SERIES 24

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

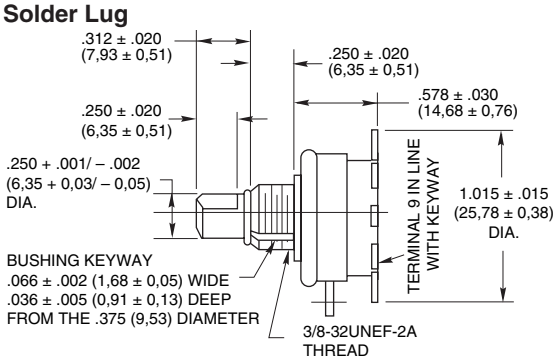
FEATURES

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

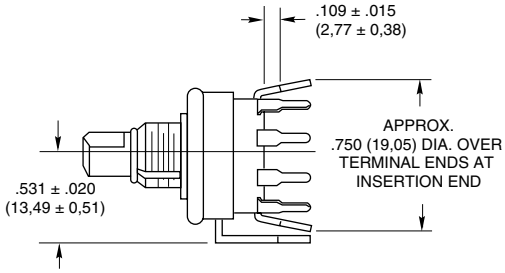


DIMENSIONS In inches (and millimeters)

Solder Lug

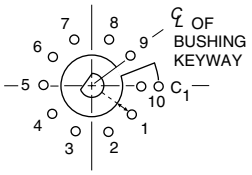


PC Mountable

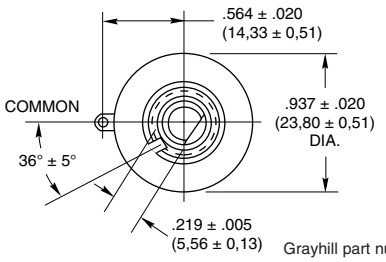


Circuit Diagram

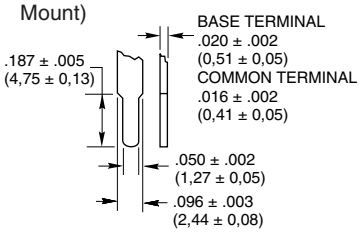
Solder Lug and PC Mount
(Switch is viewed from shaft end.)
Note: Common Terminal is
located above Base Terminal 10.



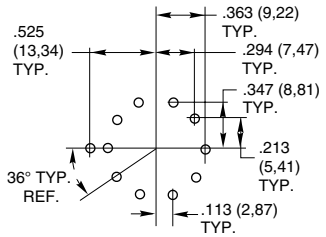
ONE POLE



Typical Terminal Detail (PC Mount)



Terminal Location (PC Mount)



Grayhill part number and date code marked on label. Customer part number marked on request.

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.