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

Break-before-make **Contact Timing:**

Angle of Throw: 90° for 2-position & 45° for 3-position

Materials & Finishes

Zinc alloy with chrome plating (matte) for low security models; Key:

> brass with nickel plating (shiny) for medium security models 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

Tumbler Barrel:

Stationary Contacts: Silver capped copper with silver plating Terminals: Copper or brass with silver plating

Environmental Data

-25°C through +70°C (-13°F through +158°F) **Operating Temperature Range:**

> **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/s²) 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

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

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.

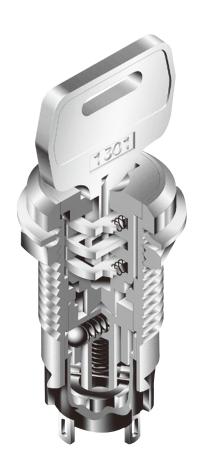
Epoxy sealed terminals prevent entry of flux and other contaminants.

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.

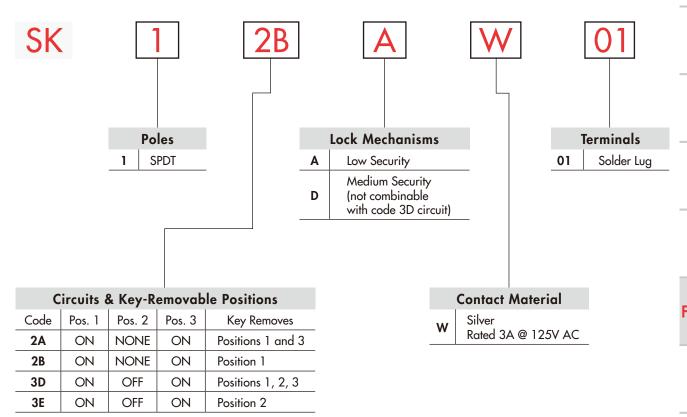


Actual Size





TYPICAL SWITCH ORDERING EXAMPLE



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 &		Key Positions			Connected Terminals (Terminal numbers are on switch)				 = Key Removable = Not Removable
Throw	Model	Pos 1	Pos 2	Pos 3	Pos 1	Pos 2	Pos 3	Schematic	✓ = Maximum Arc
SPDT	SK12A	ON	NONE	ON	COM-1		COM-2	сом	POS 1 • 3
SPDT	SK12B	ON	NONE	ON	COM-1		COM-2	1 2	POS 1 • 3
SPDT	*SK13D	ON	OFF	ON	COM-1	OPEN	COM-2	сом	POS 1
SPDT	SK13E	ON	OFF	ON	COM-1	OPEN	COM-2	0 0 0 1 Z 2	POS 1 $\overset{2}{\odot}$ 3

^{*} Available with low security only

KEY REMOVABLE

A

Positions 1 & 3 90° Angular Throw



Position 1 90° Angular Throw



Positions 1, 2 & 3 45° Angular Throw



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.





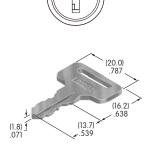








Typical Key Ordering Example: AT4124-001



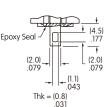


CONTACT MATERIALS, RATINGS, & TERMINALS

Silver over Silver

Power Level

3A @ 125V AC

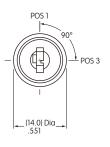


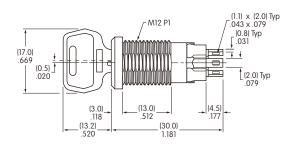
01

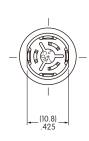
Solder Lug Terminals

TYPICAL SWITCH DIMENSIONS

Low Security • 90° Angular Throw



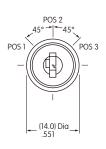


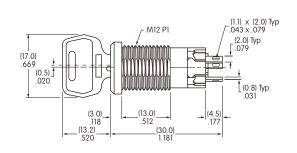




SK12BAW01

Low Security • 45° Angular Throw







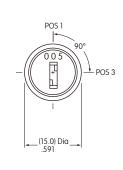


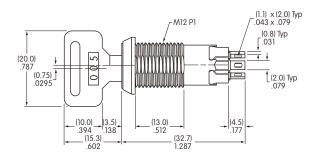
SK13EAW01

TYPICAL SWITCH DIMENSIONS

Medium Security • 90° Angular Throw





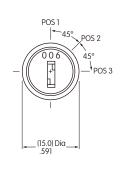


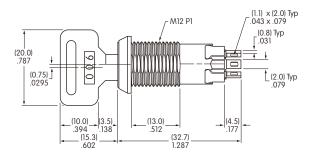


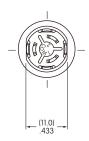
SK12ADW01

Medium Security • 45° Angular Throw



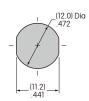






SK13EDW01

PANEL CUTOUT & THICKNESS

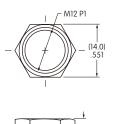


The 12mm bushing is .512" (13.0mm) long. It allows mounting these devices in a maximum effective panel thickness of .315" (8.0mm).

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

