

## SERIES 26 Binary and Gray Code

### AVAILABLE CODES

- Hexadecimal
- Octal
- BCD (Adjusted)
- Quadrative
- Custom (4-Bit, 16 position maximum)
- RoHS Compliant



### DIMENSIONS in inches (and millimeters)



### SPECIFICATIONS

#### Electrical Ratings

**Rated:** 25,000 cycles with logic compatible loads. Make and break 200 mA.

**Contact Resistance:** 500 milliohms maximum (less than 100 milliohms initially)

**Insulation Resistance:** 1000 megohms minimum (10,000 megohms initially)

**Dielectric Strength:** 250 Vac minimum

#### Materials and Finishes

**Panel Seal:** Silicone Rubber

**Shaft Seal:** Fluorosilicone

**Mounting Nut (mounting hardware—one per switch):** Brass, tin/zinc-plated

**Internal Tooth Lockwasher (mounting hardware):** Steel, tin/zinc-plated

**Detent Balls:** Carbon steel, nickel-plated

**Detent Spring:** Pretinned music wire

**Detent Rotor:** Thermoplastic

**Shaft, Stop Arm and Stop Pins:** Stainless steel

**Bushing:** Zamak II tin/zinc alloy, zinc-plated

**Switch Base:** Diallyl phthalate

**Printed Circuit Board:** NEMA Grade FR-4.

**Terminals:** Brass, gold-plated over nickel plate

**Contacts:** Copper alloy, gold-plated over nickel plate

#### Additional Characteristics

**Rotational Torque:** 4 to 8 oz-in initial

**Vibration Resistance:** 10 to 55 Hz at 0.060" double amplitude; no damage and no contact openings per MIL-STD-202, Method 201A

**Shock Resistance:** Passes medium requirement MIL-DTL-3786 (MIL-STD-202, Method 213)

**Stop Strength:** 5 in-lbs minimum

**Relative Humidity:** 90-95% at 40°C for

240 hours (MIL-STD-202 Method 103, Test Condition A)

#### Shaft and Panel Seal

All switches are provided with a shaft and panel seal.

#### OPTIONS

##### Adjustable Stop Switches

The switch may have continuous rotation, or be adjusted to limit the rotation. The panel seal ring can be removed to expose the stop pin holes on the front of the switch. Two stop pins and panel seal o-ring are supplied with the switch. One or both may be used to limit the rotation as desired.

Custom encoders with options such as custom code output, 1/4" shaft diameter, factory set stops and longer shaft terminal lengths are available by contacting the Grayhill sales office at 708.482.2123.

#### ORDERING INFORMATION

Available from your local Grayhill Distributor.

For prices and discounts, contact a local Sales Office, or an authorized local Distributor or Grayhill through [grayhill.com/where-to-buy](http://grayhill.com/where-to-buy).

### CODE AND TRUTH TABLE

Switch Position	Code Position	BCD Output*				Gray Output*			
		1	2	4	8	1	2	4	8
1	0								
2	1	●				●			
3	2		●			●	●		
4	3	●	●				●		
5	4			●			●	●	
6	5	●		●		●	●	●	
7	6		●	●		●		●	
8	7	●	●	●				●	
9	8				●			●	●
10	9	●			●	●		●	●
11	10		●		●	●	●	●	●
12	11	●	●		●	●	●	●	●
13	12			●	●		●		●
14	13	●		●	●	●	●		●
15	14		●	●	●	●			●
16	15	●	●	●	●				●

\*Dot indicates terminal tied to common.

