

## SERIES 19

2" Diameter, 15 Amp

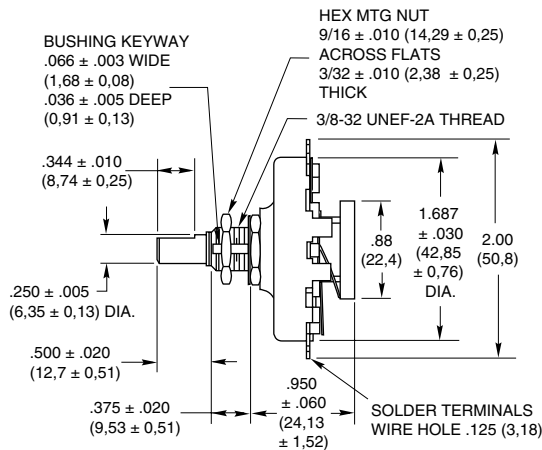
### FEATURES

- UL Recognized
- Rugged Construction
- Choice of Termination

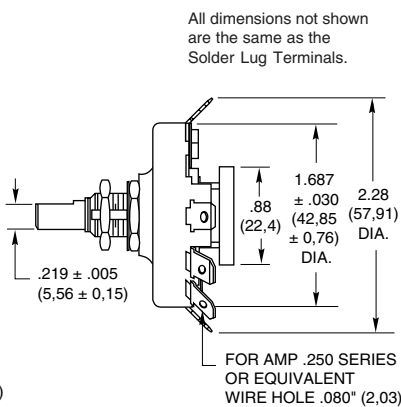


### DIMENSIONS In inches (and millimeters)

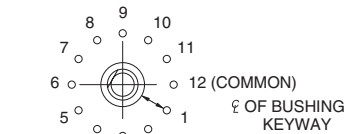
#### Solder Lug Terminals



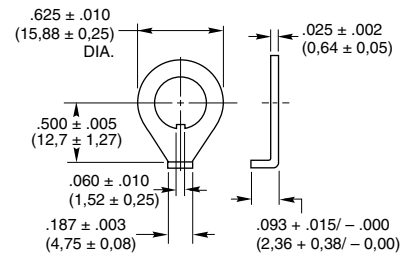
#### 'Faston' Terminals



#### Circuit Diagram viewed from shaft end with switch in position #1



#### Non-Turn Washer Detail



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

## SPECIFICATIONS

### Electrical Rating

**Rated:** UL Recognition: File Number E35289  
 15 Amps, 120 Vac, non-inductive load.  
 One Amp, 120 Vdc, non-inductive load.  
 Additional Grayhill Rating: 7.5 Amps, 220 Vac, non-inductive load.

This rating is based on the following criteria:  
 Overload—50 operations at 125% rated ac load and 150% rated DC load.

Endurance—6000 operations at rated load with 900 Vac dielectric strength before and after test.  
 Temperature Rise—Not to exceed 30°C when carrying rated ac load after endurance test.  
 Contacts will carry 20 Amps at 115 volts AC with 30°C maximum temperature rise.

**Contact Resistance:** (Measured at 2 Vdc and approximately 100 mA) for new switch approximately 10 milliohms.

**Insulation Resistance:** Approximately 100,000 Mohms. Between mutually insulated parts.

**Voltage Breakdown:** Approximately 2500 Vac between mutually insulated parts.

### Materials and Finishes

**Rotor Contact:** Silver alloy

**Stator Contact:** Silver alloy

**Shaft:** 303 Stainless steel

**Stop Rivet:** Steel, tin/zinc-plated

**Mounting Bushing:** Brass, tin/zinc-plated

**Base and Drive Hub:** Heat resistant, electrical grade phenolic.

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

**Detent Mechanism:** Brass, silver-plated

**"Faston" Terminal:** Brass, silver-plated

**Solder Terminal:** Brass, silver-plated

**Mounting Hardware:** One mounting nut  $9/16$ " across flats,  $3/32$ " thick and one non-turn washer (see detail) are supplied with each switch.

### Additional Characteristics

**Single Pole, Single Deck:** 2 to 11 positions plus common 30° Indexing.

**Contacts:** Non-shorting type

**Stops:** A rivet provides the fixed stop on all switches. Minimum number of positions is 2, and maximum is 11. Terminal 12, the common, is isolated from rotation.

**Rotational Torque:** 30 to 75 ounce-inches on a new switch. Approximately 22 ounce-inches after 25,000 cycles of operation.

**Contact Force:** Approximately 12 ounces

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

## ACCESSORIES

### Screw Terminal Adapter

Spring loaded, plug-in adapters for 'Faston' Terminals provide excellent mechanical fit and electrical contact. Adapter material is brass tin-plated. The terminal adapters are available with a 6-32 thread (-1) or 8-32 thread (-2). A 1/4" panhead screw is provided as part of the adapter.



Part No. SC906-1 .....6-32 Thread

Part No. SC906-2 .....8-32 Thread

### Non-Turn Washer

Brass, tin/zinc-plated washer, detailed above may be purchased as a separate item.  
 Part No. 19C1014.

## ORDERING INFORMATION

Part Numbers: Designate as follows, using the 2 digits after the dash to indicate the number of positions.

### For Faston Terminal:

Use 19101-02UL through 19101-11UL

### For Solder Terminal:

Use 19001-02UL through 19001-11UL

**Specials:** Not available through Distributors. For special shafts, bushings, etc. contact Grayhill.

**Available from your local Grayhill Distributor.** For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.