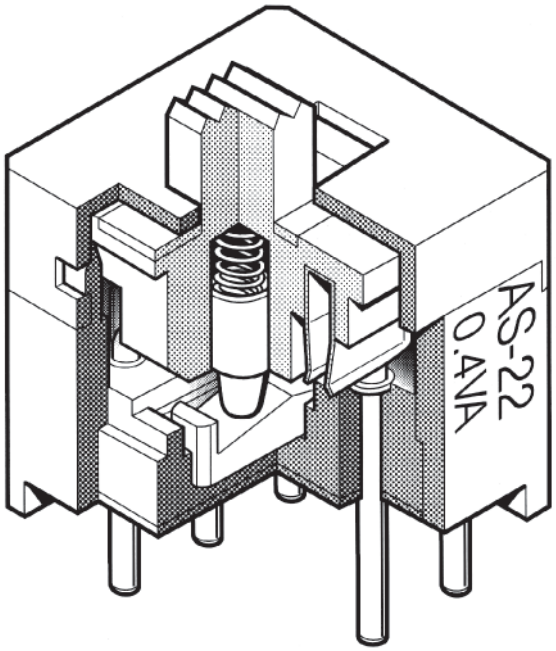
Distinctive Characteristics

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 page Z2.)



Available in various actuator lengths.

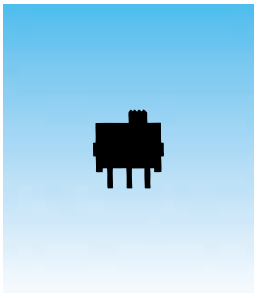
Antistatic superstructure of carbon impregnated polyamide prevents static discharge to the contacts.

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

.100" x .100" terminal spacing conforms to standard PC board grid spacing.

Matching indicators available and shown in the Indicator section.

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: See Supplement Index (page Z2) to find explanation of operating range.

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:	260 grams
Contact Timing:	Nonshorting (break-before-make)
Travel:	2.1mm (.082") pretravel; 0.4mm (.016") overtravel; 2.5mm (.098") total travel

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 Temp 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)

Installation

Soldering Time & Temperature:	3 seconds @ 350°C or 5 seconds @ 270°C
Process Seal:	Not available

Standards & Certifications

UL Recognition or CSA Certification:	The AS 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" Long
B	Flush
C	.150" Long

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

* Bracketed models are ESD protected.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

AS22AH

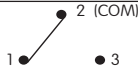
POLES & CIRCUITS

Pole	Model	Slide Position ( ) = Momentary: Left	Center	Right	Connected Terminals: Left	Center	Right
SP	AS11	ON	NONE	OFF	3-1	OPEN	OPEN
SP	AS12	ON	NONE	ON	2-1	OPEN	2-3
	AS13	ON	OFF	ON	2-1	OPEN	2-3
DP	AS22	ON	NONE	ON	2-1 5-4	OPEN	2-3 5-6
	AS23	ON	OFF	ON	2-1 5-4	OPEN	2-3 5-6

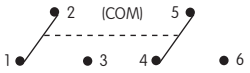
Note: Terminal numbers are not actually on the switch.

SPST

SPDT



DPDT



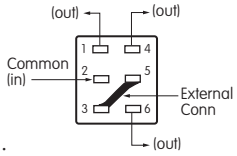
For 3 Throw (3-On)

Pole	Model	Connected Terminals & Schematics: Left	Center	Right
SP	AS24	ON 2-1 5-4	ON 2-3 5-4	ON 2-3 5-6

External Connection

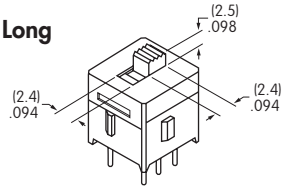
The SP3T model utilizes a double pole base.

External connections must be made during field installation.

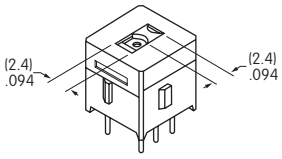


ACTUATORS

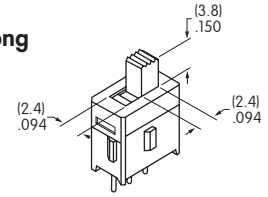
A .098" Long



B Flush



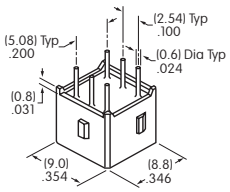
C .150" Long



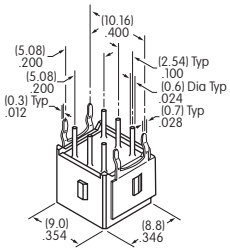
Actuator Color: Gray standard Contact factory for other colors.

