

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

LEAD FREE*

Maxim™ Series M400, M400N, M400Z

Reduced Pressure Zone Assemblies

Sizes: 2½" – 10" (65 – 250mm)

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.

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 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 Fire & Waterworks.

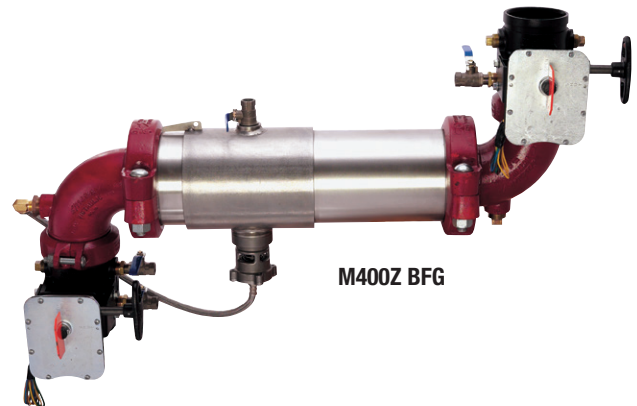
NOTICE

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.



M400 OSY



M400Z BFG

*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 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 GxG - 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

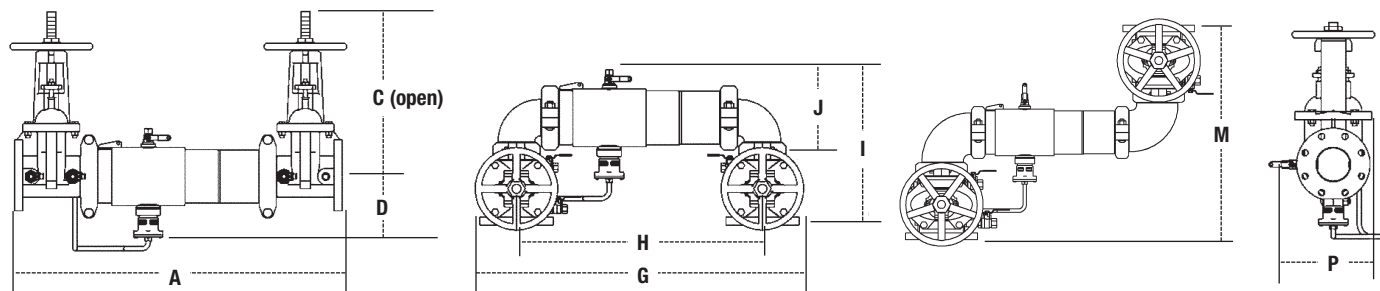
Temperature Range: 33°F – 110°F (0.5°C – 43°C)

Maximum Working Pressure: 175 psi (12.1 bar)

NOTICE

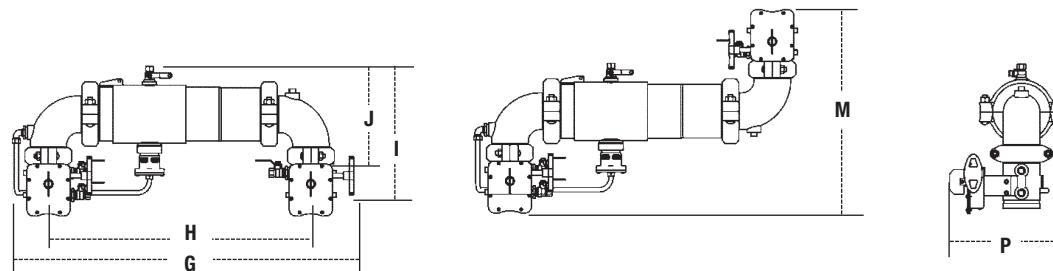
When installing a drain line on Series M400 backflow preventer use 400, 500 air gap. See ES-A-AG/EL/TC for additional information.

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				
<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>lbs.</i>	<i>kgs.</i>	<i>lbs.</i>	<i>kgs.</i>	<i>lbs.</i>	<i>kgs.</i>		
2½	65	30¾ 781	16¾ 416	9¾ 238	6½ 165	21½ 546	15⅞ 395	9¾ 238	21¼ 540	29½ 749	8⅜ 223	128 58	118 54	136 62	126 57				
3	80	31¾ 806	18¾ 479	10¼ 260	6⅞ 170	22¼ 565	16¼ 413	10⅞ 271	23 584	30½ 775	9¾ 233	148 67	134 61	161 73	147 67				
4	100	40½ 1029	22¾ 578	12¾ 310	8 203	32¼ 819	19⅞ 500	11¾ 287	26¼ 667	39¾ 1010	11 280	222 101	222 101	245 111	245 111				
6	150	47¾ 1213	30¾ 765	16 406	9½ 241	39¾ 1003	23⅞ 580	15½ 394	34¼ 870	49 1244	14¾ 358	393 178	371 168	433 196	411 186				
8	200	54¾ 1391	37¾ 959	9⅞ 506	10½ 267	45¾ 1146	27⅞ 690	17¾ 448	36¾ 937	59¾ 1502	16¾ 425	567 257	525 238	643 292	601 273				
10	250	57¾ 1476	45¾ 1162	23⅞ 605	11¾ 285	49½ 1257	32½ 825	20⅞ 516	44½ 1124	66 1676	17⅞ 440	784 356	724 326	894 406	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
2½	65	23	584	15⅞	398	11⅞	300	19¾	502	32½	825	9½	242
3	80	24	610	16⅞	415	12⅞	308	21¼	540	34	864	10⅞	255
4	100	32¼	819	18⅞	466	13⅞	354	23½	597	42½	1080	12	305
6	150	39½	1003	21¼	553	16⅞	418	27¼	692	50⅞	1291	15⅞	386

Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCCHR-USC)
(2 1/2" – 10" horizontal, 2 1/2" – 6" N and Z pattern)

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

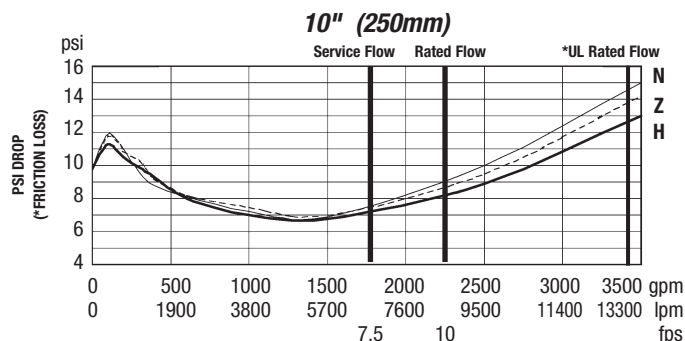
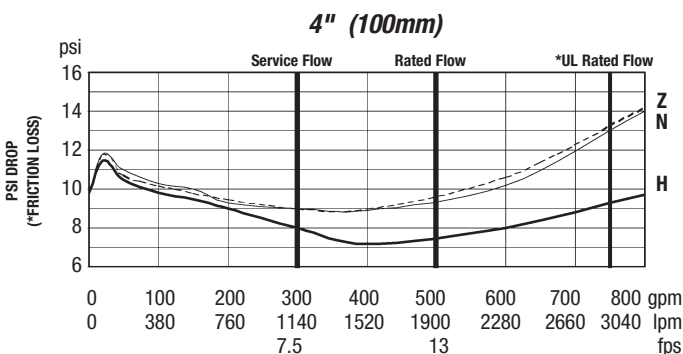
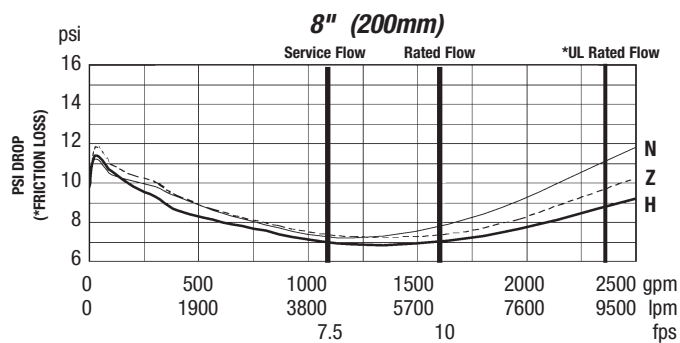
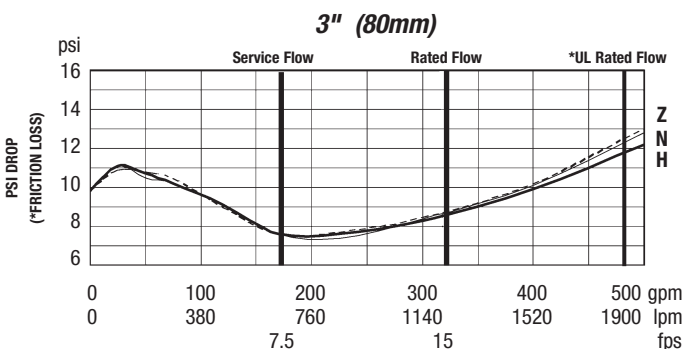
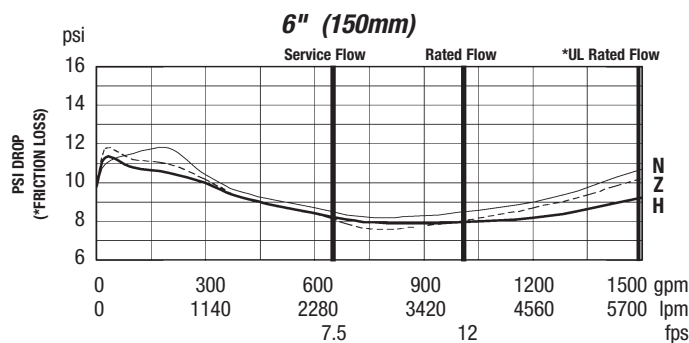
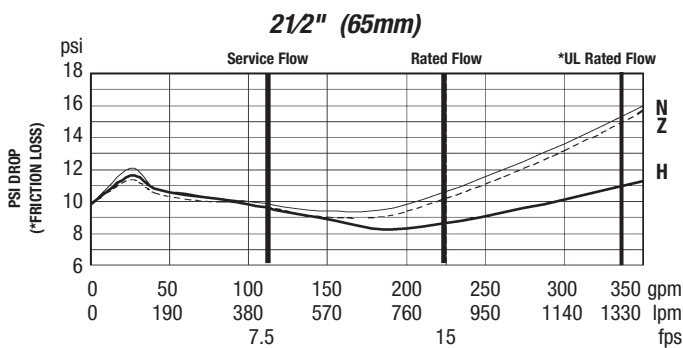


Capacity

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

For additional information, visit our web site at: www.amesfirewater.com



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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