



Inspection & Maintenance Manual for the:



Flow Control Valve

FluidDruid™s are comprised of parts as shown in Figure 1 below.

FIGURE 1

The upstream flange may, or may not, be present. On some valves, this flange may have a screen over it. A perspective view of the FluidDruid™ is provided on the next page.

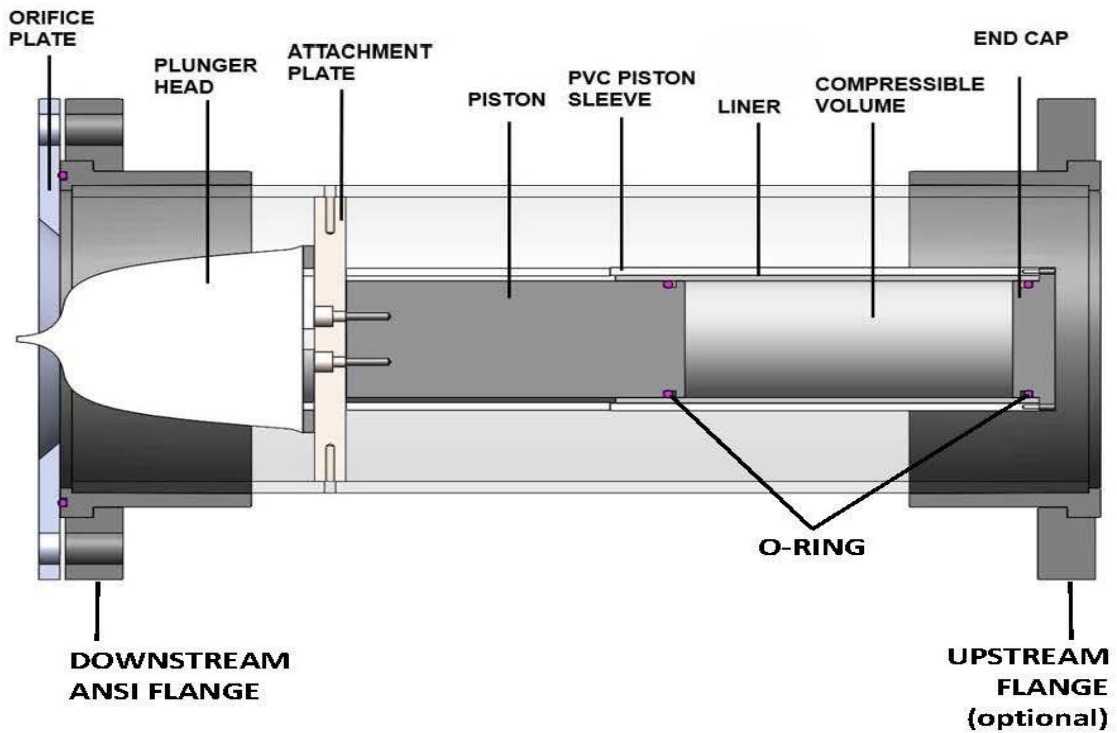
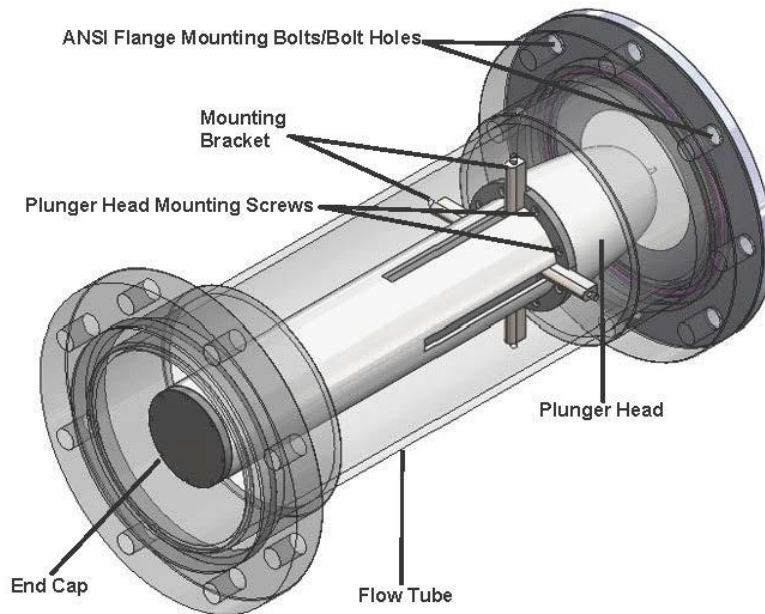


Figure 2



The End Cap (Figures 1 and 2) is at the inlet side of the valve. The downstream ANSI Flange (Figures 1 and 2) is toward the outlet side of the FluidDruid™ and, in some cases, a flange can be used to connect the valve to a fixture on the weir wall in the outlet control structure.

