Job Name _____ Contractor _____

Job Location _____ Approval _____

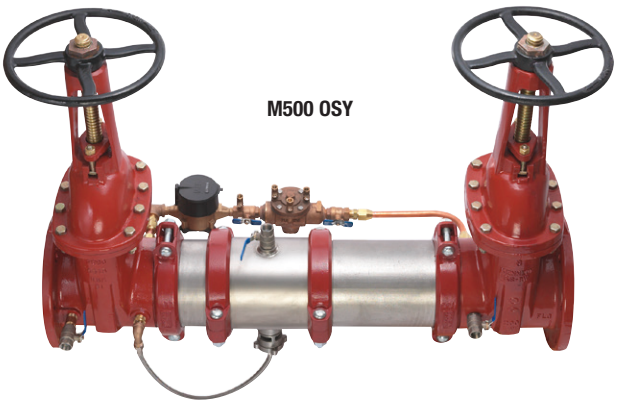
Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

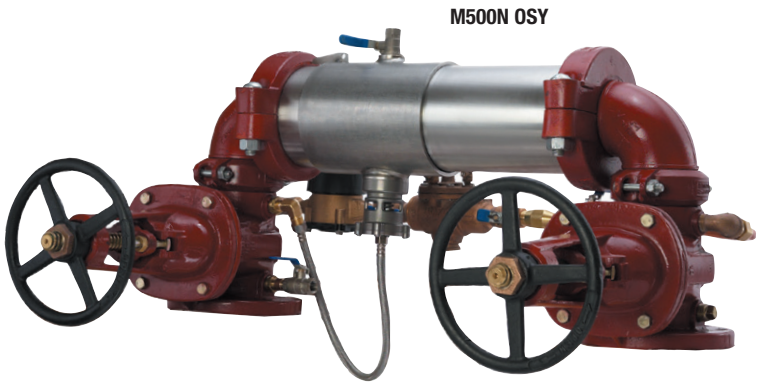
Maxim™ Series M500, M500N, M500Z

Reduced Pressure Detector Assemblies

Sizes: 2½" – 10" (65 – 250mm)



M500 OSY



M500N OSY

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

⚠ 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 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.

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.

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

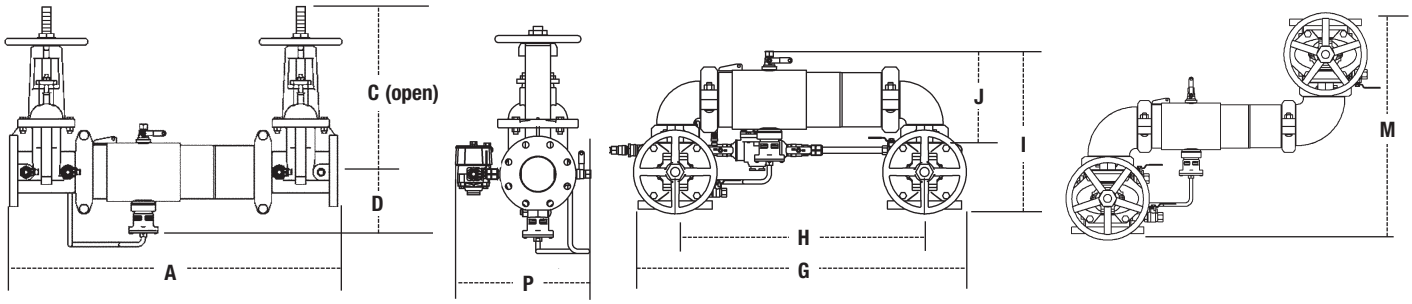
***OSY GxG** - Grooved inlet gate connection and grooved outlet gate connection

