

## SERIES 24

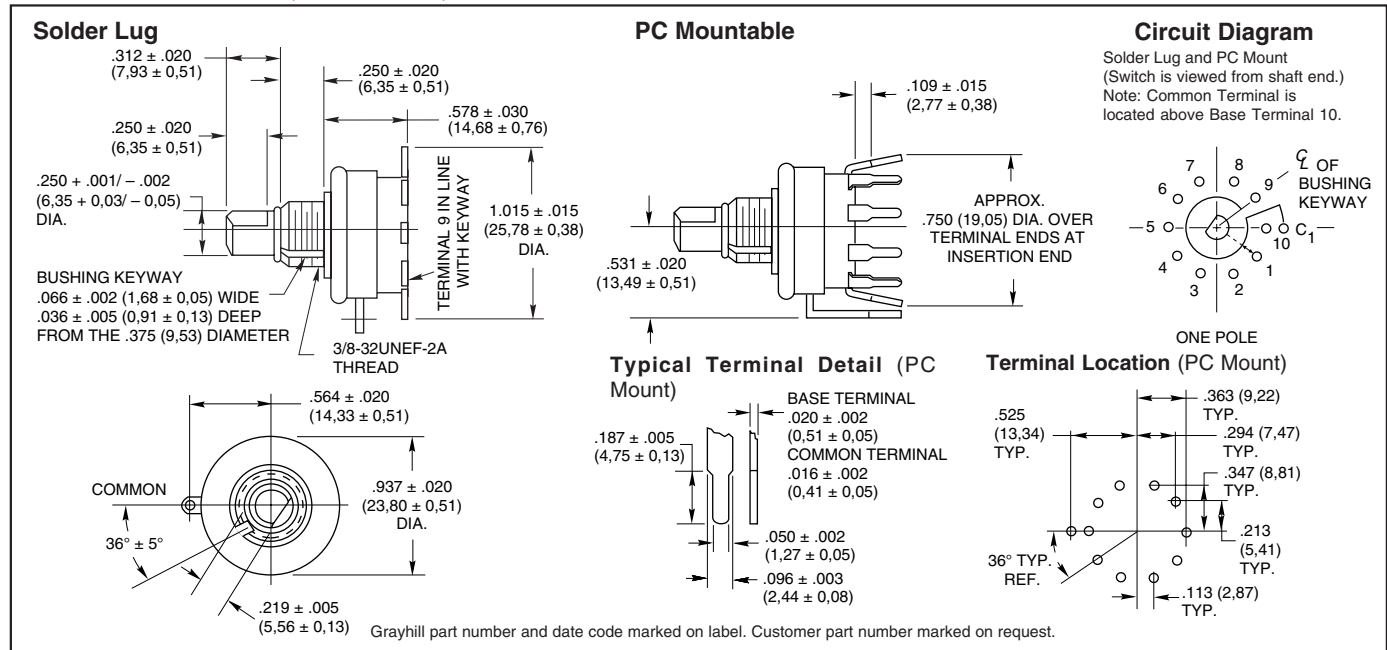
1" Diameter, 1 Amp,  
.580" Behind Panel

## FEATURES

- Positive Detent Provides Operator Feedback
- Stainless Steel or Plastic Shaft Option
- Unsurpassed Performance in Numerous Applications



## DIMENSIONS In inches (and millimeters)



## 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:** Brass, tin/zinc-plated

**Contacts:** Both shorting and non-shorting wiping contacts have over 300 grams contact force.

### Retaining Rings, Stop Arms, and Thrust Washers:

Stainless steel

**Detent Balls:** Steel, nickel-plated

**Shafts:** Stainless steel, or plastic

**Detent:** Opposing spring and ball in a hill and valley raceway.

**Detent Springs:** Tinned music wire

**Terminals (except common):** Brass, tin plated.

**Rotor Contact:** Steel shaft version—phosphor bronze, silver-plated .0003" minimum. Plastic shaft version—silver alloy.

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

**Common Plate, including Solder Lug or PC Tab:** Brass, silver-plated .0003" minimum

**Rotor Mounting Plate:** Nylon fabric-based laminated phenolic per MIL-T-15047

**Mounting Nut:** Brass, tin/zinc-plated or stainless steel.

### Additional Characteristics

**Stop Strength:** 12 in-lbs

**Rotational Torque:** 12 in-ozs

**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.

**PC Mount:** PC Switches are furnished with 10 base terminals for mounting purposes.

## STANDARD OPTIONS

### Special Terminals

### RFI Grounding

Not available through distributors.

## ORDERING INFORMATION

Switches are single deck, one pole switches of 2 to 10 positions. They have plastic or steel shaft, with solder lug or PC terminals, with either shorting or non-shorting contacts (plastic shaft PC mount in non-shorting only). Ten position switches have continuous rotation; fixed stop switch with a metal shaft is available by special order. Base part numbers are as follows:

Lug style, steel shaft: 24001-X\*

Lug style, plastic shaft: 24B36-01-1-X\*

PC style, steel shaft: 24878-X\*

PC style, plastic shaft: 24P36-01-1-X\*

The X is replaced with the number of positions required (02, 03, etc.) Complete the 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, an authorized local Distributor or Grayhill.