

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Maxim™ Series M500, M500N, M500Z

Reduced Pressure Detector Assemblies

Sizes: 2½" – 10"

The Maxim M500, M500N, M500Z 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 Maxim M500, M500N, M500Z are used to monitor unauthorized use of water from the fire protection system.

Features

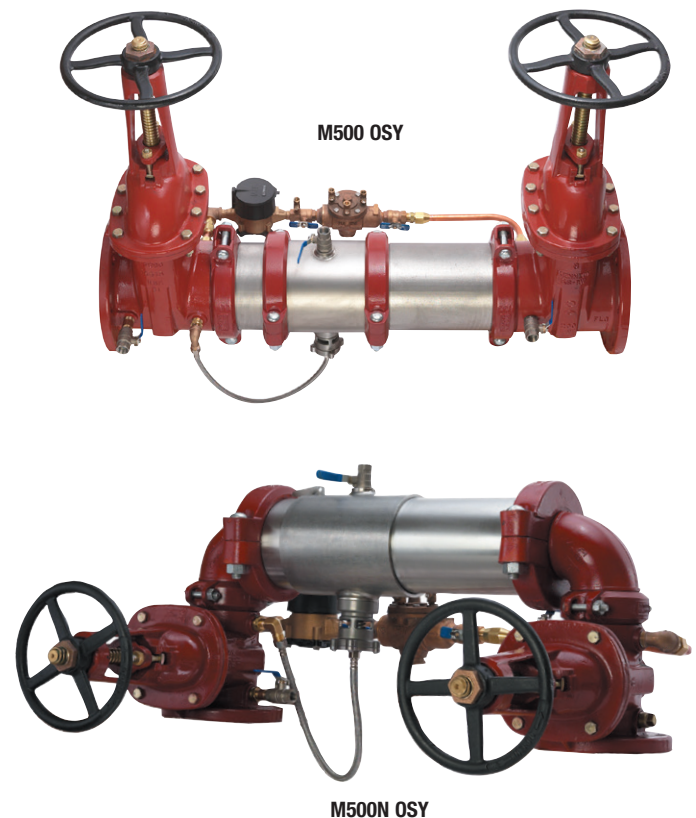
- Extremely Compact Design
- 70% Lighter than Traditional Designs
- 304 (Schedule 40) Stainless Steel Housing & Sleeve
- Groove Fittings Allow Integral Pipeline Adjustment
- Patented Link Check Provides Lowest Pressure Loss
- Unmatched Ease of Serviceability
 - Available with Grooved Butterfly Valve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

Specifications

The 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 Maxim M500, M500N, M500Z as manufactured by the Ames Fire & Waterworks.

⚠ 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.



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.

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.


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 EPDMr
- Test Cocks: Bronze Body Nickel Plated
- Pins & Fasteners: 300 Series Stainless Steel
- Springs: Stainless Steel

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*

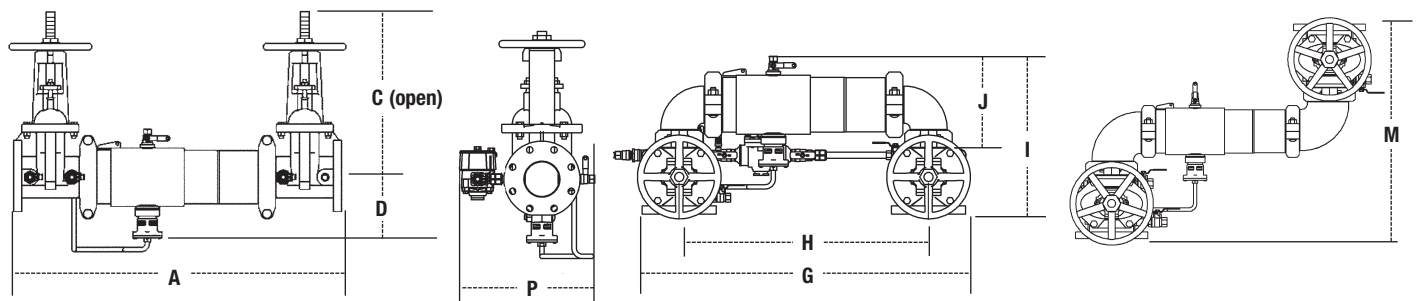
*Consult factory for dimensions

Pressure – Temperature

Temperature Range: 33°F – 110°F (5°C – 43°C)