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

Pressure — Temperature

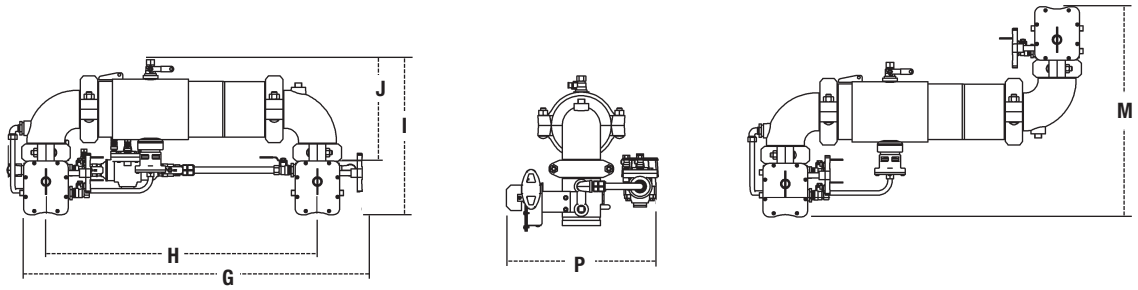
Temperature Range: 33°F – 110°F (5°C – 43°C)
Maximum Working Pressure: 175psi (12.06 bar)

Dimensions — Weights



M500, M500N

SIZE	DIMENSIONS																		WEIGHT			
	A		C (OSY)		D		H		I		P		M		G		J		M500		M500N	
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*	*lbs.*	*kgs.*
2 1/2	30 3/4	781	16 3/8	416	6 1/2	165	21 1/2	546	15 9/16	395	13 3/8	340	21 1/4	540	29 1/2	749	8 13/16	223	142	64	150	68
3	31 3/4	806	18 7/8	479	6 11/16	170	22 1/4	565	16 1/4	413	14 11/16	372	23	584	30 1/2	775	9 3/16	233	162	73	175	79
4	40 1/2	1029	22 3/4	578	8	203	30 1/4	768	19 11/16	500	15 5/16	389	26 1/4	667	39 3/4	1010	11	280	236	107	259	117
6	47 3/4	1213	30 1/8	765	9 1/2	241	37 1/2	953	23 3/16	605	19 1/2	495	34 1/4	870	49	1245	14 3/16	360	407	185	447	203
8	54 3/4	1391	37 3/4	959	10 1/2	267	45 1/8	1146	27 3/16	690	21 5/8	549	36 7/8	937	59 1/8	1502	16 3/4	425	581	264	657	298
10	57 3/4	1467	45 3/4	1162	11 3/16	284	49 1/2	1257	32 1/2	825	24 5/16	617	44 1/2	1124	66	1676	17 5/16	440	798	362	968	439



M500NBFG, M500ZBFG

SIZE	DIMENSIONS												WEIGHT	
	H		I		P		M		G		J			
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
2 1/2	23	584	15 11/16	398	11 13/16	300	19 3/4	502	31 15/16	811	9 1/2	242	81	37
3	24	610	16 5/16	415	12 1/8	308	21 1/4	540	33 5/16	846	10 1/16	255	84	38
4	30 1/4	768	18 5/16	466	13 15/16	454	23 1/2	597	42	1067	12	305	159	72.1
6	37 1/2	953	21 3/4	553	16 7/16	418	27 1/4	692	50 13/16	1291	15 3/16	386	268	121.5

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

Approvals

1047 B64.4 (**BFG & OSY Only)

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

Capacity

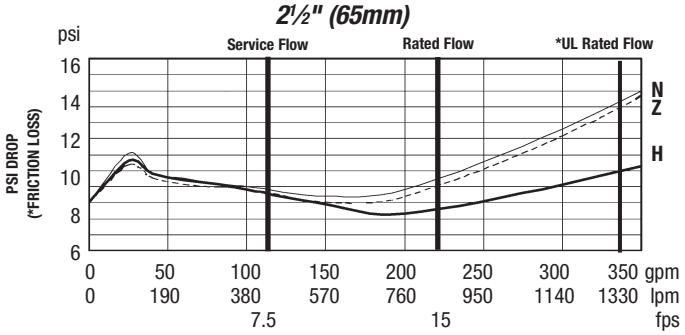
UL/FM Certified Flow Characteristics
Flow characteristics collected using butterfly shutoff valves.

