



PVC Y STRAINER INSTALLATION & OPERATION

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PLEASE READ THE FOLLOWING INFORMATION PRIOR TO INSTALLING AND USING COLONIAL VALVES and STRAINERS, AND OTHER ASSOCIATED PRODUCTS. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.

1. Colonial Valve guarantees its products against defects in material and workmanship only. Colonial Valve assumes no responsibility for damage or injury resulting from improper installation, misapplication, or misuse of any product.
2. Colonial Valve assumes no responsibility for damage or injury resulting from chemical incompatibility between its products and the process fluids to which they are subjected. Compatibility charts provided in Colonial Valve literature are based on ambient temperatures of 70°F and are for reference only. Customer should always test to determine application correctness.
3. Consult Colonial Valve literature to determine operating pressure and temperature limitations before installing any Colonial Valve product. Note that the maximum recommended fluid velocity through any Colonial Valve product is FIVE feet per second. Higher flow rates can result in possible damage due to water hammer effect. Also note that maximum operating pressure is dependent upon material selection as well as operating temperature.
4. Colonial Valve products are designed primarily for use with non-compressible liquids. They should NEVER be used or tested with compressible fluids such as compressed air or gas.
5. Systems should always be depressurized and drained prior to installing Colonial Y Strainers.
6. Temperature effect on piping systems should always be considered when the systems are initially designed. Piping systems must be designed and supported to prevent excess mechanical loading on Colonial Valve equipment due to system misalignment, weight, shock, vibration, and the effects of thermal expansion and contraction.
7. Because PVC plastic products become brittle below 40°F, Colonial Valve recommends caution in their installation and use below this temperature.
8. Due to differential thermal expansion rates between metal and plastic, transmittal of pipe vibration, and pipe loading forces **DIRECT INSTALLATION OF METAL PIPE INTO PLASTIC CONNECTIONS IS NOT RECOMMENDED.** Wherever installation of plastic valves into metal piping systems is necessary, it is recommended **FLANGED** connections are used.

SOCKET CONNECTION:

Socket end connections are manufactured to ASTM D2467. Solvent cementing of socket end connections to pipe should be performed per ASTM specifications D2855-87. Cut pipe square. Chamfer and deburr pipe. Surfaces must be cleaned and free of moisture, oil, dirt and other foreign material. Apply primer to inside socket surface of end connector. Never allow primer or cement to contact valve interior beyond the sockets, as leaking may result. Use a scrubbing motion. Next, liberally apply primer to the male end of the pipe to the length of the socket depth. Again apply to the socket, and without delay apply cement to the pipe while the surface is still wet with primer. Next apply cement lightly, but uniformly to the inside of the socket. Apply a second coat of cement to the pipe, and assemble the end connector to the pipe, rotating the end connector 1/4 turn in one direction as it is slipped to full depth on to the pipe. The end connector should be held in position for approx. 30 seconds to allow the connection to “set”. After assembly wipe off excess cement. Follow cement manufacturer’s guidelines for proper “cure-time”, based on the pipe size that you are joining.

- Y-Strainers are designed for horizontal or vertical installation. They must be installed with the Flow-Arrow Indicator pointing in the direction of the flow of the system.
- The Y-leg must be pointed downward to properly collect sediment. This will also enable proper flushing.
- The standard screen is 20 mesh / polypropylene. The “screen” is permanently-contained in a support-housing. Replacements are available (referred to as “screens” in the catalog).

Process for changing / cleaning screen support housing:

1. Depressurize the system
2. Place a bucket under the Y-leg. Liquid will drain out of the Y-leg during this process, so be prepared to contain it, and prepared to handle any hazardous materials that may be exposed.
3. The union nut on the Y-leg has a C-Clip that fastens it to the screen support-housing.
4. Loosen the union-nut and slowly pull it out of the Y-leg. The screen support-housing will also be removed with the union nut.
5. Remove the screen support-housing from the union-nut by removing the C-Clip at the end of the assembly.
6. Rinse or replace the screen support-housing and re-assemble (in reverse of the steps listed above).
7. Hand-tighten the union-nut, and re-pressurize the system.

As with all PVC piping, the maximum fluid velocity is 5 feet per second. This velocity reduces the risk of water-hammer due to valve closure and pump start-up or shut-down.

Pressure rated up to 150 psi (non-shock water at 73° F).

