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

# Maxim<sup>™</sup> Series M300 (Maxim 300), M300N (Maxim 300N) Double Check Detector Assemblies

### Sizes: 21/2" - 10"

The Maxim M300, M300N Double Check Detector Assemblies are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for non-health hazard non-potable service applications such as irrigation, fire line, or industrial processing. The Maxim M300, M300N may be installed under continuous pressure service and may be subjected to backpressure. The Maxim M300, M300N are used primarily on fire line sprinkler systems when it is necessary to monitor unauthorized use of water.

#### Features

- Extremely Compact Design
- 70% Lighter than Traditional Designs
- 304 (Schedule 40) Stainless Steel Housing & Sleeve
- Groove Fittings Allow Integral Pipeline Adjustment
- Patented Tri-Link Check Provides Lowest Pressure Loss
- Unmatched Ease of Serviceability
- Available with Grooved Butterfly Valve Shutoffs
- Available for Horizontal, Vertical or N Pattern Installations
- Replaceable Check Disc Rubber

#### 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.

#### 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.





### **Specifications**

The Double Check Detector Assemblies shall consist of two independent Tri-Link Check modules within a single housing, sleeve access port, four test cocks and two drip tight shutoff valves. Tri-Link Checks shall be removable and serviceable, without the use of special tools. The housing shall be constructed of 304 (Schedule 40) stainless steel pipe with groove end connections. Tri-Link Checks shall have reversible elastomer discs and in operation shall 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 double check valve assembly and required test cocks. Assembly shall be a Maxim M300, M300N as manufactured by the Ames Fire & Waterworks.



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.

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### Configurations

- Horizontal
- Vertical up
- "N" pattern horizontal

### **Materials**

Housing & Sleeve:	304 (Schedule 40) Stainless Steel
Elastomers:	EPDM, Silicone and Buna 'N'
Tri-Link Checks:	Noryl <sup>®</sup> , Stainless Steel
Check Discs:	Reversible Silicone or EPDM
Test Cocks:	Lead Free* Bronze Body
Pins & Fasteners:	300 Series Stainless Steel
Springs:	Stainless Steel

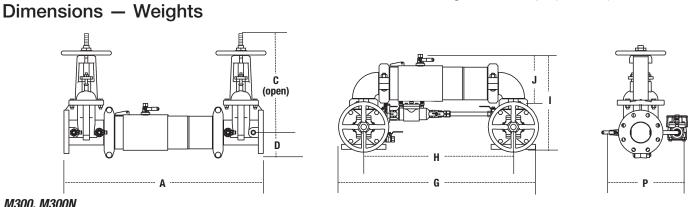
### **Available Models**

- OSY UL/FM flanged 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

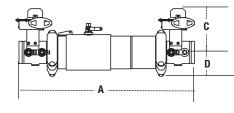
### Pressure - Temperature

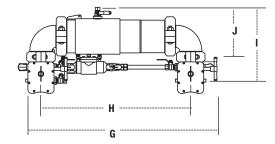
Temperature Range: 33°F – 110°F (5°C – 43°C) Maximum Working Pressure: 175psi (12.06 bar)

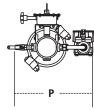


#### M300, M300N

SIZE	SIZE WEIGHT																			
	A		C (OSY)		D		G		H		I		J		Р		M300		M300N	
in	in	тт	in	тт	in	тт	in	тт	in	тт	in	тт	in	mm	in	тт	lbs.	kgs.	lbs.	kgs.
21/2	30¾	781	16%	416	31⁄2	89	291/16	738	211/2	546	15 <sup>13</sup> ⁄16	402	<b>8</b> <sup>13</sup> ⁄16	223	<b>13</b> <sup>3</sup> ⁄16	335	139	63	147	67
3	31¾	806	181%	479	<b>3</b> <sup>11</sup> /16	94	301/2	775	221/4	565	171//8	435	<b>9</b> <sup>3</sup> ⁄16	233	141/2	368	159	72	172	78
4	401/2	1029	22 <sup>3</sup> /4	578	5	127	393⁄4	1010	301/4	768	20%	518	<b>11</b> <sup>11</sup> / <sub>16</sub>	297	153/16	386	233	106	256	116
6	47¾	1213	301/%	765	6½	165	40	1016	371/2	953	24¾	629	143/16	360	191⁄2	495	404	183	444	201
8	54¾	1391	37¾	959	71⁄2	191	591/8	1502	451/8	1146	28%	721	16¾	425	<b>21</b> ½	546	578	262	654	297
10	57¾	1467	45¾	1162	<b>8</b> <sup>3</sup> ⁄16	208	66	1676	491/2	1257	321/2	826	175/16	440	24	610	795	361	965	438







