

Figure 991-D

Vacuum Breaking for Sewage

Description

GA Industries Figure 991-D Vacuum Breaking Valves are typically installed at locations along the forcemain where column separations are predicted to occur. The Figure 991-D has no internal spokes, stems or springs and is especially designed for use with sewage and fluids containing floatable solids.

The Figure 991-D is an “air inlet only” valve. The valve is normally held closed by the counterweight and system pressure and opens only if an when the pressure inside the pipe falls below atmospheric. The position and amount of counterweight determines the negative pressure at which the valve opens to rapidly admit air to limit the negative pressure. The valve closes when the pipeline pressure recovers above the opening pressure.

Product Features

- Especially designed for use on sewage
- Full port orifice for maximum air inflow during negative pressure, small orifice controls air release rate
- Rugged iron body with 316SS trim
- Tight sealing and easily replaceable rubber seat
- Screened hood to minimize entry of foreign matter

Standard Materials

- Body Cast Iron, ASTM A126 Class B
- Body Seat Type 316 Stainless Steel
- Replaceable Seat Buna-N
- External Fasteners Steel, A307, Zinc Plated

Corrosion Protection

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



Options/Accessories

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

Ordering Data

- Figure Number (991-D)
- Size
- Options

Non-Shock Working Water Pressure at up to 150F (66C)	
Figure No.	991-D
Pipeline Connection	ANSI Class 125
Size	3" to 8"
Air Inlet	Screened Cowl
Working Pressure	10 - 200 PSI
Pressure Rating	200 PSI
Hydro Test	300 PSI

Data Sheet 991.01B

Air Inflow Rate

Pressure Inside Valve	Air Inflow Rate, Standard Cubic Feet/Min (SCFM)			
	3"	4"	6"	8"
-1 PSIG	721	1280	2880	5130
-2 PSIG	1020	1810	4080	7250
-3 PSIG	1250	2220	5000	8880
-4 PSIG	1440	2560	5770	10300
-5 PSIG	1610	2870	6430	11500

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.

Installation Dimensions

SIZE	3"	4"	6"	8"
A	15½	17	22	23¼
B	16½	17½	20½	22½
C	4¼	5	6	7⅞
D	5	6	7½	8
E	11½	11¼	13¼	15
Weight	95	140	220	340

Dimensions in inches, weight in pounds and are approximate. Request certified drawings if critical. Larger size valves available, consult factory

