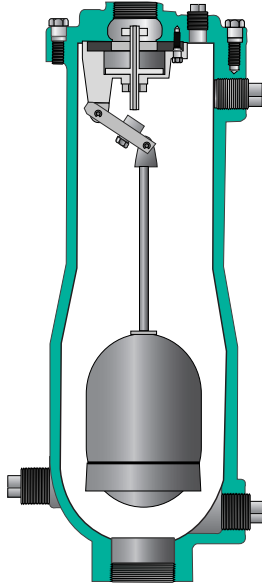




# Series 36-WW

## COMBINATION AIR VALVES DATA AND SIZING WASTEWATER SERVICE (Single Body Style)



- **Stainless Steel T316 Trim Standard**
- **Stainless Steel Floats Guaranteed**
- **Fully Ported Valves - No Restrictions**
- **Engineered For Drip Tight Seal At Low Pressures**
- **Optional Backwash Kit Available**

The Cla-Val Series 36WW Combination Air and Vacuum Valve is a multipurpose valve that combines the operation of both the Series 34WW Air Release Valve and Series 35WW Air and Vacuum Valve, especially for sewage and wastewater applications. It functions to exhaust large quantities of air in the pipeline during the filling cycle and to admit air, as necessary, to prevent a potentially dangerous vacuum from forming when being emptied either intentionally or as a result of pipeline breakage.

Note: For Valve sizing see Formula page 14.

### Installation

The Series 36WW Combination Air Valve should be installed at high points and grade changes within the pipeline.

Mount the unit in the vertical position on top of the pipeline with an isolation valve installed below each valve in the event servicing is required. A vault with adequate venting and drainage should also be provided.

For regular cleaning to keep sewage equipment in good working condition use the optional customer installed BWKT Backwash Kit with back flushing hose and quick disconnect couplings.

### Purchase Specification

The combination air valve shall combine the operating features of both an air and vacuum valve and an air release valve in one housing. The air and vacuum valve portion shall automatically exhaust large quantities of air during the filling of the pipeline and automatically allow air to reenter the pipeline when the internal pressure of the pipeline approaches a negative value due to column separation, draining of the pipeline, or other emergency. The air release valve portion shall automatically release small amounts of air from the pipeline while it is under pressure.

The inlet and outlet of the valve shall have the same cross-section area. The float shall be guided by a stainless steel guide shaft and seat drip-tight against a synthetic rubber seal.

The float shall be of all stainless steel construction and capable of withstanding maximum system surge pressure without failure. The body and cover shall be concentrically located and of cast iron and all valve internal parts shall be T316 stainless steel with Buna-N® rubber seat. Must be Manufactured per ANSI/AWWA C512-04

The Combination Air Release and Vacuum Valve shall be Model 36WW from Cla-Val., Newport Beach, CA, U.S.A.

