

# 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:** 50 milliohms maximum  
**Insulation Resistance:** 500 megohms minimum @ 500V DC  
**Dielectric Strength:** 500V AC minimum for 1 minute minimum  
**Mechanical Life:** 50,000 operations minimum  
**Electrical Life:** 50,000 operations minimum  
**Nominal Operating Force:** 2.55N  
**Contact Timing:** Nonshorting (break-before-make)  
**Travel:** Pretravel: .082" (2.1mm); Overtravel: .016" (0.4mm); Total Travel: .098" (2.5mm)

## Materials & Finishes

**Actuator:** Glass fiber reinforced polyamide  
**Upper Case Housing:** Carbon blended polyacetal (antistatic)  
**Lower Case Housing:** Glass fiber reinforced polyamide  
**Support Bracket:** Tin plated phosphor bronze  
**Movable Contact:** Phosphor bronze with gold plating  
**Stationary Contacts:** Brass with gold plating  
**Terminals:** Brass with gold plating

## Environmental Data

**Operating Temperature Range:** -30°C through +85°C (-22°F through +185°F)  
**Humidity:** 90 ~ 95% humidity for 192 hours @ 40°C (104°F)  
**Vibration:** 10 ~ 60Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 5 minutes; 3 right angled directions for 30 minutes  
**Shock:** 50G (490m/s<sup>2</sup>) 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: for single pole see Profile B in Supplement section; for double pole see Profile A.  
**Cleaning:** These devices are not process sealed. Hand clean locally using alcohol based solution.

## Standards & Certifications

The A Series slides 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

Subminiature size (1/3 size of Series M switches) saves space on PC boards.

Specifically developed for logic-level applications.

Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

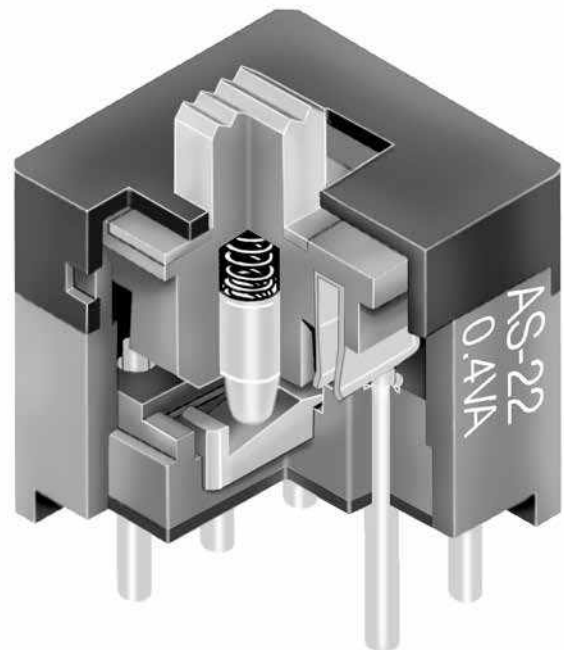
Available in various actuator lengths.

Antistatic superstructure of carbon blended polyacetal prevents static discharge to the contacts.

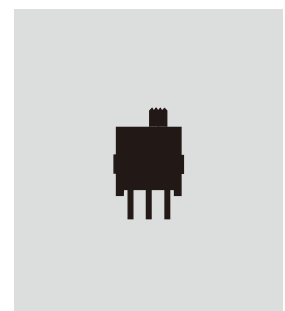
Molded-in, epoxy sealed or ultrasonically welded terminals lock out flux, solvents, and other contaminants.

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

Matching indicators available.



Actual Size



## TYPICAL SWITCH ORDERING EXAMPLE

**AS**      **2**      **2**      **A**      **H**

Poles		Circuits				Actuators		PC Terminals		
1	SPST SPDT	1	ON	NONE	OFF	A	.098" (2.5mm) Long		P	Straight
2	DPDT SP3T	2	ON	NONE	ON	B	Flush		*B	Straight with Bracket
		3	ON	OFF	ON	C	.150" (3.8mm) Long		*H	Right Angle with Bracket
		4	ON	ON	ON				*V	Vertical with Bracket

\* Bracketed models are ESD protected

### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

**AS22AH**



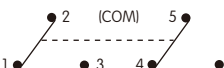
DPDT  
ON-NONE-ON Circuit

.098" (2.5mm) Long  
Actuator



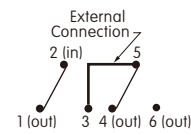
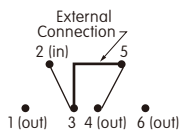
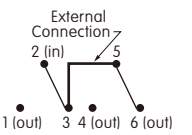
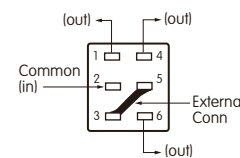
Right Angle PC Terminals