### M300BFG, M300NBFG

SIZE			DIMENSIONS														WEIGHT				
	ļ	ł	(	)	D		G		Н		1		J		Р		M300BFG		M300NBFG		
in.	in.	mm	in.	тт	in.	тт	in.	тт	in.	тт	in.	mm	in.	тт	in.	тт	lbs.	kgs.	lbs.	kgs.	
<b>2</b> <sup>1</sup> / <sub>2</sub>	273⁄4	705	8	203	31/2	89	291/8	759	21½	546	<b>14</b> <sup>15</sup> / <sub>16</sub>	379	<b>8</b> <sup>13</sup> ⁄16	223	13	330	70	32	78	35	
3	281/4	718	85/16	211	311/16	94	30¾	781	221/4	565	157/16	392	<b>9</b> <sup>3</sup> ⁄16	233	131/2	343	68	31	81	37	
4	35¾	908	811/16	221	<b>4</b> <sup>13</sup> ⁄16	122	39	991	301/4	768	18	457	<b>11</b> <sup>11</sup> / <sub>16</sub>	297	15	381	133	60	156	71	
6	40¾	1035	10	254	6	152	471/16	1205	37½	953	<b>20</b> <sup>11</sup> / <sub>16</sub>	525	143/16	360	191/2	495	225	102	265	120	
8	<b>47</b> <sup>3</sup> ⁄ <sub>4</sub>	1213	<b>12</b> <sup>3</sup> ⁄16	310	613/16	173	56	1422	451/%	1146	241/8	613	16¾	425	<b>21</b> ½	546	359	163	435	197	

Noryl<sup>®</sup> is a registered trademark of SABIC Innovative Plastics<sup>™</sup>

### Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The Unversity of Southern California (FCCCHR-USC)
- AWWA C510-97

psi

14

12

10

8

6

4

2

0

0

PSI DROP (\*FRICTION LOSS)

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



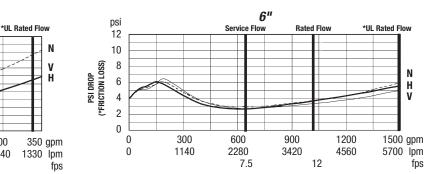
## Capacity

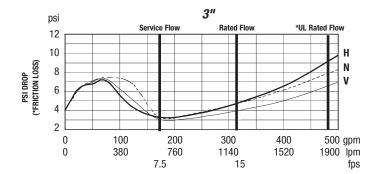
UL/FM Certified Flow Characteristics

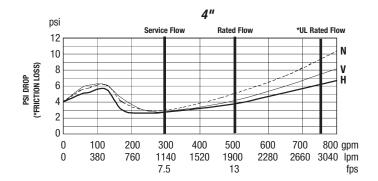
Flow characteristics collected using butterfly shutoff valves. See literature S-MAXIM-200/300 for gate valve flow characteristics

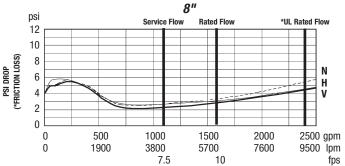
Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

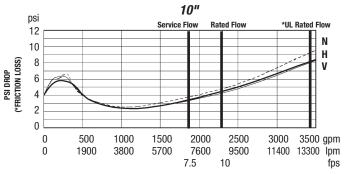
- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends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











**NOTICE** Inquire with governing authorities for local installation requirements

Horizontal — Vertical ----- N-Pattern

Service Flow

100

380

7.5

150

570

200

760

250

950

15

300

1140

50

190

**2**<sup>1</sup>/2"

Rated Flow



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