Contents Keylocks

General Specifications

Electrical Capacity (Resistive Load)

Power Level: 3A @ 250V AC

Other Ratings

Contact Resistance: 20 milliohms maximum
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: 1,000V AC minimum between contacts for 1 minute minimum;
1,500V AC minimum between contacts & case for 1 minute minimum
Mechanical Life: 30,000 cycles minimum
Electrical Life: 10,000 cycles minimum
Static Capability: Withstands 15 kilovolts minimum ESD minimum (for CKM models only)
Nominal Operating Torque: 16mm Bushing (CKM models):
0.04Nm (5.67 oz•in) for Flat Key
0.08Nm (11.33 oz•in) for Tubular Key
19mm Bushing (CKL models):
0.05Nm (7.08 oz•in) for Flat Key
0.07Nm (9.91 oz•in) for Tubular Key
Contact Timing: Break-before-make
Angle of Throw: 90° for 2-position & 45° for 3-position

Materials & Finishes

Keys for CKM: Brass with nickel plating with ABS handle
Keys for CKL: Brass with nickel plating for tubular key;
brass with chrome plating for flat key
Housing/Bushing: Glass fiber reinforced PBT for CKM models;
zinc alloy with chrome plating for CKL
Base: LCP (Liquid Crystal Polymer)
Contact Terminals: Copper with silver plating
Common Terminals: Copper with silver plating
Movable Contactor: Copper
Movable Contacts: Silver

Environmental Data

Operating Temperature Range: –25°C through +70°C (–13°F through +158°F)
Humidity: 90 ~ 95% humidity for 240 hours @ 40°C (104°F) for CKM;
90 ~ 95% humidity for 96 hours @ 40°C (104°F) for CKL
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm for CKM or 0.7mm for CKL traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration for CKM; 30G (294m/s^2) acceleration for CKL; (CKM & CKL tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Mounting Torque: 1.5 Nm (13.28 lb•in) maximum
Soldering Time & Temperature: Manual Soldering: See Profile A in Supplement section.

Distinctive Characteristics

High insulating material for 16mm CKM models withstands over 15 kilovolts of electrostatic discharge, thus providing antistatic feature.

Rugged, die cast housing 19mm CKL models designed for higher security requirements.

Vertically rotating switching mechanism combines with self-cleaning sliding contacts for high reliability and long operating life.

16mm and 19mm diameter bushings available.

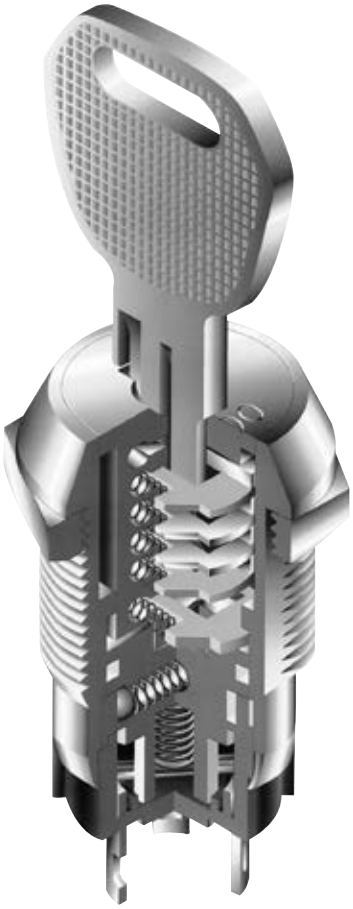
CKL and CKM on-off-on models with tubular keys have push-and-lock mechanism which allows contactor to drop and slide over stationary contacts.

Available in both flat and tubular key styles; flat key is reversible for easier setting.

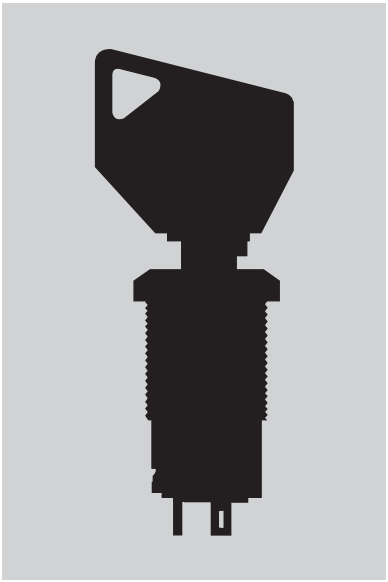
Epoxy sealed terminals prevent entry of flux and other contaminants.

Interior construction provides seal for contact area.

High dielectric strength of 1,500 volts between contacts and case.



Actual Size CKM with Tubular Key



TYPICAL SWITCH ORDERING EXAMPLE

CK | M | 1 | 2A | F | W | 01

Bushings

M	16mm Diameter
L	19mm Diameter

Poles

1	SPDT

Keys

F	Flat
T	Tubular

Terminals

01	Solder Lug

Circuits & Key-Removable Positions

Code	Pos. 1	Pos. 2	Pos. 3	Key Removes
2A	ON	NONE	ON	Positions 1 and 3
2B	ON	NONE	ON	Position 1
3E	ON	OFF	ON	Position 2

Contact Material

W	Silver Rated 3A @ 250V AC

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

CKM12AFW01

One key supplied with each switch

SPDT ON-NONE-ON Circuit
Key Removable in Positions 1 and 3

16mm Diameter Bushing

Solder Lug Terminals

Silver Contacts
Rated 3A @ 250V AC

POLES, CIRCUITS & KEY-REMOVABLE POSITIONS

Pole & Throw	Model	Key Positions Pos 1	Pos 2	Pos 3	Connected Terminals (Terminal numbers are on switch) Pos 1	Pos 2	Pos 3	Schematic	⊙ = Key Removable • = Not Removable ◺ = Maximum Arc
SPDT	**CKM12A CKL12A**	ON	NONE	ON	COM-1	——	COM-2	COM 1 2	POS 1 3
SPDT	**CKM12B CKL12B**	ON	NONE	ON	COM-1	——	COM-2		POS 1 3
SPDT	**CKM13E CKL13E**	ON	OFF	ON	COM-1	OPEN	COM-2	COM OPEN 1 2	2 POS 1 3

KEYS

F **Flat Key**

AT4147 for CKM 16mm
Brass with Nickel Plating key base & ABS key handle
AT4153 for CKL 19mm
Brass with Chrome Plating (crosshatch texture on handle)

One key provided with each switch (no master key available)
For ordering additional keys, indicate the same key number that is engraved on the face of your switch.

Randomly assigned key number (001 through 010 for CKM models & 001 through 025 for CKL models).

Typical Key Ordering Example: AT4153-001

T **Tubular Key**
(must be pressed inward to actuate)

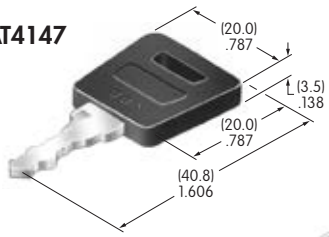
AT4146 for CKM 16mm
Brass with Nickel Plating key base & ABS key handle
AT4152 for CKL 19mm
Brass with Nickel Plating (smooth)

One key provided with each switch (no master key available)
For ordering additional keys, indicate the same key number that is engraved on the face of your switch.

