



D-020 SB PN 16



Under Ground Air Valve System For Waste Water

Description

The D-020 SB is a complete package that combines the reliable and efficient properties of the A.R.I. D-020 waste water air valve with the added feature of a sub-surface valve that can be buried below ground.

A specially designed shut-off valve - situated at the base of the D-020 SB assembly allows maintenance from ground level.

The shut-off valve is equipped with a safety mechanism enabling disconnection and removal of the D-020 air valve from its sub-surface 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.

Features

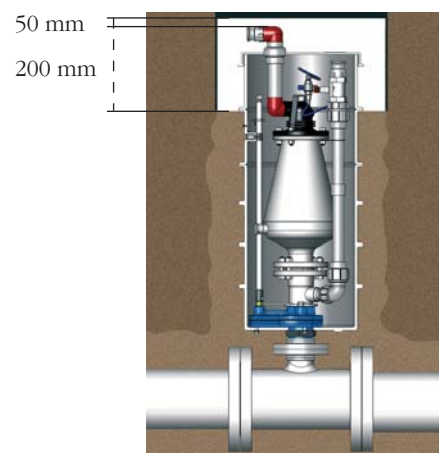
- Working pressure range: 0.2-16 bar.
- Testing pressure 25 bar.
- Working Temperature: 60^o C
- Maximum instantaneous working temperature: 90^o C
- A combination air valve for waste water, with a large air/vacuum orifice and a small automatic air release orifice, integrated into one body.
- The air valve's inlet diameter is 3".
- Pipe connections: 3" threaded or flanged, in accordance with all standards.
- The D-020 SB integral, flat, quarter-turn, knife shut-off valve has a 3" full bore passage .
- The shut-off valve is operated from the surface.
- Easy and efficient back flushing, for cleaning, can be achieved while the air valve is in its sub-surface housing.
- All connections are quick connections, to facilitate handling and maintenance operations, flushing (inlet & outlet) connections and adaptor connected to the shut-off valve).
- Safety elements: Disengaging the air valve is safeguarded: unless the shut-off valve is in "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 St.St., Ductile Iron or steel. Composite material parts – made of Nylon, PA, PVC.

Advantages And Benefits

- Relatively light 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-man 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 reduced 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, preventing premature closure.
- A.R.I. patented rolling seal mechanism.
- Since the valve is a sub-surface (underground), it is more resistant in cold conditions.

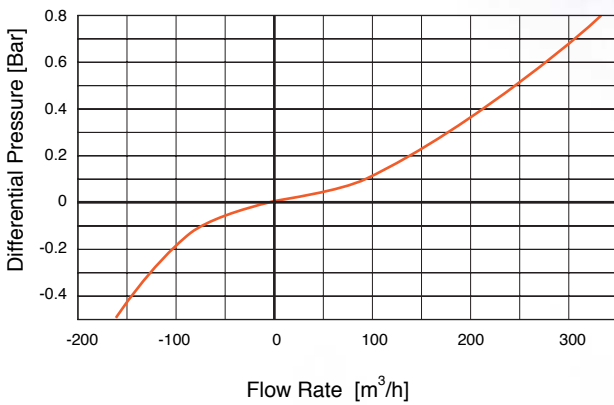
Valve Selection

- The main part of the air valve's body is made of Stainless Steel SAE 316 or Steel DIN St.37
- The cover and top of the air valve are made of Reinforced Nylon or Stainless Steel SAE 316.
- Addition of one-way attachments (optional) : one-way in, one-way out, slow release (non-slam).

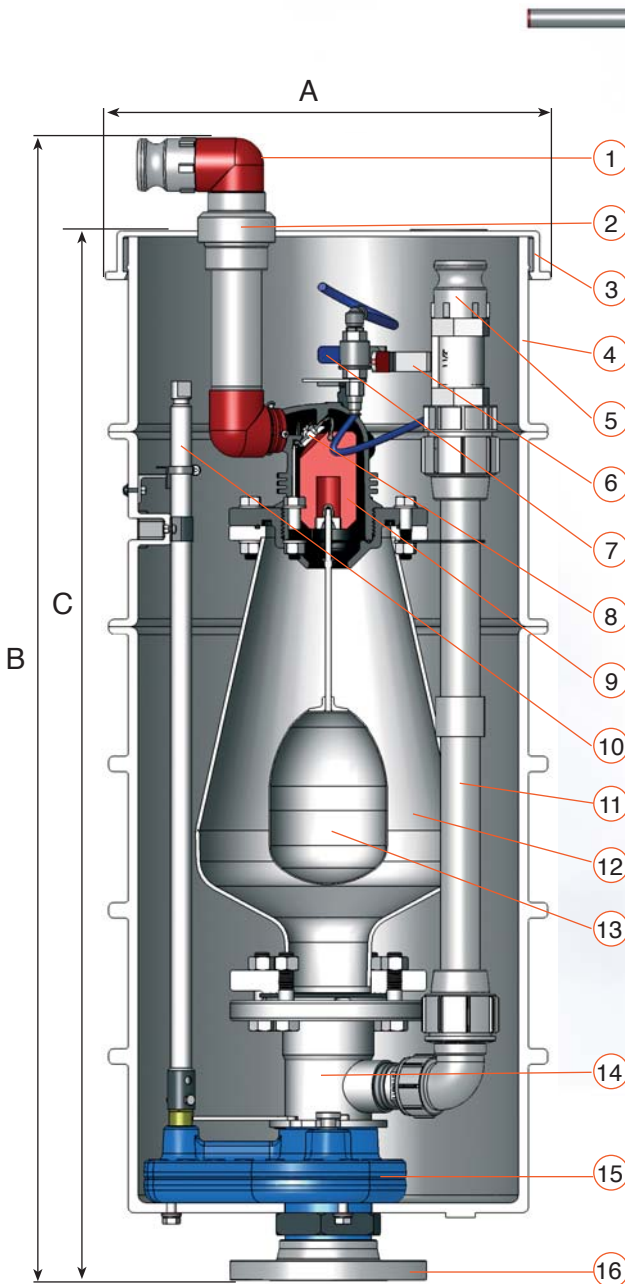
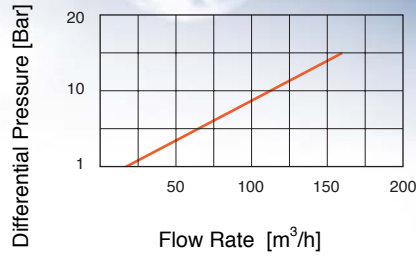


Sample Installation Scheme

AIR AND VACUUM FLOW RATE



AUTOMATIC AIR DISCHARGE



DIMENSIONS AND WEIGHTS

Dimensions			Weight Kg.
A	B	C	
454	1168	1003	56

PARTS LIST AND SPECIFICATION

No.	Part	Material
1.	Discharge Outlet	Polypropylene
2.	Coupling 1 1/2"	P.V.C.
3.	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.	Seal Plug ASS.	PA+E.P.D.M.+STST
9.	Float	Foamed Polypropylene
10.	Shut-off Valve Extension	
11.	Spindle Assembly	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.	Knife Shut off 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