Single Deck Rotary Switches





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# FEATURES • 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 <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:** 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.

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