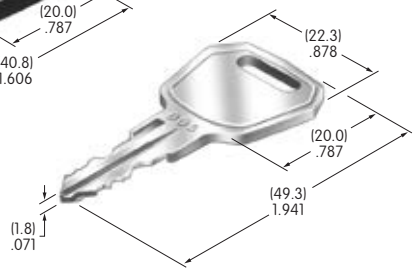
Randomly assigned key number (001 through 025 for CKM models & 001 through 050 for CKL models).

Typical Key Ordering Example: AT4146-001

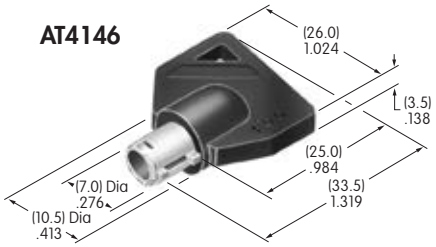
AT4147



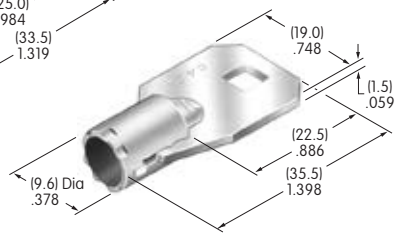
AT4153



AT4146



AT4152

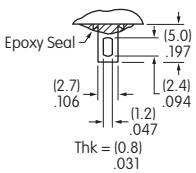


CONTACT MATERIALS, RATINGS & TERMINALS

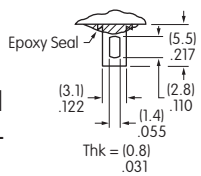
W **Silver over Silver**
Power Level 3A @ 250V AC

01 **Solder Lug Terminals**

Solder Lug Terminal for CKM



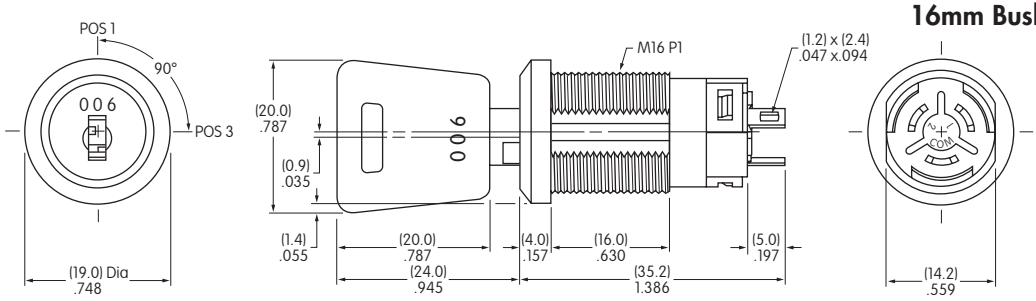
Solder Lug Terminal for CKL



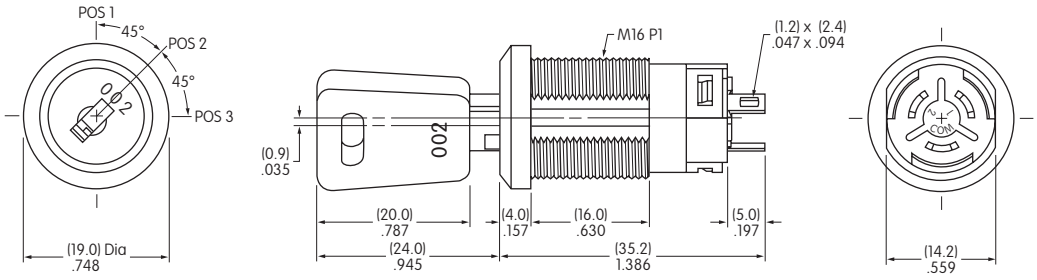
TYPICAL SWITCH DIMENSIONS

16mm Bushing • Flat Key

90° Angular Throw



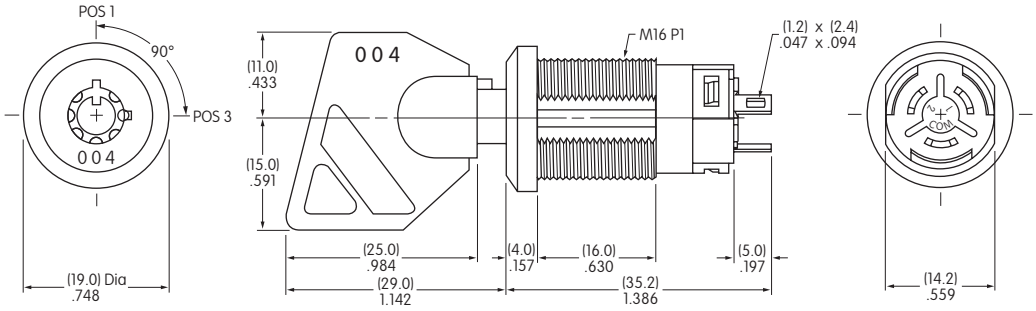
45° Angular Throw



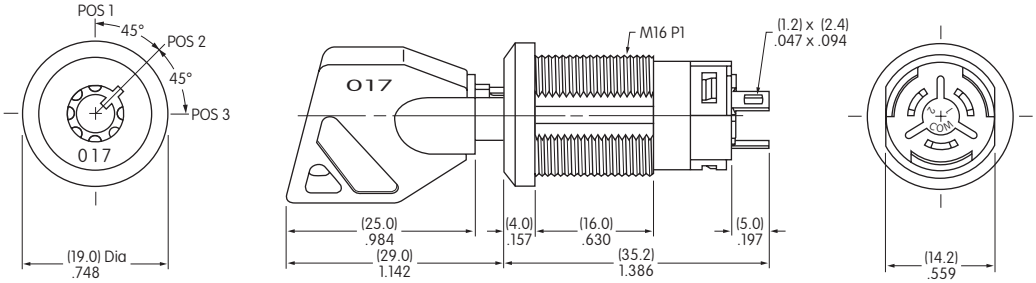
CKM12AFW01

16mm Bushing • Tubular Key

90° Angular Throw



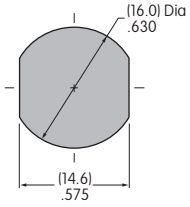
45° Angular Throw



CKM13ETW01

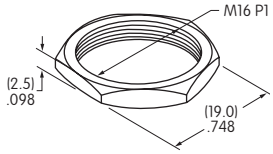
PANEL CUTOUT & STANDARD HARDWARE FOR 16MM BUSHING

Maximum Effective Panel Thickness: .469″ (11.9mm)



AT016
16mm Hex Mounting Nut for CKM

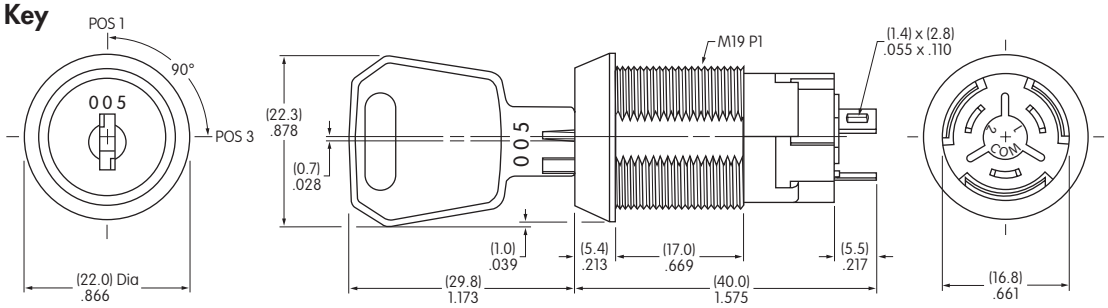
1 included with each switch
Steel with nickel plating



