



# D-020 SB 250 PSI



## Underground Air Valve System for Wastewater

### Description

The D-020 SB is a complete product package that combines the reliable and efficient properties of the A.R.I. D-020\*\* combination air valve for wastewater with the added feature of a sub-surface valve that can be buried below ground. A specially designed horizontal sliding disc valve - situated at the base of the D-020 SB assembly - allows for the air valve disconnection and maintenance from ground level. This shut-off valve is equipped with a safety mechanism enabling disconnection and removal of the D-020 air valve from its subsurface housing, even when the system is under pressure. Since service and maintenance operations of the unit are performed entirely from the surface, there is no need for safety considerations associated with confined space entry.

\*\* Note: For additional information on the D-020 air valve, please review our catalog technical sheet UsC-D020-10

### Main Features

- Working pressure range: 3 - 250 psi .
- Testing pressure: 360 psi.
- Maximum working temperature: 140° F.
- Maximum intermittent temperature: 194° F.
- A combination air valve for wastewater with a large air & vacuum orifice and a small air release orifice integrated into one body.
- The air valve's inlet diameter is 3".
- Pipe connections: 3" threaded or flanged, in accordance with all standards.
- The D-020 SB incorporates an integral, flat, quarter-turn, horizontal sliding disc valve with a 3" full bore passage.
- The shut-off valve is operated from the surface.
- Easy and efficient back flushing can be achieved while the air valve is in its sub-surface housing.
- All connections utilize quick connectors to facilitate easy usage during:
  - Handling (quick connector from adaptor to shut-off valve)
  - Maintenance operations (quick connectors on both the inlet & outlet flushing positions).
- **Safety elements:** Disengaging the air valve is safeguarded: unless the shut-off valve is in the "closed" position and the internal pressure is released, it is not possible to extract the air valve.
- **All parts are corrosion resistant:** Metal parts made of Stainless Steel, Ductile Iron or steel, Composite material parts made of Nylon, PA, and PVC.

- **Drainage system:** a special one-way valve that drains the water from the valve box and does not admit water.

### Advantages And Benefits

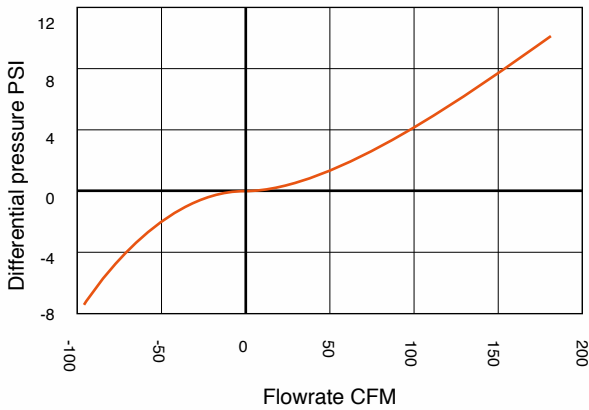
- Relatively lightweight and convenient to install.
- Sub-surface installation.
- **Low installation costs:**
  - No need for expensive, large excavation.
  - No need for expensive, human-accessible manholes.
- **Low Maintenance costs:**
  - No need for specialized tools or safety equipment.
  - One person needed for operation and maintenance.
  - Clean and environmentally friendly.
  - Complete service and maintenance system, including an integral disassembly mechanism to ensure easy back flushing and servicing, while reducing the need for spare changeable valves.
- **Safe in operation:**
  - Greatly reduces the danger of contact with local fauna – snakes and scorpions, etc!
  - Entirely operated and maintained from ground level.
- **Reliable and efficient operation:**
  - Dynamic design allows high velocity air discharge while preventing premature closure.
  - A.R.I. patented rolling seal mechanism.
  - Since the valve is a sub-surface (underground), it is more resistant to frost conditions.

