

**SERIES 44L**

**High Current, 5 Amp**

**LOCK FEATURES**

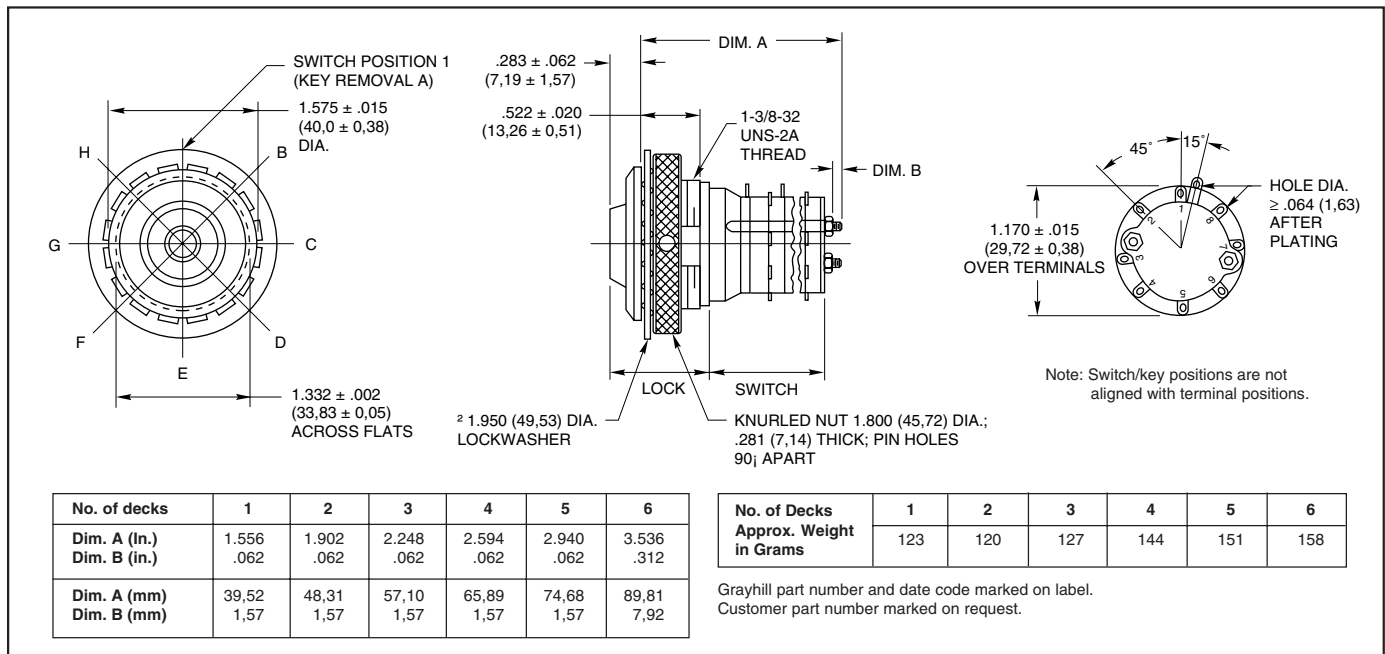
- 8-Pin, Round Key Security
- Options for Flat Keys, Special Keying, and Key Removals

**SWITCH FEATURES**

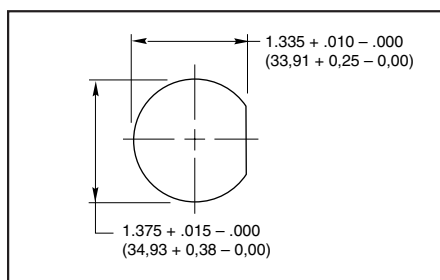
- High, 5 Amp Current Switching
- 45°, Up to 8 Poles Per Switch
- 25,000 Cycles of Operation
- RoHS Compliant



**DIMENSIONS** In inches (and millimeters)



**RECOMMENDED PANEL CUT**



**LOCK SPECIFICATIONS**

- Keying:** Each lock is keyed differently
- Key Removal:** All positions (45°, etc)
- Special Options:** Flat key with 90° or 180° increment key removals; 7 thru 12 decks