### Specifications

#### Sizes - Inlet & Outlet

1", 2", 3", 4" NPT

#### Working Pressure Ratings

175 psi & 300 psi ratings

#### Standard Pressure

Air Release Orifice  
1/8" Diameter

#### NOTE: SPECIFY WHEN OPERATING PRESSURE BELOW 10 PSI

#### Materials

Body and Cover:  
Cast Iron ASTM  
A 126, Class B

#### Float:

Stainless Steel T316

#### Internal Parts:

Stainless Steel T316

#### Seal:

Buna-N® Rubber

### When Ordering, Please Specify

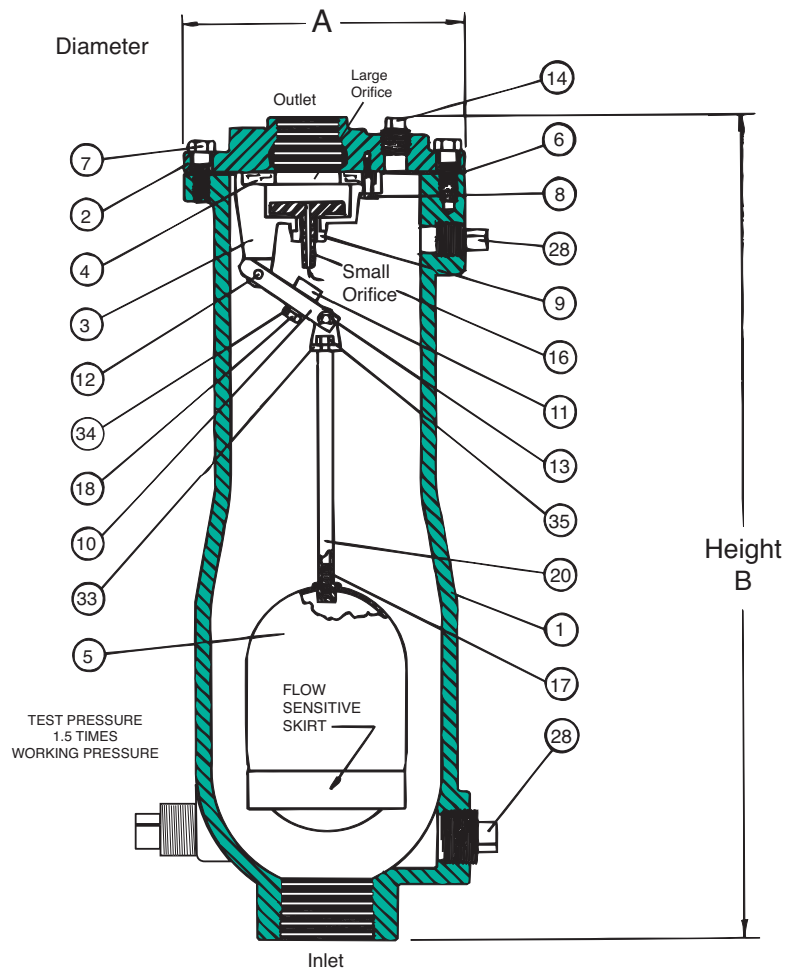
1. Model Number
2. Inlet Size (minimum is 2" NPT)
3. Inlet Pressure Rating
4. Orifice Size (175 psi 1/8") (300 psi 3/32")
5. Optional Backwash Kit (see page 70)





# Series 36-WW

## Wastewater Combination Air Valve (Single Body)



Valve Model	Inlet Outlet Size Inches	Large Orifice Size Inches	Small Orifice 175 MWP	Small Orifice 300 NWP	A	B	Weight Lbs Approx.
36WW21	2 x 1	1	1/8	3/32	7	14 15/16	50
36WW22	2 x 2	2	1/8	3/32	9 1/2	18	85
36WW33	3 x 3	3	1/8	3/32	11	23	160
36WW44	4 x 4	4	1/8	3/32	11	23	175

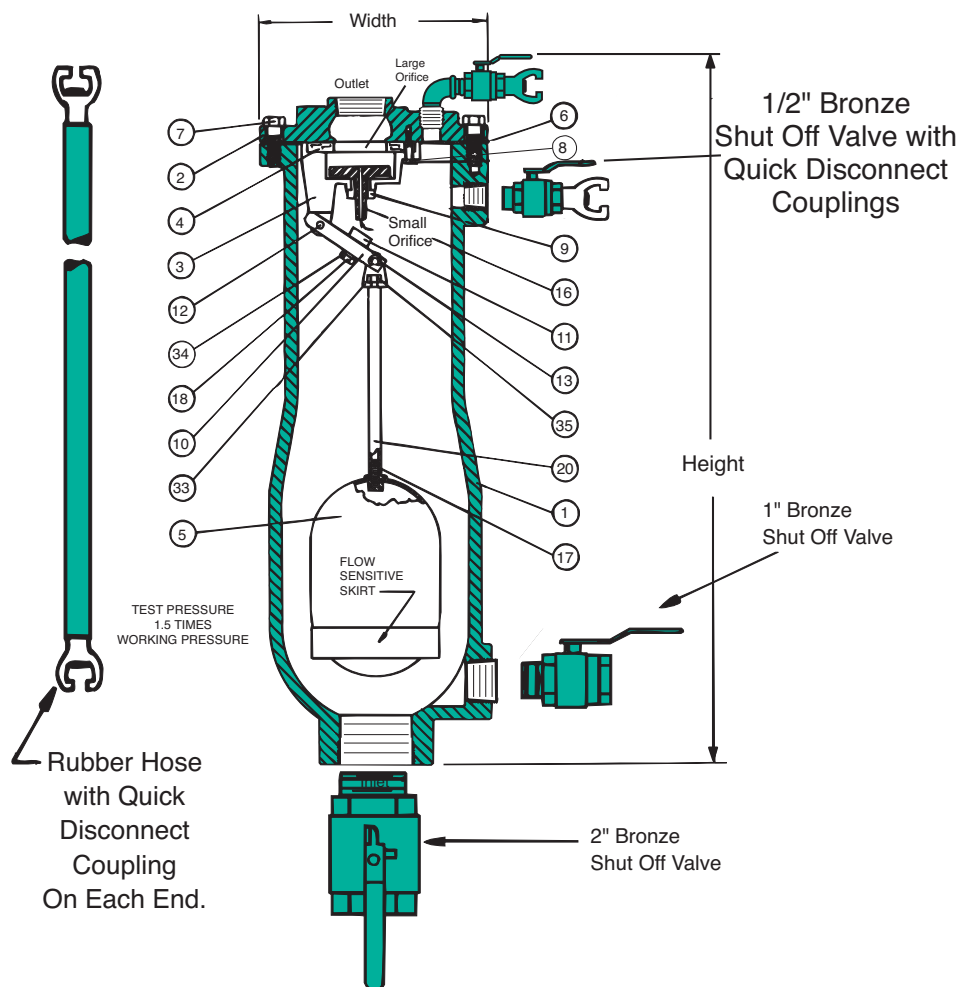
Detail	Part Name	Material	Detail	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	12	Pivot Pin	Stainless Steel T316, ASTM A276
2	Cover	Cast Iron ASTM A126, Class B	13	Retaining Ring	Stainless Steel PH 15-7 Mo
3	Baffle	Cast Iron ASTM A126, Class B	14	Pipe Plug	Malleable Steel
4	Seat	Buna-N®	16	Plug	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276	17	Float Retainer	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511	18	Lock Nut	Stainless Steel T316, ASTM A276
7	Cover Bolt	Carbon Steel ASTM A449, Grade 5	20	Guide Shaft	Stainless Steel T316, ASTM A276
8	Retaining Screws	Stainless Steel T316, ASTM A276	28	Body Pipe Plug	Malleable Iron
9	Guide Busing	Stainless Steel T316, ASTM A276	33	Clevis	Stainless Steel T316, ASTM A276
10	Float Arm	Stainless Steel T316, ASTM A276	34	Lock Washer	Stainless Steel T316, ASTM A276
11	Orifice Button	Stainless Steel T316 & Buna-N®	35	Retainer	Stainless Steel T316, ASTM A276