### Valve Selection

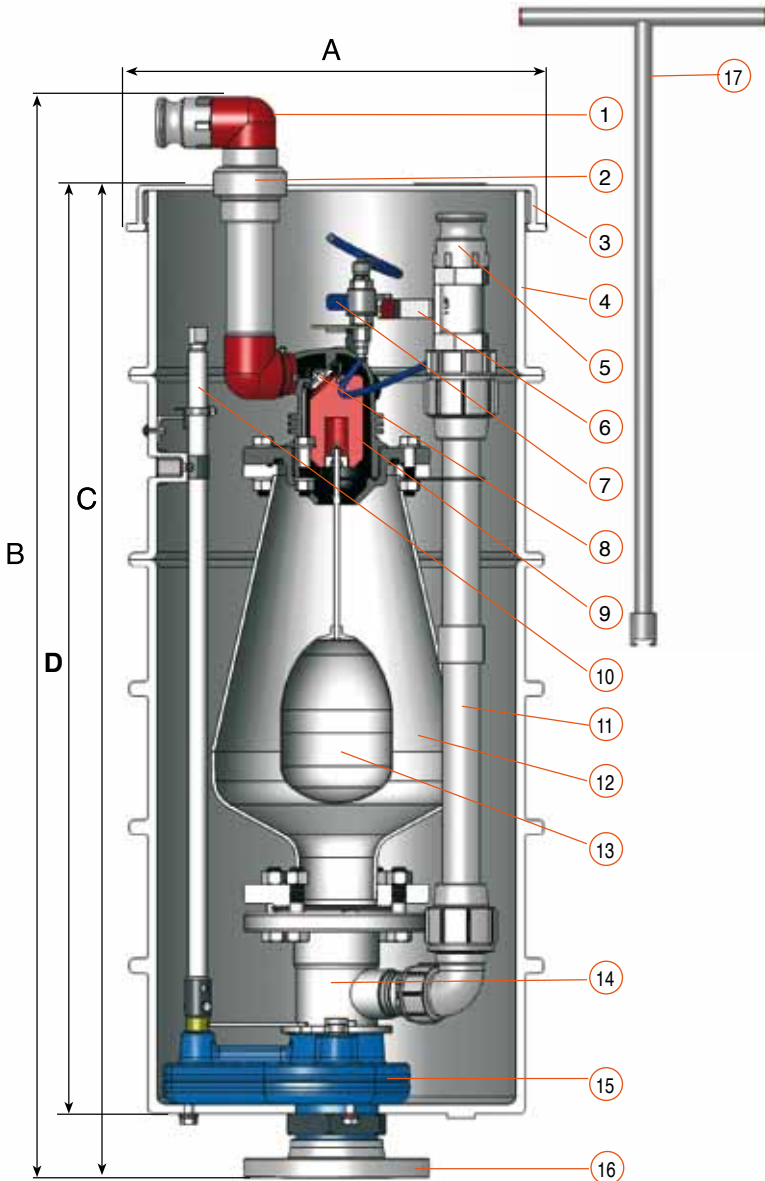
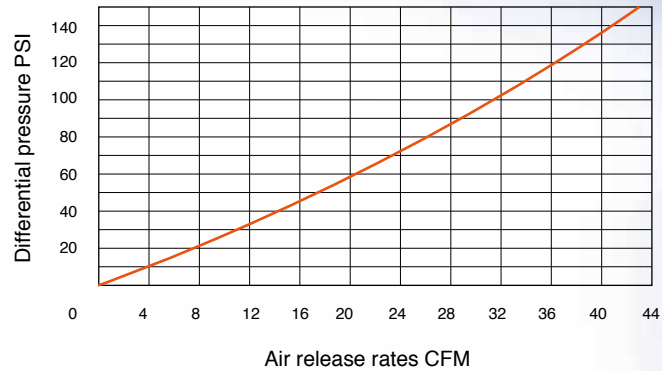
- Air valve body: Stainless Steel SAE 316 or Steel DIN St.37
- Cover and top air valve body: Stainless Steel SAE 316 or Reinforced Nylon.
- Additional Accessories
  - One-way out-only attachment, allows for air discharge only, prevents air intake.
  - One-way in-only attachment, allows for air intake only, prevents air discharge.
  - With a Non-Slam discharge-throttling attachment, allows for free air intake, throttles air discharge.

**Upon ordering, please specify: model, size, working pressure, threads standard and type of liquid.**

### AIR & VACUUM FLOWRATE



### AUTOMATIC AIR RELEASE



### DIMENSIONS AND WEIGHTS

Dimensions inch			Weight Lbs.
A	B	C	
17.87	46	39.5	123

### PARTS LIST AND SPECIFICATION

No	Part	Material
1.	Discharge Outlet	Polypropylene
2.	Coupling 1 1/2"	P.V.C.
3.	Air Valve Box Cover	Polyethylene
4.	Air Valve Box	Polypropylene
5.	Drainage Outlet	Polypropylene
6.	Ball Valve 1 1/2" f/f, 1/4" Outlet	Stainless Steel SAE 304
7.	Pressure Relief Cock	Stainless Steel SAE 316
8.	Rolling Seal Assembly	PA+E.P.D.M.+STST
9.	Float	Foamed Polypropylene
10.	Operating Rod	STST SAE 304+P.V.C.
11.	Back Flushing Drainage Assembly	Polyethylene
12.	Body	Stainless Steel SAE 316
13.	Float	Polycarbonate + St. St. / St. St. SAE 316
14.	Adaptor -Quick Connection	Stainless Steel SAE 316
15.	Horizontal Sliding Disc Valve 3"	DI+STST+E.P.D.M.
16.	Flange 3"	PA /St. St. SAE 316
17.	"T" Key	Stainless Steel SAE 304

DI=Ductile Iron PA=Reinforced Nylon