## POLES & CIRCUITS

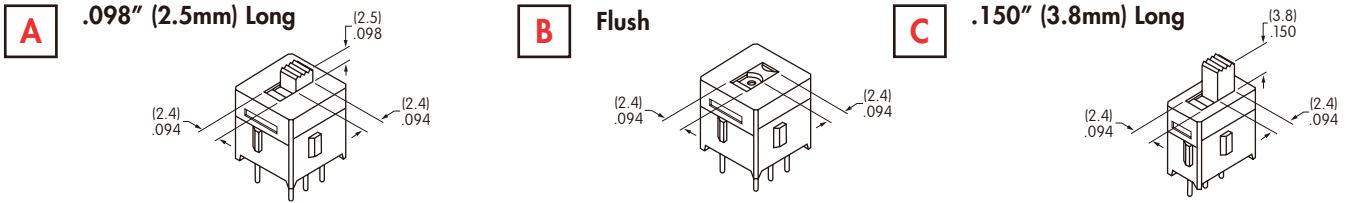
		Slide Position			Connected Terminals			Throw & Schematics
Pole	Model	Left	Center	Right	Left	Center	Right	
SP	<b>AS11</b>	ON	NONE	OFF	3-1	OPEN	OPEN	SPST 
SP	<b>AS12</b> <b>AS13</b>	ON ON	NONE OFF	ON ON	2-1 2-1	OPEN OPEN	2-3 2-3	SPDT 
DP	<b>AS22</b> <b>AS23</b>	ON ON	NONE OFF	ON ON	2-1 5-4 2-1 5-4	OPEN OPEN	2-3 5-6 2-3 5-6	DPDT 

Note: Terminal numbers are not actually on the switch.

### For 3 Throw (3-On)

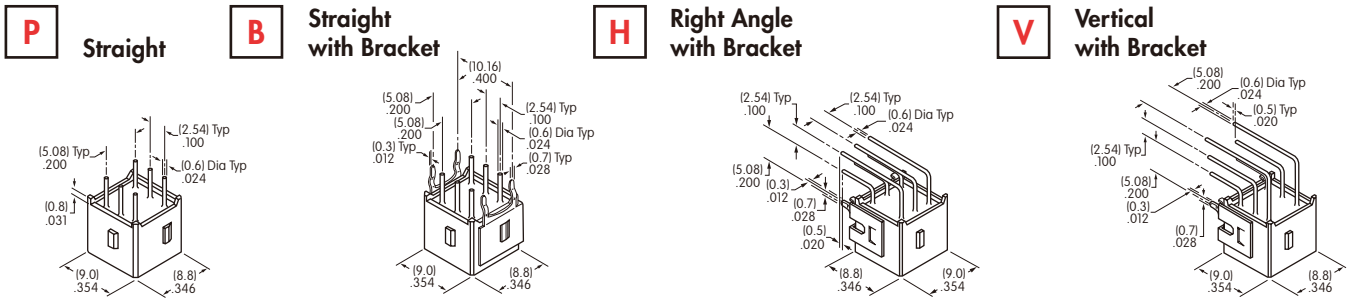
Connected Terminals & Schematics					External Connection
Pole	Model	Left	Center	Right	
SP	<b>AS24</b>	ON 	ON 	ON 	The SP3T model utilizes a double pole base.  External connections must be made during field installation. 
		2-1 5-4	2-3 5-4	2-3 5-6	

ACTUATORS



Actuator Color: Gray standard; contact factory for other colors.

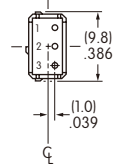
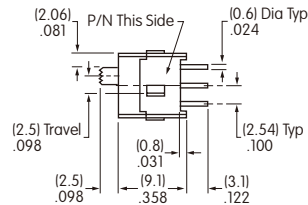
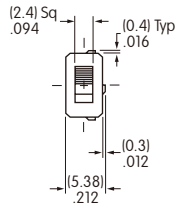
PC TERMINALS



Use of a support bracket is recommended to increase PCB mounting strength and stability.

TYPICAL SWITCH DIMENSIONS

Single Pole



Actuator shown in LEFT position

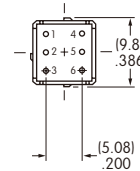
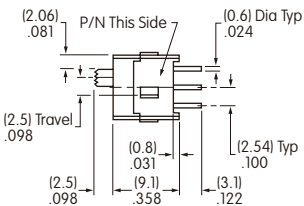
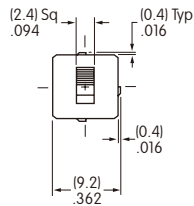
Single throw models do not have terminal 2.

