

**Ultrasonic Sensor Installation for Models AD8 / AD9**

**General:**

The AD8 / AD9 air and liquid detection sensors incorporate the latest generation of pulse-type technology. The circuitry employs state-of-the-art software algorithms hosted by an on-board microcontroller.

**Electrical Connections:**

The AD8 / AD9 is an integral sensor that consists of an ultrasonic sensor housing that has fixed electronics internal to the device. No external PCB is required for operation. The standard AD8 / AD9 is typically terminated with four discrete wires as follows.

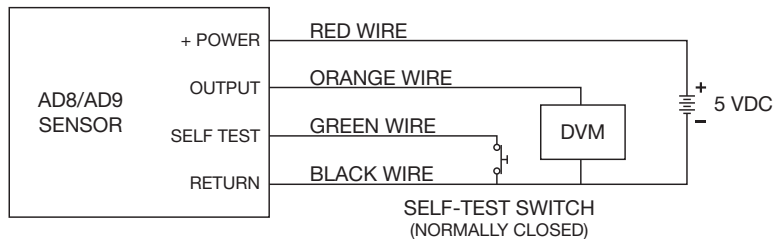
- Pin 1 - Red, 5.0 ±10% VDC Power Supply
- Pin 2 - Black, Ground/Output Return
- Pin 3 - Green, Self Test
- Pin 4 - Orange, Logic Output (high=wet)

**Power supply** - The power voltage will need to be regulated to 5VDC ±10%, the supply current will be typically 15mA. For sensor with an LED indicator the power supply current will be typically 24mA.

**Output** - The output is standard CMOS logic levels. Logic high = VCC - .5VDC @ 5mA

**Self Test** - The Self Test is active high and will toggle the output.

**Standard Test Setup:**



**Mounting Consideration:**

The mounting provision for the sensor is located on the underneath side of the housing. The sensor can be secured onto a customer supplied mounting plate using standard 4-40 screws. Screw protrusion into the sensor housing is to be 3/16 maximum. Torque force on mounting screws is not recommended to exceed 1.5 inch/lbs.

