Maxim™ Series M400, M400N, M400Z

Reduced Pressure Zone Assemblies

Sizes: 2½" – 10" (65 – 250mm)

LEAD FREE*



M400 OSY



M400Z BFG

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

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

The Maxim M400, M400N, M400Z Reduced Pressure Zone Assemblies provide protection to the potable water system from contamination in accordance with national plumbing codes. The Maxim 400, 400N, 400Z are normally used in health hazard applications for protection against backsiphonage, backpressure and the fouling of either check valve.

Specifications

The Reduced Pressure Zone Assemblies shall consist of two independent Link Check modules, a differential pressure relief valve located between and below the two modules, two drip tight shut-off valves, and required test cocks. Link Check modules and the 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. Assembly shall be Maxim M400, M400N, M400Z as manufactured by the Ames Company.

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.

Job Name _____ Contractor _____

Job Location _____ Approval _____

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

Approval _____ Representative _____

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.

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

Available Models

NRS - non-rising stem resilient seated gate valves

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

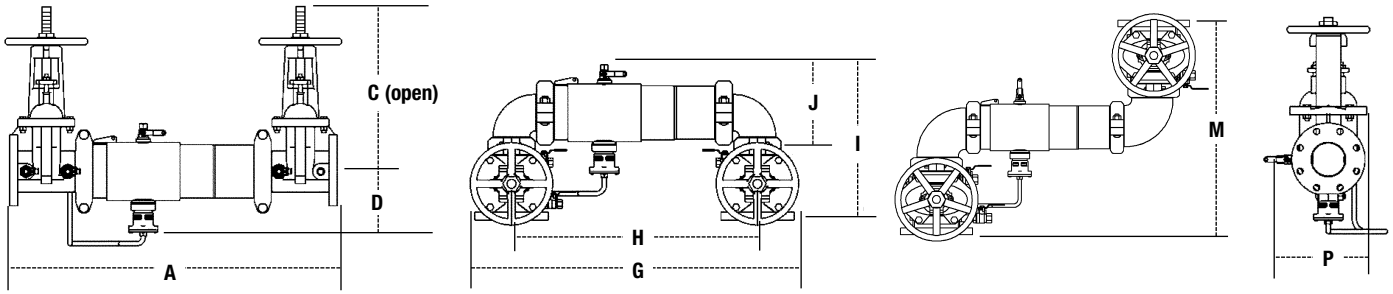
Available with grooved NRS gate valves - consult factory*
Post indicator plate and operating nut available - consult factory*
*Consult factory for dimensions

Pressure — Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C)
Maximum Working Pressure: 175psi (12.1 bar)

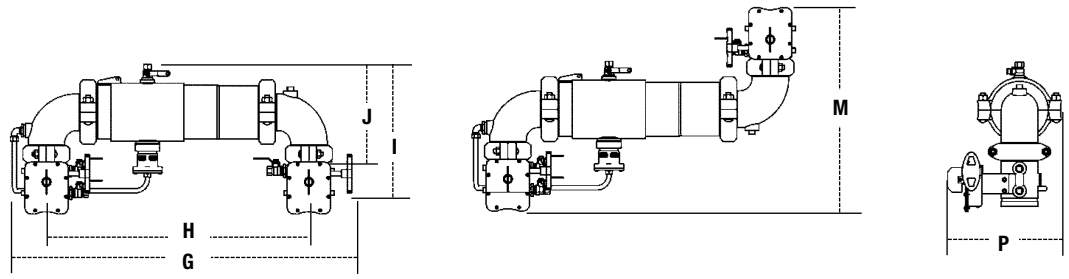
Note: When instaling a drain line on Series M400 backflow preventer use 400, 500 air gap. See ES-A-AG/EL/TC for additional information.

