

## **Inline Filter Canister with Weighted Relief Valve Installation and Operation**

Pathfinder Systems would like to thank you for your purchase of a weighted relief valve with inline filter canister. You should find that it provides years of trouble-free operation.

## Warning

The weights may have sharp edges. It is recommended that you wear gloves when you are handling the weights.

Protect your eyes. Do not look into the discharging valve.

This side contains the Filter Element



Filter Monitor Gauge (optional)

This side contains the Weighted Relief Valve

## To Install the Weighted Relief Valve

1. Flip the latches of the cover and remove.



2. Wrap Teflon tape on the plunger threads.



- 3. Install the plunger in the canister as shown below. Hand tighten to prevent damage to the aluminum threads. Do not use a pipe wrench to tighten. **Do not over tighten!**
- 4. Place the bonnet, as shown below, on the plunger. We recommend lubricating mating surfaces with 30-weight oil. There should be a light film of oil on the plunger at all times.
  - Mount vertical and plumb. Check regularly for proper operation and cleanliness.
- 5. Place all of the provided weights on the bonnet as shown below.

**Pressure** – Each plunger/bonnet assembly is 1 PSI. The valve uses 0.5 PSI incremental weights. Each valve size can utilize a maximum of (28) 0.5 PSI weights. For example, a 2" valve set at 15 PSI would require (28) 0.5 PSI weights. Divide 15 PSI by 0.5 PSI = 30 and subtract (2) 0.5 for the body (1 PSIG) for a total of (28) 0.5 weights.

**Vacuum** – Each plunger/bonnet assembly is equal to 2 inHg. Each 0.5 weight is equal to 1 inHg. Each valve size can utilize a maximum of (28) 1 inHg weights. For example, 2" a valve set at 6 inHg would ship with the plunger/bonnet for 2 inHg and (4) 1 inHg weights. 2 + 4 = 6.



6. Install the provided snap ring into the groove at the top of the bonnet. If you don't have a tool as shown in the picture, you can use a needle nose pliers or similar.

To adjust the weights, use a snap ring pliers to remove the snap ring and then add or remove weights. The snap ring is not necessary for operation. It is provided so that once weights are set, the valve cannot be easily modified in the field. If necessary, you may install a wire with a lead seal to prevent the valve from being modified.



7. Line up the hook latches and install the cover. Secure the latches.

## To Change the Filter Element

1. Flip the latches of the cover and remove.



2. Remove the wing nut and the lid. Replace the filter element with the same size/brand.

