Job Name _____ Contractor _____

Job Location _____ Approval _____

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

Approval _____ Representative _____

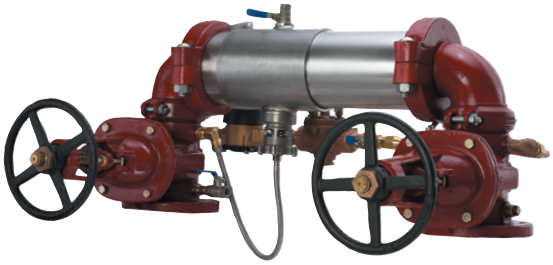
LEAD FREE*

Maxim™ Series LFM500 (Maxim 500), LFM500N (Maxim 500N), LFM500Z (Maxim 500Z)

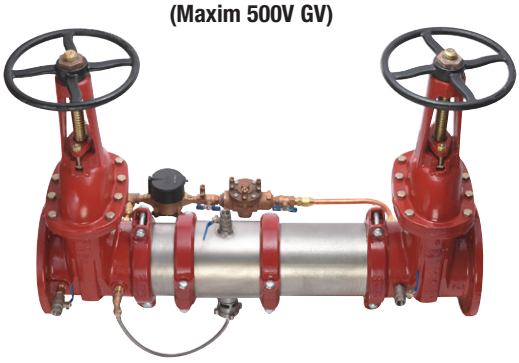
Reduced Pressure Detector Assemblies

Sizes: 2½" – 10"

The Maxim LFM500, LFM500N, LFM500Z Reduced Pressure Detector Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. The Maxim LFM500, LFM500N, LFM500Z are normally used in health hazard applications to protect against backsiphonage, backpressure and the fouling of either check valve. The Maxim LFM500, LFM500N, LFM500Z are used to monitor unauthorized use of water from the fire protection system.



LFM500N OSY (Maxim 500V GV)



LFM500 OSY (Maxim 500)

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 Lead Free* 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 feet measurements, a Reduced Pressure Zone Assembly and required test cocks. Assembly shall be Maxim LFM500, LFM500N, LFM500Z 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.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

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:	Lead Free* Cast Copper Silicon Alloy
Pins & Fasteners:	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

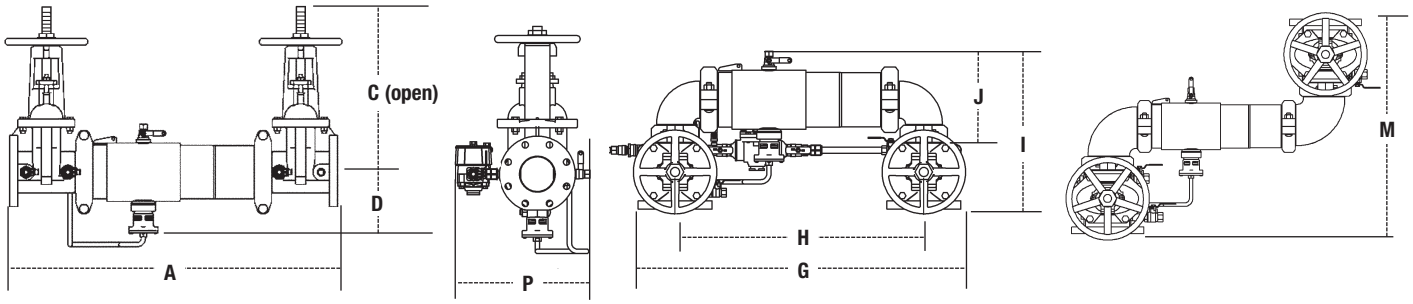
†OSY GxG — Grooved inlet gate connection and grooved outlet gate connection

Available with grooved NRS gate valves – consult factory†
Post indicator plate and operating nut available – consult factory†
tConsult factory for dimensions