PC TERMINALS

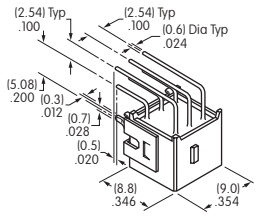
P Straight



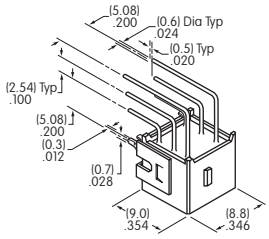
B Straight with Bracket



H Right Angle with Bracket



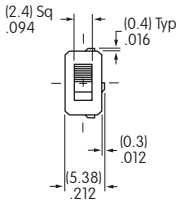
V Vertical with Bracket

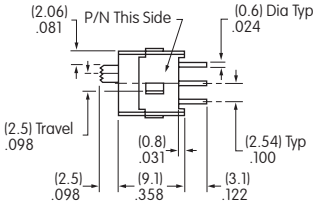


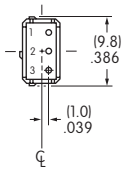
Use of a support bracket is recommended to increase PCB mounting stability.

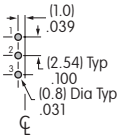
TYPICAL SWITCH DIMENSIONS

Straight PC • Single Pole







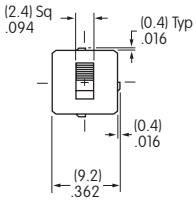


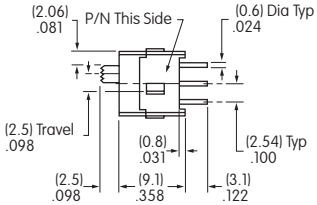
AS12AP

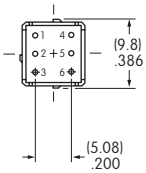
Actuator shown in LEFT position.

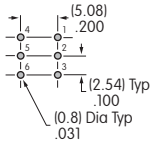
Single throw models do not have terminal 2.

Straight PC • Double Pole





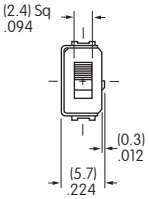


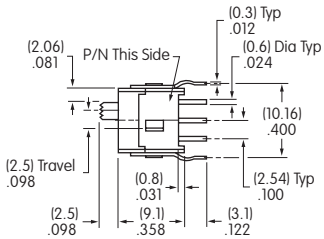


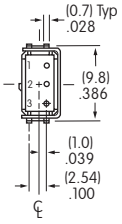
AS22AP

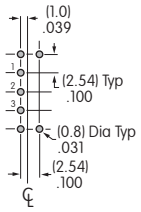
Actuator shown in LEFT position.

Straight PC • Bracket • Single Pole







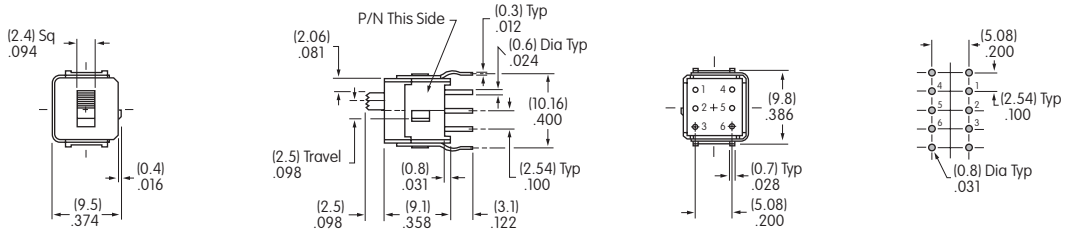


AS12AB

Actuator shown in LEFT position.