Note: Manufactured to meet ANSI/AWWA C512-04



# Series 36-WWBW

## Wastewater Combination Air Valve with Backwash Kit (Single Body)



Size	36-WW21BW	36-WW22BW	36WW33BW	36-WW33BW	Small Orifice 175 MWP	Small Orifice 300 MWP	Weight Lbs. Approx.
Inlet-Outlet	2 x 1	2" x 2"	3" x 3"	4" x 4"	1/8"	3/32"	60
Height	25 1/2"	26"	30 1/2"	33"	1/8"	3/32"	95
Width	10 1/2"	14"	16"	16"	1/8"	3/32"	175
Weight	72	109	190	305	1/8"	3/32"	200

Detail	Part Name	Material	Detail	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	12	Pivot Pin	Stainless Steel T316, ASTM A276
2	Cover	Cast Iron ASTM A126, Class B	13	Retaining Ring	Stainless Steel PH 15-7 Mo
3	Baffle	Cast Iron ASTM A126, Class B	14	Pipe Plug	Malleable Steel
4	Seat	Buna-N®	16	Plug	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276	17	Float Retainer	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511	18	Lock Nut	Stainless Steel T316, ASTM A276
7	Cover Bolt	Carbon Steel ASTM A449, Grade 5	20	Guide Shaft	Stainless Steel T316, ASTM A276
8	Retaining Screws	Stainless Steel T316, ASTM A276	33	Clevis	Stainless Steel T316, ASTM A276
9	Guide Busing	Stainless Steel T316, ASTM A276	34	Lock Washer	Stainless Steel T316, ASTM A276
10	Float Arm	Stainless Steel T316, ASTM A276	35	Retainer	Stainless Steel T316, ASTM A276
11	Orifice Button	Stainless Steel T316 & Buna-N®			