Dimensions — Weights



M400, M400N, M400Z

SIZE (DN)		DIMENSIONS																		WEIGHT					
		A		C (OSY)		C (NRS)		D		H		I		P		M		G		J		M400OSY		M400NRS		M400NOSY		M400NNRS	
in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*	*lbs.*	*kgs.*	*lbs.*	*kgs.*	*lbs.*	*kgs.*
2½	65	30¾	781	16⅜	416	9⅜	238	6½	165	21½	546	15⁹⁄₁₆	395	9⅜	238	21¼	540	29½	749	8¹³⁄₁₆	223	128	58	118	54	136	62	126	57
3	80	31¾	806	18⅞	479	10¼	260	6⅛	170	22¼	565	16¼	413	10¹¹⁄₁₆	271	23	584	30½	775	9⅜	233	148	67	134	61	161	73	147	67
4	100	40½	1029	22¾	578	12⅜	310	8	203	32¼	819	19¹¹⁄₁₆	500	11⁵⁄₁₆	287	26¼	667	39¾	1010	11	280	222	101	222	101	245	111	245	111
6	150	47¾	1213	30⅛	765	16	406	9½	241	39½	1003	23¹³⁄₁₆	580	15½	394	34¼	870	49	1244	14⅛	358	393	178	371	168	433	196	411	186
8	200	54¾	1391	37¾	959	9¹⁵⁄₁₆	506	10½	267	45⅛	1146	27⅜	690	17⅝	448	36⅞	937	59⅛	1502	16¾	425	567	257	525	238	643	292	601	273
10	250	57¾	1476	45¼	1162	23¹³⁄₁₆	605	11¾	285	49½	1257	32½	825	20⁵⁄₁₆	516	44½	1124	66	1676	17⁵⁄₁₆	440	784	784	724	356	954	433	894	406



M400NBFG, M400ZBFG

SIZE (DN)		DIMENSIONS												WEIGHT	
		H		I		P		M		G		J			
in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
2½	65	23	584	15¹¹⁄₁₆	398	11¹³⁄₁₆	300	19¾	502	32½	825	9½	242	67	30
3	80	24	610	16⁵⁄₁₆	415	12⅛	308	21¼	540	34	864	10⅛	255	70	32
4	100	32¼	819	18⁵⁄₁₆	466	13¹⁵⁄₁₆	354	23½	597	42½	1080	12	305	145	66
6	150	39½	1003	21¾	553	16⁷⁄₁₆	418	27¼	692	50¹³⁄₁₆	1291	15⅜	386	254	115

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Approvals

1013 B64.4 (**BFG & OSY Only)

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

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

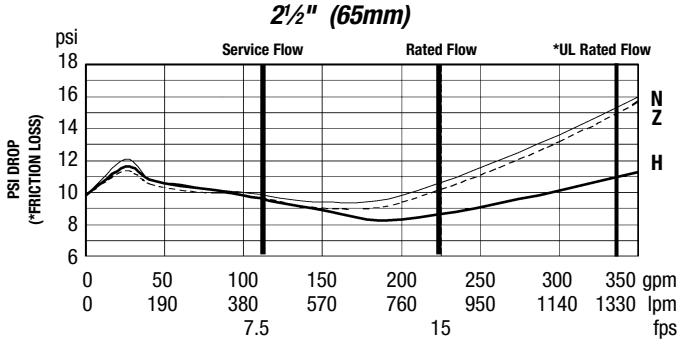
- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends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

Capacity

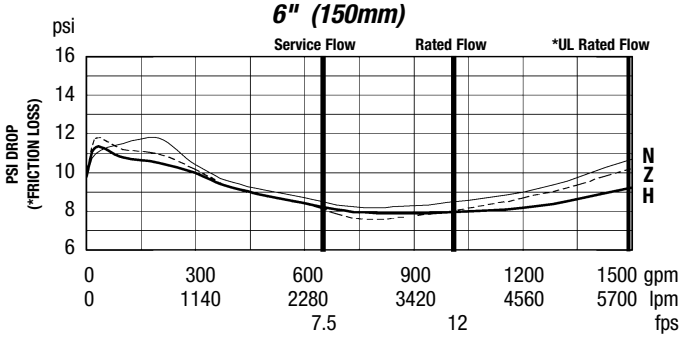
UL/FM Certified Flow Characteristics
Flow characteristics collected using butterfly shutoff valves.