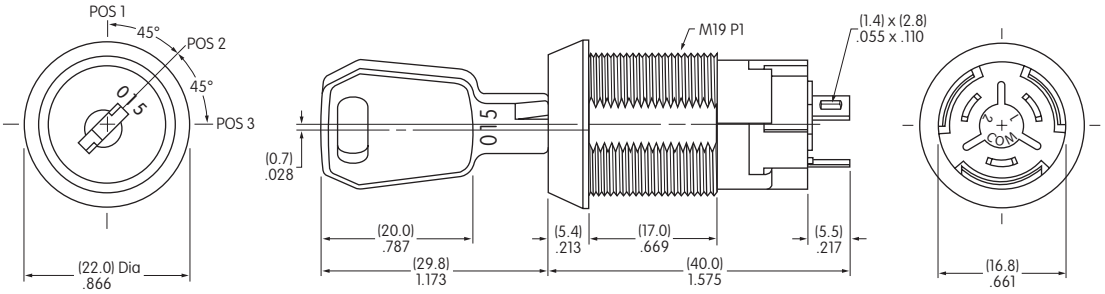
TYPICAL SWITCH DIMENSIONS

19mm Bushing • Flat Key

90° Angular Throw



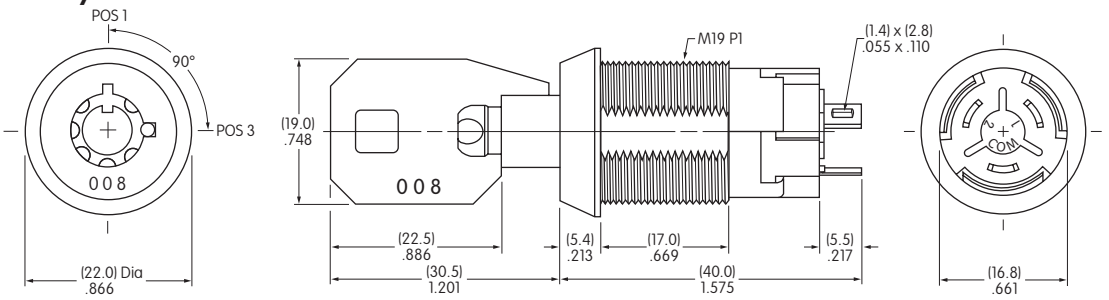
45° Angular Throw



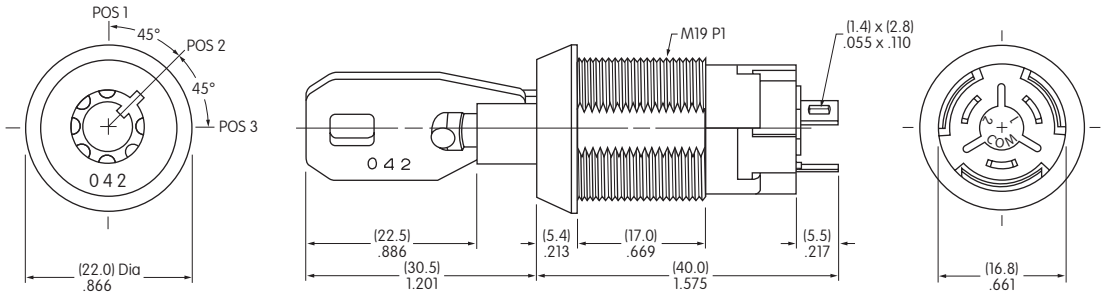
CKL12AFW01

19mm Bushing • Tubular Key

90° Angular Throw



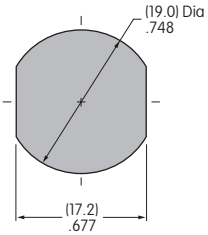
45° Angular Throw



CKL13ETW01

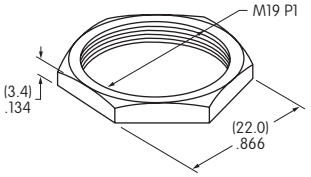
PANEL CUTOUT & STANDARD HARDWARE FOR 19MM BUSHING

Maximum Effective Panel Thickness: .496" (12.6mm)



AT019
19mm Hex Mounting Nut for CKL

1 included with each switch
Steel with nickel plating



General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 3A @ 125V AC for low & medium security; 1A @ 250V AC for low security

Other Ratings

Contact Resistance: 10 milliohms maximum
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: 1,000V AC minimum between contacts for 1 minute minimum;
1,500V AC minimum between contacts & case for 1 minute minimum
Mechanical Life: 30,000 cycles minimum
Electrical Life: 10,000 cycles minimum
Nominal Operating Torque: .026Nm (.234 lb•in) for low & medium security
Contact Timing: Break-before-make
Angle of Throw: 90° for 2-position & 45° for 3-position

Materials & Finishes

Key: Zinc alloy with chrome plating (matte) for low security models;
brass with nickel plating (shiny) for medium security models
Tumbler Barrel: Zinc alloy with chrome plating (matte) for low security models;
zinc alloy with chrome plating (shiny) for medium security models
Housing/Bushing: Zinc alloy with chrome plating (matte) for low security models;
zinc alloy with chrome plating (shiny) for medium security models
Base: Phenolic resin (thermoset)
Movable Contactor: Silver
Stationary Contacts: Silver capped copper with silver plating
Terminals: Copper or brass with silver plating

Environmental Data

Operating Temperature Range: –25°C through +70°C (–13°F through +158°F)
Humidity: 90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Mounting Torque: 1.5Nm (13.28 lb•in) maximum
Soldering Time & Temperature: Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

UL: **File No. E44145 - Recognized only when ordered with marking on switch.**
Add "/U" or "/CUL" to end of part number to order UL recognized switch.
All low security models recognized at 3A @ 125V AC or 1A @ 250V AC
& all medium security models recognized at 3A @ 125V AC
CSA: **File No. 023535_0_000 - Certified only when ordered with marking on switch.**
Add "/C" to end of part number to order CSA certified switch.
All low security models certified at 3A @ 125V AC or 1A @ 250V AC

Distinctive Characteristics

12mm diameter bushing for easy panel cutout preparation and high density mounting.

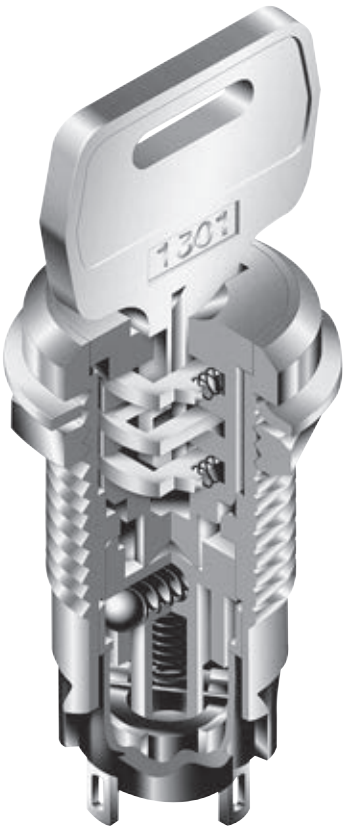
Epoxy sealed terminals prevent entry of flux and other contaminants.