TYPICAL SWITCH DIMENSIONS

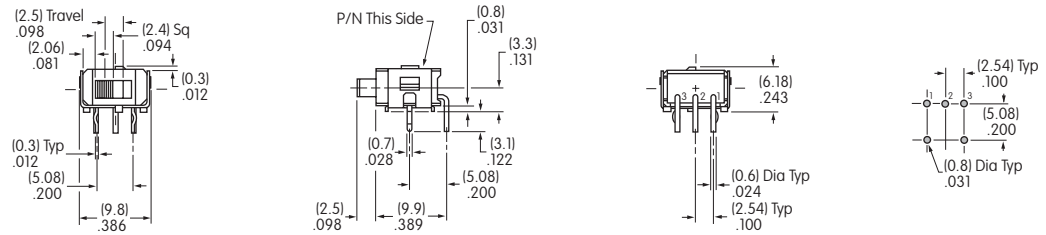
Straight PC • Bracket — Double Pole



AS22AB

Actuator shown in LEFT position.

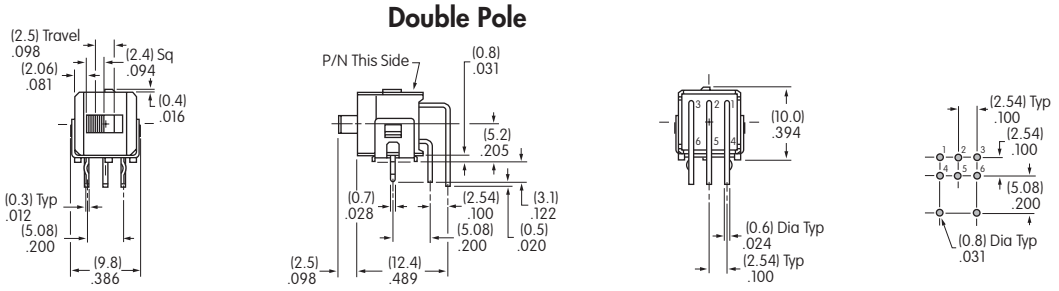
Right Angle PC — Single Pole



AS12AH

Actuator shown in LEFT position.

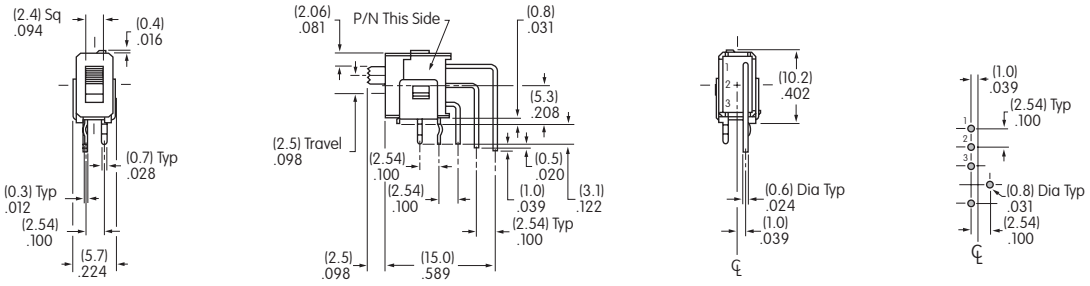
Right Angle PC — Double Pole



AS22AH

Actuator shown in LEFT position.

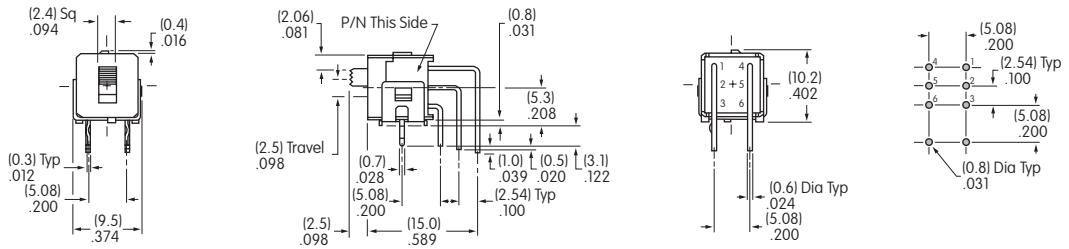
Vertical PC — Single Pole



AS12AV

Actuator shown in LEFT position.

Vertical PC — Double Pole



AS22AV

Actuator shown in LEFT position.