# Installation, Operation and Maintenance



# AIR & VACUUM VALVE MODEL K-020

#### A. INSTALLATION

- 1. The air valve will be mounted on a riser, connected to the top of the pipe.
- 2. An inlet isolating valve will be installed below the air valve.

#### B. Periodic Maintenance Procedure

#### B.1. Releasing Pressure

- 1. Shut the isolating valve located on the riser under the air valve.
- 2. Open the Ball Valve to release pressure and drain the air valve.
- 3. Important: Discard liquid in compliance with local regulations.

#### B. 2 Disassembly

- 1. Unscrew the Discharge Elbow (1) from the valve Cover (5).
- 2. Unscrew the Bolts, Washers and Nuts (9) that connect the Cover to the Body (15).
- 3. Lift up the Cover with the attached Float Assembly (6, 11-13) and remove it from the valve Body.
- 4. Unscrew the Domed Nut (2) and remove together with the Washer (3).
- 5. Drop down and remove the Float Assembly from the Cover.
- 6. Remove the O-ring (10) from the upper Body. Examine for tears or cracks. Replace, if necessary.

#### B.3. Maintenance

Wash and clean the Float Assembly, Cover, Body, the O-ring and Discharge Elbow under clean running water to remove all grime. Pay special attention to thoroughly clean the area of the Orifice Seat (7) and Orifice Seal (8) in the bottom of the Cover, the Spherical Flap & Stem (6) and the Bushing (4).

#### B.4. Assembly

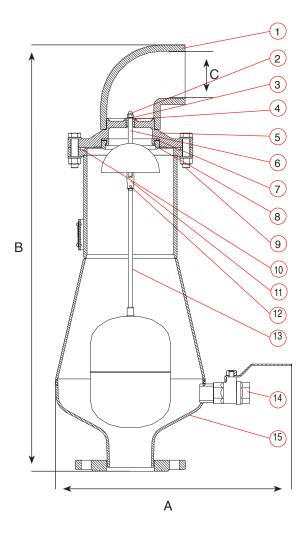
- 1. Insert the top rod of the Float Assembly into the cover Bushing. Put the Washer on the rod and tightly screw on the Domed Nut.
- 2. Place the O-ring securely in the groove on the upper Body.
- 3. Insert the Cover and Float Assembly into the Body. Line up the holes of the cover with the holes in the Body.
- 4. Screw in the Bolts, Washers and Nuts that connect the Cover to the Body.
- 5. Open the Ball Valve.
- 6. Open the isolating valve.



#### PARTS LIST AND SPECIFICATION

### No. Part

- 1. Discharge Outlet
- 2. Domed Nut
- 3. Washer
- 4. Bushing
- 5. Cover
- 6. Stem + Spherical Flap
- 7. Orifice Seat6
- 8. Orifice Seal
- 9. Bolt & Nut
- 10. O-ring
- 11. Joint
- 12. Pin
- 13. Stem + Float
- 14. Ball Valve 1"
- 15. Body



## TROUBLESHOOTING GUIDE

PROBLEM	REASON	SOLUTION
Valve leaking from the	A. Low pressure B. Debris caught in sealing mechanism	A. Requires a minimum pressure of 0.05 bar (0.7 psi) to seal properly B. Perform the B. Periodic Maintenance Procedure
Discharge Outlet	A. Ball Valve not completely closed B. Debris caught inside the Ball Valve	A. Tightly close the Ball Valve B. Fully open, then fully close the Ball Valve

