

DUAL SAMPLE SIZE INTERNAL VOLUME INJECTORS

Technical Note 208

This type of valve is indicated by two sample sizes in the product number, such as CI4W.06/.5. In this example, the valve as originally supplied will inject a .06 μ l sample. When the rotor is removed and manually rotated 180°, the sample size injected is .5 μ l. This rotor re-orientation can be accomplished without disengaging the valve from the actuator or manual handle assembly. If cleaning is necessary, consult **Technical Note 201, Operation Notes and Cleaning Instructions, W and UW Type Valves**.

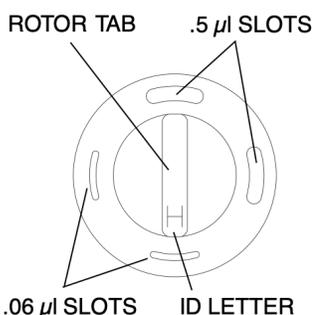
ROTATING THE ROTOR TO CHANGE THE SAMPLE SIZE

1. See **Figure 1**. Unscrew the pre-load assembly. Do not tamper with the socket adjustment screw.
2. Engage the end of the rotor with a pencil-type magnet, available from Valco or any electronic components supplier. Cycle the valve one time to break the "shear seal" between the rotor and the valve body.

CAUTION: Any contact between the interior of the valve body and the metal of the rotor or any tool used is likely to cause damage.

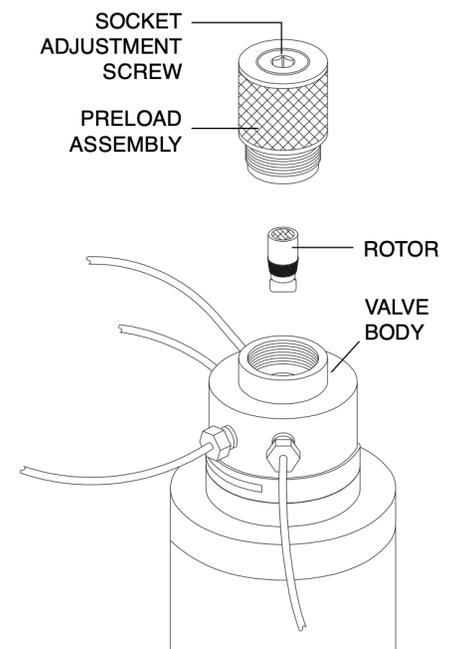
3. Carefully withdraw the rotor from the valve body with the magnet.
4. Rotate the magnet with attached rotor 1/2 turn (180°). Carefully reinstall the rotor in the valve body, making sure that the rotor tab is fully inserted into the slot in the driver (**Figure 2**). Once again, avoid touching the interior of the valve body with any of the metal parts of the rotor.

FIGURE 2: Rotor ID letter and slot arrangement



5. Using a pencil or other small pointed object, hold the rotor in place in
6. Replace the knurled pre-load assembly, tightening it into the valve body by hand until it bottoms. The pre-load must be fully bottomed-out, but attempts at further tightening will not affect the sealing forces.
7. Cycle the valve 10 times to seat the sealing surfaces, taking care that the valve is not left in mid-position.

FIGURE 1: CI4W valve



THE ARRANGEMENT OF THE SLOTS ON THE ROTOR

One end of the rotor tab has a small ID letter (typically H, P, E, or T). The slot on the polymer near this end of the tab (as well as one of the slots adjacent to it) carries the volume of the first sample size in the product number: the opposite slots correspond to the volume after the "slash" (/) in the product number (**Figure 2**). In the example of the CI4W.06/.5, the letter on the tab indicates the .06 μ l sample slots. If the rotor is inserted with the ID letter toward the ports of the valve body, then a .06 μ l sample will be injected (**Figure 3**). If the rotor is inserted with the ID letter away from the ports, a .5 μ l sample will be injected.

FIGURE 3: Valve with preload and rotor removed

