

# Figures 959-T, 959L-T, 959F-T, 959LF-T

## Dual Short Body

### Combination Air Valves for Sewage

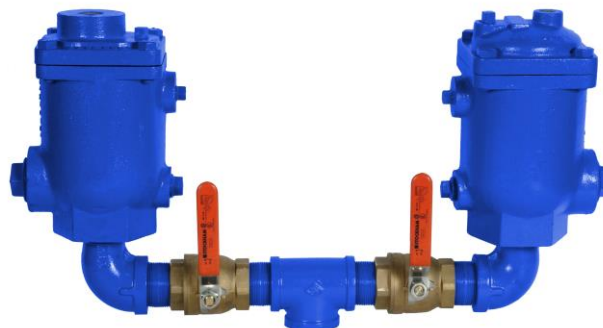
#### Description

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

#### Corrosion Protection

- Standard: Uncoated internal, external enamel primer, 2 mil DFT
- Optional See Option P2

#### Approvals & Certifications

- Complies with AWWA Standard C512

#### Options/Accessories

- Option P2 316 Stainless Steel external fasteners and internal/external Carbolite 891 NSF-61 certified 2-part epoxy, 6 mil DFT

#### 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-T, 959LF-T			959-T, 959F-T		
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 959.01B

**Air Vacuum Orifice**

Pressure at Valve Inlet	Air Outflow Rate, Standard Cubic Feet/Min (SCFM)		
	2" x 1"	2"	3" x 2"
1 PSI	78.5	314	314
2 PSI	111	444	444
3 PSI	136	544	544
4 PSI	157	628	628
5 PSI	176	703	703

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**

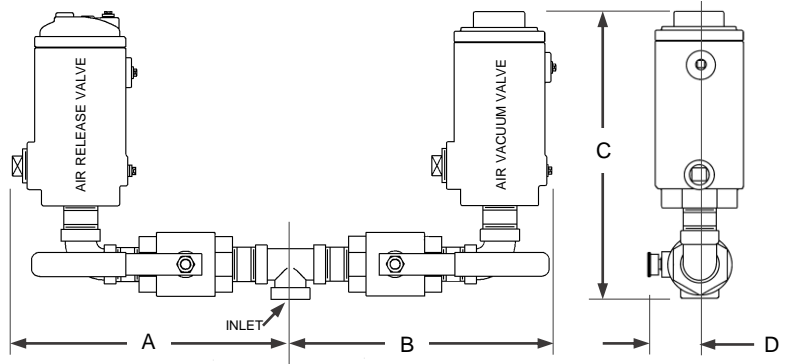
Pressure at Valve Inlet	Air Inflow Rate, Standard Cubic Feet/Min (SCFM)		
	2" x 1"	2"	3" x 2"
-1 PSIG	80	320	320
-2 PSIG	113	453	453
-3 PSIG	138	555	555
-4 PSIG	160	641	641
-5 PSIG	179	716	716

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.

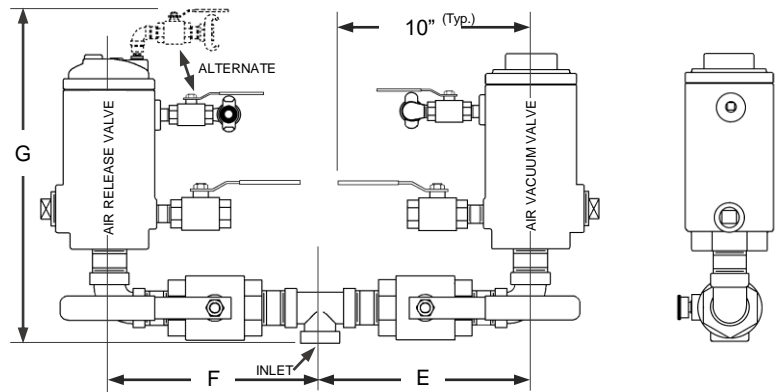
**Air Release Orifice**

Pressure At Valve Inlet	Air Venting Rate, Standard Cubic Feet/Min (SCFM)	
	Figure 959L-T	Figure 959-T
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

VALVE ONLY



VALVE WITH BACKFLUSH ATTACHMENTS



**Installation Dimensions**

SIZE (Inlet x Outlet)	2" X 1"	2" x 2"	3" X 2"
A	15½	15½	18½
B	15½	15½	20½
C	17¼	17¼	19
D	3½	3½	4½
E	11	11	16
F	11	11	14
G	20¾	20¾	22½
Valve Weight	110	110	140
Add for Backflush Attachments	15	15	15

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