Straight PC

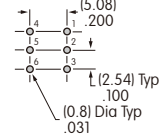


AS12AP

Double Pole



Actuator shown in LEFT position

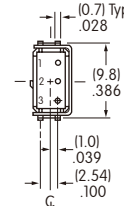
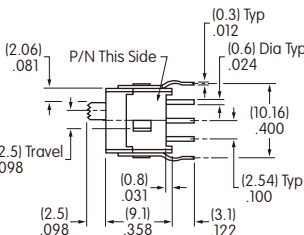
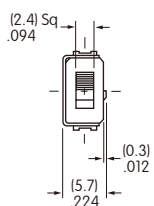


Straight PC

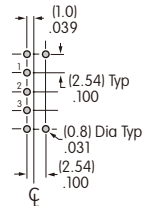


AS22AP

Single Pole



Actuator shown in LEFT position



Straight PC • Bracket



AS12AB

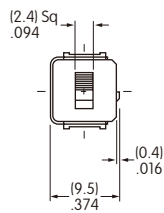
Toggles  
 Rockers  
 Pushbuttons  
 Illuminated PB  
 Programmable  
 Keylocks  
 Rotaries  
 Slides  
 Tactiles  
 Tilt  
 Touch  
 Indicators  
 Accessories  
 Supplement

## TYPICAL SWITCH DIMENSIONS

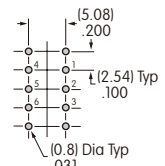
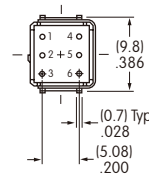
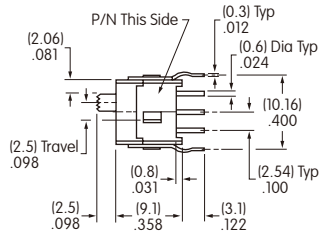
### Straight PC • Bracket



**AS22AB**



### Double Pole

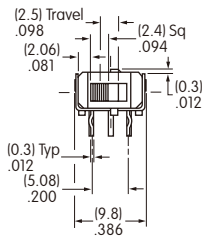


Actuator shown in LEFT position

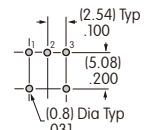
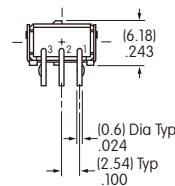
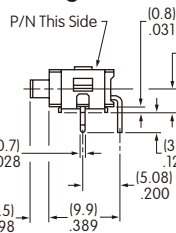
### Right Angle PC



**AS12AH**



### Single Pole

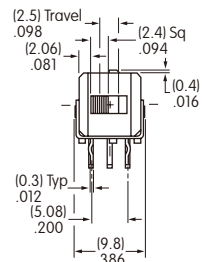


Actuator shown in LEFT position

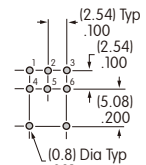
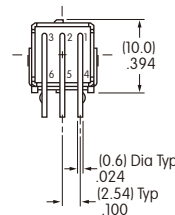
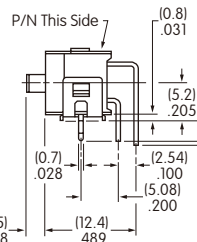
### Right Angle PC



**AS22AH**



### Double Pole

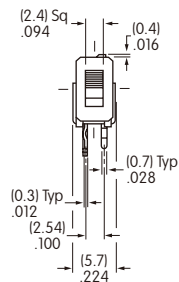


Actuator shown in LEFT position

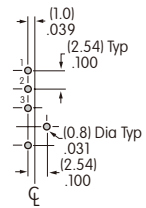
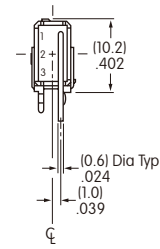
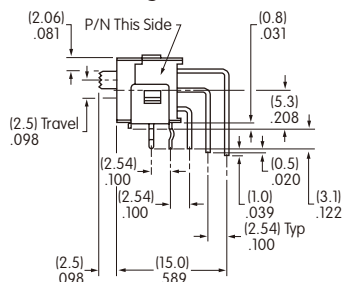
### Vertical PC



**AS12AV**



### Single Pole

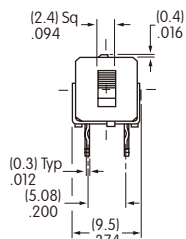


Actuator shown in LEFT position

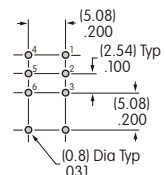
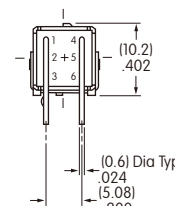
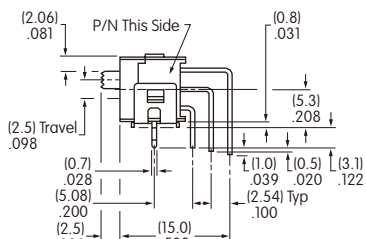
### Vertical PC



**AS22AV**



### Double Pole



Actuator shown in LEFT position