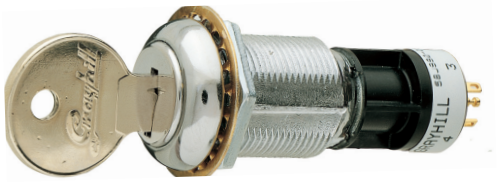
SERIES 58
Single Deck, Antistatic

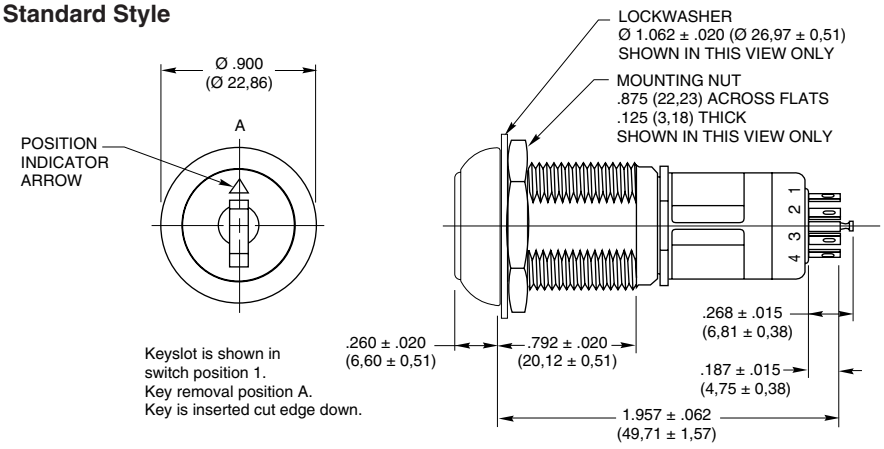


LOCK FEATURES
- Minimum Space Behind Panel
- 15,000 Vdc Static Protection
- 5 Tumbler-Plate Security
- In-Panel Key Recoding

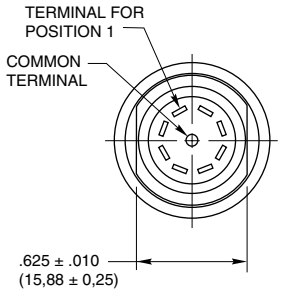
SWITCH FEATURES
- Economical
- Solder Lug or PC Mount
- 36°, 45°, 60°, or 90° Throws
- 1 or 2 Poles Per Switch
- Up to 10 Positions for 1 Pole
- 200 mA for 25,000 Cycles

DIMENSIONS in inches (and millimeters)

Standard Style



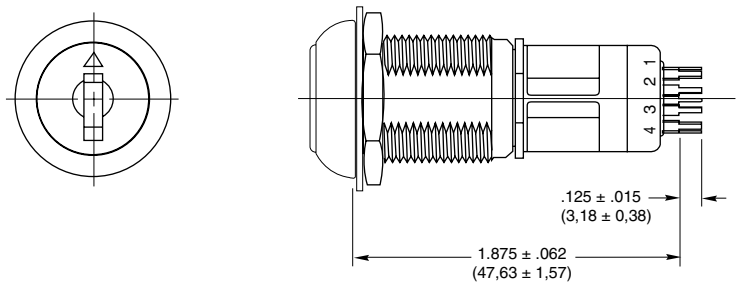
36°, 45°, 60°, or 90° Angle of Throw



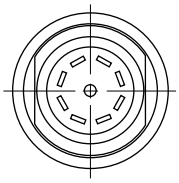
All terminals are provided regardless of the number of active switch positions.

PC Mount Style

Dimensions not shown are the same as above.



