

SERIES 58

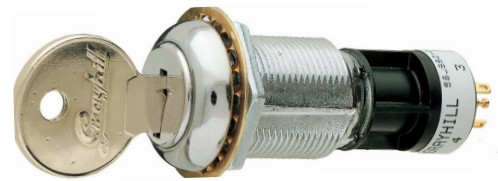
Single Deck, Antistatic

LOCK FEATURES

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

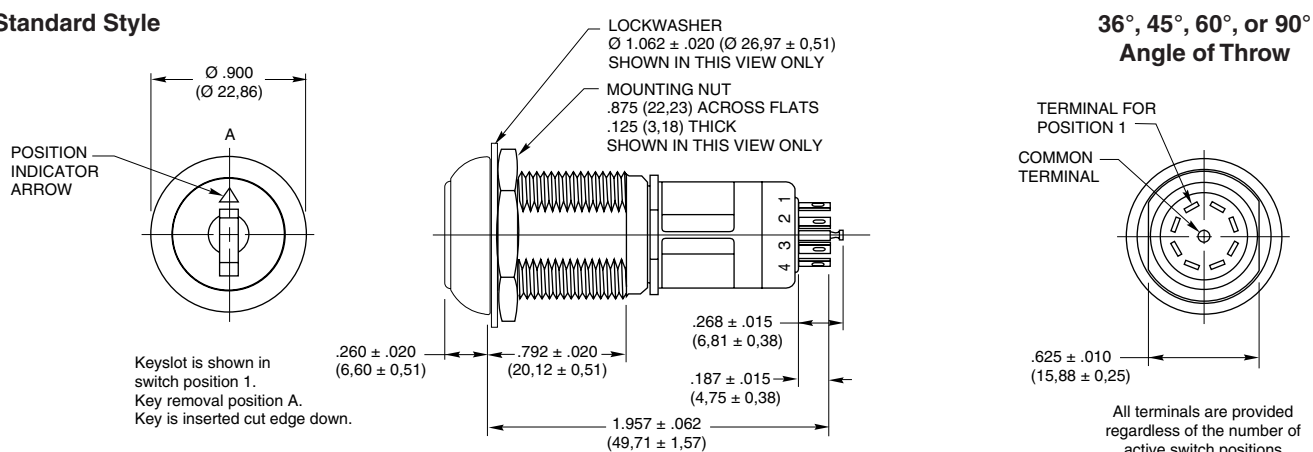
SWITCH FEATURES

- 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



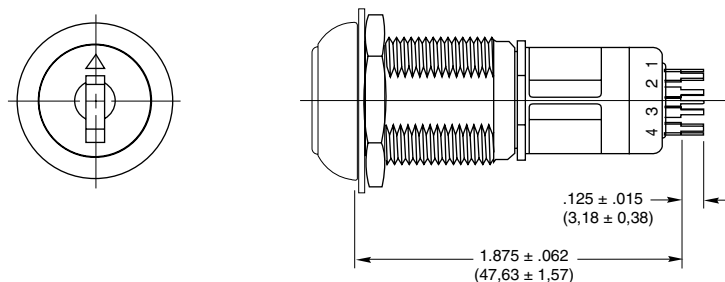
DIMENSIONS in inches (and millimeters)

Standard Style



PC Mount Style

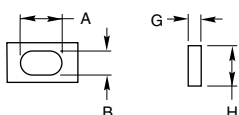
Dimensions not shown are the same as above.



Grayhill part number and date code marked on label. Customer part number marked on request.

