



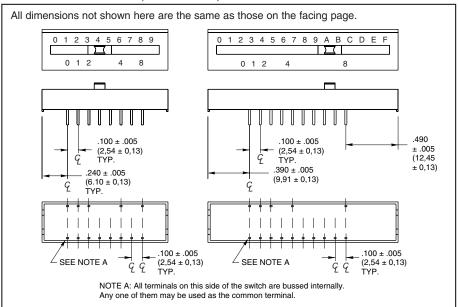
# SERIES 79B

# Linear Action, Coded Output **FEATURES**

- Reliable Switching, Positive Detent
- Codes in BCD and Hexadecimal
- True Zero Output
- 10 or 16 Positions
- 2000 Cycle Life
- Up to 60,000 Detent Operations

# **CIRCUITRY**

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



# BINARY CODES 16 • • . . . . TERMINAL LOCATIONS Dot indicates contact made between contact and output terminal.

#### **SPECIFICATIONS**

#### **Electrical Ratings**

Make-and-break Current Rating: 2,000 cycles at 10 mA, 50 mVdc; 2,000 cycles at 125 mA, 6 Vdc; 2,000 cycles at 50 mA, 30 Vdc.

Contact Resistance: 100 mohms maximum after life, measured at 10 mA dc and 50 mV (open circuit). Initial values are 60 mohms maximum for coded switches, and 50 mohms for other linear action switches.

#### Insulation Resistance (at 100 Vdc):

Between adjacent isolated contacts: Initial: 5,000 Mohms minimum; After Life: 1,000 Mohms minimum

Across open contacts: Initial: 5,000 Mohms minimum; After Life: 1,000 Mohms minimum

Dielectric Strength: Between adjacent isolated contacts and across open contacts. Initial: 750 Vac; After Life: 500 Vac

Contact Carry Rating: 2 amps with a maximum

contact temperature rise of 20°C.

#### **Mechanical Ratings**

Mechanical Life: 4,000 cycles maximum. Note: a cycle is one complete operation, back and forth through all switch positions.

Vibration Resistance: 10 to 2,000 Hz at 15G or 0.060" double amplitude; no damage and no contact openings exceeding 10 mS (Method 204. Test Condition B).

Shock Resistance: 509, 11 mS, half sine; no damage and no openings exceeding 10 microseconds (Method 213, Test Condition A).

#### **Environmental Ratings**

Refer to MIL-STD-202F per MIL-S-83504 Operating Temperature Range: -40°C to +85°C Storage Temperature Range: -55°C to +85°C Moisture Resistance: 240 hours with temperature cycling and polarization, per MIL-STD-202F. Method 305

# ORDERING INFORMATION

Number of Positions	Type of Circuit Code	Number per Tube	Part Number*
10	Binary Code Decimal	9	79B10T
16	Hexadecimal		79B16T

\*A top tape seal is required for switches that are machine soldered or heavily cleaned after hand soldering. To order top seal versions, add "S" before the "T" in the Grayhill part number.

#### **Materials and Finishes**

Nonconductive Parts: Plastic UL94V-O Shorting Arm: Phosphor bronze, gold plate

over nickel plate

Base Contacts: Copper alloy, gold plate over nickel plate

Terminals: Copper alloy, matte tin plated over nickel barrier

Potting Material: Epoxy

### **Tape Seal and Packaging**

Tape Seal: Polyester film

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