Short behind panel dimension - only 1.063" (27.0mm).

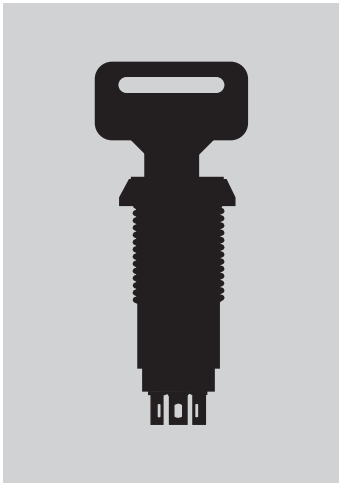
High dielectric strength of 1,500 volts between contacts and case.

Detent mechanism gives crisp, positive action for accurate switch setting.

Dust resistant interior construction protects contacts.



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

SK | 1 | 2B | A | W | 01

Poles

1	SPDT

Lock Mechanisms

A	Low Security
D	Medium Security (not combinable with code 3D circuit)

Terminals

01	Solder Lug

Circuits & Key-Removable Positions

Code	Pos. 1	Pos. 2	Pos. 3	Key Removes
2A	ON	NONE	ON	Positions 1 and 3
2B	ON	NONE	ON	Position 1
3D	ON	OFF	ON	Positions 1, 2, 3
3E	ON	OFF	ON	Position 2

Contact Material

W	Silver Rated 3A @ 125V AC

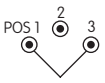
IMPORTANT:

Switches are supplied without UL, cULus & CSA marking unless specified. **UL, cULus & CSA recognized only when ordered with marking on the switch.** Specific models, ratings, & ordering instructions are noted on the General Specifications page.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

SK12BAW01

POLES, CIRCUITS & KEY-REMOVABLE POSITIONS

Pole & Throw	Model	Key Positions Pos 1	Pos 2	Pos 3	Connected Terminals (Terminal numbers are on switch) Pos 1	Pos 2	Pos 3	Schematic	◉ = Key Removable • = Not Removable ◡ = Maximum Arc
SPDT	**SK12A**	ON	NONE	ON	COM-1	——	COM-2		
SPDT	**SK12B**	ON	NONE	ON	COM-1	——	COM-2		
SPDT	***SK13D**	ON	OFF	ON	COM-1	OPEN	COM-2		
SPDT	**SK13E**	ON	OFF	ON	COM-1	OPEN	COM-2		

* Available with low security only

KEY REMOVABLE

A Positions 1 & 3, 90° Angular Throw

B Position 1, 90° Angular Throw

D Positions 1, 2 & 3, 45° Angular Throw

E Position 2, 45° Angular Throw

LOCK MECHANISMS & KEYS

A Low Security Mechanism

Zinc Alloy with Chrome Plating (matte finish)

Two keys provided with each switch
(no master key available)

For ordering additional keys:
AT4081 for SK12A and SK12B, marked "1201"
AT4082 for SK13D and SK13E, marked "1301"

D Medium Security Mechanism

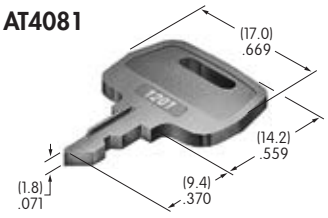
Brass with Nickel Plating (shiny finish)

One key provided with each switch
(no master key available)

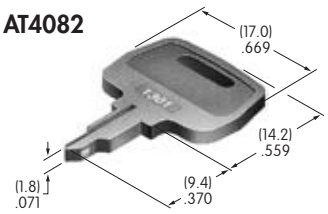
For ordering additional keys, indicate the same key number that is engraved on the face of your switch.

Key numbers (001 through 010) randomly assigned.

