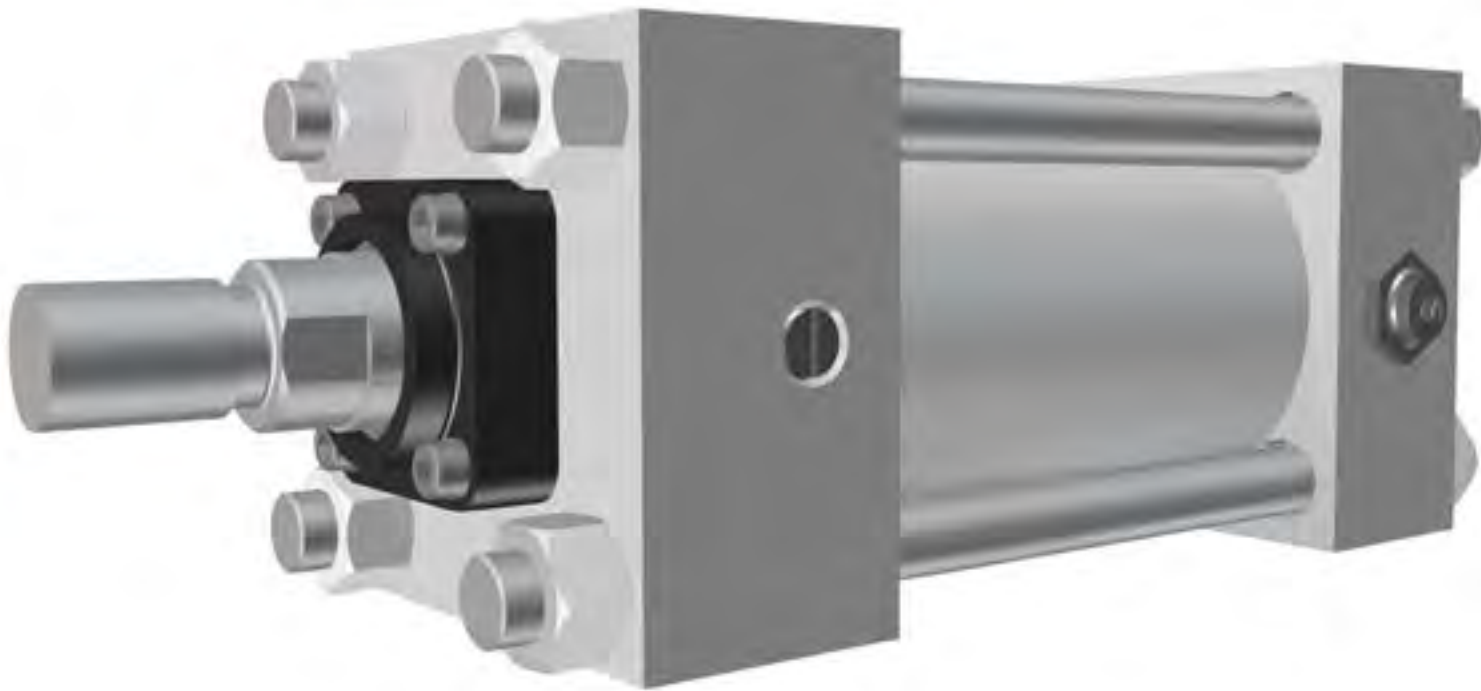


# Class 6

## Intermediate Pressure Square-Head Cylinders

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# PROXIMITY POSITION INDICATOR SWITCH

## HYDRAULIC OR PNEUMATIC CYLINDER OPERATIONS

### SQUARE-HEAD CYLINDERS

#### NOPAK Cylinder with Switch (pictured)

- Non-contact design
- Long life
- Pressures to 3000 PSI
- High reliability
- Versatile, easy operation



For positive full indication of stroke Hydraulic and Pneumatic Cylinders

### WORKING PRINCIPLE

NOPAK Position Indicator Switches are easily mounted in both hydraulic and pneumatic cylinder heads to confirm the position of the piston in either extended or retracted positions. Designed for versatility, NOPAK switches can be mounted in virtually any position. When inserted in the cylinder head, the switch senses the cushion sleeve's position at end of stroke. NOPAK's threaded switch screws easily into the cylinder heads making it a natural for accurate confirmation. Totally self-contained, the switch will not be contaminated by dirt, oil, grease, and most corrosive atmospheres. The non-contact design also eliminates the need for linkage or external actuators. Heavy-duty construction allows the switch to withstand up to 3000 PSI of external pressure (higher pressure available upon request).

### DESIGN FEATURES

- **Very Economical** - Easy to install, NOPAK Position Indicator Switches are totally self-contained, eliminating external power supply requirements.
- **Enclosure** - 300 Series Stainless Steel provides reliable performance under even the most adverse conditions.
- **Hermetically Sealed** - To ensure a clean, stable contact environment, the entire assembly is completely evacuated, then back-filled under pressure.
- **Long Life** - Tested to over 1,000,000 cycles. (Actual life varies with load.)
- **High Contact Pressure** - Heavy vibrations will not cause false operations of the switch. Good electrical characteristics for dry circuit and low load applications.

### SPECIFICATIONS

#### CONTACT ARRANGEMENT:

Single Pole Double Throw SPDT (Form C)

#### CONTACT RATINGS:

UL Rated (NEMA Type 1)

240 VAC @ 2A

250 VDC @ 0.5A Resistive

Although not UL General Purpose, switch is suitable for: 24 VDC @ 50 mA

#### TEMPERATURE RANGE:

-40°F (-40°C) to 221°F (105°C)

**RESPONSE TIME:** 8 milliseconds

#### REPEATABILITY:

0.002" (0.05 mm) of setpoint under identical operating conditions.

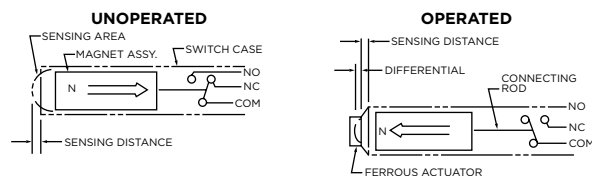
Consult Factory for other contact arrangements, ratings, terminations, and approvals.

### PROXIMITY POSITION INDICATOR SWITCH PRINCIPLES OF OPERATION

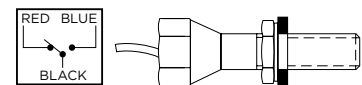
The NOPAK Proximity Limit Switch is based on an operating principle which utilizes "new," high energy, rare earth magnets to provide an end sensing range fixed at approximately .072" (1.83 mm) with a ferrous actuator. Use of an external magnet increases this appreciably. The differential (hysteresis) is approximately half of the sensing range.

When time, accuracy, and dependability count... you can count on a NOPAK Indicator Switch. Maintenance free: engineered for precision, performance and reliability.

**NOTE:** This is not a 'reed' type switch.



Wiring Color Code: Black = Common, Red = Normally Closed; Blue = Normally Open



Switch enclosure incorporates a 1/2-14 NPT conduit connection. Switch wire connections are a potted 3 wire cable 18" long. External mounting threads are locked to cylinder head port with a hex jam nut and seal.

Where installation height is limited some switches are available with side-potted leads. Consult factory.

