

REV A 2018/06/11

877.582.3569

### **Product Overview**

The DIXON ADS capacitance sensor tester is designed to verify function and calibration on a selection of DIXON ADS brand liquid level sensors. The regular test and verification of sensors ensures the ongoing safe, reliable, and consistent operation for the life of the sensor. The capacitance sensor tester and go-gauge verify the output signals are within the factory accepted tolerances.



- 1. Capacitance sensor tester
- 2. 9V Battery
- 3. Trip window gauge
- 4. Storage Case

# Compatibility

The capacitance sensor tester is designed to test the output and trip point of A100 and A200 series sensors. It is necessary for the A100 and A200 to be partly disassembled before testing can be completed. The tester is limited to only single point sensors.

# **Technical Specifications**

Size: [Case] 9.7" x 10.7" x 4.8" Weight: 5Lbs Battery Type: 9V of any chemistry Automatic Power Timeout: 5 minutes Approximate Battery Life: 15hrs continious

## Procedure

### A100 Disassembly

1. Remove the back of the A100 by unscrewing these four screws:



#### 30471PA, CAP. SENSOR TESTER KIT INSTRUCTIONS

2. Unplug the sensor connection at the bottom of the unit.



- 3. Connect this to the capacitance sensor tester.
- 4. Continue to *Testing the Sensor* section.

### A200 Disassembly

1. Unscrew the housing lid.



2. Once open, disconnect the sensor from the external plug and connect it the Sensor Output Tester.



### **Testing the Sensor**

1. Unscrew the thumb screw and knob all the way.



 Place the capacitance sensor tip into the go-gauge, then pull the sensor back until the shoulder is captured.



- 3. Screw in the knob all the way.
- 4. Push the sensor towards the knob stem until the sensor butts up against it.
- 5. Tighten the thumb screw to lock the sensor in place.



#### 30471PA, CAP. SENSOR TESTER KIT INSTRUCTIONS

- 6. Turn on the capacitance sensor tester.
- Verify the capacitance sensor tester shows closed. If the capacitance sensor tester shows any of the following conditions, the sensor is considered bad:
  - a. Closed
  - b. No sensor
  - c. Shorted

Removed from service and contact Dixon technical support.

- 8. Begin unscrewing the knob.
- 9. Verify the capacitance sensor tester switches from closed to open before the knob is completely unscrewed. Be sure to remove your hand from the knob as this will interfere with the gauges accuracy. If the knob is completely unscrewed and the sensor output tester shows any of the following conditions, the sensor is considered bad:
  - a. Closed
  - b. No sensor
  - c. Shorted

Remove from service and contact Dixon technical support.

### **Replacement Parts**

9V Battery: Dixon 10261 Storage Case: Dixon 10491

## FAQ & Troubleshooting

- The capacitance sensor tester is not turning on.
  The battery may be low. Try replacing the battery.
- The capacitance sensor tester shows red momentarily while adjusting the trip window gauge.
  - This is normal behavior. The sensor and tester are working properly.
- The capacitance sensor tester shows the sensor is working correctly but the sensor doesn't work when assembled back into the A100/A200.
  - This may be an indication that the A100, or A210 repeater is bad. Call Dixon Technical service for further troubleshooting.
- The sensor tester changes states when touching it with my hand.
  - This is normal behavior. Your hand should be removed while not adjusting the knob to prevent interfering with the gauge's capacitance.

# Support

For questions, technical support, or to request an RGA to return products for warranty inspection, please call our 24 hour technical hotline at +1 (877) 582-3569



USA: Dixon Bayco USA Chestertown, Maryland Phone: 410-778-2000 Fax: 410-778-4702 Toll Free: 800-355-1991 E-mail: dixonbayco@dixonvalve.com



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