## Simple Switch Box Controls

All actuators are controlled using an external-retract-off switching function. The SBC-DC and SBC-AC provide a simple mounted switch compatible with Warner Linear actuators.

## SBC-DC



## SBC-AC



Power: $\quad$ Compatible with 115 or 230 volt VAC input
Function: Extend, Retract, Off via DPDT momentary contact switch
Enclosure: $\quad 4.72^{\prime \prime} \mathrm{L} \times 4.72^{\prime \prime} \mathrm{W} \times 3.15^{\prime \prime}(119.89 \mathrm{~mm} \mathrm{~L} \times 119.89 \mathrm{~mm} \mathrm{~W} \times 80.01 \mathrm{~mm} H)$ long dust tight enclosure
Protection: Externally mounted 5 Amp fuse on outside of enclosure for easy replacement
Input Cable: 6 ft . ( 1.829 m ) open ended tinned AC input cable provided
Output Cable: Sealed cable gland included for customer supplied output cable


## Optional Extension and Control Power Cables

Power supplies include a 1 ft . $(.30 \mathrm{~m})$ length cable to connect to actuator.

Accessory cables may be ordered in lengths of 5, 10, 20 and 25 feet (1.524, 3.048, 6.096 and 7.62 meters) with the appropriate connector for the actuator selected. (mini-packard, Packard 56, Weatherpack, Deutsch)

Live Power (LP) cables are required to provide constant power to BTc Limit switch or potentiometer feedback circuits mounted on the actuator. LP cables provide two connectors.

Signal Cables (SC) provide the LP cable with two additional connectors for use with limit switch or potentiometer feedback.

## Switch Only Units SO

Any of Warner Linear's K2 or K2x actuators can be provided with Hall effect or reed switches to be used by the customer to control actuator start/stopping \& positioning. The Hall effect and reed switches are both non-contact, and use a magnet mounted on the screw inside the actuator tube to activate. Actuators can have 2-4 switches dependent on stroke length.

## Hall Effect

The Hall effect switch is an NPN output/current sinking and requires a pull-up resistor to operate.

The Hall effect switches can also be configured to provide positioning information. A ten tooth wheel with two switches is used to provide an A and $B$ pulse for position and direction along with a home switch and fully extended switch. This unit would be a "SO4" configuration.

## Hall Effect Switch Part Numbers Available, with K2 actuator product: <br> SO2H - 2 end limit switches

Hall Effect Switch Part Numbers Available, with K2e or K2XE actuator product:
SO2H - 2 end limit switches
S03W - 2 wheel position switches \& home end limit switch
S03H - 2 end \& 1 mid limit switches
SO4W - 2 wheel position switches \& 2 end limit switches
SO4H - 2 end \& 2 mid limit switches
Note 1: Consult factory for other options if needed
Note 2: Units with 3 switches can be no shorter than 4" and units with 4 switches can be no shorter than 6 ".

| Hall Effect |  |
| :--- | :--- |
| Supply Voltage: | 4.75 to 24 VDCt |
| Output: | Current sinking, max. of 25 mA |
| Lead Wires: | 24 AWG |
| Operating <br> Temperature: | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Protection: | Reverse polarity protected |
| Housing: | Rugged thermoplastic, sealed |

## Reed

The reed switch can only be provided on a K2e or K2Xe actuator (adjustable unit). Switches can be selected as normally open (O) or normally closed (C).

Reed Switch Part Numbers Available, with K2E or K2XE actuator product only:
S020 - 2 Normally Open, adjustable reed switches
S02C - 2 Normally Closed, adjustable reed switches
S030 - 3 Normally Open, adjustable reed switches
S03C - 3 Normally Closed, adjustable reed switches
SO40 - 4 Normally Open, adjustable reed switches
S04C - 4 Normally Closed, adjustable reed switches
Note 1: Consult factory for other options if needed
Note 2: Units with 3 switches can be no shorter than 4" and units with 4 switches can be no shorter than 6 ".

| Reed |  |
| :--- | :--- |
| Supply Voltage: | Up to 200 VDC max. O switch <br> Up to 175 VDC max. C switch |
| Switching <br> Current: | 1.2 Amps max. O switch <br> 1.5 Amps max. C switch |
| Contact Rating: | 10 Watts max. O switch <br> 5 Watts max. C switch |
| Lead Wires: | 24 AWG |
| Operating <br> Temperature: | $-40^{\circ} \mathrm{C}$ to $+105^{\circ} \mathrm{C}$ |
| Housing: | Hermetically sealed |

## SO20 Normally Open Reed



S02H Hall Effect


All dashed lines are customer supplied connections

