

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

**LEAD FREE\***

# Colt™ Series LFC500 (LF Colt 500), LFC500N (LF Colt 500N), LFC500Z (LF Colt 500Z)

## Reduced Pressure Detector Assemblies

**Sizes: 2½" – 10"**

The Colt LFC500, LFC500N, LFC500Z Reduced Pressure Detector Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. The Colt LFC500, LFC500N, LFC500Z are normally used in health-hazard applications to protect against backsiphonage, backpressure and the fouling of either check valve. The Colt LFC500, LFC500N, LFC500Z are used to monitor unauthorized use of water from the fire protection system. The Colt LFC500, LFC500N, LFC500Z feature 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
- 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

### NOTICE

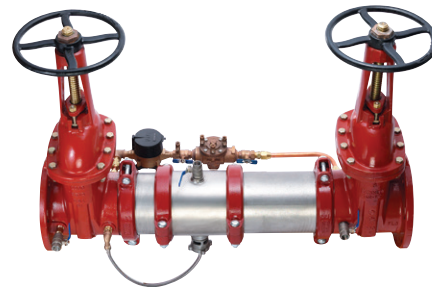
The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation 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.



**LFC500N OSY  
(LF Colt 500N OSY)**



**LFC500 OSY  
(LF Colt 500 OSY)**

### Specifications

The Colt LFC500, LFC500N, LFC500Z 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 LFC500, LFC500N, LFC500Z as manufactured by the Ames Fire & Waterworks.

**AMES**  
FIRE & WATERWORKS  
**A WATTS Brand**

## 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

## Pressure — Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C)

Maximum Working Pressure: 175psi (12.1 bar)

## Available Models

Suffix:

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

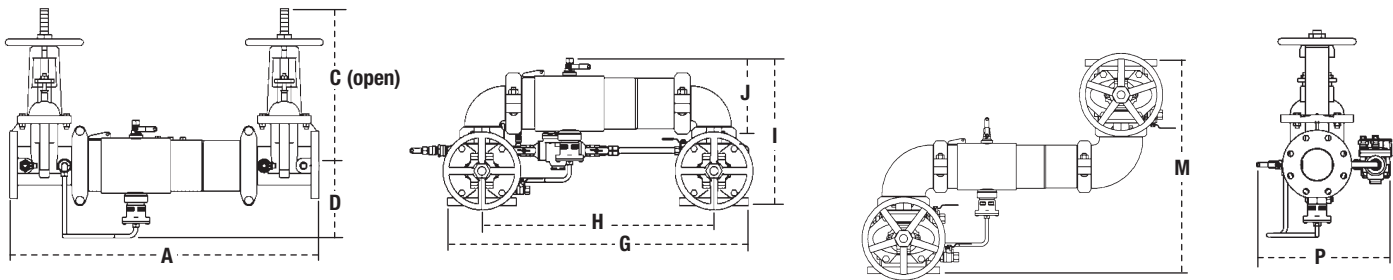
\*OSY GxG - Grooved inlet gate connection and grooved outlet gate connection

Available with grooved NRS gate valves - consult factory\*

Post indicator plate and operating nut available - consult factory\*

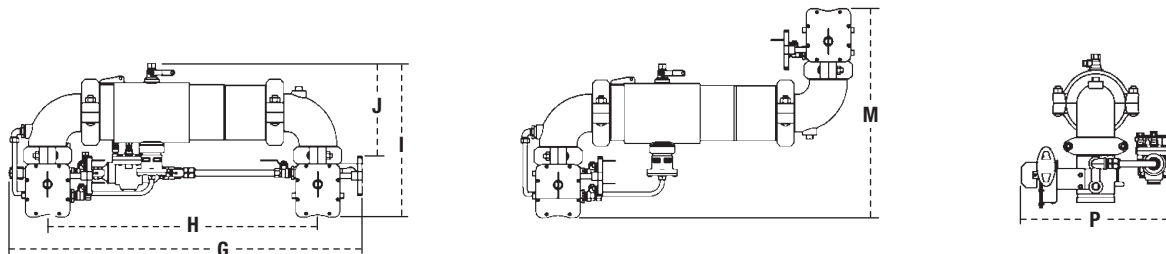
\*Consult factory for dimensions.

## Dimensions — Weights



### LFC500, LFC500N, LFC500Z

SIZE			DIMENSIONS												WEIGHT							
A			C (OSY)		D		G		H		I		J		M		P		C500		C500N	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
2½	30¾	781	16⅞	416	6½	165	29⅞	738	21½	546	15½	393	8⅜	223	21¼	540	13⅞	335	142	64	150	68
3	31¾	806	18⅞	479	6⅞	170	30¾	768	22¼	565	17⅞	435	9⅞	233	23	584	14½	368	162	73	175	79
4	33¾	857	22¼	578	7	178	33	838	23½	597	18½	470	9⅞	252	26¼	667	15⅞	386	178	81	201	91
6	43½	1105	30⅞	765	8½	216	44¾	1137	33¼	845	23⅞	589	13⅞	332	32¼	819	19	483	312	142	353	160
8	49¾	1264	37¼	959	9⅞	246	54⅞	1375	40⅞	1019	27⅞	697	15⅞	399	36⅞	937	21⅞	538	497	225	572	259
10	57¾	1467	45¾	1162	11⅞	285	66	1676	49½	1257	32½	826	17⅞	440	44½	1124	24	610	797	362	964	437



