



D-090-P



UNDER GROUND AIR VALVE SYSTEM

Save manhole costs with the new A.R.I UNDER GROUND AIR VALVE

designed to provide reliable solutions for special needs as:

- Better freeze protection.
- Saving in installation costs.
- Installations under important crossings: Roads, pavements, buildings.
- The valve shall is made of composite materials corrosion free.

Features

Combination Air Valve with three functions of operation:
Discharges air at high flow rates while the system is filled with water.

Admits air into the system at high flow rates during drainage the system.

Releases entrapped air that accumulates at peaks when the system is under pressure.

- Working range: 2-150 psi, 3-250 psi
- Working Temp. : 203^o f
- Connections: Threaded 2" , Flange: 2" 3" 4"
- Flange standard: ASA 150.
- Materials: The air valve is made of corrosive resistant materials.
- Integral shut-off valve : Shut off automatically when dismantling the air valve for maintenance purposes.
- Drainage System : A special one way outlet that drains the water from the valve box and does not admit water in (upon request).
- Eight Different Lengths of Installation:
1.5, 2.5, 3.5, 4.5, 5, 6, 7, 8 Ft.

Advantages and Benefits

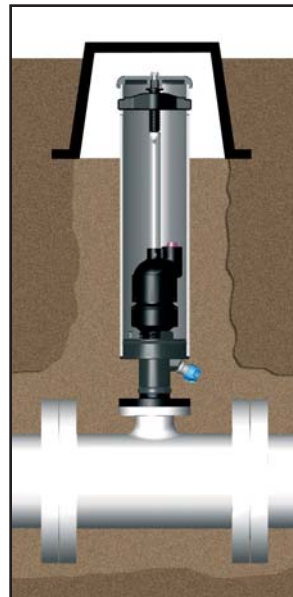
- Dynamic Design allows high velocity air discharge, preventing premature closing.
- A.R.I patent rolling Seal Mechanism:
 - Dramatically reduces obstruction by debris.
 - The automatic function discharges high air flow rates of up to 587 GPM.
 - Self - cleaning mechanism.
- Low maintenance costs.
- Air valve box made of P.V.C – according to high quality standard.
- Light Weight and compact silhouette.

Installation

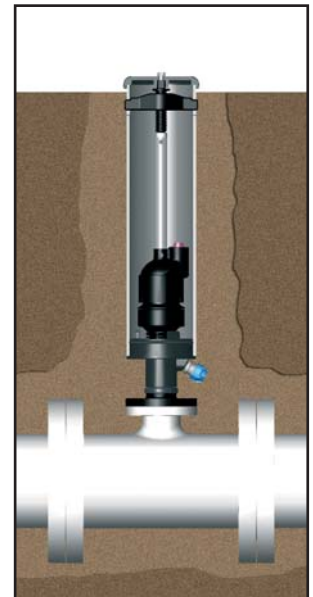
Available in eight different installation lengths.

Two installation possibilities:

Under ground installation with street cap



Stand post installation



Options

- Vacuum - Air discharge only.
- "Non-Slam" System.
- D-090-P for corrosive fluids.
- D-090-P U : confirmed for NSF 61



D-090-P provided with external freeze protection

DIMENSIONS AND WEIGHTS

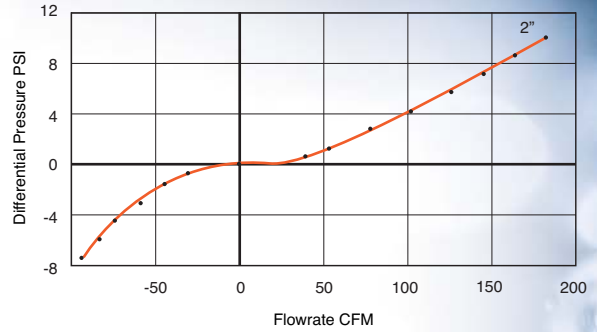
Dimensions		Weight Lbs.	
W	H	Aluminium B.	Sphero B.
7.7	19.5	12.8	15.4
7.7	30.0	16.0	18.7
7.7	41.5	19.6	21.6
7.7	53.0	21.8	24.7
7.7	61.0	24.5	27.1
7.7	72.0	27.3	30.0
7.7	84.0	30.2	32.8
7.7	96.0	33.0	35.9

