

## SERIES 5000

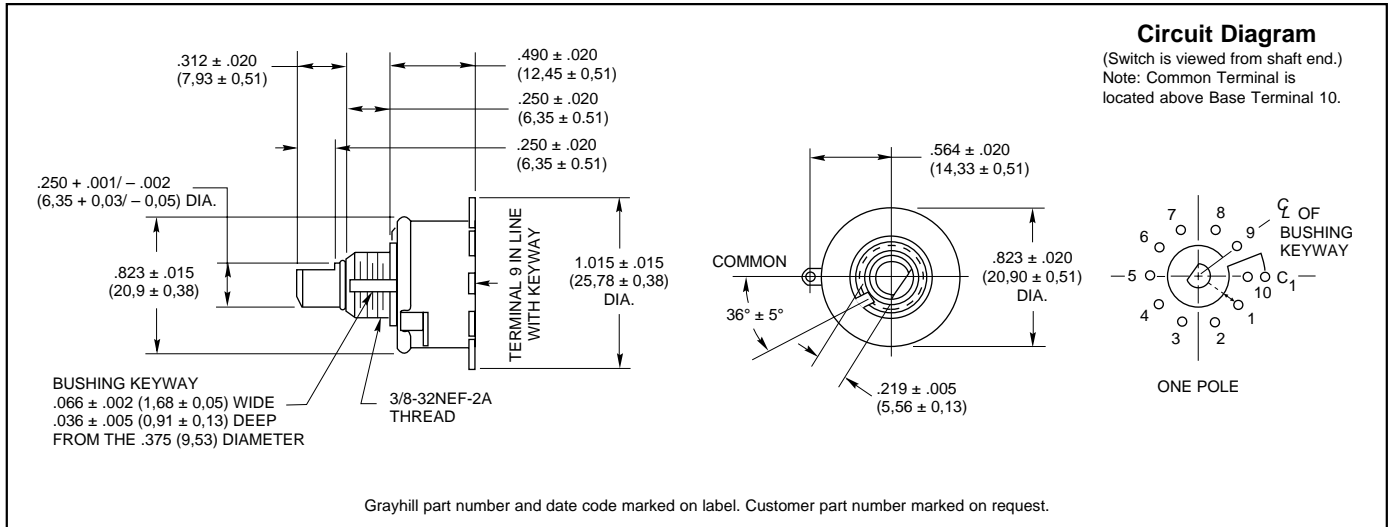
### 1" Diameter, 1 Amp, .470" Behind Panel

#### FEATURES

- High Quality at a Low Price
- High Contact Force Provides Stable Electrical and Mechanical Operation
- Proven Reliability in Thousands of Applications



#### DIMENSIONS In inches (and millimeters)



Rotary Switches

#### SPECIFICATIONS

##### Electrical Rating

**Rated:** To make and break the following loads: 1 amp at 115 Vac resistive; 0.5 amp at 220 Vac resistive; 1/4 amp, 115 Vac inductive; 1/50 amp, 115 Vdc inductive, 1/10 amp, 6 to 28 Vdc inductive; 1/10 amp, 115 Vdc resistive; 1 amp, 6 to 28 Vdc resistive; to carry 10 amps continuously.

**Contact Resistance:** 10 milliohms initial. After 25,000 cycles of operation 20 milliohms maximum.

**Insulation Resistance:** 50,000 Mohms minimum initially

**Voltage Breakdown:** 1,000 Vac (500 Vac, or better after most environmental tests).

**Life Expectancy:** 100,000 mechanical cycles of operation normally.

NOTE: Actual life is determined by a number of factors, including electrical loading, rate of rotation, and environment, as well as maximum contact resistance, minimum insulation resistance, and minimum voltage breakdown required at the end of life.

##### Materials and Finishes

**Switch Base:** Melamine per MIL-M-14 (ASTM-D-5948)

**Cover, Stop Washers, Bushing and Nut:** Brass, cadmium-plated

**Retaining Rings, Stop Arms, and Thrust Washers:** Stainless steel, passivated

**Shaft:** Stainless steel, passivated

**Terminals (except common):** Brass, lead-tin plated, and fused

**Rotor Contact:** Phosphor bronze, silver-plated .0003" minimum

**Stator (Base) Contact:** Brass, silver-plated .0003" minimum

**Common Plate:** Brass, silver-plated .0003" minimum

**Rotor Mounting Plate:** Nylon fabric-based laminated Phenolic per MIL-T-1 5047.

##### Additional Characteristics

**Stop Strength:** 12 in-lbs

**Rotational Torque:** 12 in-ozs.

**Contacts:** Shorting or non-shorting wiping contacts with over 500 grams contact force.

**Shaft Flat Orientation:** Opposite point of contact (See circuit diagram.)

**Environmental:** These switches have passed the following environmental testing: Altitude and temperature; 100 hour salt spray; Vibration 10 to 500 cps; Shock 30-G; Humidity; Fungus.

**Detent:** A formed spring operating against a formed wave washer.

#### STANDARD OPTIONS

##### Special Terminals

Not available through distributors. See page F-9.

#### ACCESSORIES

Control knobs available, see page E-39.

#### ORDERING INFORMATION

The Series 5000 switches are single deck, one pole switches of two to 10 positions. Ten position switches have continuous rotation. Ten position fixed stop switches are available by special order.

The part number is 05001-XX with the number of positions required (02,03, etc.) listed in place of the XX. Complete part number by adding N for non-shorting contacts or S for shorting contacts.

**Available from your local Grayhill Distributor.** For prices and discounts, contact a local Sales Office in CHINA(Beijing): Fax: (010)6851-5578