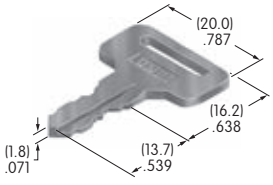
AT4081



AT4082



Typical Key Ordering Example:
AT4124-001

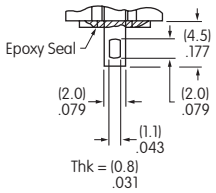


CONTACT MATERIALS, RATINGS, & TERMINALS

W Silver over Silver

Power Level

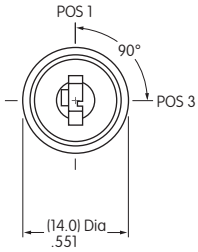
3A @ 125V AC

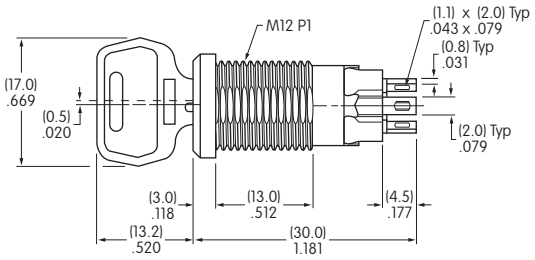


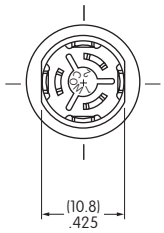
01 Solder Lug Terminals

TYPICAL SWITCH DIMENSIONS

Low Security • 90° Angular Throw

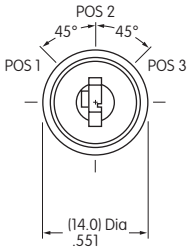


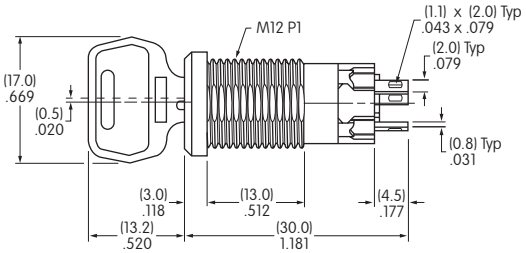


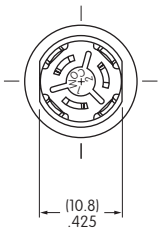


SK12BAW01

Low Security • 45° Angular Throw



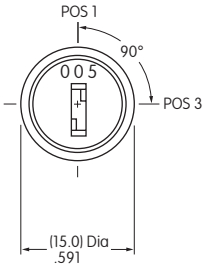


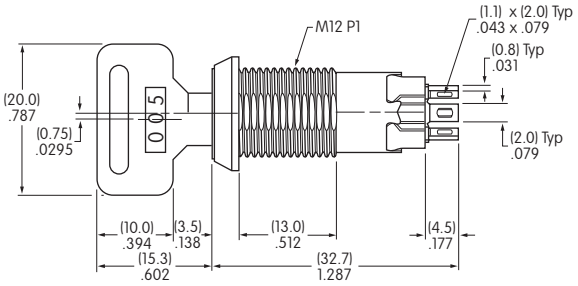


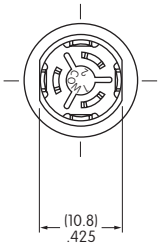
SK13EAW01

TYPICAL SWITCH DIMENSIONS

Medium Security • 90° Angular Throw

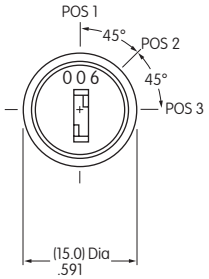


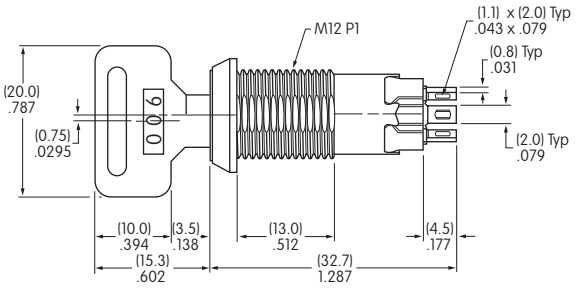


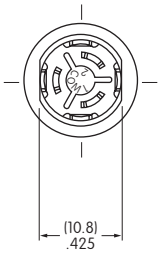


SK12ADW01

Medium Security • 45° Angular Throw

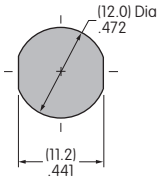






SK13EDW01

PANEL CUTOUT & THICKNESS



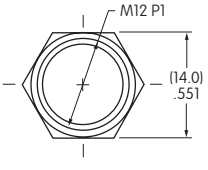
The 12mm bushing is .512" (13.0mm) long.
It allows mounting these devices in a maximum effective panel thickness of .315" (8.0mm).

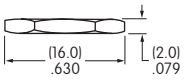
STANDARD HARDWARE

AT527M
Hex Mounting Nut

1 included with each switch

Steel with nickel plating

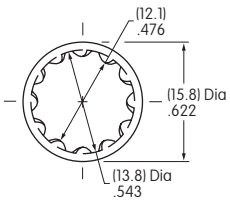




AT508
Internal Tooth Lockwasher

1 included with each switch

Steel with
zinc/chromate plating



General Specifications

Electrical Capacity (Resistive Load)

Logic Level: 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Note: Find additional explanation of operating range in Supplement section

Other Ratings

Contact Resistance: 100 milliohms maximum
Insulation Resistance: 100 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum for 1 minute minimum
Mechanical Life: 30,000 cycles minimum
Electrical Life: 20,000 cycles minimum
Static Capability: Withstands 15 kilovolts ESD
Nominal Operating Torque: .0002Nm (.0017 lb•in)
Contact Timing: Break-before-make
Angle of Throw: 45° for 3-position & 5-position

Materials & Finishes

Key: Polyacetal
Housing/Bushing: Glass fiber reinforced polyester (PBT)
Base: Glass fiber reinforced polyamide
Rotor & Stopper: Polyacetal
Tumbler Plate: Brass
Movable Contactor: Beryllium copper with gold plating
Stationary Contacts: Phosphor bronze with gold plating
Terminals: Phosphor bronze with gold plating
Mounting Bracket: Steel with tin plating

Environmental Data

Operating Temperature Range: –25°C through +70°C (–13°F through +158°F)
Humidity: 90 ~ 95% humidity for 240 hours @ 40°C (104°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

Soldering: Wave Soldering Recommended. See Profile A in Supplement section.
Manual Soldering: See Profile A in Supplement section.
Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

The SK Series devices have not been tested for UL recognition or CSA certification.
These switches are designed for use in a low-voltage, low-current, logic-level circuit.
When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Distinctive Characteristics

Housing and bushing of high insulating material withstands over 15 kilovolts of electrostatic discharge, thus providing antistatic protection.

Totally sealed construction with internal o-ring, with gasket between base and housing, and with insert-molded terminals, gives protection for automated processing techniques.

Subminiature size allows high density mounting.

Molded-in terminals prevent entry of flux and other contaminants.

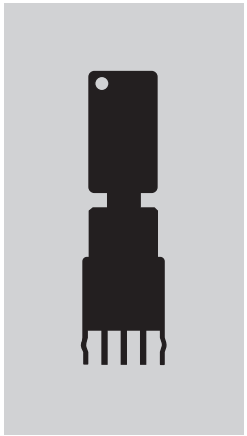
Crimped bracket legs ensure secure PCB mounting and prevent dislodging during automated wave soldering.

Bifurcated, self-wiping contact mechanism provides unequalled logic-level reliability and smoother, positive detent actuation.

Detent mechanism, with its spring-operated steel ball, gives distinct feel and crisp actuation for accurate switch setting.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing.

Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

SK | 1 | 3 | A | E | G | 13

Poles

1	SP3T SP5T

Key Removable

A	All Positions

Bushing

E	9mm Diameter Smooth

PC Terminals

13	Straight with Bracket
30	Right Angle

Positions

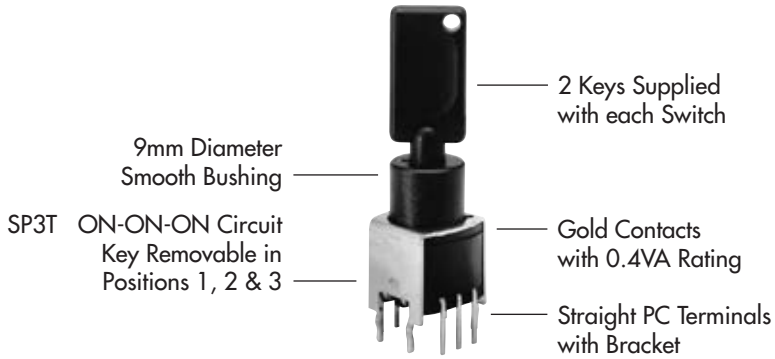
Code	Pos. 1	Pos. 2	Pos. 3	Pos. 4	Pos. 5
3	ON	ON	ON	NONE	NONE
5	ON	ON	ON	ON	ON

Contact Material

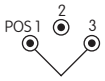
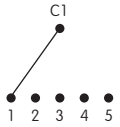
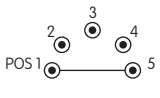
G	Gold Rated 0.4VA @ 28V AC/DC

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

SK13AEG13



POLES, CIRCUITS & KEY-REMOVABLE POSITIONS

Pole & Throw	Model	Key Positions Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Connected Terminals (Terminal numbers are not on switch) Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Schematic	⊙ = Key Removable • = Not Removable ◡ = Maximum Arc
SP3T	**SK13A**	ON	ON	ON	-----	-----	C1-2	C1-3	C1-4	-----	-----		
SP5T	**SK15A**	ON	ON	ON	ON	ON	C1-1	C1-2	C1-3	C1-4	C1-5		