PARTS LIST AND SPECIFICATION

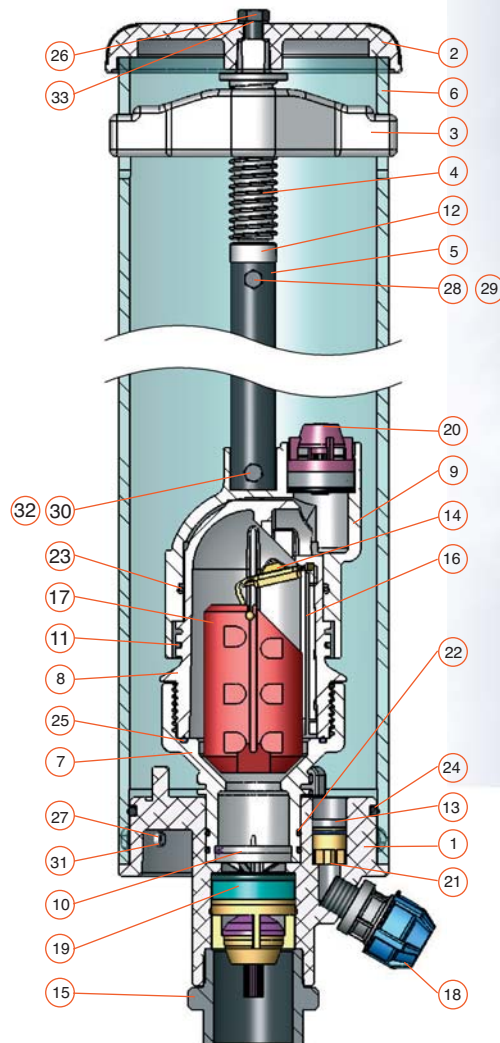
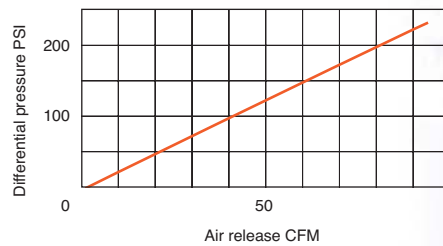
No.	Part	Material
1	Base	Aluminum / Ductile Iron
2	Cover	Aluminum
3	Bridge	Reinforced nylon
4	Bridge bolt	Reinforced nylon
5	Tightening rod	Stainless Steel SAE 304
6	Air valve box	P.V.C
7	D-040 base	Reinforced nylon
8	D-040 body	Reinforced nylon
9	D-040 cover	Reinforced nylon
10	Pusher	Reinforced nylon
11	Lock pin	Stainless Steel SAE 304
12	Bolt house	Stainless Steel SAE 316
13	Stopper	Aluminum
14	Seal assembly	Sealing ASS
15	Adaptor	stainless steel
16	Clamping stem	Reinforced nylon
17	Float	Foamed polypropelene
18	Male valve	
19	Check valve	
20	Check Valve (D-090-P V)*	
21	Check valve	
22	O-Ring	BUNA-N
23	O-Ring (D-090-P V)*	BUNA-N
24	O-Ring	BUNA-N
25	O-Ring	BUNA-N
26	Bolt	Stainless Steel SAE 316
27	Bolt	Stainless Steel SAE 316
28	Bolt	Stainless Steel SAE 316
29	Self lock Domed nut	Stainless Steel SAE 316
30	Bolt	Stainless Steel SAE 316
31	Washer	Stainless Steel SAE 316
32	Washer	Stainless Steel SAE 316
33	Spring lock washer	Stainless Steel SAE 316

