CLAIMS

What is claimed is:

1. An apparatus, comprising:

a valve housing with internal flow pathways for flowing fluids therein;

end caps on either end of the valve housing;

posts that extend between the end caps;

fasteners disposed on one end of the posts;

a pair of balanced valves disposed in the valve housing; and

elongated rods disposed in the slots and coupled to each of the pair of balanced valves,

wherein tightening the fasteners applies compressive forces onto either end of the valve housing.

2. The apparatus of claim 1, further comprising:

an alignment rod that prevents rotation of the valve housing relative to the end caps.

3. The apparatus of claim 1, further comprising:

a detent in the valve housing; and

an alignment rod that resides in the detent and engages with each of the end caps.

4. The apparatus of claim 1, wherein the valve housing comprises a plurality of individual pieces forming a stack.

5. The apparatus of claim 1, further comprising:

diaphragms disposed between parts of the valve housing.

6. The apparatus of claim 1, wherein one of the end caps has internal flow pathways that fluidly couple with internal chambers of the valve housing.

7. The apparatus of claim 1, wherein one of the end caps includes a boss protrusion with a notched cut-out.

8. The apparatus of claim 1, wherein the

pair of balanced valves coupled to each other.

9. The apparatus of claim 1, further comprising:

a manifold with a no-bleed valve coupled to the valve housing.