

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement



A Series B4
 Process Sealed
 0.4VA Logic Level
 Straight, Right Angle, & Vertical PC



CW Series B12
 6A Power Level
 Solder Lug, Quick Connect, & Right Angle PC
 Snap-in Mount



CWSB Series Illuminated B18
 Neon; 9A Power Level
 Quick Connect; Snap-in Mount



CWSC Series Illuminated B22
 LED; 9A Power Level
 Solder Lug/Quick Connect; Snap-in Mount



G Series B28
 Process Sealed
 0.4VA Logic Level
 Straight PC



GW Series B32
 Ultra-Thin
 0.4VA Logic Level
 Straight, Right Angle, & Vertical PC



GW Series Illuminated B36
 Fully Illuminated Paddle
 0.4VA Logic Level
 Straight, Right Angle, & Vertical PC



JW Series B40
 Internationally Approved
 10A & 16A Power Level
 Solder Lug; Snap-in-Mount



JWS Series Illuminated & Nonilluminated ... B50
 Internationally Approved
 6A & 10A Power Level
 Solder Lug; Snap-in-Mount



LW Series Illuminated B56
 10A Power Level
 Incandescent Dual Lamps
 Solder Lug; Snap-in Mount



M Series B62

Snap-in Mount
6A Power Level & 0.4VA Logic Level
Solder Lug, Quick Connect, Straight PC, & Wirewrap



M Series B72

Bracketed PC Mount
6A Power Level & 0.4VA Logic Level
Straight, Right Angle, & Vertical PC with Bracket



M Series B83

Flat Frame Mount
6A Power Level & 0.4VA Logic Level
Solder Lug & Straight PC



M2100 Series Illuminated B92

6A Power Level & 0.4VA Logic Level
Solder Lug, Quick Connect, & PC
Flat Frame & Snap-in Mount



M2T Series B98

Process Sealed
6A Power Level & 0.4VA Logic Level
Straight, Right Angle, & Vertical PC



MLW Series Illuminated B106

5A Power Level
Incandescent, Neon, & LED Lamps
Solder Lug; Snap-in Mount



P Series B114

Internationally Approved
10A Power Level
Solder Lug, Straight PC, & Quick Connect; Flat Frame Mount



SW Series B120

15A to 30A Medium & High Capacity
Solder Lug & Screw Lug
Screw Mount



WR Series B124

Environmentally Sealed
15A Power Level
Solder Lug, Screw Lug, Wire Lead, & Quick Connect
Snap-in Mount

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

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: 100,000 operations minimum for On-None-On & On-Off-On
 50,000 operations minimum for other circuits
Electrical Life: 50,000 operations minimum
Nominal Operating Force: 2.73N (momentary); 1.84N (maintained)
Contact Timing: Nonshorting (break-before-make)
Angle of Throw: 26°

Materials & Finishes

Actuator or Toggle: Nickel plated brass
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 240 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

Cap Installation Force: 39.23N (8.82 lbf) maximum downward force on actuator

PCB Processing

Soldering: Wave Soldering Recommended: See Profile A in Supplement section.
 Manual Soldering: See Profile B in Supplement section.
Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

The A Series rockers 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 saves space on PC boards.

Specifically developed for logic-level applications.

