

# SINGLE BODY SEWAGE SERVICE COMBINATION AIR VALVE

2" through 6" Inlet and NPT Outlet



FIG. 942

## DUO-MATIC

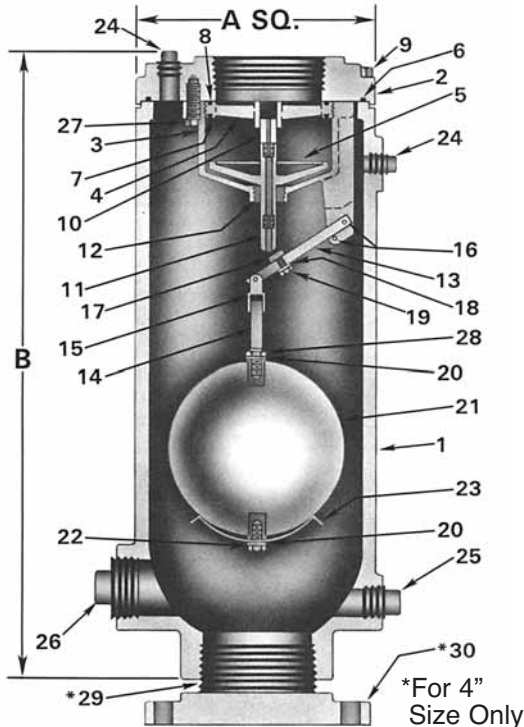


FIG. 942

\*29 \*For 4" Size Only

## GENERAL DIMENSIONS

| SIZE        | 2" X 1" | 2" X 2" | 3" X 2" | 3" X 3" | 4"      | 6"      |
|-------------|---------|---------|---------|---------|---------|---------|
| A (SQ.)     | 6-1/2"  | 6-1/2"  | 6-1/2"  | 9-1/2"  | 9-1/2"  | 13-1/2" |
| B           | 20-1/2" | 20-1/2" | 20-1/2" | 23-1/2" | 25-1/2" | 29"     |
| WGT. (LBS.) | 60      | 60      | 60      | 170     | 190     | 320     |

8", 10", 12" - (Manifolded 6" Valves) Also Available  
CONSULT FACTORY FOR DETAILS

## ENGINEERING SPECIFICATION

The Combination Air Valve shall be designed to exhaust large amounts of air during filling, to release small amounts of accumulated air during operation and to admit large amount of air upon impending vacuum during draining.

The valve shall be float operated and both the Air & Vacuum and Air Release functions shall be housed in a single body. Body and cover shall be of cast iron conforming to ASTM A126, Class B. All leverage mechanism parts and the spherical float shall be stainless steel. The large and small orifice seats shall be Buna-N and shall be renewable.

When specified, the Combination Air Valve shall be supplied with "Flushing Attachments" to allow periodic flushing of sediment, grease and solids. Attachments consist of: an inlet isolating valve, bronze blow-off and flushing valves and a minimum of 5 feet of rubber hose with quick-disconnects to allow connection to a clean water source.

Combination Air Valves shall be as manufactured by GA Industries, Inc., their Figure 942 (formerly Figure SCAVE).

## PARTS LIST

- BODY - Cast Iron A126 Class B
- COVER - Cast Iron A126 Class B
- CAGE - Ductile Iron A536, Grade 65-45-12
- SEAT - 316 Stainless Steel
- PLUG - 316 Stainless Steel
- O-RING - Buna-N
- O-RING - Buna-N
- O-RING - Buna-N
- COVER BOLTS - Steel Grade 2
- UPPER PLUG EXTENSION- 316 Stainless Steel
- LOWER PLUG EXTENSION- 316 Stainless Steel
- BUSHING - 316 Stainless Steel
- LEVER ARM - 316 Stainless Steel
- FLOAT ARM - 316 Stainless Steel
- UNIVERSAL COUPLING - 316 Stainless Steel
- COILED SPRING PIN - 302 Stainless Steel
- ORIFICE BUTTON - 18-8 Stainless Steel/Buna-N
- LOCKWASHER - 18-8 Stainless Steel
- HEX NUT - 18-8 Stainless Steel
- LOCKWASHER - 18-8 Stainless Steel
- FLOAT BALL - 316 Stainless Steel
- FLOAT BALL SCREW - 316 Stainless Steel
- FLOAT HOOD - 316 Stainless Steel
- PIPE PLUG 1/2" NPT - Steel (Commercial)
- PIPE PLUG 1" NPT - Malleable Iron
- PIPE PLUG 2" NPT - Cast Iron
- CAGE BOLTS - 18-8 Stainless Steel
- HEX NUT - 18-8 Stainless Steel
- CLOSE NIPPLE - Steel (Commercial)
- COMPANION FLANGE - Cast Iron A126 Class B

## ENGINEERING DATA

### Pressure Rating:

Body rated to 200 psi WOG; tested to 300 psi  
Float tested to 1000 psi.

### Working Pressure:

10-150 psi with 1/8" orifice, 2" x 1" through 3" x 2" size  
10-150 psi with 3/16" orifice, 3" x 3" through 4" size  
10-150 psi with 5/16" orifice, 6" size  
CONSULT FACTORY IF OPERATING PRESSURE IS LESS THAN 10 PSI.

### Small Orifice (Air Release) Maximum Venting Rate:

@ 150 psi with 1/8" orifice @ 26.1 SCFM,  
2" x 1" through 3" x 2" size  
@ 150 psi with 3/16" orifice @ 58.7 SCFM,  
3" x 3" through 4" size  
@ 150 psi with 5/16" orifice @ 163 SCFM, 6" size

FOR SIZING AND LOCATING SEE PAGES 16-17, 36-37.  
OTHER ORIFICES AVAILABLE; CONSULT FACTORY.

### Connections:

Inlet - NPT, Standard, 2" x 1" - 3" x 3"  
CL.125 FLG, Standard, 4" & 6"  
Outlet - NPT, Standard, 1/2" - 6"  
CL.125 FLG, Optional, 2" - 6"

### Options:

For Optional Flanged Outlet, specify 942-J  
For Optional Flushing Attachments,  
specify 942-F, see Pg. 15

### Where to Install Air Valves:

- Peaks
- Increased Down Slope
- Decrease in Upward Slope
- Long Ascents
- Long Descents
- Long Horizontals
- Pumps
- Large Valves, Cylinders and Piping Loops