* Option -upon request

AIR & VACUUM FLOWRATE

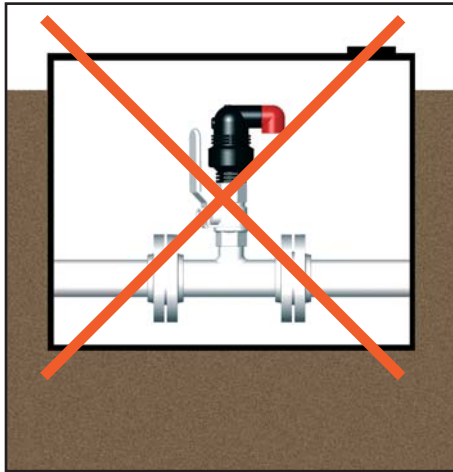


AUTOMATIC AIR RELEASE FLOWRATE



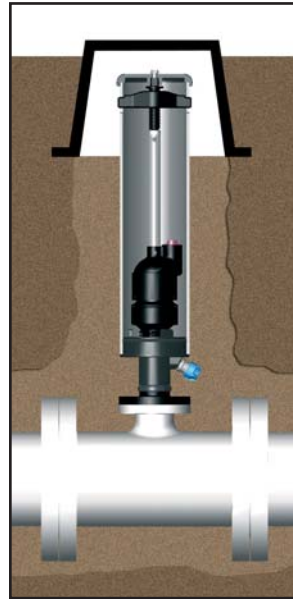
The New Installation Approach

- Cut costs of accessories and installation.
- More flexibility in designing and installing, thanks to the availability of different installation lengths.



The Old Concept Requires High Costs

- Digging (Excavating).
- Big Manhole.
- Sealing materials and work.
- Separate shut-off valve.

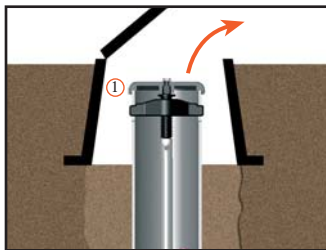


The new approach save costs in means of

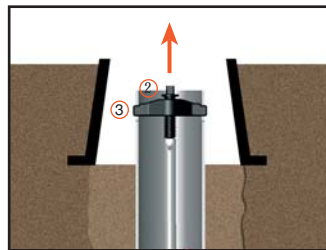
- Manhole (Cachets) - is not needed
- Innovative Air Valve.
- Sealing the manhole – is not needed.
- Automatic shut-off valve – included.

Maintenance Advantages – Cost Saving

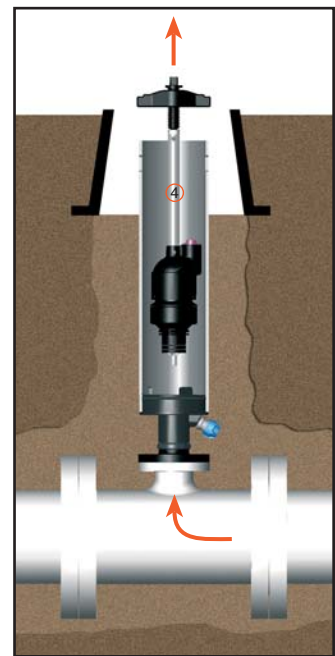
- Only one man is needed for all maintaining process.
- The maintaining work can be done when the network is under pressure.
- The maintenance can be done at the site ● Assembly of the air valve is the same as dismantling, only in reverse order.



- Remove the manhole cover
- Remove the upper cover assembly (1).



- Unscrew the bridge stem (2)
- Remove the bridge with the bridge stem (2+3).



- Hold the shaft (4) and pull the air valve straight up **without turning the shaft**. The shut off valve will isolate the system automatically