## Figures 935, 935F Sewage/Wastewater Air Vacuum Valve

#### Description

GA Industries Figure 935 Air & Vacuum Valves efficiently vent air and sewage gas from sewage forcemains as they are being filled and then close tight once the system is full and pressurized. They automatically open to admit air to limit vacuum formation when the forcemain is drained and/or a negative pressure occurs in the valve.

Figure 935 Air & Vacuum Valves are typically installed at system high points where air and sewage gas naturally rise during filling and vacuum first forms during draining. The elongated body is designed to maintain an air gap between the solids bearing fluid and the valve's internal mechanism to minimize fouling and spillage.

Figure 935F includes optional "back flushing attachments" to facilitate cleaning sludge and debris from the valve

#### **Product Features**

- · Full size orifice for maximum air outflow and inflow rates
- Corrosion resistant Type 316 stainless steel float, plug, seat ring and internal mechanism
- · Elongated body reduces potential for fouling
- Tight sealing and easily replaceable rubber seat
- · 2" NPT plugged port allows removal of large debris

#### Standard Materials

- Body & Cover Cast Iron, ASTM A126 Class B
- Float Stainless Steel, Type 316
- Internal Linkage Stainless Steel, Type 316
- · Replaceable Seat Buna-N
- External Fasteners Steel, A307, Zinc Plated

See Data Sheet 939SS.01 for Durovent™ all 316SS construction version

#### Coating

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



### Data Sheet 935.01D



#### **Approvals & Certifications**

Complies with AWWA Standard C512

#### **Options/Accessories**

- Option IV Inlet Isolating Valve lever operated bronze ball valve (3" NPT and smaller inlet valves) Note: inlet valve included with backflush attachments.
- Option P2 316 Stainless Steel external fasteners and internal/external Carboline 891 NSF-61 certified 2-part epoxy, 6 mil DFT
- Option SC Bronze surge check (slow closing device) factory installed in the valve outlet

#### **Ordering Data**

- Figure Number (935, 935F)
- Size (Inlet x Outlet)
- Options/Accessories

| Non-Shock Working Water Pressure at up to 150F (66C) |            |        |        |        |                                  |        |        |  |
|--|------------|--------|--------|--------|----------------------------------|--------|--------|--|
|  | Valve Only |        |        |        | Valve and Backflush Attachments* |        |        |  |
| Figure Numbers                                       | 935        |        |        |        | 935F                             |        |        |  |
| Inlet Size   | 2" NPT     | 2" NPT | 3" NPT | 4" NPT | 2" NPT                           | 2" NPT | 3" NPT |  |
| Outlet Size  | 1" NPT     | 2" NPT | 2" NPT | 4" NPT | 1" NPT                           | 2" NPT | 2" NPT |  |
| Working<br>Pressure                                  | 10-200 PSI |        |        |        | 10-200 PSI                       |        |        |  |
| Pressure Rating                                      | 200 PSI    |        |        |        | 200 PSI                          |        |        |  |
| Hydro Test   | 300 PSI    |        |        |        | 300 PSI                          |        |        |  |

\* See Data Sheet 935.02 for 4" and 6" flanged valves with backflush attachments



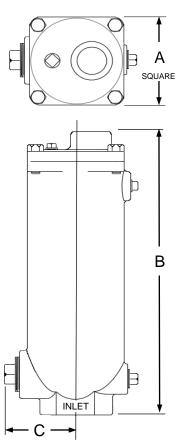
### Data Sheet 935.01D

| Pressure at<br>Valve Inlet | Air Outflow Rate, Standard Cubic Feet/Min (SCFM) |     |         |      |      |  |  |
|----------------------------|--|-----|---------|------|------|--|--|
|                            | 2" x 1"  | 2"  | 3" x 2" | 3"   | 4"   |  |  |
| 1 PSI                      | 78   | 279 | 279     | 706  | 1208 |  |  |
| 2 PSI                      | 114  | 407 | 407     | 1031 | 1762 |  |  |
| 3 PSI                      | 144  | 513 | 513     | 1300 | 2222 |  |  |
| 4 PSI                      | 171  | 609 | 609     | 1543 | 2637 |  |  |
| 5 PSI                      | 196  | 699 | 699     | 1770 | 3027 |  |  |

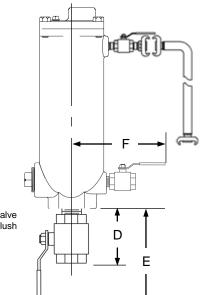
Value is rate at which air is vented from pipeline/system during filling at valve inlet pressures shown. Inlet pressure during filling should not exceed 2 PSI. Size is inlet x outlet.

| Pressure at<br>Valve Inlet | Air Inflow Rate, Standard Cubic Feet/Min (SCFM) |     |         |      |      |  |  |
|----------------------------|---|-----|---------|------|------|--|--|
|                            | 2" x 1"   | 2"  | 3" x 2" | 3"   | 4"   |  |  |
| -1 PSIG                    | 79  | 318 | 318     | 717  | 1275 |  |  |
| -2 PSIG                    | 112   | 451 | 451     | 1015 | 1804 |  |  |
| -3 PSIG                    | 138   | 552 | 552     | 1243 | 2210 |  |  |
| -4 PSIG                    | 159   | 637 | 637     | 1435 | 2551 |  |  |
| -5 PSIG                    | 178   | 713 | 713     | 1604 | 2853 |  |  |

Value is rate at which air is drawn into the valve at negative pipeline/system pressure shown. Size is inlet x outlet.



# With INLET ISOLATING VALVE or BACKFLUSH ATTACHMENTS



Inlet isolating ball valve included with backflush attachments



NA - Not Available on NPT inlet valve, see Data Sheet 939.02

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