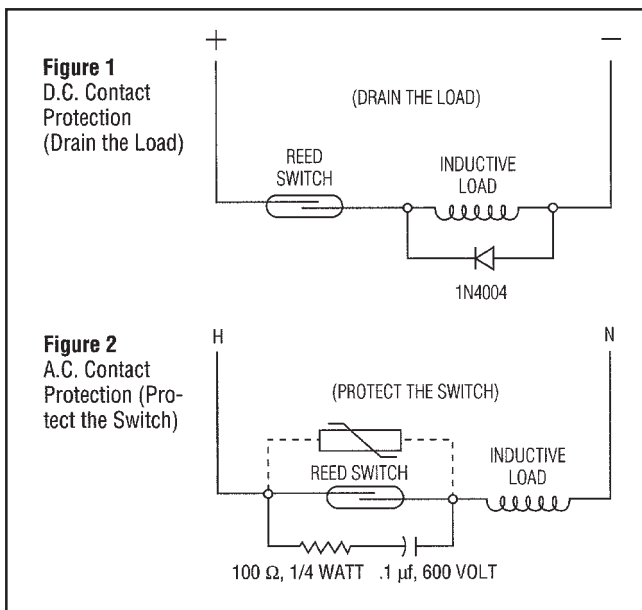


## Switch Ratings - Max. Resistive

VA	Volts	Amps AC	Amps DC
<b>10</b> General Use	0-50	.2	.13
	120	.08	N.A.
	100	N.A.	.3
<b>20</b> Pilot Duty	0-30	.4	.3
	120	.17	.13
	240	.08	.06
<b>50</b> General Use	0-50	0.5	0.5
	120	.4	.4
	240	.2	.2
<b>100</b>	120	.8**	N.A.
	240	.4	N.A.

\*\* Limited to 50,000 operations.



Note: Max. Leakage Current: 4ma @ 120 VAC

## Load

Standard reed switches in level and flow switch units are hermetically sealed, magnetically actuated, make-and-break type. Switches are SPST or SPDT in various ratings, depending on unit model.

## Contact Protection Requirements

When switching inductive loads such as relays, solenoids and transformers, reed switch contacts require protection in order to insure long, dependable life. When current is interrupted, 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 break down the medium in the gap between them, making a conductive path. This phenomenon, called "arcing", is the spark you see. Arcing can cause the contacts to burn, weld together or stick; thus, giving unreliable performance. The purpose of protection circuits is to prevent arcing, by shorting this voltage through an alternate path.

## Recommended Protection

### (D.C.)

A 1N4004 diode (or equivalent) connected cathode-to-positive, as shown in Figure 1, is recommended. The diode does not conduct when the load is energized, but conducts and shorts out the generated voltage when the switch opens. The generated voltage always acts in series with the applied voltage.

### (A.C.)

A resistor and capacitor, connected in parallel with the switch, as shown in Figure 2, is recommended. The capacitor is a high impedance to 60 hertz, but is essentially a short circuit to high frequencies of generated voltages.