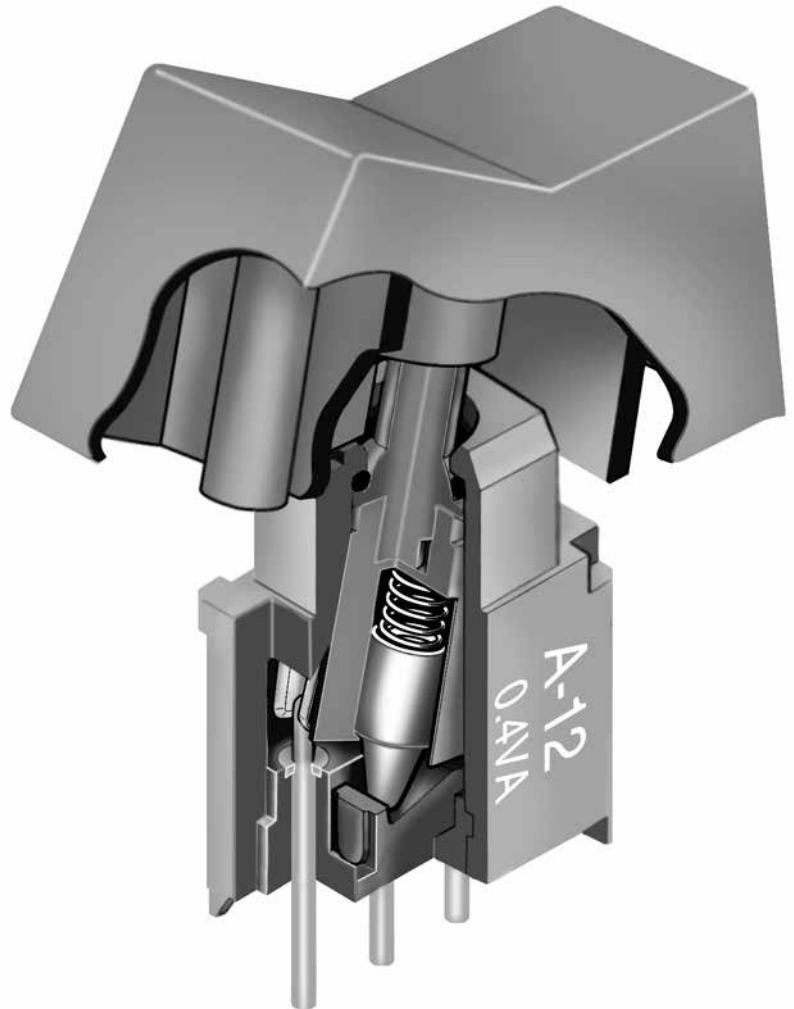
Totally sealed body construction prevents contact contamination and allows time- and money-saving automated soldering and cleaning.

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.)

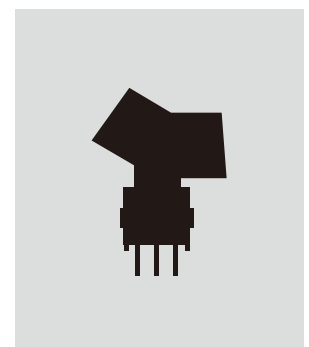
Molded-in, epoxy sealed or ultrasonically welded terminals lock out flux, solvents, and other contaminants.

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

Matching indicators available.



