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

# **Maxim™ 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.



#### 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®, 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**

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

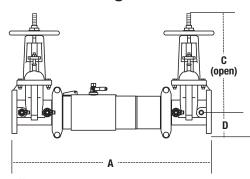
\*OSY GxG - Grooved inlet gate connection and grooved outlet gate connection

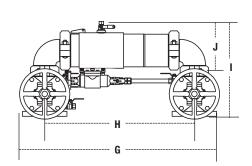
Available with grooved NRS gate valves - consult factory\* Post indicator plate and operating nut available - consult factory\* \*Consult factory for dimensions

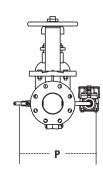
#### Pressure — Temperature

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

#### Dimensions - Weights

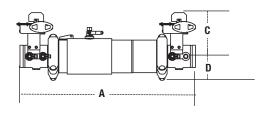


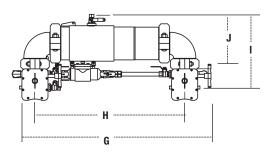


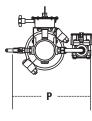


#### M300, M300N

SIZE	ZE																WEIGHT			
	A		C (OSY)		[	)	G	i	Н		I		J		Р		M300		M300N	
in	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs.	kgs.	lbs.	kgs.
21/2	30¾	781	16%	416	31/2	89	291/16	738	21½	546	15 <sup>13</sup> / <sub>16</sub>	402	813/16	223	13¾16	335	139	63	147	67
3	31¾	806	187/8	479	311/16	94	30½	775	221/4	565	171//8	435	93/16	233	141/2	368	159	72	172	78
4	401/2	1029	223/4	578	5	127	39¾	1010	301/4	768	20%	518	<b>11</b> <sup>11</sup> / <sub>16</sub>	297	153/16	386	233	106	256	116
6	473/4	1213	301//8	765	6½	165	40	1016	371/2	953	24¾	629	143/16	360	19½	495	404	183	444	201
8	543/4	1391	37¾	959	71/2	191	591//8	1502	451//8	1146	28%	721	16¾	425	21½	546	578	262	654	297
10	57¾	1467	45¾	1162	83/16	208	66	1676	491/2	1257	32½	826	175/16	440	24	610	795	361	965	438







#### M300BFG, M300NBFG

SIZE	DIMENSIONS														WEIGHT							
	A C		D		G		Н		I		J		Р		M300BFG		M300NBFG					
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.		
21/2	273/4	705	8	203	31/2	89	297/8	759	21½	546	<b>14</b> <sup>15</sup> ⁄ <sub>16</sub>	379	813/16	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	93/16	233	13½	343	68	31	81	37		
4	353/4	908	811/16	221	413/16	122	39	991	301/4	768	18	457	1111/16	297	15	381	133	60	156	71		
6	40¾	1035	10	254	6	152	<b>47</b> <sup>7</sup> / <sub>16</sub>	1205	37½	953	2011/16	525	143/16	360	19½	495	225	102	265	120		
8	473/4	1213	123/16	310	613/16	173	56	1422	451//8	1146	241/8	613	16¾	425	21½	546	359	163	435	197		

#### **Approvals**

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

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



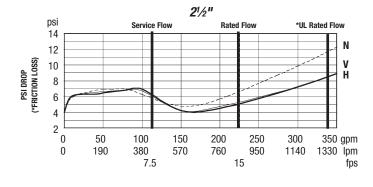


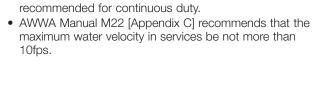


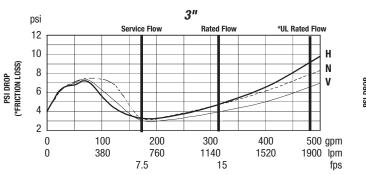


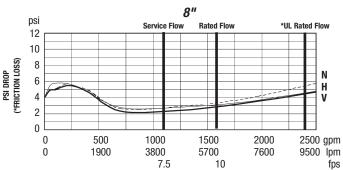
(\*\*BFG & OSY Only)

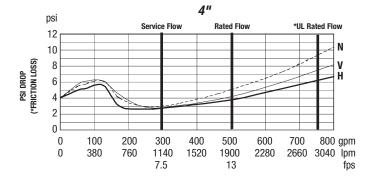
#### - Horizontal — Vertical ---- N-Pattern

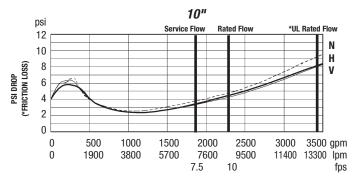












Inquire with governing authorities for local installation requirements

### Capacity

psi

12

10

8

6

4

2

0

0

300

1140

PSI DROP (\*FRICTION LOSS)

**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.
- maximum water velocity in services be not more than

Service Flow

600

2280

7.5

6"

Rated Flow

900

3420

12

1200

4560

\*UL Rated Flow

N

H

1500 gpm

5700 lpm

fps



A WATTS Brand