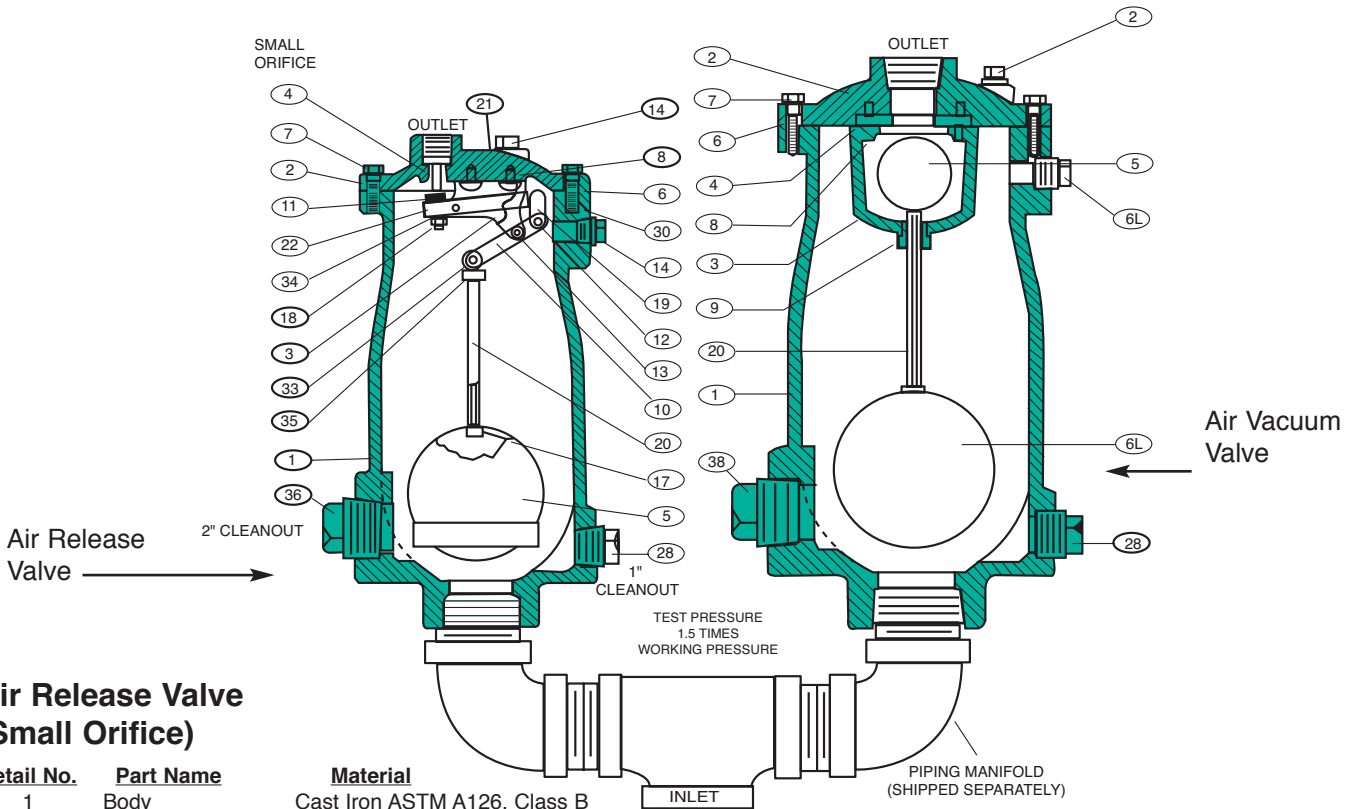
Note: Manufactured to meet ANSI/AWWA C512-04



# Series MTP36-WW

## Wastewater Combination Air Valve

### Dual Body Style 1"- 2"- 3"



#### Air Release Valve (Small Orifice)

Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B
2	Cover	Cast Iron ASTM A126, Class B
3	Leverage Frame	Stainless Steel T316, ASTM A276
4	Seat	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5
8	Retaining Screws	Stainless Steel T316, ASTM A276
10	Float Arm	Stainless Steel T316, ASTM A276
11	Orifice Button	Stainless Steel T316 & Buna-N®
12	Pivot Pin	Stainless Steel T316, ASTM A276
13	Retaining Ring	Stainless Steel PH 15-7 Mo
14	Cover Pipe Plug	Malleable Iron
17	Float Retainer	Stainless Steel T316, ASTM A276
18	Lock Nut	Stainless Steel T316, ASTM A276
19	Link	Stainless Steel T316, ASTM A276
20	Guide Shaft	Stainless Steel T316, ASTM A276
21	Location Pin	Stainless Steel T316, ASTM A276
22	Orifice Button	Stainless Steel T316, ASTM A276
28	Body Pipe Plug	Malleable Steel
30	Washer	Stainless Steel T316, ASTM A276
33	Clevis	Stainless Steel T316, ASTM A276
34	Lock Washer	Stainless Steel T316, ASTM A276
35	Retainer	Stainless Steel T316, ASTM A276
36	Body Pipe Plug	Stainless Steel T316, ASTM A276

#### Air Vacuum Valve (Large Orifice)

Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B
2	Cover	Cast Iron ASTM A126, Class B
3	Baffle	Ductile Iron ASTM A536
4	Seat	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276
5-L	Float	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5
8	Retaining Screws	Stainless Steel T316, ASTM A276
9	Guide Bushing	Stainless Steel T316, ASTM A276
14	Cover Pipe Plug	Malleable Iron
20	Guide Shaft	Stainless Steel T316, ASTM A276
28	Body Pipe Plug	Malleable Steel

