# **Instructions for Setting Reed Switches**

Option 1S2 or 2S2 General Purpose

- Check the flow meter mechanical zero. Pointer should point to the zero reference mark on the dial with no flow. See installation, Operation and Maintenance Manual (M1) page 4 for re-zeroing instructions.
- Remove the back cover plate to gain access to the reed switches. Loosen the 2 adjustment clamp screws to the point where when moving the reed switches there is some resistance.
- Use the Continuity tester or volt meter with buzzer to check continuity when making adjustments to the reed switches.
- Move the pointer to the desired flow rate either by moving the lever or by establishing the desired flow rate through the flow meter (preferred method). Caution: When moving the pointer using the lever method, do not flex the lever forward or backward as this will distort the set point.
- With the pointer at the desired set point, gently slide the reed switch until the tester or volt meter changes state. The set point range window should indicate a partial or complete green mark. (When viewed from the rear, move the switch right for upscale and left for downscale).
- Check new set point by moving the lever or establishing flow to verify that switching occurs at the desired flow rate. Minor adjustments of the switch may be necessary to "fine tune" to the desired set point. Tighten the adjustment clamp screws taking care not to over tighten as over tightening may break the switch.
- Replace the back cover plate, adjustment of the reed switch is now complete.

**Important:** Read all installation and wiring instruction before making any adjustments to the set point. Contact the factory for additional information and/or assistance.

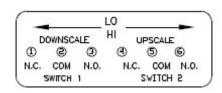
## Ratings

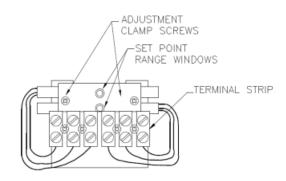
Contact Rating 10 watts
Voltage 175Vdc max.

125Vac max.

Current 350mA max switching

Hysteresis 13% F.S.





# **Reed Switch Contact Protection**

When switching inductive loads such as relays, solenoids and transformers, reed switch contacts require protection in order to ensure long, dependable life. When contacts open, the inductance or electrical inertia of the load generates a large high frequency voltage which appears across the switch contacts. If the voltage is large enough, it can arc, causing the contacts to burn, weld together or stick. The purpose of protecting the circuit is to prevent arcing by shorting this voltage through an alternate path.

### Important:

- Don't be misled by the resistive rating of the switch. Most applications involve inductive loads.
- Don't be misled by the wattage ratings of the load. Low wattage loads are often high inductive devices, making contact protection important.

### D.C.

A 1N4004 diode (or equivalent) should be connected in series with the reed switch as shown in Figure 1.

# Reed Inductive Load 1N4004

Figure 1

DC Contact Protection

### A.C.

Connect a resistor and capacitor in parallel with the switch.

Transient suppressors or varistors may also be used to dissipate the transient and protect the switch contacts.

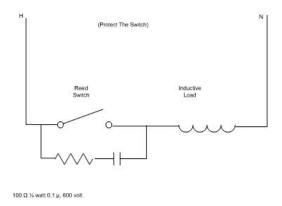


Figure 2
AC Contact Protection