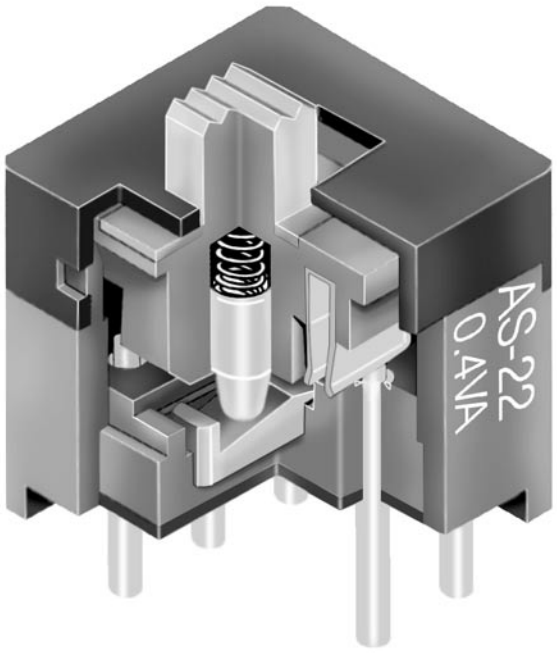
Distinctive Characteristics

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.

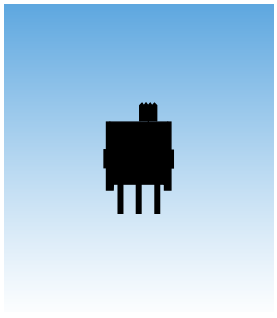
Antistatic superstructure of carbon blended polyacetal prevents static discharge to the contacts.

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 and shown at the end of Section M.

Actual Size



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^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: 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

UL Recognition or CSA Certification: 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.

TYPICAL SWITCH ORDERING EXAMPLE

AS 2 2 A H

POLES	
1	SPST SPDT
2	DPDT SP3T

CIRCUITS			
1	ON	NONE	OFF
2	ON	NONE	ON
3	ON	OFF	ON
4	ON	ON	ON

ACTUATORS	
A	.098" (2.5mm) Long
B	Flush
C	.150" (3.8mm) Long

PC TERMINALS	
P	Straight
*B	Straight with Bracket
*H	Right Angle with Bracket
*V	Vertical with Bracket

*Bracketed models are ESD protected

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

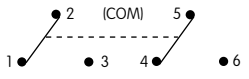
AS22AH

DPDT
ON-NONE-ON Circuit

.098" (2.5mm) Long
Actuator

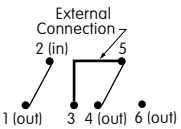
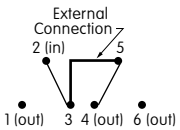
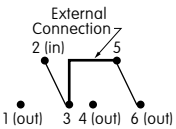
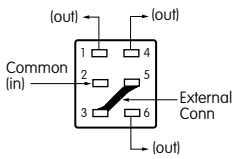
Right Angle PC Terminals

POLES & CIRCUITS

Pole	Model	Slide Position: Left	Center	Right	Connected Terminals: Left	Center	Right	Throw & Schematics
SP	AS11	ON	NONE	OFF	3-1	OPEN	OPEN	SPST 
SP	AS12 AS13	ON ON	NONE OFF	ON ON	2-1 2-1	OPEN OPEN	2-3 2-3	SPDT 
DP	AS22 AS23	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 

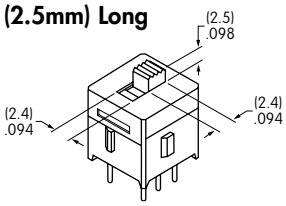
Note: Terminal numbers are not actually on the switch.

For 3 Throw (3-On)

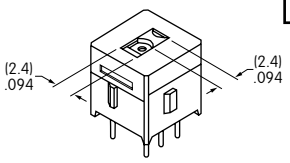
Pole	Model	Connected Terminals & Schematics: Left	Center	Right	External Connection
SP	AS24	ON  2-1 5-4	ON  2-3 5-4	ON  2-3 5-6	The SP3T model utilizes a double pole base. External connections must be made during field installation. 

ACTUATORS

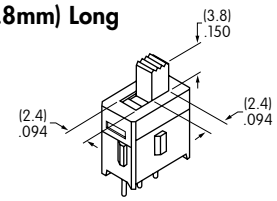
A .098" (2.5mm) Long



B Flush



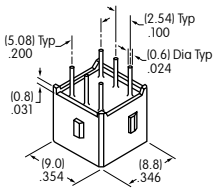
C .150" (3.8mm) Long



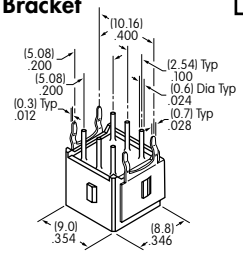
Actuator Color: Gray standard; contact factory for other colors.

PC TERMINALS

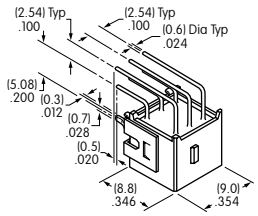
P Straight



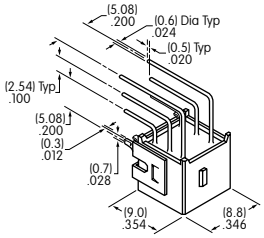
B Straight with Bracket



H Right Angle with Bracket



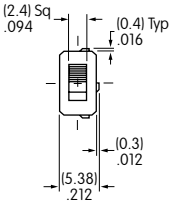
V Vertical with Bracket

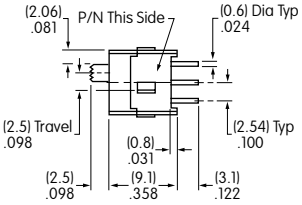


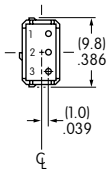
Use of a support bracket is recommended to increase PCB mounting strength and stability.