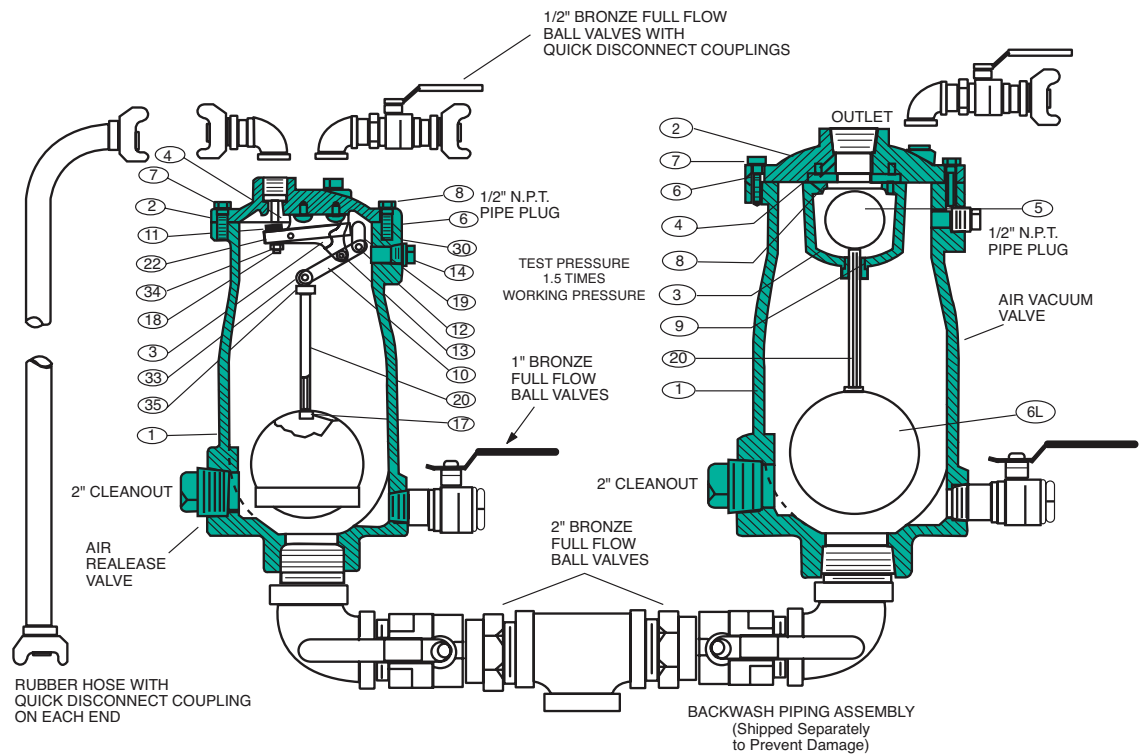
Note: Manufactured to meet ANSI/AWWA C512-04

Valve Size	Inlet Size	OUTLET		MODEL NUMBER FOR STANDARD 175WP	Large Orifice Diameter	SMALL ORIFICE DIAMETER		Height	Width	Depth	Wt. Lbs.
		Air Release	Air Vacuum			175 MWP	300MWP				
1"	2"	1/2" NPT	1" NPT	MTP3601/3420WW316	1"	3/16"	5/32"	26	23	7	105
2"	2"	1/2" NPT	2" NPT	MTP3602/3420WW316	2"	3/16"	5/32"	27	26	9 1/2	110
3"	3"	1/2" NPT	3" NPT	MTP3603/3420WW316	3"	3/16"	5/32"	27	27	9 1/2	130