Pressure — Temperature

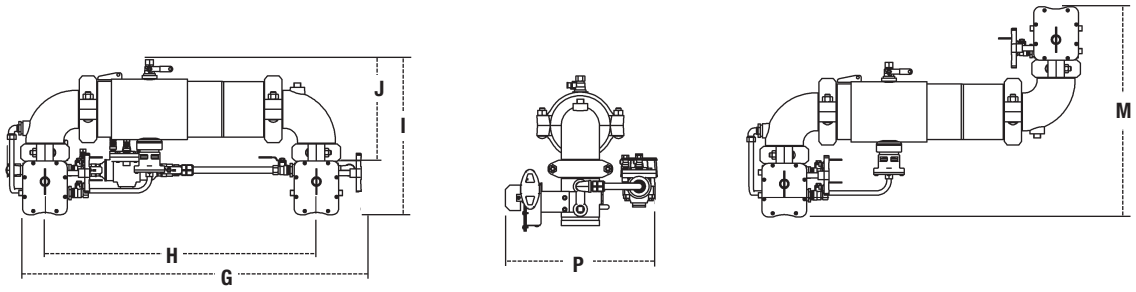
Temperature Range: 33°F – 110°F (5°C – 43°C)
Maximum Working Pressure: 175 psi (12.06 bar)

Dimensions — Weights



LFM500, LFM500N, LFM500Z

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.*
2½	30¾	781	16⅜	416	6½	165	21½	546	15⁹⁄₁₆	395	13⅜	340	21¼	540	29½	749	8¹³⁄₁₆	223	142	64	150	68
3	31¾	806	18⅞	479	6¹¹⁄₁₆	170	22¼	565	16¼	413	14¹¹⁄₁₆	372	23	584	30½	775	9³⁄₁₆	233	162	73	175	79
4	40½	1029	22¾	578	8	203	30¼	768	19¹¹⁄₁₆	500	15⁵⁄₁₆	389	26¼	667	39¾	1010	11	280	236	107	259	117
6	47¾	1213	30⅛	765	9½	241	37½	953	23⅜	605	19½	495	34¼	870	49	1245	14⅜	360	407	185	447	203
8	54¾	1391	37¾	959	10½	267	45⅛	1146	27⅜	690	21⅝	549	36⅞	937	59⅛	1502	16¾	425	581	264	657	298
10	57¾	1467	45¾	1162	11⅜	284	49½	1257	32½	825	24⁵⁄₁₆	617	44½	1124	66	1676	17⁵⁄₁₆	440	798	362	968	439



LFM500NBFG, LFM500ZBFG

SIZE	DIMENSIONS												WEIGHT	
	H		I		P		M		G		PJ			
in.	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
2½	23	584	15¹¹⁄₁₆	398	11¹³⁄₁₆	300	19¾	502	31¹⁵⁄₁₆	811	9½	242	81	37
3	24	610	16⁵⁄₁₆	415	12⅛	308	21¼	540	33⁵⁄₁₆	846	10¹⁄₁₆	255	84	38
4	30¼	768	18⁵⁄₁₆	466	13¹⁵⁄₁₆	454	23½	597	42	1067	12	305	159	72.1
6	37½	953	21¾	553	16⁷⁄₁₆	418	27¼	692	50¹³⁄₁₆	1291	15³⁄₁₆	386	268	121.5

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

Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The Unversity of Southern California (FCCCHR-USC)
- AWWA C511-97

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

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

Capacity

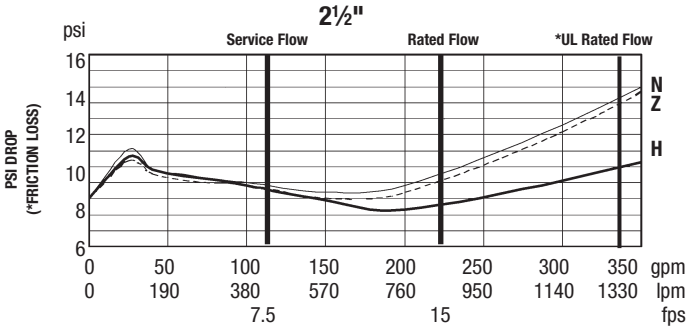
UL/FM Certified Flow Characteristics

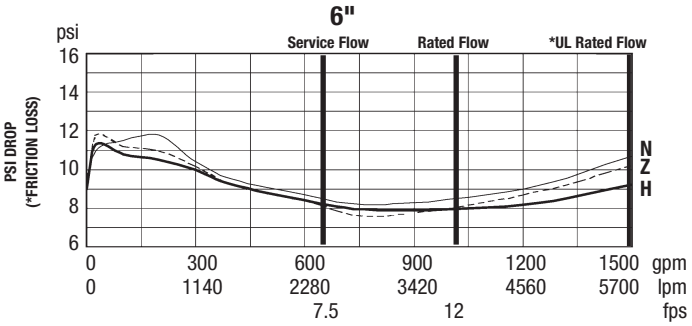
Flow characteristics collected using butterfly shutoff valves.

