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

LEAD FREE*

Maxim[™] Series M400, M400N, M400Z

Reduced Pressure Zone Assemblies

Sizes: 21/2" - 10"

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.





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



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: Lead Free* Bronze Body

• 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

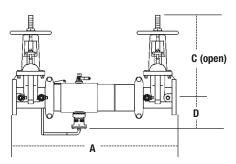
Pressure — Temperature

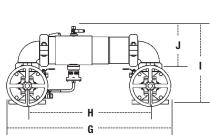
Temperature Range: 33°F – 110°F (0.5°C – 43°C) Maximum Working Pressure: 175 psi (12.1 bar)

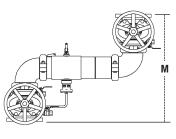
NOTICE

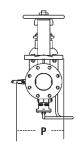
When instaling a drain line on Series M400 backflow preventer use 400, 500 air gap. See ES-A-AG/EL/TC for additional information.

Dimensions - Weights



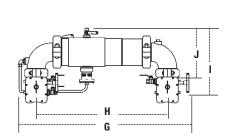


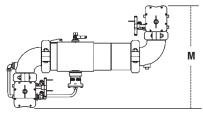


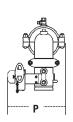


M400, M400N, M400Z

SIZE	DIMENSIONS															WEIGHT												
	А		A C (OSY)		C (NRS)		D		Н		1		Р		М		G		J		M4000SY		M400NRS		M400NOSY		M400NNRS	
in.	in. m	m	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.
21/2	30¾ 78	1	16%	416	9%	238	6½	165	21½	546	15%16	395	93/8	238	211/4	540	291/2	749	813/16	223	128	58	118	54	136	62	126	57
3	31¾ 80	6	181//8	479	101/4	260	61/16	170	221/4	565	161/4	413	10 ¹¹ / ₁₆	271	23	584	30½	775	93/16	233	148	67	134	61	161	73	147	67
_4	40½ 10	29	223/4	578	12 ³ / ₁₆	310	8	203	321/4	819	19 ¹¹ / ₁₆	500	115/16	287	261/4	667	39¾	1010	11	280	222	101	222	101	245	111	245	111
6	47¾ 12	13	301//8	765	16	406	9½	241	39½	1003	2313/16	580	15½	394	341/4	870	49	1244	141//8	358	393	178	371	168	433	196	411	186
8	54¾ 13	91	37¾	959	915/16	506	10½	267	451/8	1146	27 ³ / ₁₆	690	17%	448	367/8	937	591/8	1502	16¾	425	567	257	525	238	643	292	601	273
10	57¾ 14	76	45¾	1162	2313/16	605	113/	285	491/2	1257	32½	825	205/16	516	441/2	1124	66	1676	17 5/16	440	784	784	724	356	954	433	894	406







M400NBFG, M400ZBFG

SIZE	DIMERISIONS														
	ŀ	1	I		Р		M	1	(3		J			
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	
21/2	23	584	15 ¹¹ / ₁₆	398	11 ¹³ ⁄ ₁₆	300	19¾	502	32½	825	91/2	242	67	30	
3	24	610	16 5⁄16	415	121//8	308	211/4	540	34	864	101/16	255	70	32	
4	321/4	819	185/16	466	13 ¹⁵ / ₁₆	354	231/2	597	42½	1080	12	305	145	66	
6	39½	1003	21¾	553	16 ⁷ / ₁₆	418	271/4	692	50 ¹³ / ₁₆	1291	15¾6	386	254	115	

Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
 - (21/2" 10" horizontal, 21/2" 6" N and Z pattern)
- AWWA C511-97

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





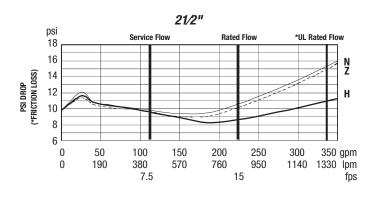


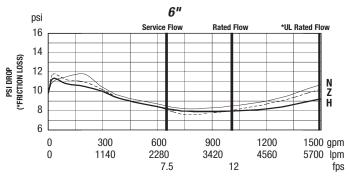


Capacity

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

Horizontal ____ N-Pattern ____ Z-Pattern





Flow capacity chart identifies valve performance

Service Flow is typically determined by a rated

· Rated Flow identifies maximum continuous duty

• UL Flow Rate is 150% of Rated Flow and is not

• AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be

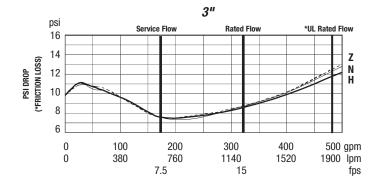
velocity of 7.5fps based upon schedule 40 pipe.

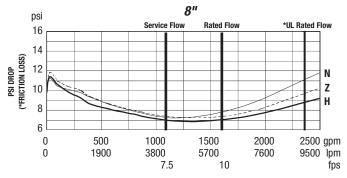
based upon rated water velocity up to 25fps

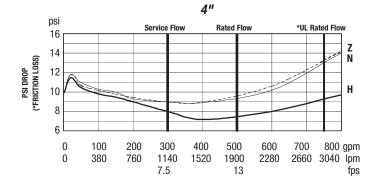
performance determined by AWWA.

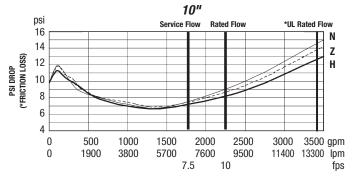
recommended for continuous duty.

not more than 10fps.









Inquire with governing authorities for local installation requirements

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

