

# Figures 959, 959L, 959F, 959LF

## Dual Short Body

### Combination Air Valves for Sewage

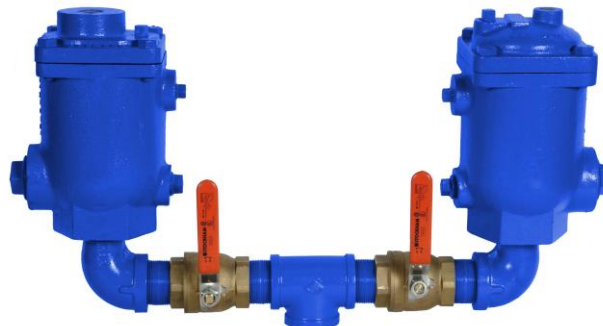
#### Description

GA Industries Figures 959-T Combination Air Valves are “triple function” valves and consist of an air release valve factory piped to an air & vacuum valve. They vent air from pipelines and systems as they are being filled with water and then close tight once the system is full and pressurized. They also release air that accumulates in the valve while the system is operational. And they automatically open to admit air to limit vacuum formation when the pipeline or system is drained and/or a negative pressure occurs in the valve.

The Figure 959 consists of a short body air release valve and a short body air & vacuum valve and is ideal for shallow cover installations.

Figure 959L provides a larger orifice for faster release air and gas on systems operating at 75 PSI or lower.

Figure 959F-T includes optional “back flushing attachments” to facilitate cleaning sludge and debris from the valve



#### Product Features

- Short overall height
- Full port large orifice for maximum air outflow and inflow
- Individual isolating ball valves in horizontal plane, do not add to height
- Rugged cast iron body and cover
- Corrosion resistant Type 316 stainless steel floats
- Tight sealing and easily replaceable rubber seats

#### Standard Materials

- Bodies & Covers Cast Iron, ASTM A126 Class B
- Floats Stainless Steel, Type 316
- Internal Linkage Stainless Steel, Type 316
- Replaceable Seat Buna-N Rubber
- External Fasteners Steel, A307, Zinc Plated
- Coating Internal and External NSF-61/600 Certified Epoxy

#### Approvals & Certifications

- Complies with AWWA Standard C512

#### Options/Accessories

- Option BA Build America/Buy America (BABA) and American Iron and Steel (AIS) Compliant
- Option SE 316 Stainless Steel external fasteners
- Option US American Iron and Steel (AIS) Compliant

#### Ordering Data

- Figure Number (959-T, 959L-T, 959F-T, 959LF-T)
- Size
- Options/Accessories

Non-Shock Working Water Pressure at up to 150F (66C)						
Figure Number	959L, 959LF			959, 959F		
Size	2" x 1"	2"	3" x 2"	2" x 1"	2"	3" x 2"
Inlet Connection	2" NPT	2" NPT	3" NPT	2" NPT	2" NPT	3" NPT
Outlet Size	1" NPT	2" NPT	2" NPT	1" NPT	2" NPT	2" NPT
Air Release Orifice Diameter	0.313"			0.188"		
Working Pressure	10 – 75 PSI			10 – 150 PSI		
Pressure Rating	200 PSI			200 PSI		
Hydro Test	300 PSI			300 PSI		

Data Sheet 959.01G

**Air Vacuum Orifice**

Pressure at Valve Inlet	Air Outflow Rate, Standard Cubic Feet/Min (SCFM)		
	2" x 1"	2"	3" x 2"
1 PSI	78	279	279
2 PSI	114	407	407
3 PSI	144	513	513
4 PSI	171	609	609
5 PSI	196	699	699

Value is rate at which air is vented from pipeline/system during filling at valve inlet pressures shown. Inlet pressure during filling should not exceed 2 PSI.

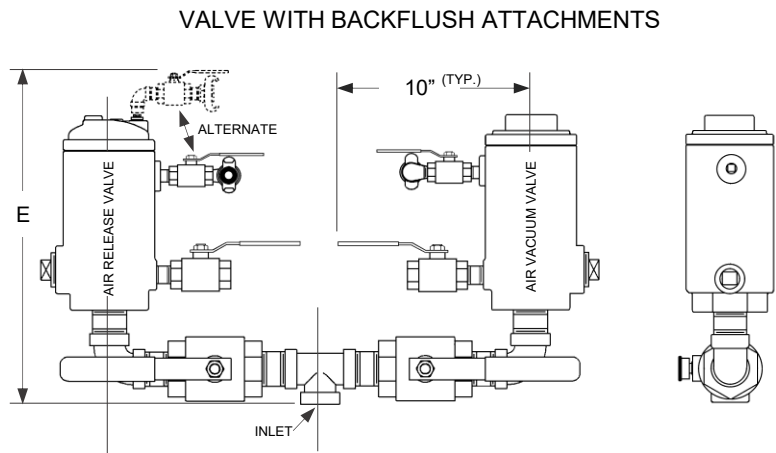
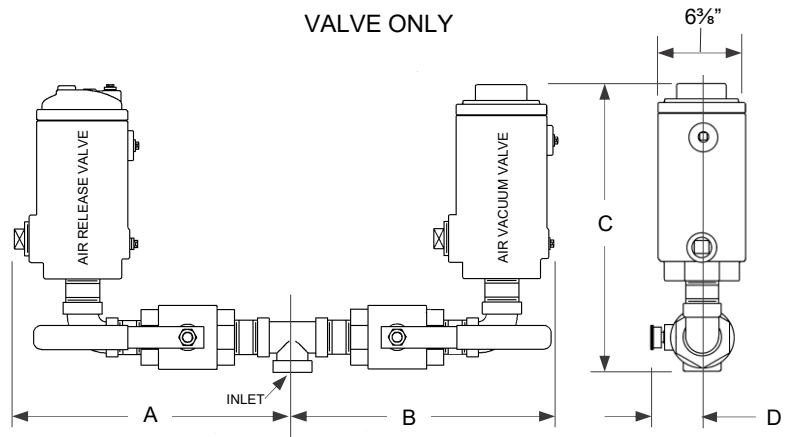
**Air Vacuum Orifice**

Pressure at Valve Inlet	Air Inflow Rate, Standard Cubic Feet/Min (SCFM)		
	2" x 1"	2"	3" x 2"
-1 PSIG	79	318	318
-2 PSIG	112	451	451
-3 PSIG	138	552	552
-4 PSIG	159	637	637
-5 PSIG	178	713	713

Value is rate at which air is drawn into the valve at negative pipeline/system pressure shown. Multiply SCFM air inflow rate x 7.48 to convert to equivalent pipeline/system liquid draining rate in USGPM.

**Air Release Orifice**

Pressure At Valve Inlet	Air Venting Rate, Standard Cubic Feet/Min (SCFM)	
	Figure 959L	Figure 959
10 PSI	24.3	8.7
15 PSI	29.4	10.6
25 PSI	39.3	14.1
50 PSI	64.0	23.1
75 PSI	88.8	32.0
100 PSI		40.9
150 PSI		58.7



**Installation Dimensions**

SIZE (Inlet x Outlet)	2" X 1"	2" x 2"	3" X 2"
A	14½	14½	14½
B	14½	14½	18½
C	17	17	20
D	3¼	3¼	4¼
E	20½	20½	23½
Valve Weight	110	110	140
Add for Backflush Attachments	10	10	10

Dimensions in inches, weight in pounds.  
All dimensions and weights are approximate. If critical request certified drawings