# Series MTP36-WWBW

## Wastewater Combination Air Valve Dual Body Style With Backwash Kit 1" - 2" - 3"



### Air Release Valve (Small Orifice)

RUBBER HOSE WITH  
QUICK DISCONNECT COUPLING  
ON EACH END

Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B
2	Cover	Cast Iron ASTM A126, Class B
3	Leverage Frame	Stainless Steel T316, ASTM A276
4	Seat	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5
8	Retaining Screws	Stainless Steel T316, ASTM A276
10	Float Arm	Stainless Steel T316, ASTM A276
11	Orifice Button	Stainless Steel T316 & Buna-N®
12	Pivot Pin	Stainless Steel T316, ASTM A276
13	Retaining Ring	Stainless Steel PH 15-7 Mo
14	Cover Pipe Plug	Malleable Iron
17	Float Retainer	Stainless Steel T316, ASTM A276
18	Lock Nut	Stainless Steel T316, ASTM A276
19	Link	Stainless Steel T316, ASTM A276
20	Guide Shaft	Stainless Steel T316, ASTM A276
21	Location Pin	Stainless Steel T316, ASTM A276
22	Orifice Button	Stainless Steel T316, ASTM A276
28	Body Pipe Plug	Malleable Steel
30	Washer	Stainless Steel T316, ASTM A276
33	Clevis	Stainless Steel T316, ASTM A276
34	Lock Washer	Stainless Steel T316, ASTM A276
35	Retainer	Stainless Steel T316, ASTM A276
36	Body Pipe Plug	Stainless Steel T316, ASTM A276

### Air Vacuum Valve (Large Orifice)

Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B
2	Cover	Cast Iron ASTM A126, Class B
3	Baffle	Ductile Iron ASTM A536
4	Seat	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276
5-L	Float	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5
8	Retaining Screws	Stainless Steel T316, ASTM A276
9	Guide Bushing	Stainless Steel T316, ASTM A276
14	Cover Pipe Plug	Malleable Iron
20	Guide Shaft	Stainless Steel T316, ASTM A276
28	Body Pipe Plug	Malleable Steel

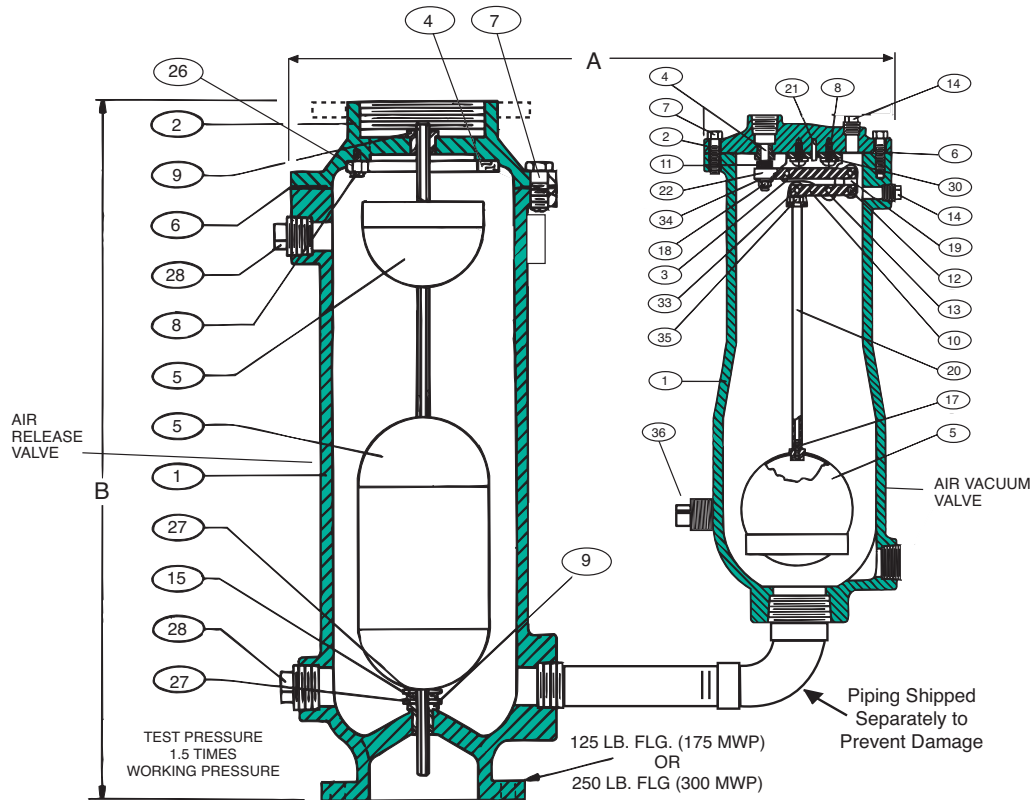
Note: Manufactured to meet ANSI/AWWA C512-04

Valve Size	Inlet Size	OUTLET		MODEL NUMBER FOR STANDARD 175WP	Large Orifice Diameter	SMALL ORIFICE DIAMETER		Height	Width	Depth	Wt. Lbs.
		Air Release	Air Release			175MWP	300MWP				
1"	2"	1/2" NPT	1" NPT	MTP3601/3420WW316BW	1"	3/16"	5/32"	26	23	7	115
2"	2"	1/2" NPT	2" NPT	MTP3602/3420WW316BW	2"	3/16"	5/32"	27	26	9 1/2	125
3"	3"	1/2" NPT	3" NPT	MTP3603/3420WW316BW	3"	3/16"	5/32"	27	27	9 1/2	150