___ Horizontal ____ N-Pattern _____ Z-Pattern

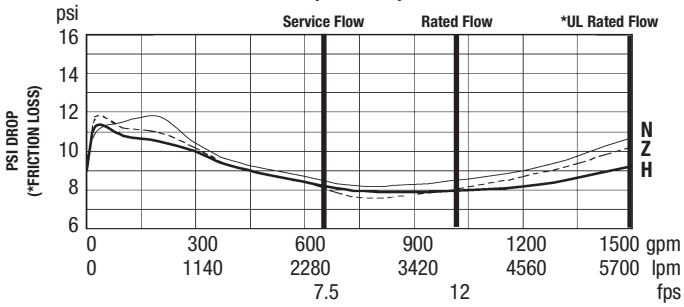
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- 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.

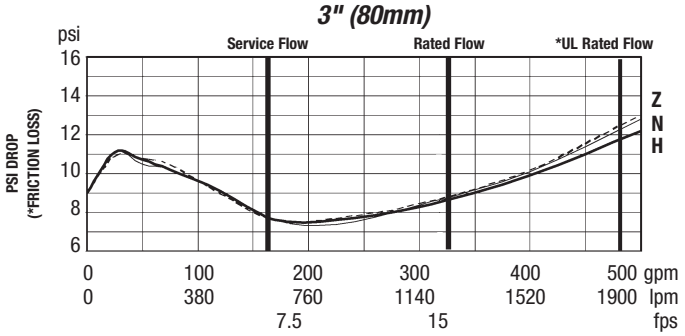
2½" (65mm)



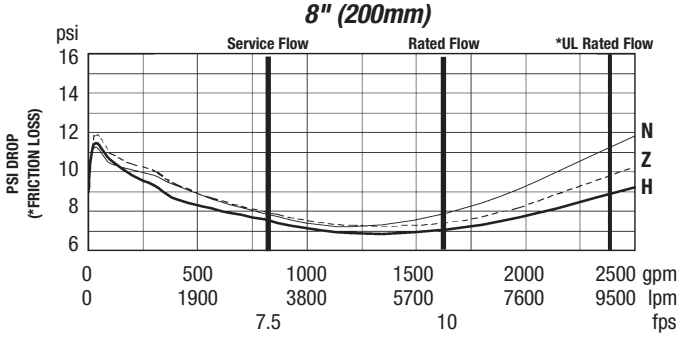
6" (150mm)



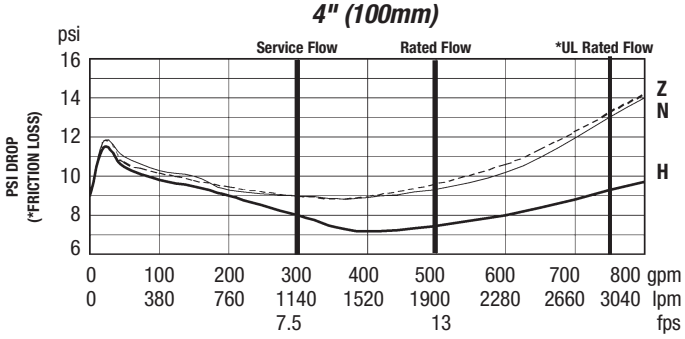
3" (80mm)



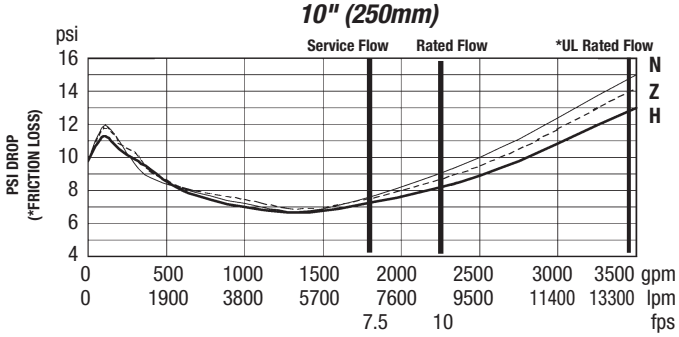
8" (200mm)



4" (100mm)



10" (250mm)



NOTICE

Inquire with governing authorities for local installation requirements

AMES
FIRE & WATERWORKS

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

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