**LOCK MATERIALS AND FINISHES**

- Bushing and Knurled Spanner Nut:** Aluminum, black anodized
- Keying Washer, Cover Support Plate, Shaft Extension:** 302 Stainless steel
- Internal and External Lockwashers:** Brass, tin/zinc-plated or stainless steel.
- Keys, Cylindrical:** Stainless steel; 2 supplied

**CHOICES AND LIMITATIONS**

| Style                     | Description           | Angle of Throw | No. Of Decks | Poles/ Deck | Positions Per Pole | Shorting or Non-Shrtg. |
|---------------------------|-----------------------|----------------|--------------|-------------|--------------------|------------------------|
| <b>Series 44 Switches</b> |                       |                |              |             |                    |                        |
| L                         | Standard, Solder Lugs | 45°            | 01 to 06     | 1           | 02 to 08           | N or S                 |
|                           |                       |                | 01 to 03     | 2           | 02 to 04           | N or S                 |
|                           |                       |                | 01 or 02     | 3           | 01 or 02           | N                      |
|                           |                       |                | 01 or 02     | 4           | 01 or 02           | N                      |

**SWITCH SPECIFICATIONS**

**Electrical Characteristics  
Industrial Grade Switch**

**Switching Current and Life**

The load-life values indicate the number of cycles of operation expected for the voltage, current and type of load. End of life is defined using the resistance and breakdown failure criteria listed below.

|       |                        |
|-------|------------------------|
| 5A at | 115 Vac, resistive     |
| 1A at | 6 to 28 Vdc, resistive |
| 2A at | 115 Vac, inductive     |

**Cycle of Operation:** 360° rotation plus a 360° return

**Test Conditions:** 25°C, 68% relative humidity, atmospheric pressure

**Life Expectancy:**

|                   |                |
|-------------------|----------------|
| With loads above: | 25,000 cycles  |
| Without load:     | 100,000 cycles |

**Contact Resistance:**

End of life: less than 20 mΩ

**Insulation Resistance:**

(Between mutually insulated parts)  
Initially: 50,000 MΩ

**Breakdown Voltage:**

(Between mutually insulated parts)  
Initially: 1,000 Vac  
End of life: 500 Vac

**Carry Current:** 10A; maximum temperature rise 20°C

**Mechanical Characteristics**

**Switching Mode:**

45°, 1 or 2 poles: Shorting or non-shorting

45°, 3 or 4 poles: Non-shorting

**Type of Contact:** Wiping contacts

**Contact Force:** greater than 150g

**Number of Terminals:** Switches are provided with only the number of terminals needed

**Stop Strength:** greater than 15 in-lbs (1.70 Nm)

**Switching Torque:** 8-115 in-ozs (28 to 230 mNm), depending on the number of poles, number of decks, and angle of throw

**Additional Characteristics**

Switches of 6 or more decks have longer studs with extra mounting nuts for recommended double end mount

**Materials and Finishes: Switch**

**Switch Bases:** Melamine per MIL-M-14, 4

**Switch Bases:**

Industrial Grade: Melamine per MIL-M-14

Military: Diallyl per MIL-M-14

**Cover, Deck Separators, End Plate, and Rotor Mounting Plate:** Phenolic per MIL-M-14

**Shaft, Shaft Extension, Stop Arm, Stop Washers, Rear Support Plate, Cover Plate, Retaining Ring, Studs, Nuts:** Stainless steel

**Detent Balls:** Steel, nickel-plated

**Detent Springs:** Tinned music wire

**Rotor Contact, and Stator (Base) Contacts:** Silver alloy

**Common Plate, and Common Terminal:** Brass, 300μ inch, (7.6 μm) silver plate

**Base Terminals:** Brass, tin plated

**ORDERING INFORMATION**

- Series
- Style Letter: L
- Angle of Throw: 45°
- Number of Decks: 01 thru 06 (per Choices chart)
- Poles per Deck: 1 thru 4 (per Choices chart)
- Positions per Pole: 02 thru 08 (per Choices chart)
- Type of Contacts:
  - N = Non-shorting
  - S = Shorting (per Choices chart)
- Stop Arrangement Suffix: (needed only for 1-pole switches with maximum positions)
  - F = Fixed stop between positions 8 and 1
  - \*Leave blank for continuous rotation

44 L 45-02-1-08N-F

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