SERIES 19
2" Diameter, 15 Amp

FEATURES
• UL Recognized
• Rugged Construction
• Choice of Termination

DIMENSIONS
In inches (and millimeters)

### Solder Lug Terminals
- BUSHING KEYWAY: .060 ± .030 WIDE (1.52 ± 0.08 mm)
- .344 ± .010 (8.74 ± 0.25 mm)
- .250 ± .005 (6.35 ± 0.13 mm) DIA.
- .060 ± .010 (1.52 ± 0.03 mm)
- .036 ± .005 DEEP (0.91 ± 0.13 mm)
- 960 ± .060 (24.13 ± 1.52 mm) SOLDER TERMINALS
- WIRE HOLE: .125 (3.18 mm)

### ‘Faston’ Terminals
- 1.687 ± .030 (42.85 ± 0.76 mm) DIA.
- .88 ± (22.4 mm)
- 2.00 ± (50.8 mm)

All dimensions not shown are the same as the Solder Lug Terminals.

### Circuit Diagram
- Non-Turn Washer Detail
- .093 ± 0.010 (2.36 ± 0.00 mm)
- .060 ± .010 (1.52 ± 0.03 mm)
- .187 ± .003 (4.75 ± 0.08 mm)
- .025 ± .002 (0.64 ± 0.05 mm)

**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.
  - 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, cadmium-plated
- Mounting Bushing: Brass, cadmium-plated
- Base and Drive Hub: Heat resistant, electrical grade phenolic.

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

**“Faston” Terminal:**
- Brass, silver-plated

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

**Mounting Hardware:**
- One mounting nut .280 (7.11 mm) DIA.
- One fastener .125 (3.18 mm) DIA.
- Non-Turn Washer: 20 ga., .060 (1.52 mm) DIA.

**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

**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, cadmium-plated washer, detailed above may be purchased as a separate item.

Part No. 19C1014.

**Control Knobs**
- See page I-57.

**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.