# Grayhill

# SERIES 19 2" Diameter, 15 Amp



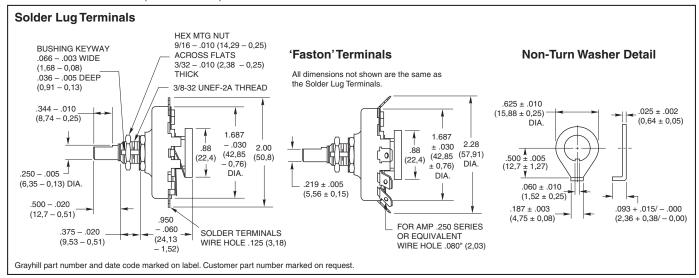
# **FEATURES**

- R
- UL Recognized
- Rugged Construction
- Choice of Termination





## **DIMENSIONS** In inches (and millimeters)



# **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"

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

### **Additional Characteristics**

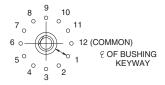
**Single Pole, Single Deck:** 2 to 11 positions plus common 30° Indexing.

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: 12 to 36 ounchinches on average for new switches. Contact Force: Approximately 12 ounces Shaft Flat Orientation: Opposite point of contact (see circuit diagram).

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



### **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.