TERMINAL DETAIL

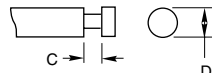
Solder Lug



$$A = .064 \pm .005 (1,63 \pm 0,13)$$

$$B = .032 \pm .004 (0,81 \pm 0,10)$$

Solder Lug Common



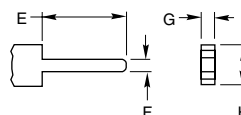
$$C = .050 \pm .010 (1,27 \pm 0,25)$$

$$D = .062 \text{ Ø} \pm .002 (1,57 \text{ Ø} \pm 0,05)$$

$$G = .020 \pm .003 (0,51 \pm 0,08)$$

$$H = .062 \pm .004 (1,57 \pm 0,10)$$

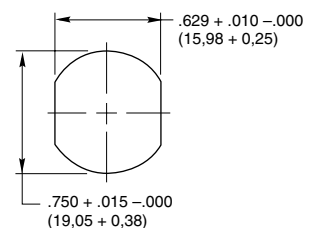
PC Mount



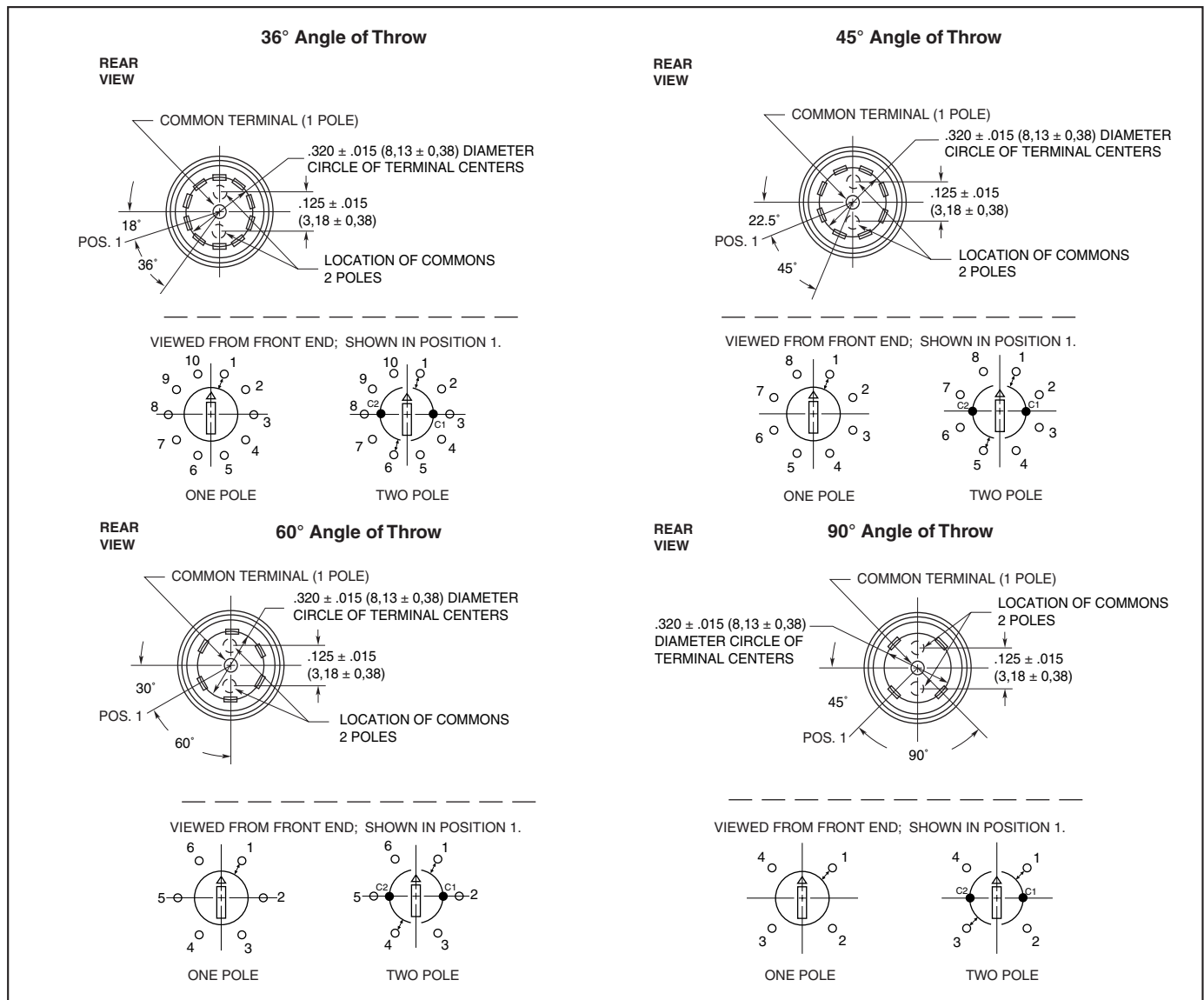
$$E = .125 \pm .015 (3,18 \pm 0,38)$$

$$F = .020 \pm .003 (0,51 \pm 0,08)$$

RECOMMENDED PANEL CUT



CIRCUITRY



LOCK SPECIFICATIONS

General Characteristics

Mounting: By bushing, nut and lockwasher

Keying: All locks keyed alike except by special order

Orientation of Keylock Switch: Lock flats on both sides with key upright (cut side down) in position 1.

Key Removals:

36° Throw Switch	At every position or At 0° & 180°
45° Throw Switch	At every position or 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

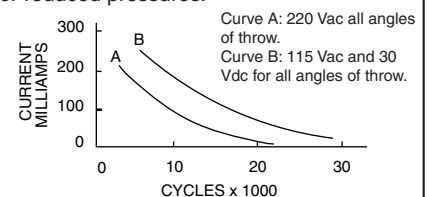
Tumbler Plates: Brass

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.



SWITCH SPECIFICATIONS *Continued*

Contact Resistance:

Initially: less than 10 mΩ
End of life: less than 50 mΩ

Insulation Resistance: (Between mutually insulated parts)

Initially: 50,000 MΩ
Minimum: 10,000 MΩ

Breakdown Voltage: (Between mutually insulated parts) more than 600 Vac

Life Expectancy: Per chart; cycle is 1 rotation thru all active positions plus a full return.

