

# **SERIES 58**

Single Deck, Antistatic



#### LOCK FEATURES

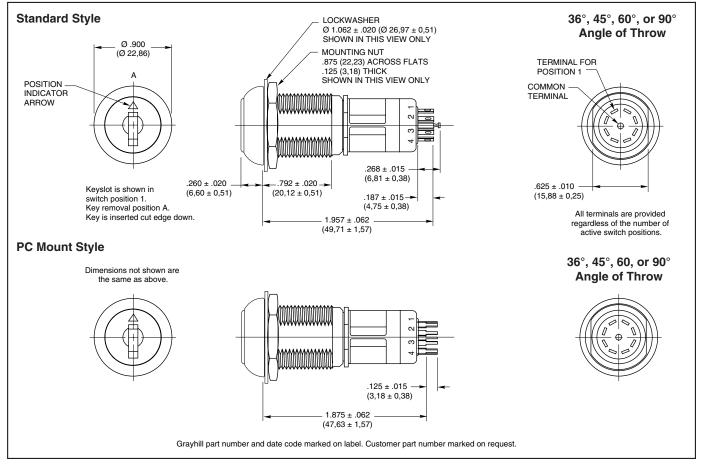
- Minimum Space Behind Panel
- 15,000 Vdc Static Protection
- 5 Tumbler-Plate Security
- In-Panel Key Recoding

# SWITCH FEATURES

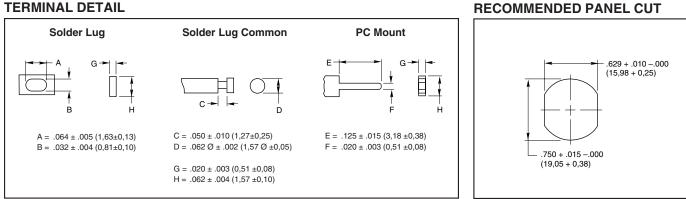
- Economical
- Solder Lug or PC Mount
- 36°, 45°, 60°, or 90° Throws
- 1 or 2 Poles Per Switch
- Up to 10 Positions for 1 Pole
- 200 mA for 25,000 Cycles



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



#### **TERMINAL DETAIL**

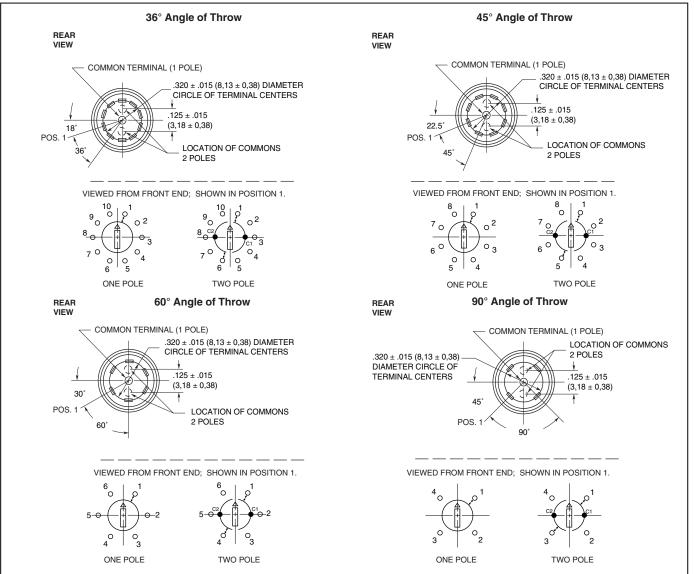


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Rotary

#### CIRCUITRY



### LOCK SPECIFICATIONS

| Keying: All locks key special order<br>Orientation of Key | ing, nut and lockwasher<br>eyed alike except by<br>lock Switch: Lock flats<br>key upright (cut side | Material<br>Keys: Bra<br>Lock Bar<br>Lockwas<br>Mounting<br>Tumbler |
|---|---|---|
| Key Removals:   |   |   |
| 36° Throw Switch  | At every position or<br>At 0° & 180°  |   |
| 45° Throw Switch  | At every position or<br>At 0°, 90°, 180°, 270°  |   |
| 60° Throw Switch  | At every position or At 0°, 180°  |   |
| 90° Throw Switch  | At every position or At 0°, 180°  |   |
| Optional pulls  | Contact Grayhill  |   |
|   |   |   |
|   |   |   |

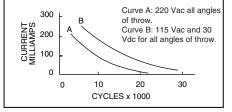
#### Materials & Finishes

Keys: Brass; 2 supplied Lock Barrel & Plug: Zinc, clear chromate Lockwasher: Steel, tin zinc plated Mounting Nut: Steel, nickel-plated Tumbler Plates: Brass

#### SWITCH SPECIFICATIONS

#### **Electrical Characteristics**

Chart is shown for non-shorting contacts and resistive load and for the life limiting criteria indicated below. The data for the curve was measured at sea level, 25°C and 68% relative humidity. Contact Grayhill for more information if any of the following is true: life limiting criteria are more critical than those listed; more cycles of operation are required; a larger make and break current is required; the operating environment includes elevated temperatures or reduced pressures.