### LFC500NBF, LFC500ZBFG

SIZE			DIMENSIONS										WEIGHT	
	G		H		I		J		M		P		C500BFG	
<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>lbs.</i>	<i>kgs.</i>
2½	32½	826	23	584	15½	394	9½	241	19¾	502	15⅜	402	81	37
3	34	864	24	610	16⅞	414	10⅞	256	21¼	540	16⅞	410	84	38
4	35½	905	25½	648	17⅞	437	10⅞	279	23½	597	16½	422	101	46
6	46½	1181	35¼	895	20½	521	13½	343	27¼	692	19	483	174	79

## Approvals

AWWA C511-97

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

- (OSY only, 'N' and 'Z' excludes sizes 6"-10")



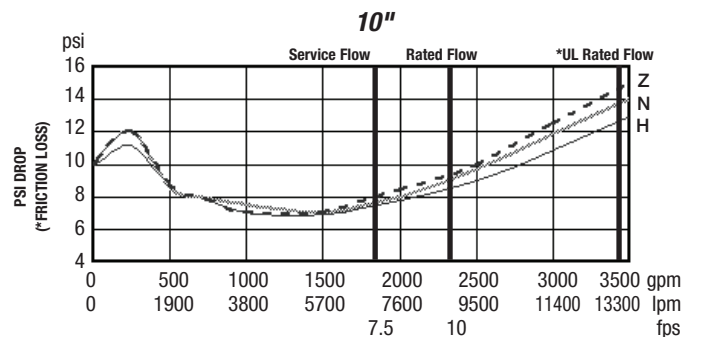
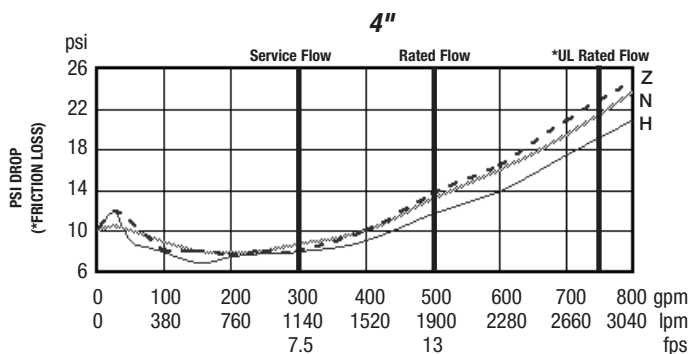
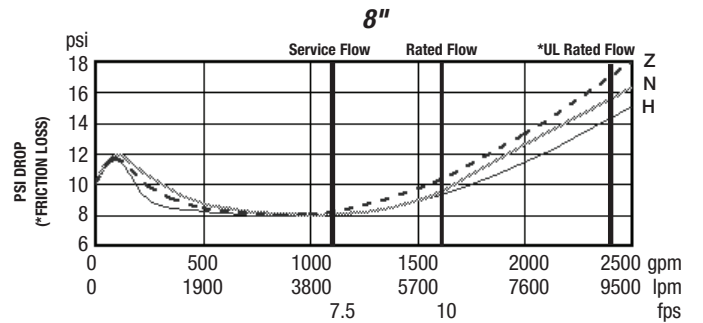
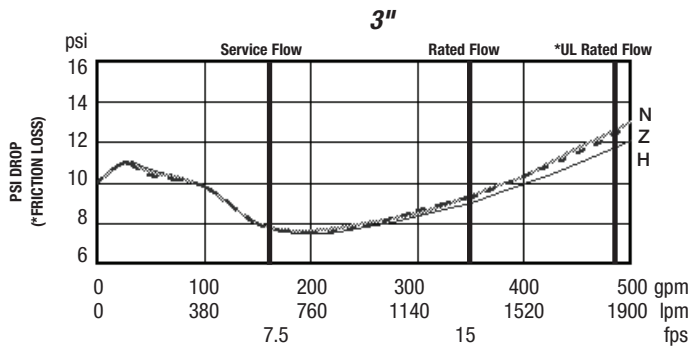
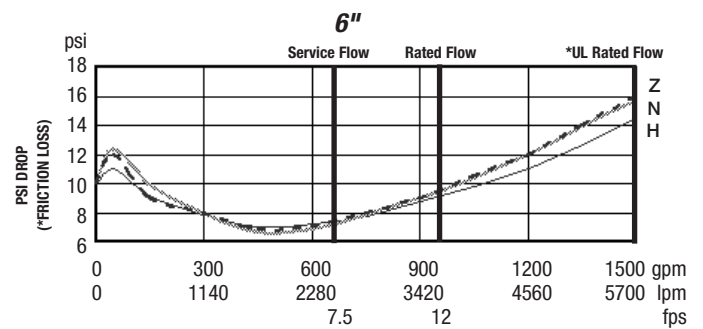
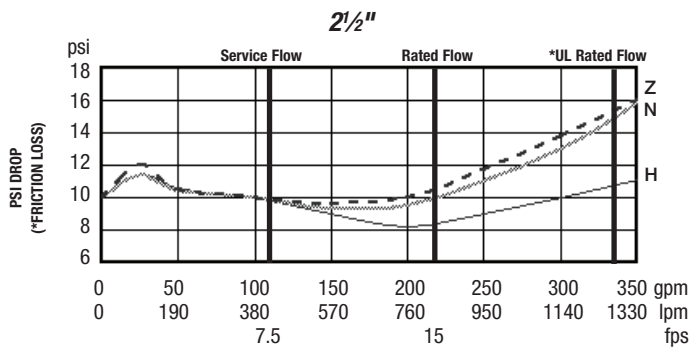
For additional approval information please contact the factory or visit our website at [www.amesfirewater.com](http://www.amesfirewater.com)

## 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 7.5fps 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



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