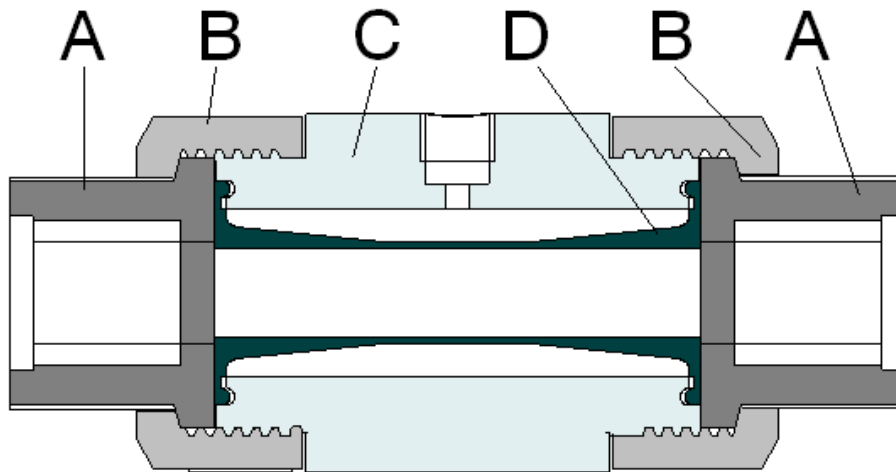


SERIES HSA PINCH VALVE INSTALLATION & MAINTENANCE INSTRUCTIONS

The HSA pinch valve consists of (6) parts:

Description	Part #
A - (2) Union ends	7613
B - (2) Union nuts	3040
C - (1) Valve body	6901
D - (1) Elastomeric sleeve	7613



FUNCTION

The HSA valve is piped into the system allowing flow of the media through the valve. Air pressure is piped to the 1/8" NPT threaded port which allows the air pressure to close the sleeve, thus stopping flow. In order to fully stop the flow, the air pressure must be 45 psi above the fluid media pressure.

LIMITATIONS

The elastomeric sleeve within the valve controls the flow. Its purpose is primarily to allow full flow and no flow, i.e. on/off. It is not designed to "throttle" flow. The fluid media flows through the valve and air pressure applied external to the sleeve (but within the valve body) closes the sleeve, stopping flow. Because the sleeve is an elastomer it is necessary to maintain certain pressure limitations to prolong its life. The sleeve requires a pressure differential of 45 psi air pressure above the flowing media pressure to fully close. If this differential pressure is raised, it will reduce the sleeves longevity. For example a fluid media pressure of 10 psi and an external air pressure of 90 psi refers to a differential pressure of 80 psi which will severely reduce the life of the sleeve.

INSTALLATION INSTRUCTIONS

PLEASE READ THIS SECTION TO AVOID EARLY FAILURES:

Metal pipe fittings must never be connected directly to this valve. The threads of a metal pipe fitting can tear at the plastic threads causing high stress points which will fail over time. Over tightening plastic fittings is another common cause for failure. A general rule of thumb is to hand tighten the fittings and then with the use of a non-metallic strap wrench turn $\frac{1}{4}$ turn further. Always check the system for leaks before placing into service. Plast-O-Matic recommends the use of a PTFE tape rather than pipe dope. Many pipe dopes have been shown to cause premature failure of plastic fittings due to chemical attack.

SLEEVE REPLACEMENT

Although very high cycle life has been achieved under laboratory conditions, it is difficult to predict the life of a sleeve under your special set of conditions. Through experience you will be able to predict the life of a sleeve.

To replace a sleeve, de-pressurize the system, and loosen the union nuts. The valve can be removed from the system.

Push one end of the sleeve into the valve. You will have to "crumple" it a bit, which can generally be done by hand. It is likely you will be able to push the sleeve out of the valve by hand. If not you may cautiously use a NON-METALLIC tool, such as the eraser end of a pencil, or a piece of smooth wood. It is imperative not to scratch, score, or in any way damage the plastic valve, since this is pressurized by air and damage to the body can cause premature failure.

Note: If a lubricant can be use without adverse affect on your media, it will ease the assembly of a new sleeve. The lubricant must be compatible with the sleeve material EPDM elastomer. Petroleum based lubricants will severely shorten the life of the sleeve and must not be used.

Crumple the end of the new sleeve and insert it into the valve. It may be possible to push the sleeve through, but most likely a NON-METALLIC tool will help. A piece of smooth wood used to push the inserted flange of the sleeve through the valve will help. USE good judgment... You don't want to tear the elastomer or scratch the valve body.

IMPORTANT: Notice the two tabs on each flange. Rotate the sleeve assuring these rest in the notches on the valve body. Their purpose is to prevent the sleeve from rotating when the union nuts are tightened. If the ends of the sleeve rotate with respect to each other the sleeve will close up.

Reassemble the valve into the system, and leak test prior to putting the system into service.