# **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



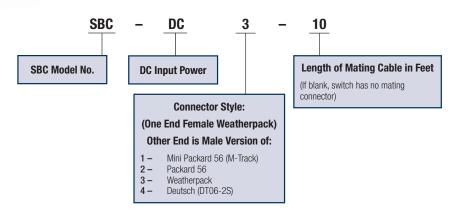
Power: Compatible with 12, 24 and 48 volt DC actuators Extend, Retract, Off via DPDT momentary toggle switch Function:

**Enclosure:** ABS plastic enclosure 4.7" L x 3.2" W x 2.2" H (119.38mm L x 81.28mm W x 55.88m H)

12ft. (3.66m), 2 wire, 14AWG cable with alligator clip ends Input Cable:

**Output Cable** 1ft. (.30m) cable provided. Designate connector appropriate to actuator being used

Optional extension cables are available in 5-25ft (1.524 - 7.62m) lengths



### **SBC-AC**



Compatible with 115 or 230 volt VAC input

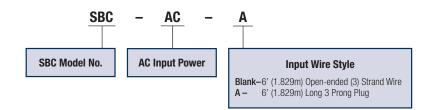
Function: Extend, Retract, Off via DPDT momentary contact switch **Enclosure:** 

4.72" L x 4.72" W x 3.15" (119.89mm L x 119.89mm W x 80.01mm H) long dust tight

enclosure

Protection: Externally mounted 5 Amp fuse on outside of enclosure for easy replacement

Input Cable: 6ft. (1.829m) 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 1ft. (.30m) 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:

S02H - 2 end limit switches

#### Hall Effect Switch Part Numbers Available, with K2E or K2XE actuator product:

**S02H** – 2 end limit switches

**S03W** - 2 wheel position switches & home end limit switch

SO3H - 2 end & 1 mid limit switches

**S04W** - 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 25mA
Lead Wires:	24 AWG
Operating Temperature:	-40° C to +85° 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:

**\$020** – 2 Normally Open, adjustable reed switches

**S02C** – 2 Normally Closed, adjustable reed switches

**\$030** – 3 Normally Open, adjustable reed switches

**S03C** – 3 Normally Closed, adjustable reed switches

**\$040** – 4 Normally Open, adjustable reed switches

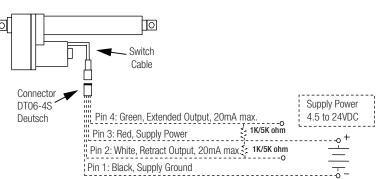
**S04C** - 4 Normally Closed, adjustable reed switches

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 Up to 175 VDC max. C switch
Switching Current:	1.2 Amps max. O switch 1.5 Amps max. C switch
Contact Rating:	10 Watts max. O switch 5 Watts max. C switch
Lead Wires:	24 AWG
Operating Temperature:	-40° C to +105° C
Housing:	Hermetically sealed

## SO2H Hall Effect



All dashed lines are customer supplied connections

**S020 Normally Open Reed** 

Adjustable Switch