Figure 945E-T Single Body

Combination Air Valve for Clean Water



Description

GA Industries Figures 945E Combination Air Valves are "triple function" valves. 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 945-E is standard with internal and external high quality NSF-61 certified fusion bond epoxy and 316SS external fasteners for long term corrosion resistance.

Product Features

- · Compact and light weight
- · Full port orifice for maximum air outflow and inflow
- · Utilizes "kinetic" operating principle, designed not to blow shut
- · Rugged iron body and cover, fusion bond epoxy coated
- · Corrosion resistant Type 316 stainless steel floats and internal linkages
- · Tight sealing and easily replaceable rubber seats

Standard Materials

· Body & Cover Cast Iron, ASTM A126 Class B Stainless Steel, Type 316 Floats · Internal Linkage Stainless Steel, Type 316

· Replaceable Seat Buna-N Rubber

External Fasteners Type 316 Stainless Steel

Coating

 Standard: 10 mil DFT Internal and External. Skotchkote 134 NSF-61 Certified Fusion

Bond Epoxy

Data Sheet 945E.01C



Approvals & Certifications

- Complies with AWWA Standard C512
- · NSF-61 Certified for Contact with Drinking Water
- NSF-372 Certified Lead Free (Max 0.25% Lead Content by Weighted Average)

Options/Accessories

 Option IV Inlet Isolating Valve - lever operated

bronze ball valve

· Option OC Outlet Cowl - Deflects air outflow.

minimizes debris from entering valve

during inflow

· Option EP **EPDM Rubber Seats**

Ordering Data

- · Figure Number
- Size
- · Options/Accessories

Non-Shock Working Water Pressure at up to 150F (66C)						
Inlet Size	1/2", 3/4",1"	2"	3", 4"	1/2", 3/4",1"	2"	3", 4"
Figure Number		945E-T		945EH-T		
Inlet Connection	NPT NPT					
Outlet Size	Same as Inlet			Same as Inlet		
Outlet Connection	NPT			NPT		
Air Release Orifice Diameter	0.094" 0.125" 0.188"			0.063"	0.094"	0.125"
Working Pressure	10 – 150 PSI			10 – 300 PSI		
Pressure Rating	300 PSI			300 PSI		
Hydro Test	450 PSI			450 PSI		



Figure 945E-T Single Body Combination Air Valve for Clean Water

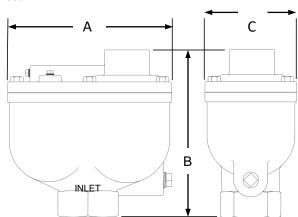
Data Sheet 945E.01C

Air Vacuum Orifice

Pressure at Valve Inlet	Air Outflow Rate Standard Cubic Feet/Min (SCFM)						
During Filling	1/2"	3/4"	1"	2"	3"	4"	
1 PSI	19.6	44.2	78.5	314	707	1260	
2 PSI	27.8	62.5	111	444	1000	1780	
3 PSI	34.0	76.5	136	544	1220	2180	
4 PSI	39.3	88.4	157	628	1410	2510	
5 PSI	43.9	98.8	176	703	1580	2810	
7 PSI	52.0	117	208	831	1870	3320	
10 PSI	62.1	140	248	994	2240	3970	
15 PSI	75.2	169	304	1217	2740	4870	

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 5 PSI.

Multiply SCFM air outflow rate x 7.48 to convert to equivalent pipeline/system liquid filling rate in USGPM.



Installation Dimensions

SIZE	1/2", 3/4", 1"	2"	3"	4"	
Α	61/4"	9"	12%"	15¼"	
B (NPT Inlet)	71/4"	9%"	12¼"	13¼"	
С	31/8"	43/4"	65%"	81/4"	
E	25%"	21/8"	3"	3¾"	
F	4"	5"	8"	9"	
G	7"	8"	13"	15"	
Valve Weight	16 lbs.	30 lbs.	65 lbs.	120 lbs.	
Add for Inlet Isolating Ball Valve	2 lbs.	8 lbs.	20 lbs.	30 lbs.	
Add for Outlet Cowl	1 lb.	1 lb.	2 lbs.	4 lbs.	

All dimensions and weights are approximate. If critical request certified drawings

Air Vacuum Orifice

Pressure at Valve Inlet	Air Inflow Rate Standard Cubic Feet/Min (SCFM)						
During Draining	1/2"	3/4"	1"	2"	3"	4"	
-1 PSIG	20.0	45.2	80	320	721	1280	
-2 PSIG	28.3	63.9	113	453	1020	1810	
-3 PSIG	34.7	78.3	138	555	1250	2220	
-4 PSIG	40.1	90.4	160	641	1440	2560	
-5 PSIG	44.9	101	179	716	1610	2870	

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	Air Release Orifice Venting Rate, Standard Cubic Feet/Min (SCFM)						
At Valve Inlet	Fig	ure 945E-		Figure 945EH-T			
	1/2", 3/4",1"	2"	3", 4"	1/2", 3/4",1"	2"	3", 4"	
10 PSI	2.2	3.9	8.7	1.0	2.2	3.9	
15 PSI	2.6	4.7	10.6	1.2	2.6	4.7	
25 PSI	3.5	6.3	14.1	1.6	3.5	6.3	
50 PSI	5.8	10.3	23.1	2.6	5.8	10.3	
75 PSI	8.0	14.2	32.0	3.6	8.0	14.2	
100 PSI	10.2	18.2	40.9	4.5	10.2	18.2	
150 PSI	14.7	26.1	58.7	6.5	14.7	26.1	
200 PSI				8.5	19.1	34.0	
250 PSI				10.5	23.6	41.9	
300 PSI				12.5	28.0	49.8	

INLET ISOLATING VALVE and/or OUTLET COWL

