



# High-Range Bourdon Tube Pressure Switch

## General Instructions



401RN



401LC

### General

This instruction provides information for mounting, electrical connections and calibration of SOR Series 401 High-Pressure Bourdon Tube Pressure Switches.

The process pressure is sensed by a limited travel bourdon tube which is counter balanced by a range spring (adjustable by an adjustment screw). This actuates the electrical snap-action switching element.

### Mounting

Attach the switch to a suitable surface with two 1/4" diameter bolts. Line mounting by either piping or electrical connections is not recommended.

### Process Connection

1. Use two wrenches when connecting process piping to the process connection.
2. Use one 1-1/8" open end wrench to hold the hex while connecting the process piping.
3. Use the other wrench to tighten the process pipe or fitting.

### Electrical Connections

Switching elements are UL Listed and CSA Certified for AC service. They are SPDT elements and may be wired to either make or break at a particular pressure on increasing or decreasing pressure.

Install in accordance with all applicable codes or safety standards.

### RN Housing

This housing has a 3/4" NPT(F) conduit outlet. The switching element in this housing is wired to a terminal block marked NC - Normally Closed, NO - Normally Open and C - Common.

### TA or LC Housings

These housings have a 3/4" NPT(F) conduit connection and the micro switch is supplied with wire leads. The leads are marked and color coded: C (Common) - Blue; NO (Normally Open) - Black and NC (Normally Closed) - Red. All splices should be made outside the housing.



**CAUTION:** On explosion proof units (LC and TA housings), power should be turned OFF before the cover is removed.

### Calibration

Remove the cover and locate the 1/4" hex head adjusting screw. To increase the set point, extend the spring by turning the adjusting screw clockwise. To decrease the set point, turn the adjusting screw counterclockwise. An independent pressure source and gage should be used for precise setting.

**CAUTION:** Do not adjust any other screws or brackets. Movement of these parts could render the device inoperative.

