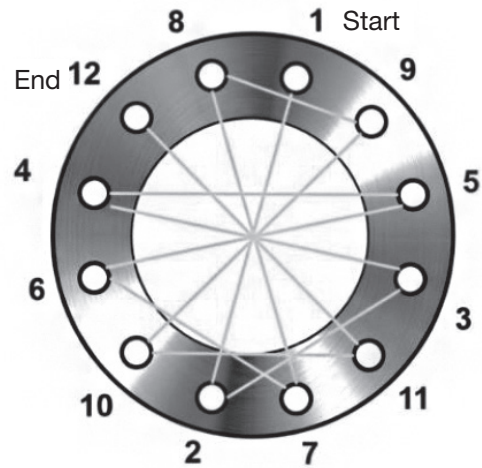
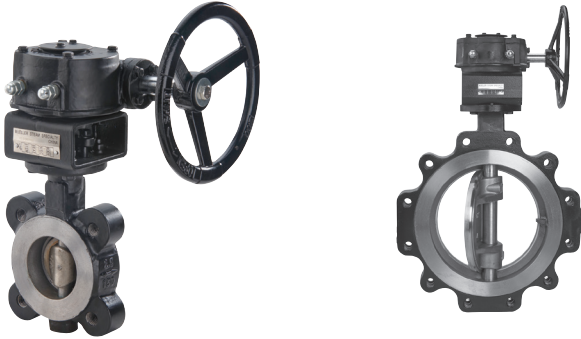


## High Performance Butterfly Valves



### General

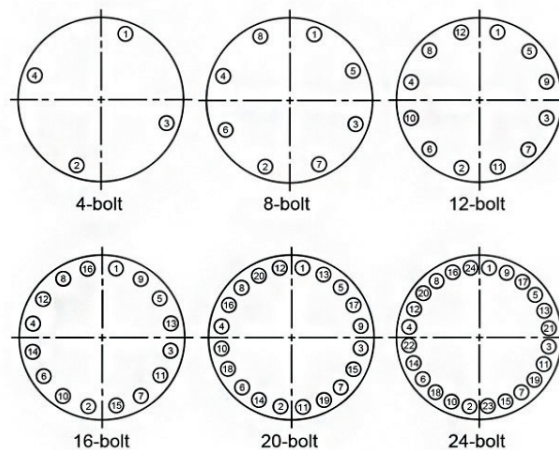
1. All cover styles
2. All nuts are to be tightened snug in a 90 degree pattern.
3. After all nuts are snug, then apply full torque per specification for unit.
4. When adding full torque, nuts should also be tightened in a 90 degree pattern.

### For Four and Eight-Bolt Flanges:

1. 1st Round - 30 percent of final torque
2. 2nd Round - 60 percent of final torque
3. 3rd Round - 100 percent of final torque
4. Final Round - Clockwise or Counter-Clockwise around the flange

### For Flanges with 12 or More Bolts:

1. 1st Round - 20 percent of final torque
2. 2nd Round - 40 percent of final torque
3. 3rd Round - 80 percent of final torque
4. 4th Round - 100 percent of final torque
5. Final Round - Clockwise or counter-clockwise around the flange



### Bolt Pattern Tightening Sequence