

## Ultrasonic Sensor Installation for Models BDF / BDP

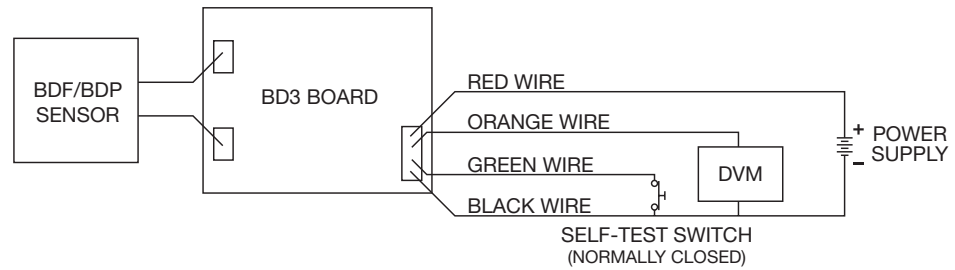
### General:

The BDF and BDP series of sensors are for non-invasive air and liquid detection. This series of sensors can accommodate a wide range of tube sizes and tube materials to compliment the many different applications in which they are used.

Typical applications include; aphaeresis, auto-transfusion, blood processing, hemodialysis, infusion pump and syringe pump devices. The sensors are considered high quality and robust enough to stand up to the most rigorous requirements.

The BDF and BDP style sensors are specifically designed to utilize remote electronics. Therefore, the BDF and BDP are sensor heads and are connected via wire or cable to a PCB to comprise an air and liquid detection system.

### Electrical Connections / Standard Test Setup:



### Mounting Consideration:

Both BDF and BDP sensors are available with or without mounting base. The mounting recommendations for both configurations are as follows.



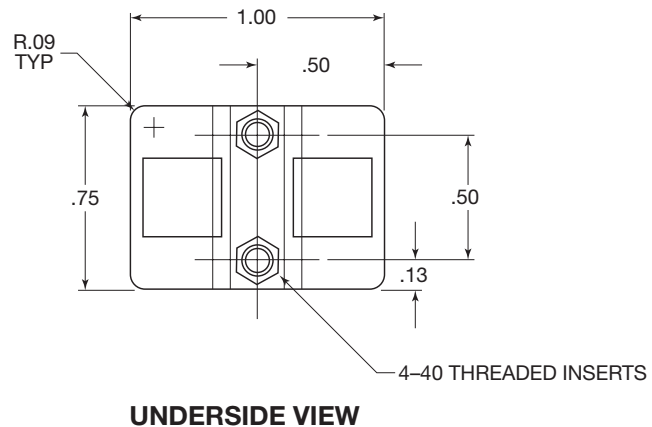
Shown without a mounting base



Shown with a mounting base

**Without Base:**

The sensor can be secured using the threaded inserts that are located on the underneath side of the sensor. These inserts will accept standard 4-40 machine screws. The screw protrusion into the sensor housing is to be 3/16 inch maximum. Torque force on mounting screws is not recommended to exceed 1.5 inch/lbs.



**With Optional Base:**

The optional sensor base incorporates slotted side feature to facilitate mounting. Using two number 8 machine screws the sensor base can be secured onto a customer supplied mounting plate as necessary.

