## 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

DIMENSIONS In inches (and millimeters)
All dimensions not shown here are the same as those on the facing page.


NOTE A: All terminals on this side of the switch are bussed internally. Any one of them may be used as the common terminal.

## SPECIFICATIONS

## Electrical Ratings

Make-and-break Current Rating: 2,000 cycles at $10 \mathrm{~mA}, 50 \mathrm{mVdc} ; 2,000$ cycles at $125 \mathrm{~mA}, 6$ Vdc; 2,000 cycles at $50 \mathrm{~mA}, 30 \mathrm{Vdc}$.
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

## ORDERING INFORMATION

contact temperature rise of $20^{\circ} \mathrm{C}$.

## 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 $2,000 \mathrm{~Hz}$ at 15 G or $0.060^{\prime \prime}$ 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: $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ Storage Temperature Range: $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ Moisture Resistance: 240 hours with temperature cycling and polarization, per MIL-STD-202F, Method 305

| Number of Positions | Type of Circuit Code | Number per Tube | Part Number* |
| :---: | :--- | :---: | :---: |
| 10 | Binary Code Decimal | 9 | 79B10T |
| 16 | Hexadecimal | 6 | 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.

## CIRCUITRY



Dot indicates contact made between contact and output terminal.

## 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.