Carry Current: 6A; maximum temperature rise 20°C

Anti-Static Voltage: Anti-static types tested to withstand 15,000 Vdc

Mechanical Characteristics

Switching Mode: Shorting (make before break) or non-shorting (break before make) as limited by the Choices chart

Type of Contact: Wiping

Number of Terminals: All switches are provided with the full circle of terminals regardless of the number of active positions

Stop Strength: 1.70 Nm maximum (15.0 in-lbs)

Switching Torque: 8 to 16 in-ozs

Materials and Finishes

Switch Base: Thermoset plastic

Switch Housing: Nylon

Detent Rotor: Nylon

Detent Balls: Steel, nickel-plated

Detent Springs, and Contact Springs: Stainless steel

Common Ring: Brass, gold plate over silver plate

Terminals: Brass, gold over silver and nickel plate

Rotor Contact: Precious metal, gold alloy

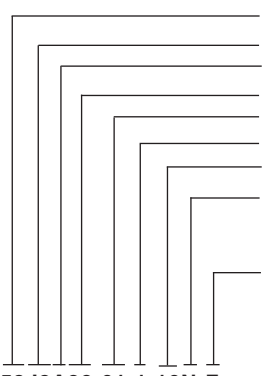
CHOICES AND LIMITATIONS

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

	Series Lock Style: per Choices Chart J4, J8, J9 Switch Style: per Choices Chart A or P Angle of Throw: 36, 45, 60 or 90 (per Choices chart) Number of Decks: 01 Poles per Deck: = 1 or 2 (per Choices chart) Positions per Pole: 02 thru 10 (per Choices chart) Type of Contacts: (per Choices chart) N = Non-shorting S = Shorting Stop Arrangement Suffix: (needed only for 1-pole switches with maximum positions) F = Fixed stop between last and first positions *Leave blank for continuous rotation
58J8A36-01-1-10N-F	

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