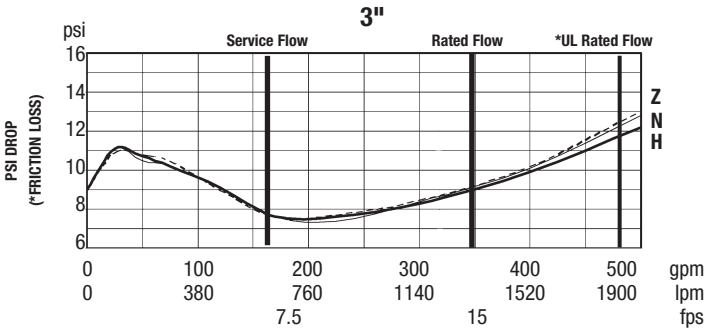
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

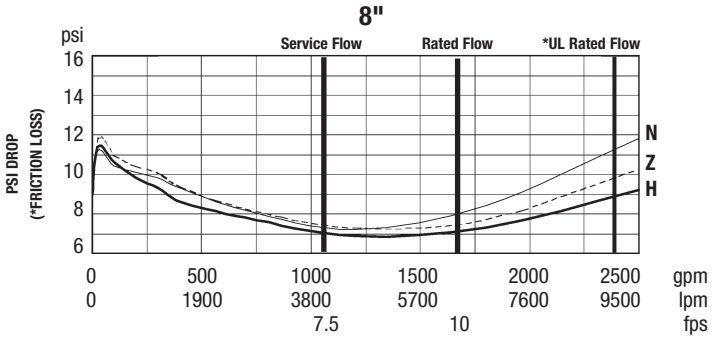
- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends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

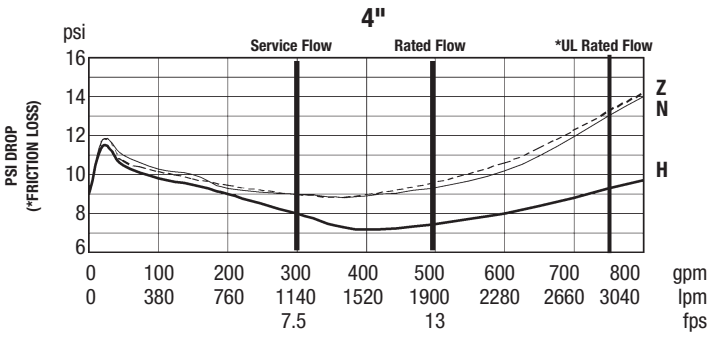
Horizontal N-Pattern Z-Pattern

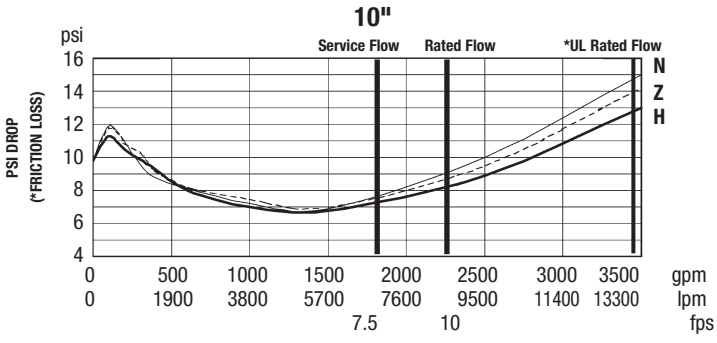












NOTICE

Inquire with governing authorities for local installation requirements

AMES
FIRE & WATERWORKS

A **WATTS** *Brand*

USA: Backflow T: (978) 689-6066 • F: (978) 975-8350 • AmesFireWater.com
USA: Control Valves T: (713) 943-0688 • F: (713) 944-9445 • AmesFireWater.com
Canada: T: (905) 332-4090 • F: (905) 332-7068 • AmesFireWater.ca
Latin America: T: (52) 81-1001-8600 • AmesFireWater.com