KEY REMOVABLE

A — **All Positions**
45° Angular Throw

BUSHING

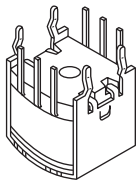
E — **9mm Diameter Smooth**

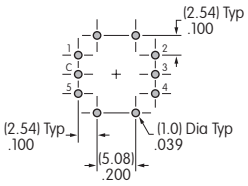
CONTACT MATERIAL & RATING

G Gold over Bronze or Copper | Logic Level | 0.4VA @ 28V AC/DC maximum

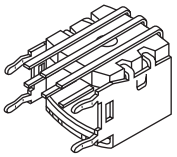
TERMINALS

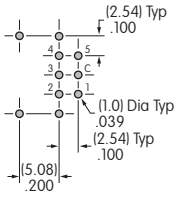
13 Straight PC with Bracket





30 Right Angle PC

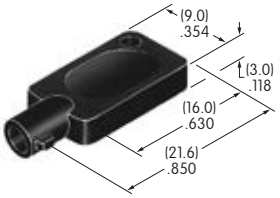




KEY

AT4094
Tubular Key

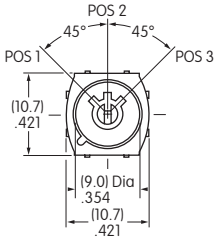
Material: Polyacetal

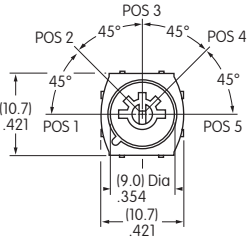


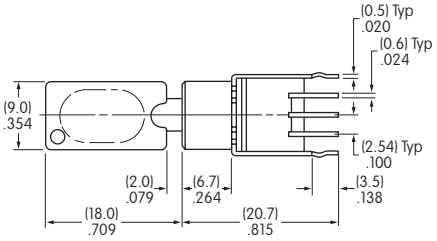
2 keys provided with each switch

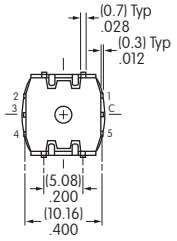
TYPICAL SWITCH DIMENSIONS

Straight PC with Bracket



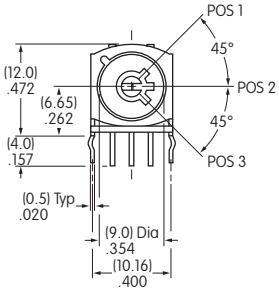


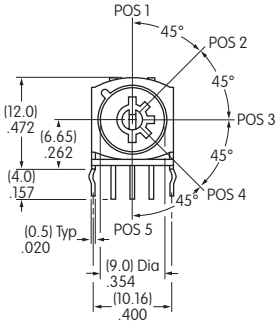


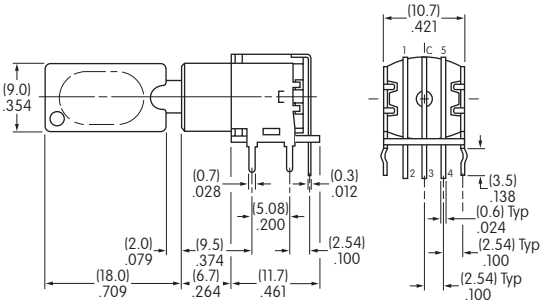


SK13AEG13 | **3 Position** | **5 Position** | On 3-position models terminals 1 & 5 are support pins.

Right Angle PC







SK15AEG30 | **3 Position** | **5 Position** | On 3-position models terminals 1 & 5 are support pins.

General Specifications

Electrical Capacity (Resistive Load)

Logic Level: 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
See Supplement section to find explanation of operating range

Other Ratings

Contact Resistance: 80 milliohms maximum
Insulation Resistance: 100 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum for 1 minute minimum
Mechanical Life: 30,000 cycles minimum
Electrical Life: 10,000 cycles minimum
Nominal Operating Torque: .026Nm (.234 lb•in) for momentary action models
.020Nm (.182 lb•in) for maintained action models
Contact Timing: Break-before-make
Angle of Throw: 90° for 2-position & 45° for 3-position

Materials & Finishes

Boot: Polyvinyl chloride
Key: Brass alloy with bright nickel plating;
brass alloy with bright nickel plating & ABS resin handle
Tumbler Barrel: Polyacetal
Bushing: Zinc alloy with nickel plating
Bracket: Steel with tin plating
Base: Glass fiber reinforced polyamide
Movable Contactor: Beryllium copper with gold plating
Stationary Contacts: Copper with gold plating
Terminals: Brass with tin plating

Environmental Data

Operating Temperature Range: –25°C through +70°C (–13°F through +158°F)
Humidity: 90 ~ 95% humidity for 240 hours @ 40°C (104°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

Soldering: Wave Soldering recommended: See Profile B in Supplement section.
Manual Soldering: See Profile B in Supplement section.
Cleaning: Automated cleaning. Boot must be on switch during processing.
See Cleaning specifications in Supplement section.

Standards & Certifications

These SK Series devices have not been tested for UL recognition or CSA certification.
These switches are designed for use in a low-voltage, low-current, logic-level circuit.
When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Distinctive Characteristics

Sealed body construction plus disposable boot protect contacts and allow automated processing.

Molded-in terminals seal out flux, solvents, and other contaminants.

Short body size for space-saving, behind panel dimensions.

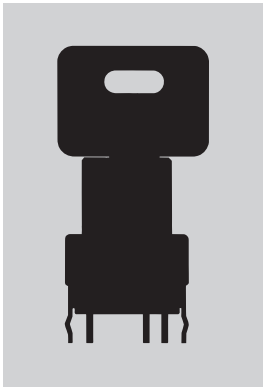
Detent mechanism, with its spring-operated steel ball, gives crisp, positive action for accurate switch setting.

Bifurcated, self-wiping contact mechanism provides unequalled logic-level reliability and smoother, positive detent actuation.

Crimped bracket legs ensure secure PCB mounting and prevent dislodging during automated wave soldering.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing.

Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

SK | 2 | 4E | G | 30

Poles

1	SPDT SP3T
2	DPDT DP3T

Contact Material

G	Gold Rated 0.4VA @ 28V AC/DC

Circuits & Key-Removable Positions

Code	Pos. 1	Pos. 2	Pos. 3	Key Removes
2A	ON	NONE	ON	Positions 1 and 3
2B	ON	NONE	ON	Position 1
5B	ON	NONE	(ON)	Position 1
***4D**	ON	ON	ON	Positions 1, 2, 3
***4E**	ON	ON	ON	Position 2

( ) = Momentary
*Can be used as ON-OFF-ON circuit

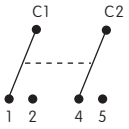
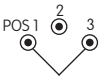
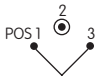
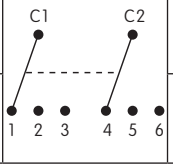
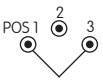
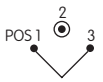
PC Terminals

13	Straight with Bracket
30	Right Angle

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

SK24EG30

POLES, CIRCUITS & KEY-REMOVABLE POSITIONS

Pole & Throw	Model	Key Positions Pos 1	Pos 2	Pos 3	Connected Terminals (Terminal numbers are not on switch) Pos 1	Pos 2	Pos 3	Schematic	= Key Removable, = Not Removable, = Maximum Arc
SPDT	**SK12A**	ON	NONE	ON	C1-1	——	C1-2		
SPDT SPDT	**SK12B** **SK15B**	ON ON	NONE NONE	ON (ON)	C1-1	——	C1-2		
DPDT	**SK22A**	ON	NONE	ON	C1-1 C2-4	——	C1-2 C2-5		
DPDT DPDT	**SK22B** **SK25B**	ON ON	NONE NONE	ON (ON)	C1-1 C2-4	——	C1-2 C2-5		
SP3T	**SK14D**	ON	ON	ON	C1-1	C1-2	C1-3		
SP3T	**SK14E**	ON	ON	ON	C1-1	C1-2	C1-3		
DP3T	**SK24D**	ON	ON	ON	C1-1 C2-4	C1-2 C2-5	C1-3 C2-6		
DP3T	**SK24E**	ON	ON	ON	C1-1 C2-4	C1-2 C2-5	C1-3 C2-6		

