

# 10 PORT W & UW TYPE VALVES

## Technical Note 103

### VALVES SHIPPED PRIOR TO JUNE 2009

The size and placement of the mounting holes in 10 port W type valves are dictated by the requirement that the same mounting hardware be used for all W type valves. In valves manufactured before June of 2009, this means that the mounting holes break through into the threads of the adjacent fittings. To minimize this breakthrough, the holes are untapped in 10 port W type valves, necessitating a special shaft housing for valves in manual configuration (**See Technical Note 401**).

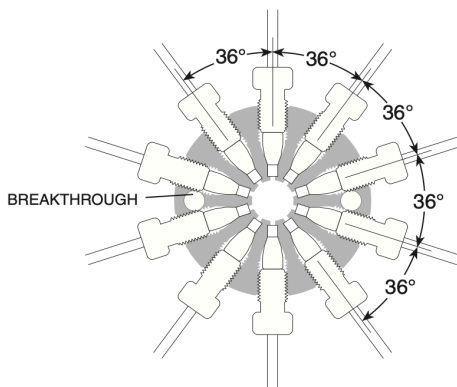
The socket cap screws used to mount the valve are specially machined to be used in these 10 port valves, but must be pushed through forcefully when first installed. This should be done before tubes and fittings are installed in the adjacent ports. Likewise, remove the fittings from the adjacent ports before trying to remove the screws from the mounting holes, such as when the valve needs to be sent in for repair.

The breakthrough has no effect on the performance of the fitting since the seal is made at the bottom of the fitting detail. If leakage occurs through the break and around the mounting screw, the problem is not at the break but at the point where the ferrule makes up on the tube or where it seats in the fitting detail.

### VALVES SHIPPED AFTER JUNE 2009

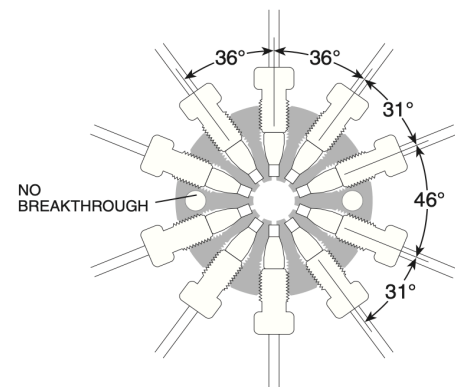
In the newer design, the fittings adjacent to the mounting holes are drilled at a slightly different angle, eliminating the breakthrough. The modification is 100% backwards compatible with original rotors, fittings, and hardware.

#### Old design with uniform 36° spacing



Old design with uniform 36° spacing

#### New design with ports offset



New design with ports offset