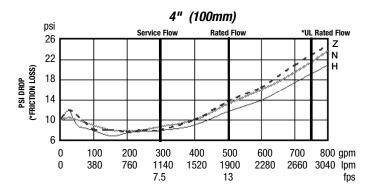
## Capacity

UL/FM Certified Flow Characteristics N&Z Flow characteristics collected using butterfly shutoff valves.

\_\_\_\_\_ Horizontal \_\_\_\_\_ N - Pattern \_\_\_\_ Z - Pattern

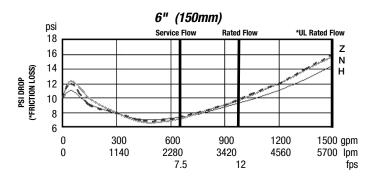
#### 21/2" (65mm) psi Service Flow Rated Flow \*UL Rated Flow 18 16 PSI DROP (\*FRICTION LOSS) 14 12 10 8 6 0 50 100 150 200 250 300 350 gpm 1330 lpm 0 190 950 380 570 760 1140 7.5 15 fps

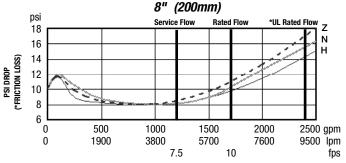


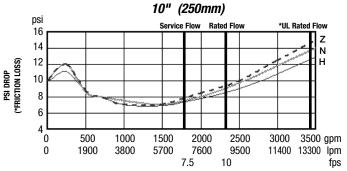


# Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- 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.







#### NOTICE

Inquire with governing authorities for local installation requirements

