

SELF-CLEANING STRAINER

INSTALLATION INSTRUCTIONS

<u>Important</u>

There are three key points to properly operate a self-cleaning strainer.

- 1. Do not pump more volume (LPM) than the capacity that the strainer is rated to handle.
- 2. Use the correct <u>supply line size</u>. Do not under-size the supply line which is supplying the strainer with pressurised backwash water.
- 3. Run the strainer's supply line at the correct operating pressure (psi).

For the volume capacity, supply line size and operating pressure for your specific strainer refer to the Self-Cleaning Strainer brochure specification tables.

Attaching Strainer

When attaching the strainer to a PVC suction line, <u>do not</u> cement in place. Use screws, or drill and tap holes for bolts or set screws to mechanically connect it. This will make it much easier to service the strainer in the future, should it be necessary.

Do not rest the suction line on the self-cleaning strainer; it is not designed to take this weight. The suction line must be supported so that the strainer is free to revolve.

The Supply Line

The supply line provides the strainer with the pressurized water to clean and rotate the screen. It is connected to the pump's discharge line between the pump and a gate valve. When filling the system, the gate valve is closed enough to provide the backpressure required to power the strainer. When there is no gate valve installed, there may initially be insufficient pressure to operate the strainer and substantial damage may occur. Double check the supply line's proper sizing and operating pressure for your model strainer.

Globe or Gate Valve for Supply Line

When the pump is capable of developing more pressure than is required to operate the strainer, the supply line globe valve can be closed enough to get the appropriate pressure level (as read on the pressure gauge).

Pressure Gauge for Supply Line

This measures the water pressure in the supply line to operate the strainer. After the globe valve, install a pressure gauge on a tee to know what pressure you are pushing to operate the strainer.

Storage

When an irrigation system is stored for the winter, rodents often build nests in pumps, suction lines or supply lines. Before operating the next season, be sure that everything is free of debris that might clog the strainer nozzles.

Strainer Orientation

- <u>Moving Water</u> Nozzle spray should flow with the current. In fast moving current that carries heavy amounts of debris or damaging logs, a V-shaped deflector may be installed in front of the strainer.
- <u>Still Water</u> Nozzle spray parallel to the water surface (never towards the bottom).

<u>Confined Pumping Applications</u> - Please call for appropriate installation information.



Strainer Service

<u>Screen removal</u> - Remove the six outer nuts on the bottom of the strainer and lift off the black bottom outer cover. Slide the screen off the assembly. When reinstalling the screen, be sure that the screen's overlap <u>trails</u> the direction of rotation.

Poly Seal removal -

- 1. The seal has a radial slit through one bolt hole. This facilitates its removal and replacement.
- 2. Remove seal retaining nuts (nylon insert locking nuts).
- 3. Remove seal in a rotating manner past the wear ring and feed pipe.
- 4. Install new seal.
- 5. Reinstall seal retaining nuts.

WARNING:

Do not fully tighten the locking nuts on the seal. The seal is designed to move and self-adjust during screen rotation. If the seal is not allowed to move, it may cause premature wear on the seal and the wear ring.

<u>Inspect</u> - Wheels and wheel bushings roll easily. The wheels have slight play and roll freely around the wear ring. This play provides room for sand or grit to work through and not bind the strainer. Check that the wheels and seal have not cut grooves in the wear ring, if so, replace it.





