

Every motorized Electric Cylinder must be controlled so that power to the motor is turned off and the brake engaged before the limits of mechanical travel are reached.

The ActionJac™ rotary limit switch senses extension shaft rotation and provides switch contact closures that can be used to control motors.

This sturdy, durable assembly is available with two or four circuits or two circuits and a potentiometer. Each circuit has a separate rotating cam that actuates a high quality switch. The switch actuation may be individually and infinitely adjusted anywhere within the travel of the cylinder.

These assemblies contain gear reducers with ratios that vary according to the model and travel of the jack. Nook selects ratios that result in maximum cam rotation for best accuracy, repeatability and minimum hysteresis. In most cases, with full travel of the actuator, the cam will rotate 3/8 to 7/8 of a revolution to actuate a switch. In the event that the cam continues to rotate, the switch returns to its original state after approximately

25° of rotation, with no damage to the limit switch assembly.

A 2-circuit switch assembly is useful for limiting the maximum and minimum extension. A 4-circuit assembly gives the possibility of additional signals for other user purposes. The potentiometer version is used to provide an analog signal for sensing cylinder position.

Single Pole Double Throw (SPDT) switches are standard and Double Pole Double Throw (DPDT) switches are optional. These assemblies are dust protected and meet NEMA 4 and 5 standards for oil and water tightness.

An ActionJac™ Rotary Limit Switch assembly is mounted to the extension shaft side of the ActionJac™ Worm Gear Screw Cylinder opposite the motor.



A rotary limit switch is available for ActionJac™ Electric Cylinder Series DD-25 and RAD-25 and larger. Most cylinder models have close and extended mounts for the switches to provide clearance around the switch housing. See the charts below for dimensions.

Switches are factory installed to assure proper assembly in the correct orientation for the specified mounting position. **CAUTION: Limit switches are not adjusted at the factory. Switches should be set after installation.**

HOW TO ORDER ROTARY LIMIT SWITCH:

SPECIFY:

- 2-circuits, 4-circuits, or 2-circuits with potentiometer
- SPDT or DPDT
- Mounting Position

Insert the correct designation in the ActionJac™ Electric Cylinder reference number (see page 000 for more information on jack reference numbers).

EXAMPLE: RAD-10086-HD / 10BT-1 / **2CA-4C** / CC / 24.5 / S

Extension shaft designation

Examples of rotary limit switch designations:

2CA-4 = Rotary Limit Switch, 2-circuit, SPDT, position 4

4CE-1 = Rotary Limit Switch, 4-circuit, DPDT, position 1

PTA-8 = Rotary Limit Switch with potentiometer, 2 SPDT's, position 8

“dash” number designates mounting position (see following page)

ORDER CODE	NUMBER OF CIRCUITS	SWITCH TYPE	POTENTIOMETER
2CA	2	SPDT	NO
2CC	2	DPDT	NO
4CA	4	SPDT	NO
4CE	4	DPDT	NO
PTA	2	SPDT	YES
PTC	2	DPDT	YES

IMPORTANT: These designation numbers are not complete part numbers. These assemblies contain gear reducers with ratios that vary according to the model and travel of the cylinder. If you are ordering a replacement switch assembly, complete information on the cylinder is required.