KEY REMOVABLE

A Positions 1 & 3, 90° Angular Throw

B Position 1, 90° Angular Throw

D Positions 1, 2 & 3, 45° Angular Throw

E Position 2, 45° Angular Throw

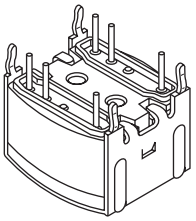
CONTACT MATERIAL & RATING

G Gold over Copper — Logic Level — 0.4VA maximum @ 28V AC/DC maximum

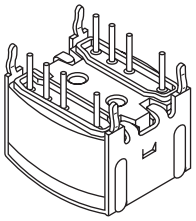
TERMINALS

13 Straight PC Terminals with Bracket

Double Throw Model

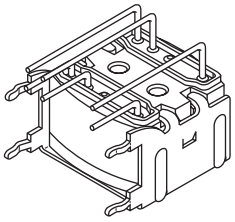


Three Throw Model

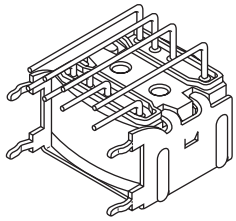


30 Right Angle PC Terminals

Double Throw Model



Three Throw Model

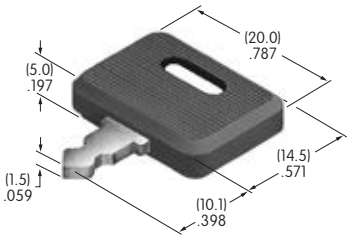


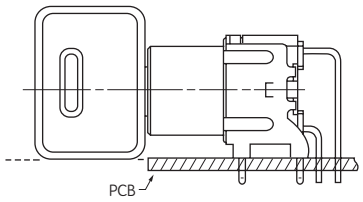
KEYS

AT4080 Standard
Antistatic Plastic Handle

Brass Alloy with Bright Nickel Plating & ABS Resin Handle

2 keys supplied with each switch



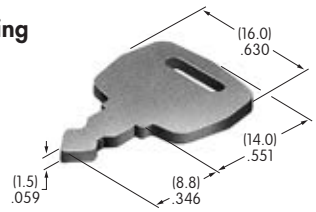


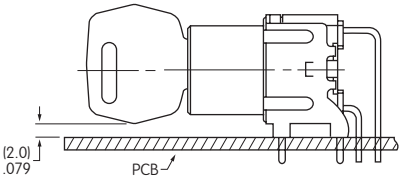
Suitable for all Straight PCB mount and for Right Angle PCB mount where clearance for key is obtainable.

AT4079 for Right Angle Mid-board Mounting
(Optional) All Metal

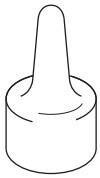
Brass Alloy with Bright Nickel Plating

Contact factory if metal keys needed





Disposable Boot



Each switch is supplied with a boot that provides protection from automated soldering and the cleaning process. Attach the boot without the key installed in the switch.

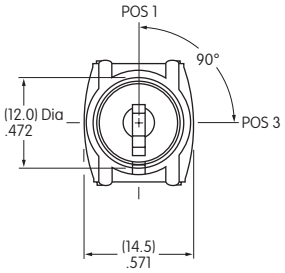
The boot is not reusable; discard after the washing procedure.

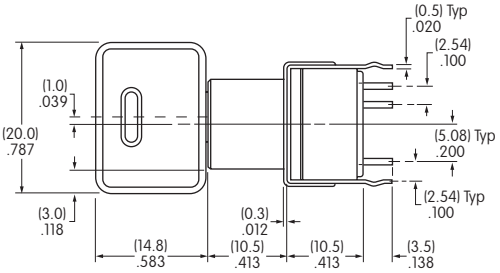
Polyvinyl Chloride

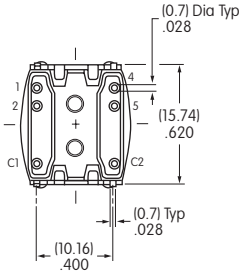
TYPICAL SWITCH DIMENSIONS

Single & Double Pole

Straight PC with Bracket • Double Throw





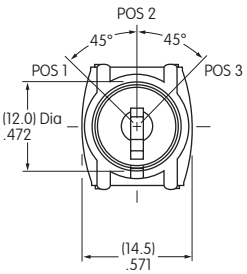


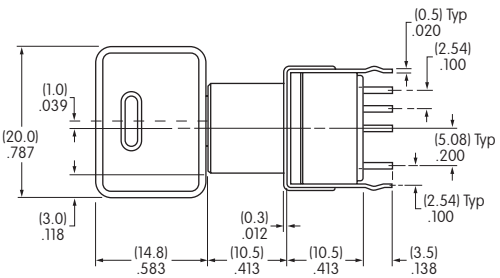
Single Pole models have only terminals 1, 2 & C1

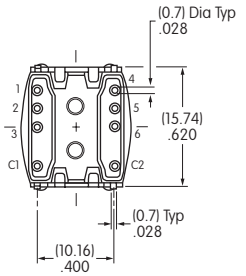
SK12AG13

Single & Double Pole

Straight PC with Bracket • Three Throw







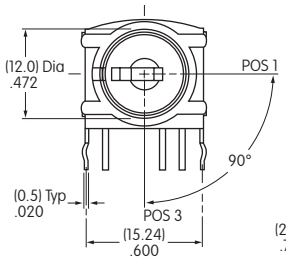
Single Pole models have only terminals 1, 2, 3 & C1