Horizontal N-Pattern Z-Pattern

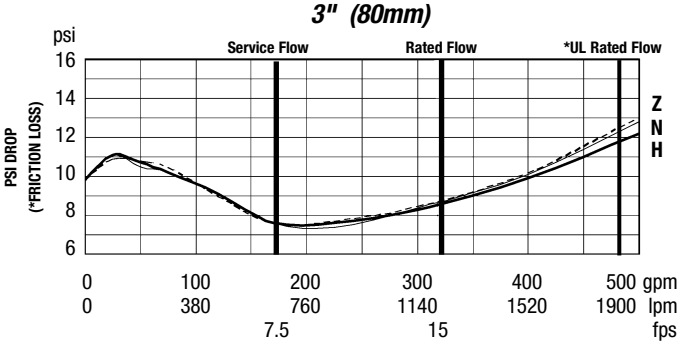
2½" (65mm)



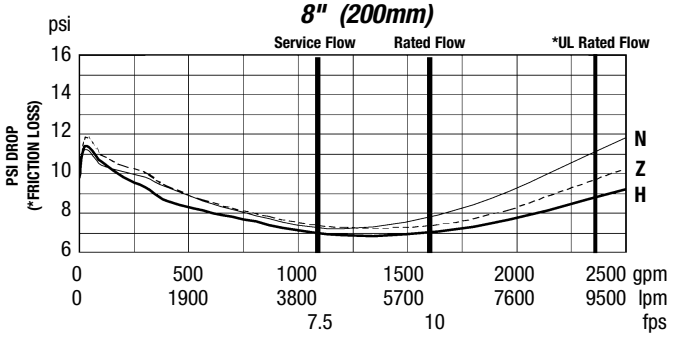
6" (150mm)



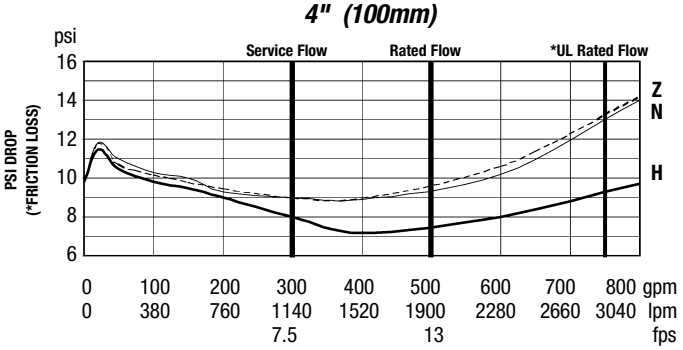
3" (80mm)



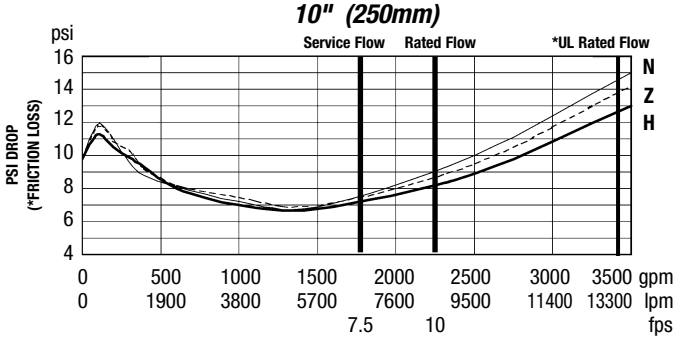
8" (200mm)



4" (100mm)



10" (250mm)



NOTICE

Inquire with governing authorities for local installation requirements

AMES
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A Watts Water Technologies Company

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USA: Control Valves Tel: (713) 943-0688 • Fax: (713) 944-9445 • AmesFireWater.com
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