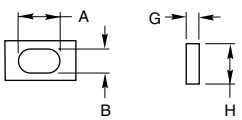
36°, 45°, 60, or 90° Angle of Throw



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

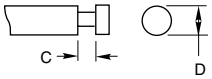
TERMINAL DETAIL

Solder Lug



A = .064 ± .005 (1,63±0,13)
B = .032 ± .004 (0,81±0,10)

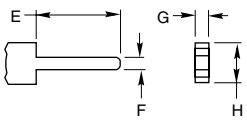
Solder Lug Common



C = .050 ± .010 (1,27±0,25)
D = .062 Ø ± .002 (1,57 Ø ±0,05)

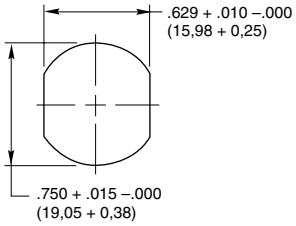
G = .020 ± .003 (0,51 ±0,08)
H = .062 ± .004 (1,57 ±0,10)

PC Mount



E = .125 ± .015 (3,18 ±0,38)
F = .020 ± .003 (0,51 ±0,08)

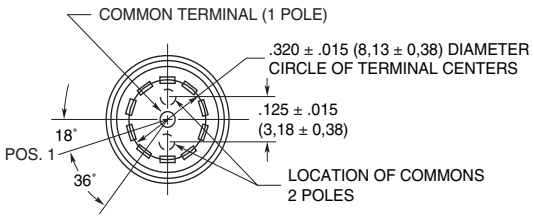
RECOMMENDED PANEL CUT



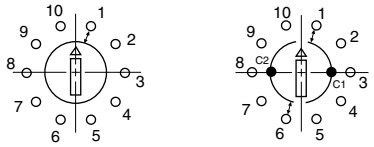
CIRCUITRY

36° Angle of Throw

REAR VIEW

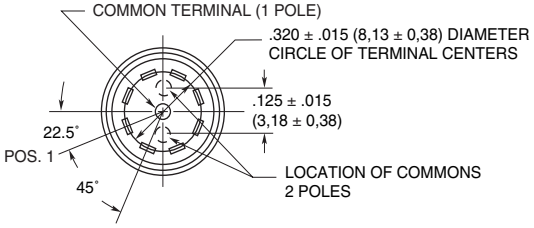


VIEWED FROM FRONT END; SHOWN IN POSITION 1.

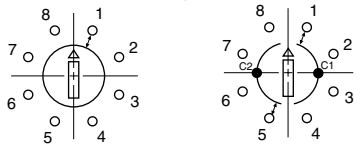


45° Angle of Throw

REAR VIEW

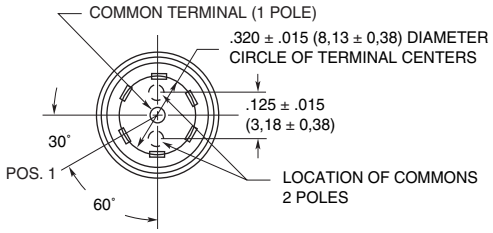


VIEWED FROM FRONT END; SHOWN IN POSITION 1.

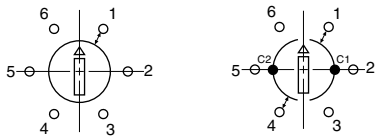


60° Angle of Throw

REAR VIEW

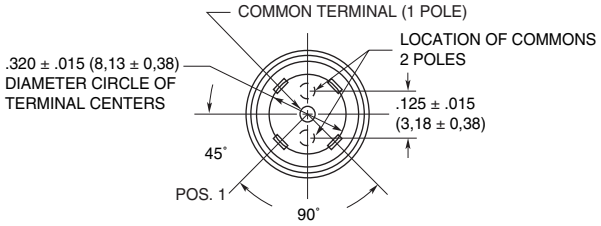


VIEWED FROM FRONT END; SHOWN IN POSITION 1.

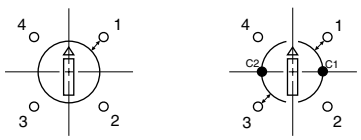


90° Angle of Throw

REAR VIEW



VIEWED FROM FRONT END; SHOWN IN POSITION 1.



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*

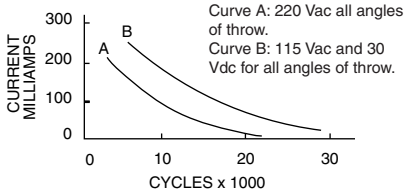
Materials & Finishes

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.