# Series MTP36-WW

## Wastewater Combination Air Valve Dual Body Style



Detail No.	Part Name	Material	Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	14	Cover Pipe Plug	Malleable Iron
2	Cover	Cast Iron ASTM A126, Class B	17	Float Retainer	Stainless Steel T18-8, ASTM A276
3	Leverage Frame	Stainless Steel T316, ASTM A276	18	Lock Nut	Stainless Steel T316, ASTM A276
4	Seat	Stainless Steel T316, ASTM A276	19	Link	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276	20	Guide Shaft	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)	21	Location Pin	Stainless Steel T316, ASTM A276
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5	22	Orifice Button	Stainless Steel T316, ASTM A276
8	Retaining Screws	Stainless Steel T316, ASTM A276	28	Body Pipe Plug	Malleable Steel
10	Float Arm	Stainless Steel T316, ASTM A276	30	Washer	Stainless Steel T18-8, ASTM A240
11	Orifice Button	Stainless Steel & Buna-N®	33	Clevis	Stainless Steel T316, ASTM A276
12	Pivot Pin	Stainless Steel T316, ASTM A276	34	Lock Washer	Stainless Steel T316, ASTM A276
13	Retaining Ring	Stainless Steel PH 15-7 Mo	35	Retainer	Stainless Steel T316, ASTM A276
			36	Body Pipe Plug	Stainless Steel T316, ASTM A276

Detail No.	Part Name	Material	Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	8	Retaining Screws	Stainless Steel T316, ASTM A276
2	Cover	Cast Iron ASTM A126, Class B	9	Guide Busing	Stainless Steel T316, ASTM A276
4	Seat	Buna-N®	15	Cushion	Buna - N®
5	Float	Stainless Steel T316, ASTM A276	26	Seat Retaining Sleeve	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)	27	Washer-Internal	Stainless Steel ASTM A240
7	Cover Bolt	Alloy Steel	28	Pipe Plug	Malleable Iron

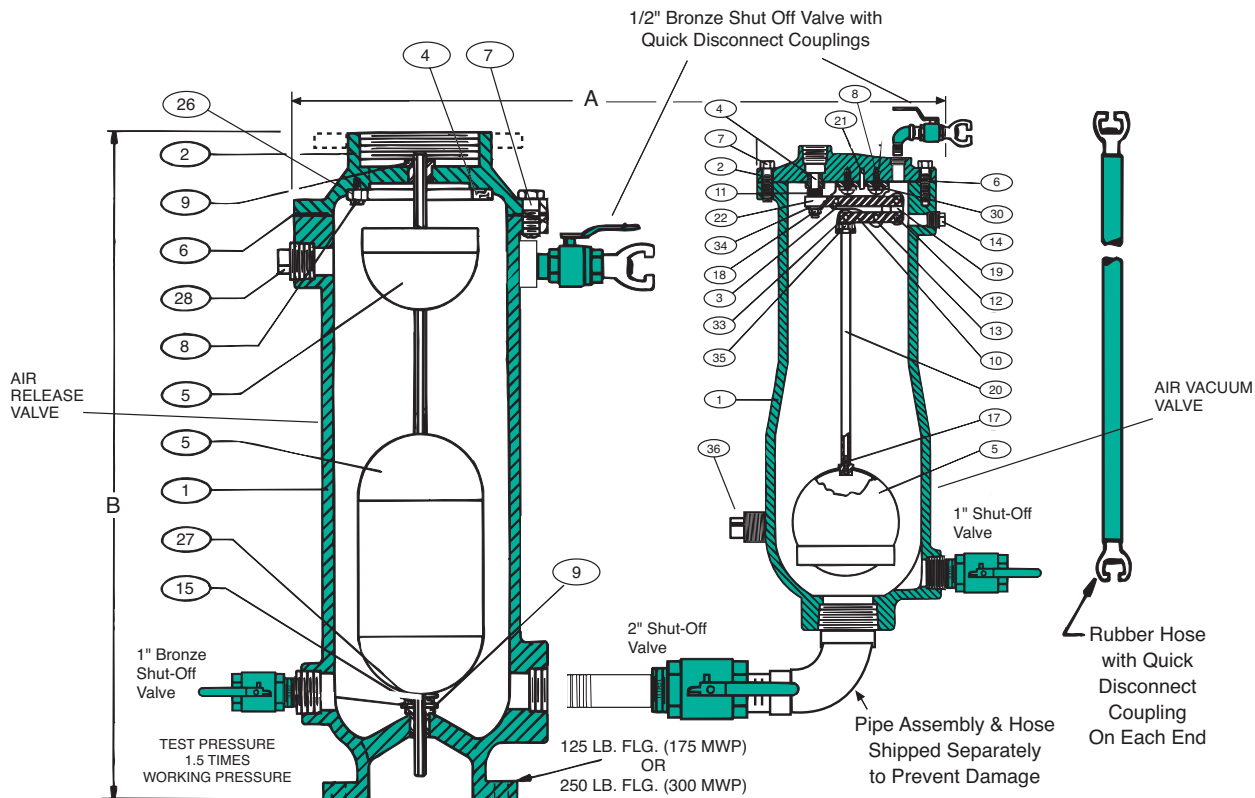
Valve Inlet Size	Model Number	A	B	LARGE ORIFICE OUTLET	SMALL ORIFICE		DEPTH	WT.
		INCHES			175MWP	300MWP		
4"	MTP3604/3420WW316	20 3/4	36 1/2	4" NPT or Flange	3/16"	3/32"	11 1/2"	215
6"	MTP3606/3420WW316	23 1/4	36 1/2	6" 125 LB. Flange	3/16"	3/32"	14"	240
8"	MTP3608/3420WW316	25 3/4	41 1/4	8" 125 LB. Flange	3/16"	3/32"	18"	380

