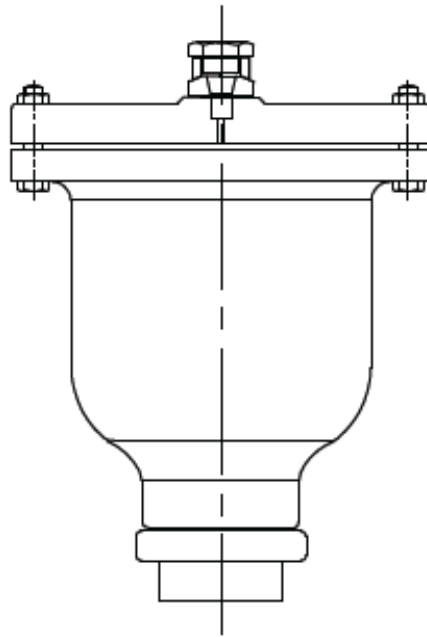


AIR / VACUUM VALVE



INSTRUCTION MANUAL ON INSTALLATION OPERATION AND MAINTENANCE

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INTRODUCTION -

The Air / Vacuum Valve has been designed with stainless steel trim to give years of trouble-free operation. This manual will provide you with the information to properly install and maintain the valve to ensure a long service life. The Air / Vacuum valve is designed to exhaust large quantities of air upon system start-up and allow air to re-enter the line upon system shut down.

Also, this valve is not intended for fluids containing suspended solids such as wastewater. For wastewater and other high turbidity applications, use DVPL Sewage Air / Vacuum Valves.

The valve is a float-operated, resilient seated valve designed to handle clean fluids. The size, maximum working pressure, and serial no. are stamped on the name plate for reference.

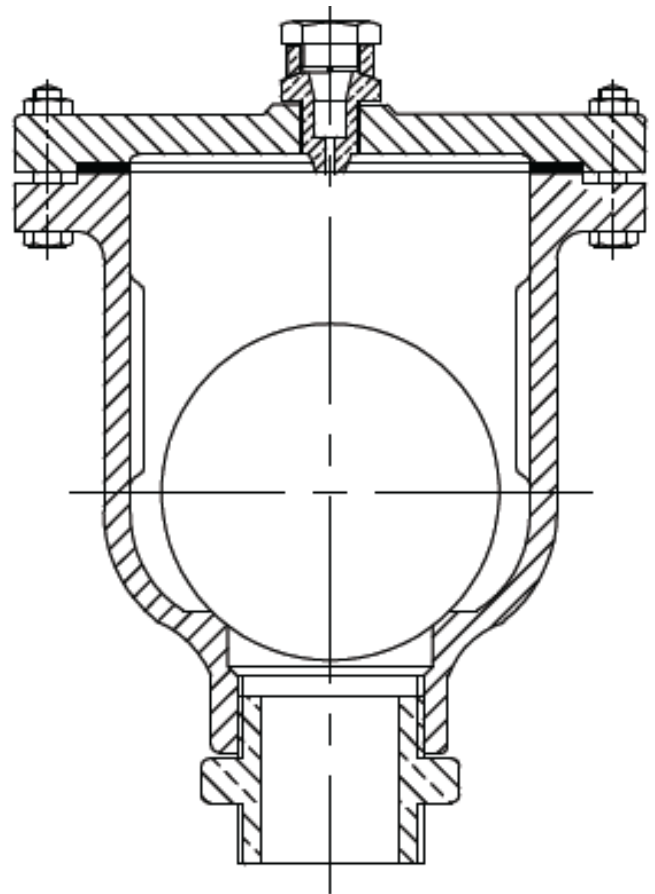


FIGURE 1. AIR/VACUUM VALVE

RECEIVING AND STORAGE -

Inspect valves upon receipt for damage in shipment. Unload all valves carefully to the ground without dropping.

