Claims

1. A fluid filtration assembly, comprising:

a filter housing having a first end for fluid connection with a fluid storage vessel;

a filter cartridge disposable within the filter housing;

a pump assembly coupled at a second end of the filter housing, the pump assembly comprising:

a pump housing defining first and second hemispheres, the first hemisphere fluidly connected to the filter housing and comprising a port; and

a diaphragm fixed in the pump housing between the first and second hemispheres; and

a sensor inserted into the first hemisphere of the pump housing via the port; wherein the sensor is coupled to the first hemisphere of the pump via a clamp and a sealing cap, the sealing cap including a flange sized and shaped to fit within the clamp when the port is sealed.

2. The fluid filtration assembly of claim 1, wherein the port comprises a tri-clover connector.

3. The fluid filtration assembly of claim 2, wherein the sensor is inserted into the port through a plug sized to substantially occlude the port and to place the sensor in contact with a fluid in the pump housing.

4. The fluid filtration assembly of claim 1, wherein the diaphragm is moveable between first and second positions.

5. The fluid filtration assembly of claim 4, wherein the diaphragm is moved between the first and second positions by a change in a pressure of the second hemisphere,

6. The fluid filtration assembly of claim 4, wherein the diaphragm is moved between the first and second positions by a mechanical actuator.

7. The fluid filtration assembly of claim 1, wherein the first and second hemispheres of the pump housing each comprise radially extending flanges, such that opposing face surfaces of the radially extending flanges contact each other when clamped together.

8. A bioprocessing fluid handling assembly, comprising:

a cylindrical fixture comprising an aperture; and

a sensor disposed within the aperture and secured to the fixture; wherein the sensor is

coupled to the first hemisphere of the pump via a clamp and a sealing cap, the sealing cap including a flange sized and shaped to fit within the clamp when the port is sealed.

9. The bioprocessing fluid handling assembly of claim 8, further comprising a plug inserted within the aperture.

10. The fluid filtration assembly of claim 1, wherein the sealing cap includes an aperture sized to receive the sensor therein.

11. The fluid filtration assembly of claim 10, wherein the sensor is secured to the sealing cap via an interference fit with the aperture.

12. The fluid filtration assembly of claim 10, further comprising an adapter including a flange configured to mate with the flange of the sealing cap and a fitting flange when sealed using the clamp.

13. The fluid filtration assembly of claim 12, wherein the adapter includes a flush surface configured to sit flush with an interior surface of the first hemisphere comprising the port.