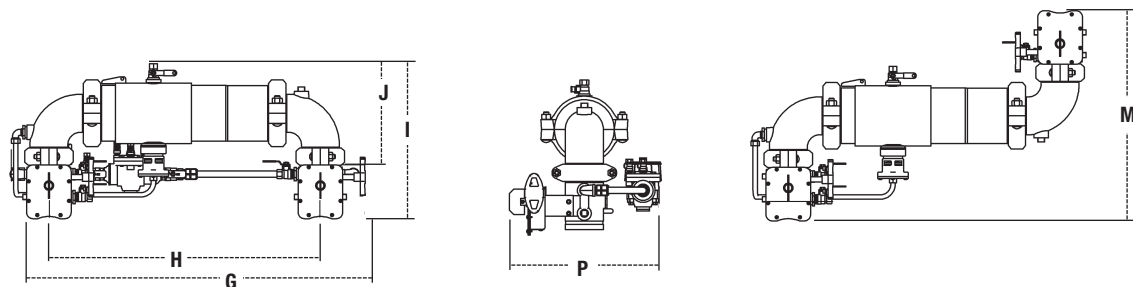
Maximum Working Pressure: 175psi (12.06 bar)

Dimensions – Weights



M500, M500N

SIZE		DIMENSIONS										WEIGHT											
in.	mm	A	C (OSY)		D		H		I		P		M		G		J		M500		M500N		
in.	mm	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	16¾	416	6½	165	21½	546	15⅞	395	13¾	340	21¼	540	29½	749	8⅓	223	142	64	150	68	
3	31¾	806	18⅞	479	6⅞	170	22¼	565	16¼	413	14⅞	372	23	584	30½	775	9⅞	233	162	73	175	79	
4	40½	1029	22¾	578	8	203	30¼	768	19⅞	500	15⅞	389	26¼	667	39¾	1010	11	280	236	107	259	117	
6	47¾	1213	30⅞	765	9½	241	37½	953	23⅞	605	19½	495	34¼	870	49	1245	14⅞	360	407	185	447	203	
8	54¾	1391	37¾	959	10½	267	45⅞	1146	27⅞	690	21⅞	549	36⅞	937	59⅞	1502	16¾	425	581	264	657	298	
10	57¾	1467	45¾	1162	11⅞	284	49½	1257	32½	825	24⅞	617	44½	1124	66	1676	17⅞	440	798	362	968	439	



M500N, M500ZBFG

SIZE	DIMENSIONS								WEIGHT					
in.	H		I		P		M		G		J		lbs.	kgs.
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
2½	23	584	15⅞	398	11⅞	300	19¾	502	31⅞	811	9½	242	81	37
3	24	610	16⅞	415	12⅞	308	21¼	540	33⅞	846	10⅞	255	84	38
4	30¼	768	18⅞	466	13⅞	454	23½	597	42	1067	12	305	159	72.1
6	37½	953	21¾	553	16⅞	418	27¼	692	50⅞	1291	15⅞	386	268	121.5

Noryl® is a registered trademark of SABIC Innovative Plastics™.

Approvals



1047



B64.4



(**BFG & OSY Only)