SK24DG13

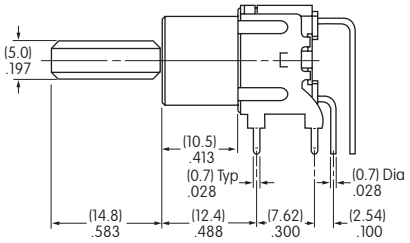
TYPICAL SWITCH DIMENSIONS

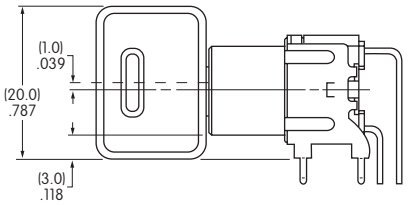
Right Angle PC Terminals Double Throw

SK15BG30



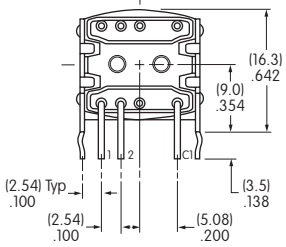
Key in Position 1



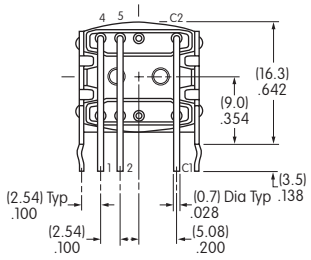


Key in Position 3

Single Pole

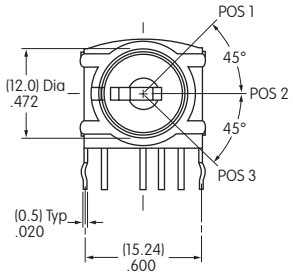


Double Pole

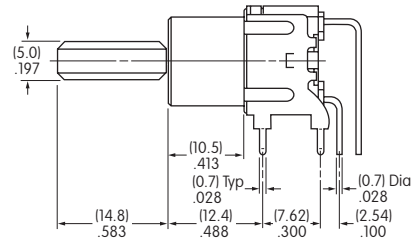


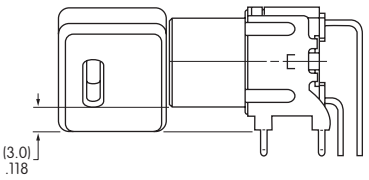
Right Angle PC Terminals Three Throw

SK24EG30



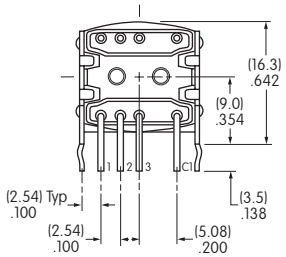
Key in Position 2



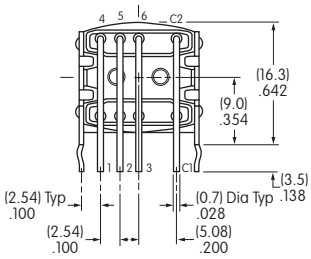


Key in Position 1

Single Pole

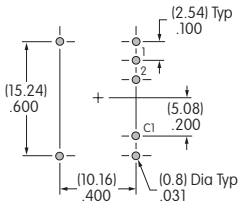


Double Pole

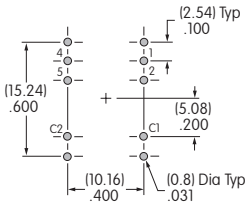


Straight PC Footprints

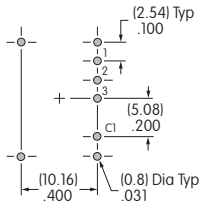
SPDT



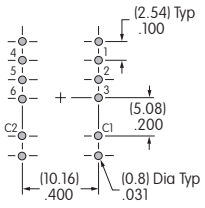
DPDT



SP3T

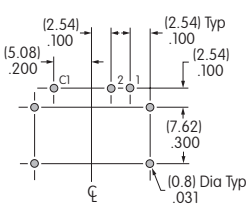


DP3T

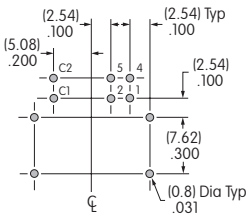


Right Angle PC Footprints

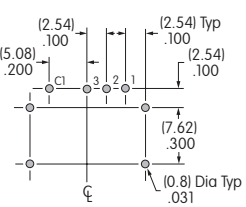
SPDT



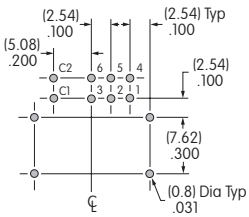
DPDT



SP3T



DP3T



General Specifications

Part Number: SK14DGMG01

Electrical Capacity (Resistive Load)

Logic Level: 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Other Ratings

Contact Resistance: 100 milliohms maximum
Insulation Resistance: 100 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum between contacts for 1 minute minimum
Mechanical Life: 30,000 operations minimum
Electrical Life: 10,000 operations minimum
Static Capability: Withstands 15 kilovolts ESD
Nominal Operating Force: 0.02Nm (0.18 lb•in)
Contact Timing: Break-before-make
Angle of Throw: 45°

Materials & Finishes

Key: Brass alloy with bright nickel plating and ABS resin handle
Housing: Polyamide
Base: Glass fiber reinforced polyamide
Rotor: Glass fiber reinforced polyamide
Tumbler Plate: Brass
Movable Contacts: Beryllium copper with gold plating
Stationary Contacts: Brass with gold plating
Switch Terminals: Brass with gold plating

Environmental Data

Operating Temperature Range: –40°C through +85°C (–40°F through +185°F)
Humidity: 90 ~ 95% humidity for 240 hours @ 60°C (140°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

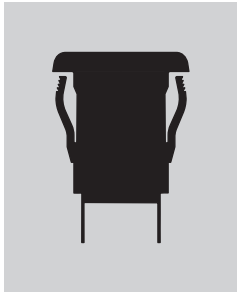
Soldering: Manual Soldering: lead-free, see profile below. Do not exceed these specifications.
Cleaning: Hand clean locally using alcohol based solution.

Solder Iron Tip Temperature	370°C
Time on Terminal	4 seconds
Cycles	2

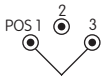
Standards & Certifications

These devices have not been tested for UL recognition or CSA certification.
These devices are designed for use in a low-voltage, low-current, logic-level circuit.
When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Actual Size



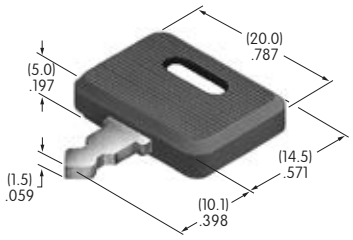
POLES, CIRCUITS & KEY-REMOVABLE POSITIONS

Pole & Throw	Key Positions Pos 1	Pos 2	Pos 3	Connected Terminals (Terminal numbers are on switch) Pos 1	Pos 2	Pos 3	Schematic	⊙ = Key Removable ◡ = Maximum Arc
SP3T	ON	ON	ON	C-1	C-2	C-3		

KEY

AT4080 Standard
Antistatic Plastic Handle

Material:
Brass Alloy with Bright Nickel Plating
& ABS Resin Handle

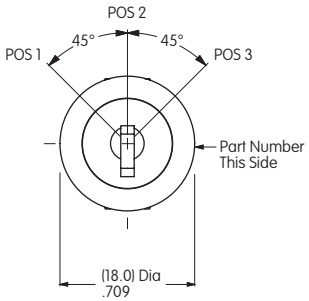


2 keys supplied with each switch

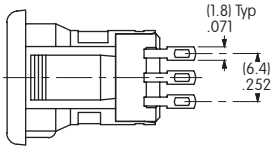
TYPICAL SWITCH DIMENSIONS

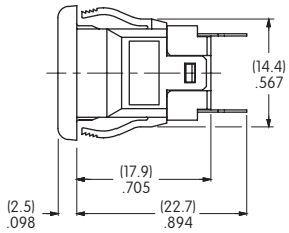
Antistatic Snap-in • Flat Key

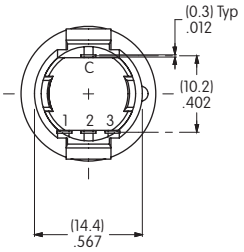
SK14DGMG01



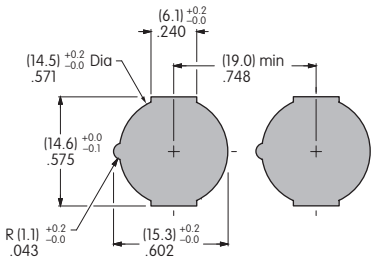
Single Pole Three Throw







PANEL CUTOUT



Panel Thickness Range
.039" ~ .079"
(1.0mm ~ 2.0mm)