The FluidDruid™ can be mounted below the water level in a sump, or it can be mounted so that the base of the Flow Tube (Figure 2) is more or less even with the water level during dry weather. In the latter case, the FluidDruid™ can be inspected and given routine maintenance in place (e.g. without removing the valve from the outlet control structure). Inspection and routine maintenance procedures for the FluidDruid™ in either of these scenarios is described below. Maintenance is considered routine if the o-rings or other parts do not need replacement or repair.

Routine Inspection and Maintenance, FluidDruid™ Mounted Above the Water Line

Recommended Frequency: Once Every 3-5 Years

If the FluidDruid™ is mounted above the water line, it can be inspected and maintained in place. The steps are listed below.

1. Inspect the overall appearance of the valve for signs of wear or damage. If wear or damage are apparent, remove the valve from the control structure for repair or replacement of the worn or damaged parts as described in the “Thorough Inspection and Maintenance” section below. If there is no visible damage or sign of wear, proceed to Step 2.

2. If an upstream flange and screen are present, remove the screen by unbolting it from the flange. If there is no upstream flange or screen, proceed to Step 3.
3. Unscrew the End Cap from the Piston Sleeve.
4. Inspect the Inner Liner and o-rings (Figure 1) for any sign of wear or degradation. Note that black rubber marks on the Inner Liner can be a sign of o-ring wear.
5. If there are no signs of wear or degradation to the Inner Liner or o-rings, use a non-toxic silicon spray to lubricate the o-rings and inner liner. If there are signs of wear, proceed to the following procedure for instructions on more thorough maintenance.
6. Pull the piston sleeve back so that the plunger head is firmly against the mounting bracket.
7. Replace the end cap and screen (if present).

Thorough Inspection and Maintenance, or FluidDruid™ Below Water Line

Recommended Frequency: If Damage or Wear to O-Rings is Observed

If the FluidDruid™ is mounted below the water line, or if visible signs of wear or damage have occurred, or if more thorough inspection is to be performed, and the valve will have to be removed as follows.

1. Remove the FluidDruid™ from the control structure. The FluidDruid™ may be attached to a weir wall via a rubber boot to a pipe fixed to the weir. In other cases, the FluidDruid™ may be bolted directly to a bracket attached to the weir. If a rubber boot is used, simply loosen the tightening band holding the FluidDruid™ to the fixed pipe and detach the valve. If the FluidDruid™ is bolted to a bracket on the weir, unbolt the FluidDruid™ from the bracket.
2. Inspect the flanges, Flow Tube, Orifice plate, and Mounting Bracket (Figures 1 and 2) FluidDruid™ for wear or damage.
3. Replace or repair worn or damaged parts as needed.
4. If an upstream flange and screen are present, remove the screen by unbolting it from the flange. If there is no upstream flange or screen, proceed to Step 6.
5. Unscrew the Mounting Bracket (Figure 2) from the Flow Tube and remove the assembly from the Flow Tube.
6. Remove the End Cap and the Plunger Head (Figure 2) by unscrewing their mounting screws.
7. Pull the Piston Sleeve and Inner Liner (which will be attached to the inside of the Piston Sleeve) off the Piston (Figure 1). (The end cap will have to have been removed to do this.)
8. Inspect the Inner Liner and o-rings for damage or wear. If no damage or wear are apparent, spray the o-rings and Inner Liner with a non-toxic silicone spray lubricant.
9. Reassemble the FluidDruid™ by following these steps in reverse and reattach it to the weir wall. Note that the Piston Sleeve should be drawn back so that it rests firmly against the Mounting Bracket (Figure 2) before screwing the End Cap on.

Contact StormWizard at: 1(888) 695-4775 or email us at: info@StormWizard.com for replacement parts or with any questions you may have about maintenance.