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Rotary Switches



#### SWITCH SPECIFICATIONS Continued

| Contact Resistance:                                      | Anti-Static Voltage: Anti-static types tested       | Materials and Finishes                     |  |  |  |
|--|---|--|--|--|--|
| Initially: less than 10 m $\Omega$                       | to withstand 15,000 Vdc                             | Switch Base: Thermoset plastic             |  |  |  |
| End of life: less than 50 m $\Omega$                     |   | Switch Housing: Nylon                      |  |  |  |
| Insulation Resistance: (Between mutually                 | Mechanical Characteristics                          | Detent Rotor: Nylon                        |  |  |  |
| insulated parts)   | Switching Mode: Shorting (make before break)        | Detent Balls: Steel, nickel-plated         |  |  |  |
| Initially: 50,000 MΩ                                     | or non-shorting (break before make) as limited      | Detent Springs, and Contact Springs:       |  |  |  |
| Minimum: 10,000 MΩ                                       | by the Choices chart                                | Stainless steel                            |  |  |  |
| Breakdown Voltage: (Between mutually                     | Type of Contact: Wiping                             | Common Ring: Brass, gold plate over silver |  |  |  |
| insulated parts) more than 600 Vac                       | Number of Terminals: All switches are provided      | plate                                      |  |  |  |
| Life Expectancy: Per chart; cycle is 1                   | with the full circle of terminals regardless of the | Terminals: Brass, gold over silver and     |  |  |  |
| rotation thru all active positions plus a full           | number of active positions                          | nickel plate                               |  |  |  |
| return.  | Stop Strength: 1.70 Nm maximum (15.0 in-lbs)        | Rotor Contact: Precious metal, gold alloy  |  |  |  |
| <b>Carry Current</b> : 6A; maximum temperature rise 20°C | Switching Torque: 8 to 16 in-ozs                    |  |  |  |  |

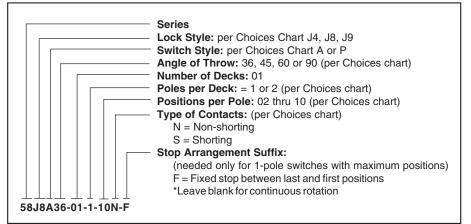
#### **CHOICES AND LIMITATIONS**

| Lock Style and<br>Description*                                      | Switch Style and<br>Description   | Angle of<br>Throw | No. Of<br>Decks | Poles/<br>Deck | Positions<br>Per Pole** | Shorting or<br>Non-Shrtg. |  |  |  |
|---|---|-------------------|-----------------|----------------|-------------------------|---------------------------|--|--|--|
| Series 58J Switches   |   |                   |                 |                |                         |                           |  |  |  |
| J4: Standard–Key pulls at Position 1<br>and at 90 Degree Increments | <ul><li>A = Standard, Solder Lugs</li><li>P = Standard, PC Mount</li></ul>    | 45°               | 1               | 1<br>2         | 02 to 08<br>02 to 04    | N or S<br>N or S          |  |  |  |
| J8: Standard–Key Pulls at Each<br>Position                          | <ul> <li>A = Standard, Solder Lugs</li> <li>P = Standard, PC Mount</li> </ul> | 36°               | 1               | 1<br>2         | 02 to 10<br>02 to 05    | N or S<br>N or S          |  |  |  |
|   |   | 45°               | 1               | 1<br>2         | 02 to 08<br>02 to 04    | N or S<br>N or S          |  |  |  |
|   |   | 90°               | 1               | 1<br>2         | 02 to 04<br>02          | N<br>N                    |  |  |  |
| J9: Standard–Key Pulls at Position 1<br>and at 180 Degrees          | <ul> <li>A = Standard, Solder Lugs</li> <li>P = Standard, PC Mount</li> </ul> | 36°               | 1               | 1<br>2         | 02 to 10<br>02 to 05    | N or S<br>N or S          |  |  |  |
|   |   | 45°               | 1               | 1<br>2         | 02 to 08<br>02 to 04    | N or S<br>N or S          |  |  |  |
|   |   | 60°               | 1               | 1<br>2         | 02 to 06<br>02 to 03    | N<br>N                    |  |  |  |
|   |   | 90°               | 1               | 1<br>2         | 02 to 04<br>02          | N<br>N                    |  |  |  |

\*Standard Keylock has anti-static protection. All keylock versions available without anti-static protection, with a reduced overall body length. Contact Grayhill for more information.

\*\*For single pole switches with maximum positions, specify continuous rotation or fixed stop when ordering.

## **ORDERING INFORMATION**



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

Rotary Switches