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

Maxim[™] Series M500, M500N, M500Z

Reduced Pressure Detector Assemblies

Sizes: 21/2" - 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 nonpotable 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.

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.





M500N OSY

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.



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: Lead Free* Bronze Body
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

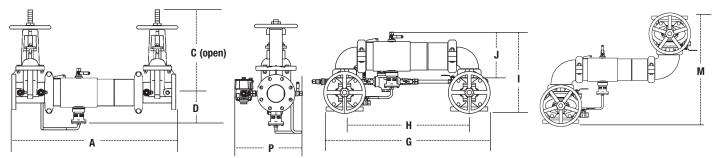
outlet gate connection

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

Pressure — Temperature

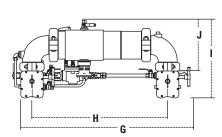
Temperature Range: 33°F – 110°F (5°C – 43°C) Maximum Working Pressure: 175psi (12.06 bar)

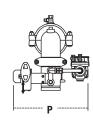
Dimensions - Weights

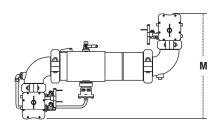


M500, M500N

SIZE	DIMENSIONS															WEIGHT						
•		Α	С	(OSY)	0)	ı	Н		Р		М		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.
21/2	303/4	781	16 ³ / ₈	416	61/2	165	211/2	546	15 ⁹ / ₁₆	395	133/8	340	211/4	540	291/2	749	813/16	223	142	64	150	68
3	313/4	806	18 ⁷ /8	479	611/16	170	221/4	565	16 ¹ / ₄	413	1411/16	372	23	584	30 ¹ / ₂	775	93/16	233	162	73	175	79
4	401/2	1029	223/4	578	8	203	301/4	768	1911/16	500	15 ⁵ / ₁₆	389	261/4	667	393/4	1010	11	280	236	107	259	117
6	473/4	1213	301/8	765	91/2	241	371/2	953	233/16	605	19 ¹ / ₂	495	341/4	870	49	1245	143/16	360	407	185	447	203
8	543/4	1391	373/4	959	10 ¹ / ₂	267	45 ¹ / ₈	1146	273/16	690	21 ⁵ /8	549	36 ⁷ /8	937	59 ¹ / ₈	1502	16 ³ / ₄	425	581	264	657	298
10	573/4	1467	453/4	1162	113/16	284	491/2	1257	321/2	825	245/16	617	441/2	1124	66	1676	175/16	440	798	362	968	439







M500NBFG. M500ZBFG

SIZE		DIMENSIONS												
		Н	I P)	М		G	ì	,	J			
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
21/2	23	584	1511/16	398	11 ¹³ / ₁₆	300	193/4	502	3115/16	811	91/2	242	81	37
3	24	610	16 ⁵ / ₁₆	415	12 ¹ / ₈	308	21 ¹ / ₄	540	335/16	846	10 ¹ / ₁₆	255	84	38
4	301/4	768	185/16	466	13 ¹⁵ / ₁₆	454	231/2	597	42	1067	12	305	159	72.1
6	371/2	953	213/4	553	16 ⁷ / ₁₆	418	271/4	692	50 ¹³ / ₁₆	1291	15 ³ / ₁₆	386	268	121.5

Approvals



AWWA C511-97

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

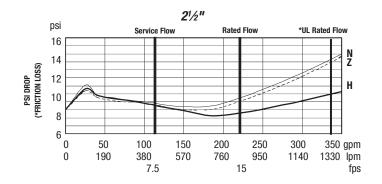
Capacity

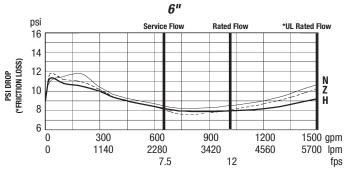
UL/FM Certified Flow Characteristics Flow characteristics collected using butterfly shutoff valves.

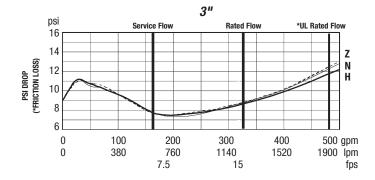
____Horizontal ____ N-Pattern ____Z-Pattern

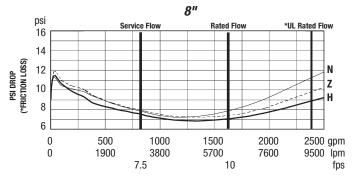
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

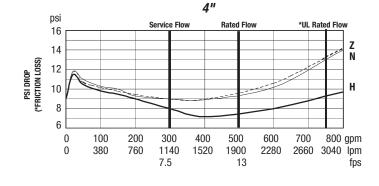
- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be not more than 10fps.

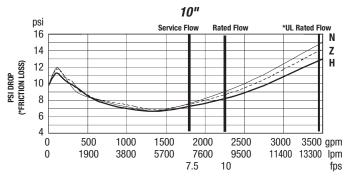












NOTICE

Inquire with governing authorities for local installation requirements



A WATTS Brand

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