

Installation and Maintenance Instructions

Angle and Y-Pattern Style Globe Valves



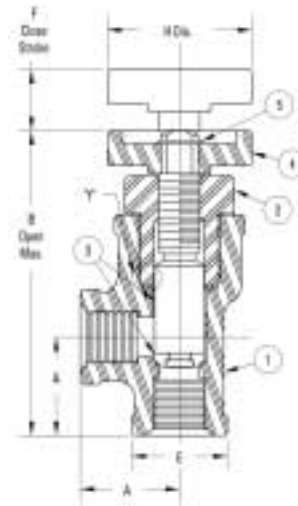
Angle

PVC
Sizes: 1/2"–1"
Threaded



Y-Pattern

PVC
Sizes: 1/2"–1"
Threaded



Installation

Threaded End Valves—Refer to the plastic thread joining instructions in the Chemtrol Thermoplastic Piping Technical Manual for proper joining techniques.

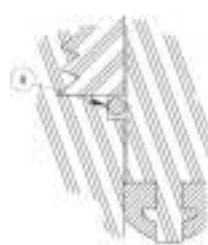
Caution: Do not overtighten threads. Usually, one to two turns beyond hand-tight, using a suitable strap-wrench, if necessary, is sufficient. (ANSI B1.20.1 defines hand-tight as 4 to 4 1/2 threads for sizes through 1".)

Adjustment—Ordinarily, no adjustment to the valves is required because the stem and bonnet seals are O-ring energized. However, if a shell leak should occur at either the stem or bonnet threads, make sure the bonnet is fully seated by attempting to tighten by hand. **Overtightening will serve no useful purpose. If a leak develops across the valve seat, do not attempt to overtighten the handle/stem.** Serious damage to the valve may result. For any type of persistent leakage, the valve should be disassembled and inspected to determine the cause.

Maintenance

Should a valve need repair, refer to the drawing and proceed as follows:

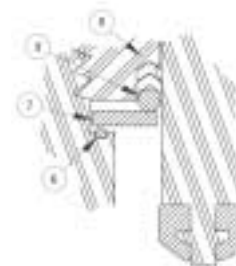
1. Set handle in open position.
2. Unscrew and remove bonnet assembly.
3. Inspect and replace worn or damaged parts as necessary.
4. If necessary, the stem and stem seal may be removed from the bonnet by removing the retainer ring and handle and screwing the stem out the under-side of the bonnet.
5. Reassemble in the reverse order, and then with the handle in the full open position, replace the top-works in the body as follows:
 - a) For 1/4" size, slide the body/stem O-ring over the end of the stem before installing the bonnet assembly in the body.
 - b) For 1/2" and 3/4" sizes, momentarily stretch the body-seal O-ring to approximately twice its diameter and then quickly place it over its retaining projection on the back-up washer. Hold the O-ring evenly in its retaining nest on the washer with finger tips. When the O-ring has relaxed to grasp the shoulder protection, the bonnet assembly may be assembled into the body with the O-ring clinging to the back-up washer.
 - c) For 1" sizes, place the body-seal O-ring in its body groove. Inspect to ensure that it is fully contained by the groove before installing the bonnet assembly.



Detail "Y" Enlarged View
1/4" Size Valve



Detail "Y" Enlarged View
1/2" & 3/4" Size Valve



Detail "Y" Enlarged View
1" Size Valve

Replacement Parts

A complete list of replacement components can be found on the preceding page. Bonnet assemblies and seals are interchangeable between angle and Y-pattern valve bodies.

To determine suitability of Chemtrol valves in your application, consult the Chemtrol Chemical Resistance Guide.