

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/s²) 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.

Toggle

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

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 | 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)

| | | Connected Terminals & Schematics | | | External Connection |
|------|-------|--|--|---|---|
| Pole | Model | Left | Center | Right | |
| 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



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

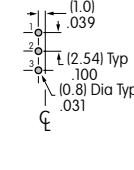
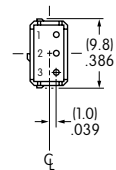
PC TERMINALS



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

TYPICAL SWITCH DIMENSIONS

Single Pole



Actuator shown in LEFT position

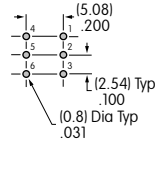
Single throw models do not have terminal 2.

Straight PC



AS12AP

Double Pole



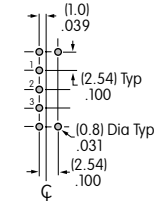
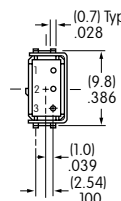
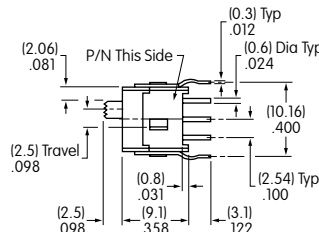
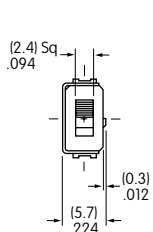
Actuator shown in LEFT position

Straight PC



AS22AP

Single Pole



Actuator shown in LEFT position

Straight PC • Bracket



AS12AB

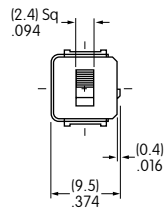
Toggles
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Rotaries
Slides
Tactiles
Tilt
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Indicators
Accessories
Supplement

TYPICAL SWITCH DIMENSIONS

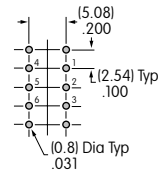
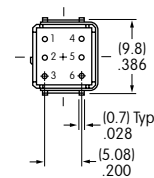
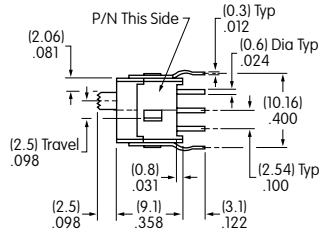
Straight PC • Bracket



AS22AB



Double Pole

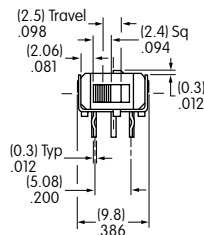


Actuator shown in LEFT position

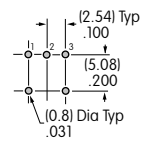
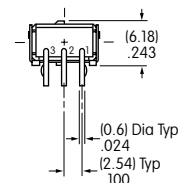
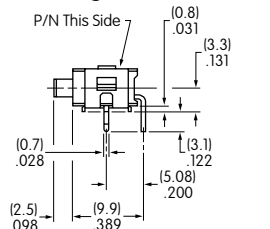
Right Angle PC



AS12AH



Single Pole

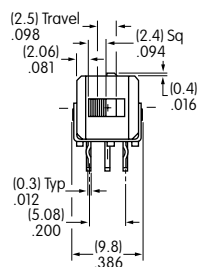


Actuator shown in LEFT position

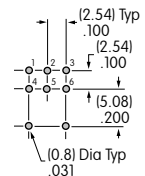
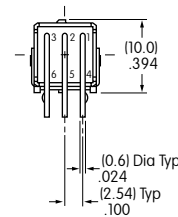
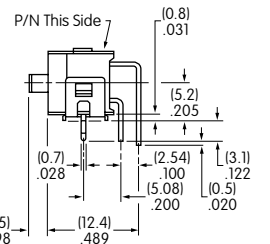
Right Angle PC



AS22AH



Double Pole

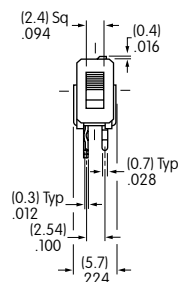


Actuator shown in LEFT position

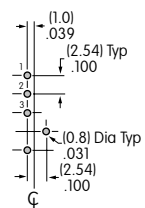
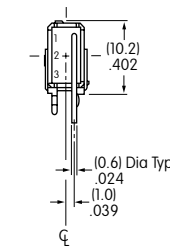
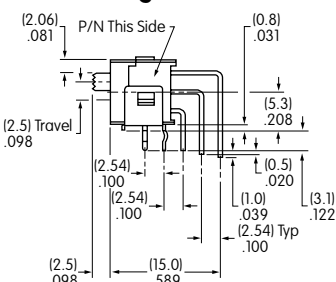
Vertical PC



AS12AV



Single Pole

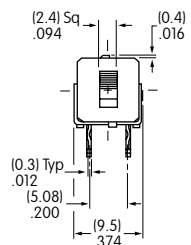


Actuator shown in LEFT position

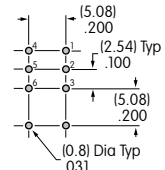
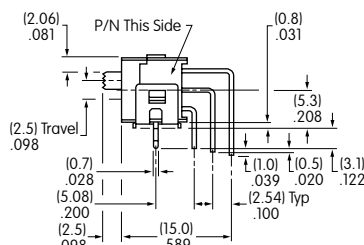
Vertical PC



AS22AV



Double Pole



Actuator shown in LEFT position

Toggles
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Keylocks
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