Approved

AWWA C511-97

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

Capacity

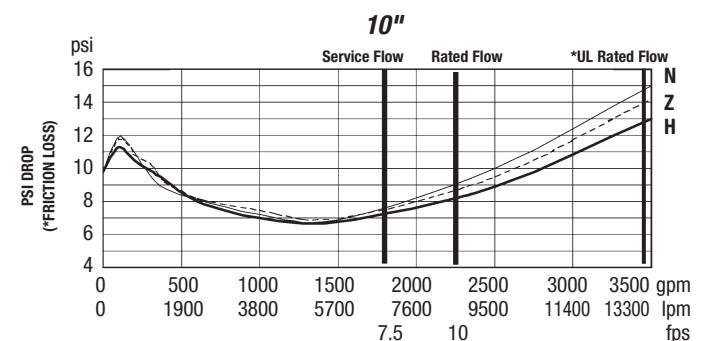
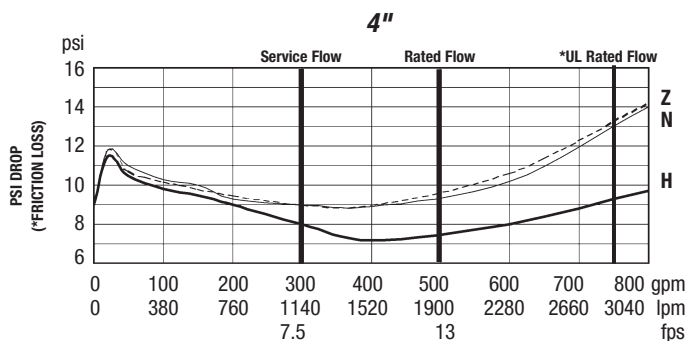
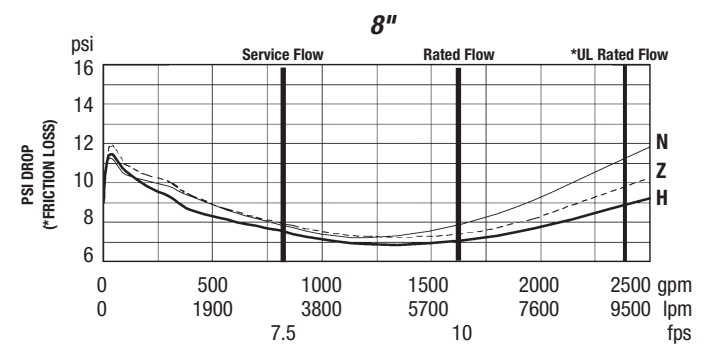
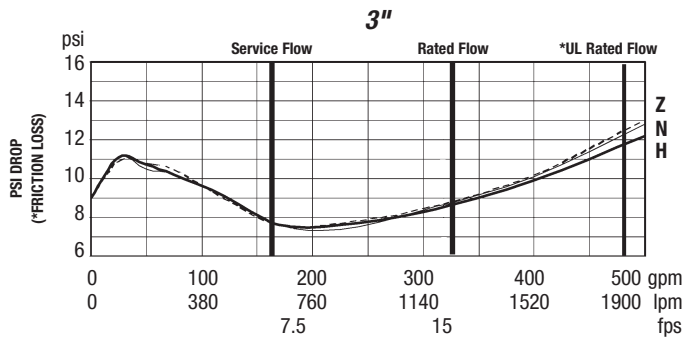
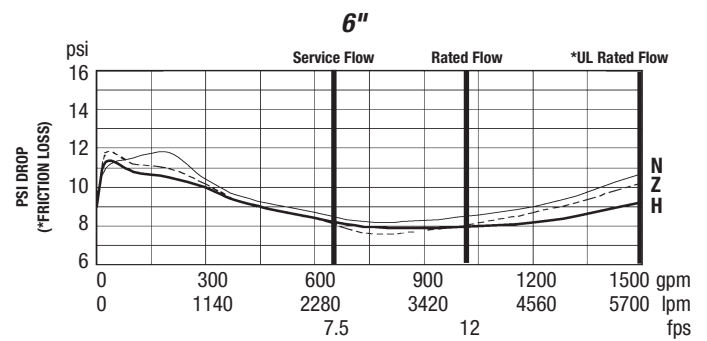
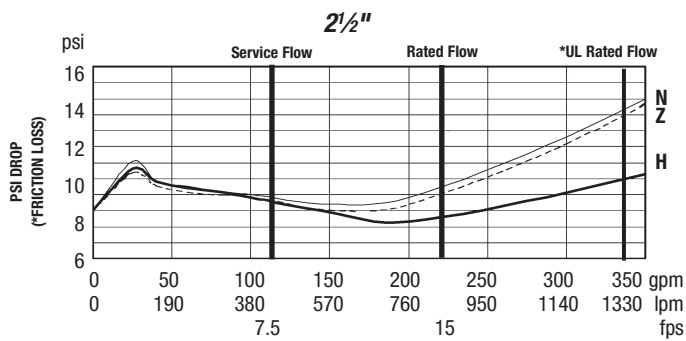
UL/FM Certified Flow Characteristics

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



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: (905) 332-4090 • Fax: (905) 332-7068 • AmesFireWater.ca
Latin America: Tel: (52) 81-1001-8600 • AmesFireWater.com