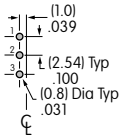
TYPICAL SWITCH DIMENSIONS

Straight PC • Single Pole







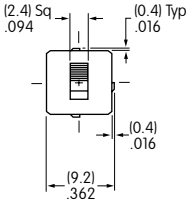


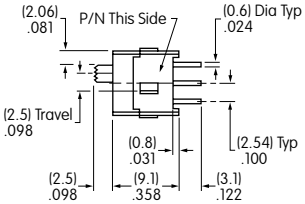
AS12AP

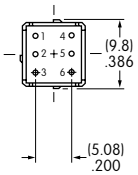
Actuator shown in LEFT position

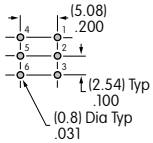
Single throw models do not have terminal 2.

Straight PC • Double Pole





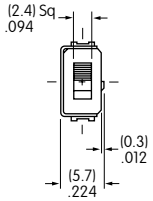


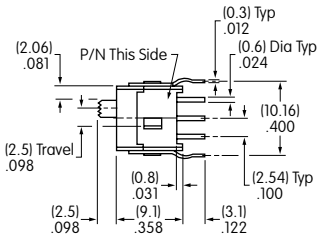


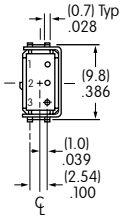
AS22AP

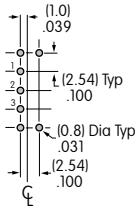
Actuator shown in LEFT position

Straight PC • Bracket • Single Pole







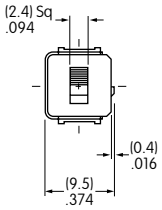


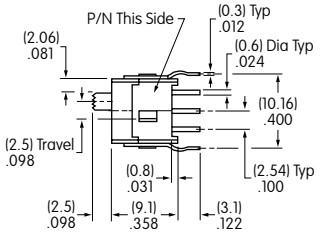
AS12AB

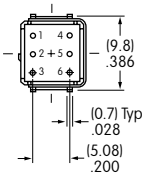
Actuator shown in LEFT position

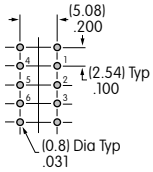
TYPICAL SWITCH DIMENSIONS

Straight PC • Bracket — Double Pole





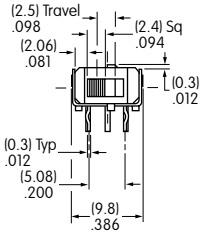


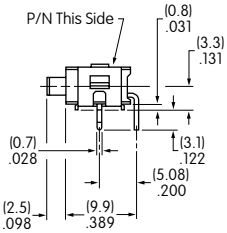


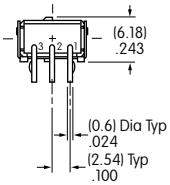
AS22AB

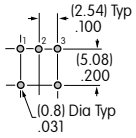
Actuator shown in LEFT position

Right Angle PC — Single Pole





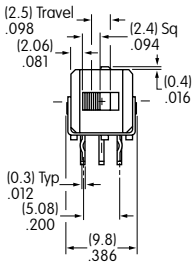


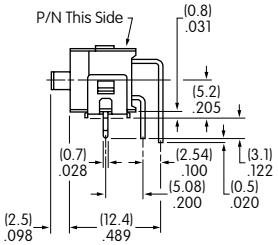


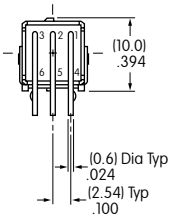
AS12AH

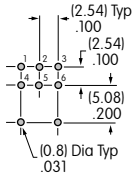
Actuator shown in LEFT position

Right Angle PC — Double Pole





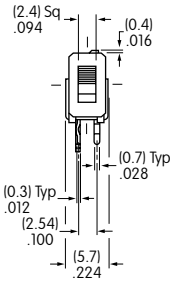


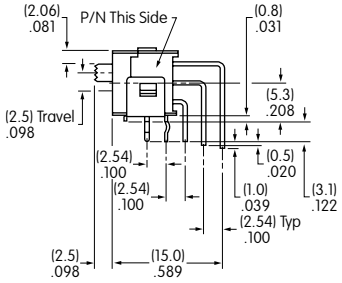


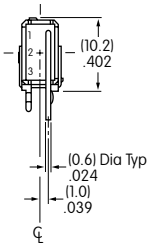
AS22AH

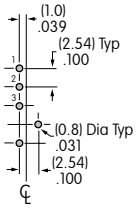
Actuator shown in LEFT position

Vertical PC — Single Pole





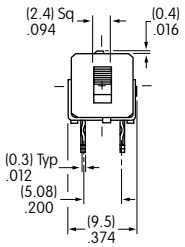


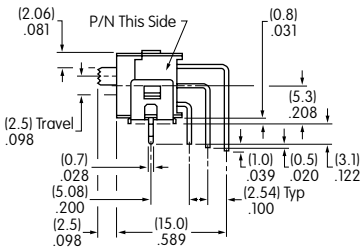


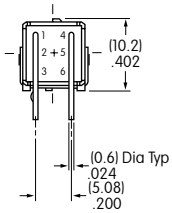
AS12AV

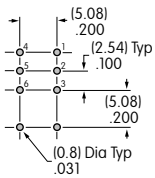
Actuator shown in LEFT position

Vertical PC — Double Pole









AS22AV

Actuator shown in LEFT position