Note: Manufactured to meet ANSI/AWWA C512-04



# Series MTP36-WWBW

## Wastewater Combination Air Valve Dual Body Style With Backwash Kit



Detail No.	Part Name	Material	Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	14	Cover Pipe Plug	Malleable Iron
2	Cover	Cast Iron ASTM A126, Class B	17	Float Retainer	Stainless Steel, T18-8 ASTM A276
3	Leverage Frame	Stainless Steel T316, ASTM A276	18	Lock Nut	Stainless Steel T316, ASTM A276
4	Seat	Stainless Steel T316, ASTM A276	19	Link	Stainless Steel T316, ASTM A276
5	Float	Stainless Steel T316, ASTM A276	20	Guide Shaft	Stainless Steel T316, ASTM A276
6	Gasket	Lexide NK-511 (non-Asbestos)	21	Location Pin	Stainless Steel T420
7	Cover Bolt	Alloy Steel ASTM A449, Grade 5	22	Orifice Button	Stainless Steel T316, ASTM A276
8	Retaining Screws	Stainless Steel T316, ASTM A276	28	Body Pipe Plug	Malleable Steel
10	Float Arm	Stainless Steel T316, ASTM A276	30	Washer	Stainless Steel T18-8, ASTM A240
11	Orifice Button	Stainless Steel T316 & Buna-N®	33	Clevis	Stainless Steel T316, ASTM A276
12	Pivot Pin	Stainless Steel T316, ASTM A276	34	Lock Washer	Stainless Steel T316, ASTM A276
13	Retaining Ring	Stainless Steel PH 15-7 Mo	35	Retainer	Stainless Steel T316, ASTM A276
			36	Body Pipe Plug	Stainless Steel T316, ASTM A276

Detail No.	Part Name	Material	Detail No.	Part Name	Material
1	Body	Cast Iron ASTM A126, Class B	8	Retaining Screws	Stainless Steel T316, ASTM A276
2	Cover	Cast Iron ASTM A126, Class B	9	Guide Busing	Stainless Steel T316, ASTM A276
4	Seat	Buna-N®	15	Cushion	Buna - N®
5	Float	Stainless Steel T316, ASTM A276	26	Seat Retaining Sleeve	Stainless Steel T316 ASTM A269
6	Gasket	Lexide NK-511 (non-Asbestos)	27	Washer-Internal	Stainless Steel ASTM A240
7	Cover Bolt	Alloy Steel	28	Pipe Plug	Malleable Iron

Valve Inlet Size	Model Number	A	B	C	LARGE ORIFICE OUTLET	SMALL ORIFICE		DEPTH	WT.
		INCHES				175MWP	300MWP		
4"	MTP3604/3420WW316BW	46	25	34	4" NPT or Flange	3/16"	3/32"	14"	235
6"	MTP3606/3420WW316BW	47	27	35	6" 125 LB. Flange	3/16"	3/32"	16"	330
8"	MTP3608/3420WW316BW	53	30	30	8" 125 LB. Flange	3/16"	3/32"	20"	700

Note: Manufactured to meet ANSI/AWWA C512-04