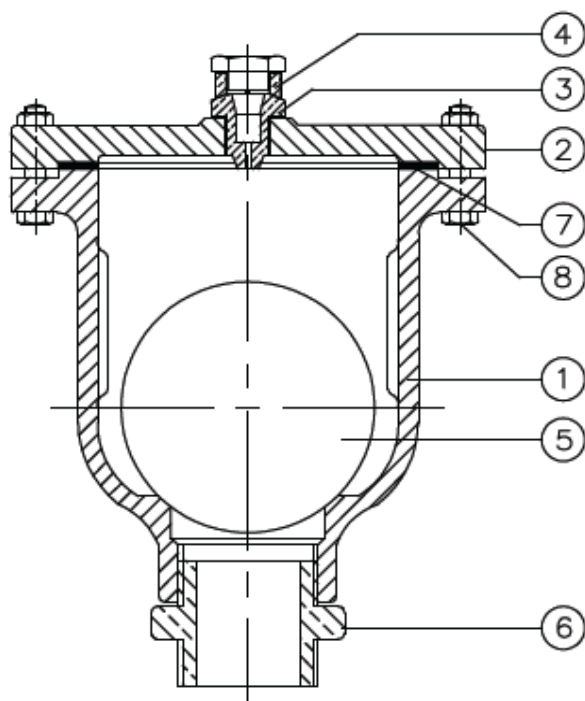
Valves should remain crated, clean and dry until installed to prevent weather related damage. For long term storage greater than six months, the rubber surfaces of the seat should be coated with thin film grease. Do not expose seat to sunlight for any extended period.

INSTALLATION -

The installation of the valve is important for its proper operation. Valve must be installed at the system high points in the vertical position with the inlet down. A vault with adequate venting and drainage should be provided. A full ported shut off valve should be installed below each valve on the event servicing is required.

VALVE CONSTRUCTION -

The Air / Vacuum Valve body and cover are cast iron. All internal components are stainless steel with the exception of the calve seat which is resilient. The float is the only moving parts assuring long life with minimal maintenance. The general details of construction are illustrated in Figure 2. The body (1) is threaded for connection to the pipeline. The high pressure cover (2)



NO.	DESCRIPTION	MATERIAL
1.	BODY	Cast
2.	HIGH PRESSURE COVER	Iron
3.	H.P. ORIFICE & SEAT RING	L.T. Bronze with Neoprene Rubber
4.	H.P. ORIFICE PLUG	L.T. Bronze
5.	H.P. BALL (FLOAT)	Stainless Steel
6.	FERRULE	Mild Steel
7.	GASKET	Rubber
8.	BOLTS & NUTS	Carbon Steel

TABLE 1. Air/Vacuum Valve Parts List

is tightening by bolt and nut. Orifice plug (4) is situated between body and cover by seat ring arrangement.

FIGURE 2. AIR/VACUUM VALVE



DESCRIPTION OF OPERATION -

The Air / Vacuum valve is designed to exhaust large quantities of air upon system start up and allow air to re-enter the line upon system shutdown or line break. As water enters the valve during start up, the float will rise, closing the outlet port. The valve will remain closed until system pressure drops to near zero pressure. It will open during shut down to perform a dual purpose. First, it eliminates the possibility of a vacuum forming and a potential pipeline collapse. Second it allows rapid drainage of the line when system maintenance is required. The only moving parts in the valve are the float and the float guide. The float guide assures that the float enters the seat at the optimum angle and assures that the float will not make contact with any surface other than the resilient seat thus assuring long maintenance free life.

MAINTENANCE -

The Air / Vacuum Valve require no scheduled lubrication or maintenance.

TROUBLESHOOTING -

Several problems and solutions are presented below to assist you in troubleshooting the valve assembly in an efficient manner.

- Leakage at Bottom Connection: Tighten valve threaded connection. If leak persists, remove valve and seal threads with Teflon sealant.
- Leakage at Cover: Tighten bolts, replace gasket.
- Valve Leaks when Closed: Inspect seat for damage and replace.

PARTS AND SERVICE -

Parts and service are available from our local representative or the factory. Make note of the valve size, series no, and serial no. located on the valve nameplate and contact.

Our Contact office & e-mail id:

H.O & WORKS ==== PH: 033-2677 8088, E-MAIL: ho@dvpl.co.in

HYDERABAD OFFICE ==== PH: 040-6631 0642, E-MAIL: hyderabad@dvpl.co.in

CHENNAI OFFICE ==== PH: 044-2498 0842, E-MAIL: chennai@dvpl.co.in

MUMBAI OFFICE ==== PH: 022-4024 2529, E-MAIL: mumbai@dvpl.co.in

GURAJAT OFFICE ==== PH: 079-2658 6080, E-MAIL: gujarat@dvpl.co.in