Actual Size



Toggle

B Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

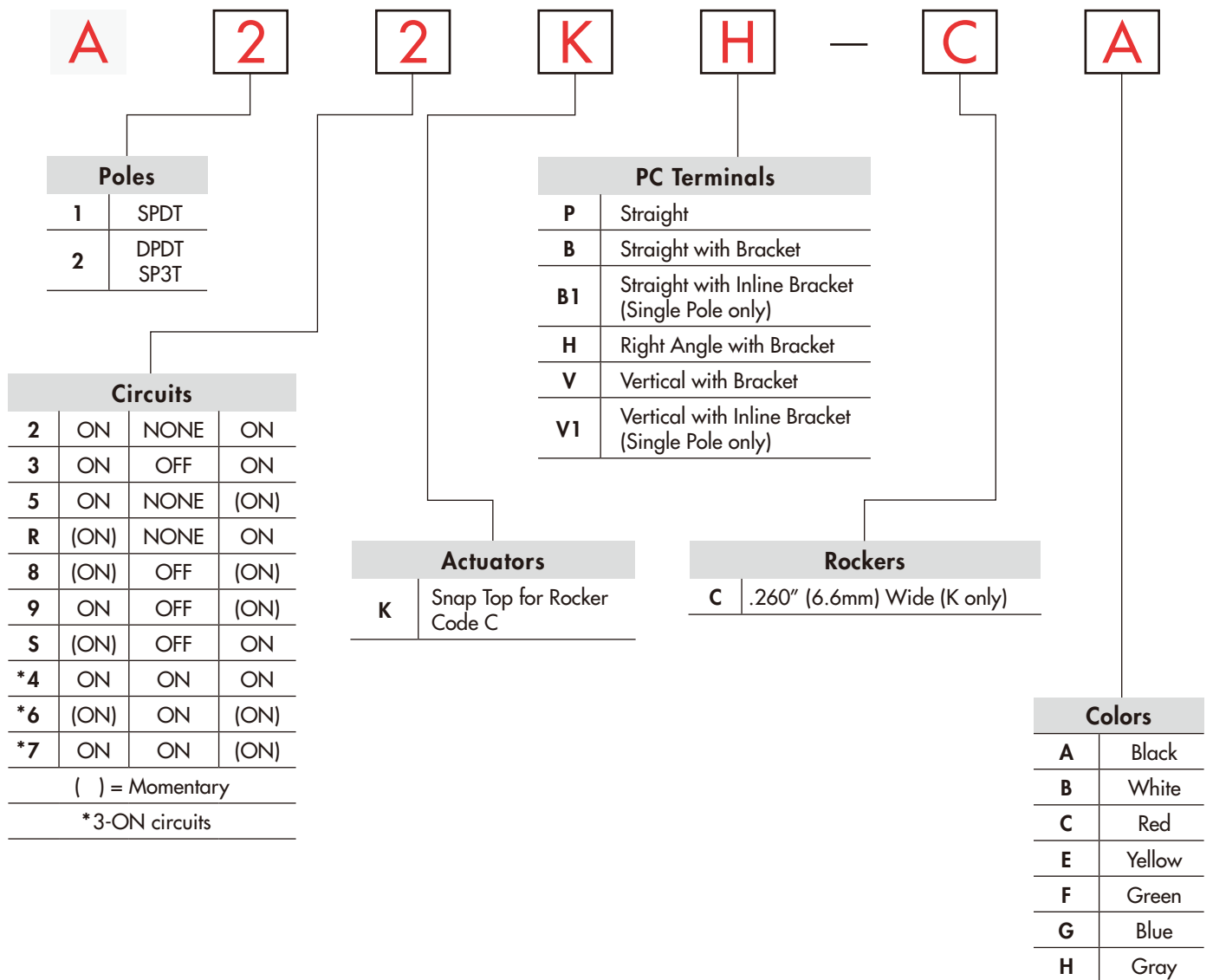
Touch

Indicators

Accessories

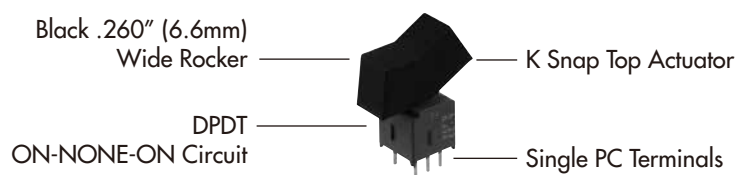
Supplement

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

A22KP-CA



POLES & CIRCUITS								
Pole	Model	Rocker Position () = Momentary			Connected Terminals			Throw & Schematics
		Up	Center	Down	Up	Center	Down	
								Note: Terminal numbers are not actually on the switch.
SP	A12 A13 A15 A1R A18 A19 A1S	ON ON ON (ON) (ON) ON (ON)	NONE OFF NONE NONE OFF OFF OFF	ON ON (ON) ON (ON) (ON) ON	2-3	OPEN	2-1	SPDT
DP	A22 A23 A25 A2R A28 A29 A2S	ON ON ON (ON) (ON) ON (ON)	NONE OFF NONE NONE OFF OFF OFF	ON ON (ON) ON (ON) (ON) ON	2-3 5-6	OPEN	2-1 5-4	DPDT

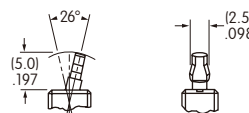
For 3 Throw (3-On)

Connected Terminals & Schematics					External Connection
Pole	Model	Up	Center	Down	
SP	A24 A26 A27	ON (ON) ON 2-3 5-6	ON ON ON 2-3 5-4	ON (ON) (ON) 2-1 5-4	The SP3T model utilizes a double pole base. External connections must be made during field installation.

ACTUATORS

K Snap Top

For Rocker AT469

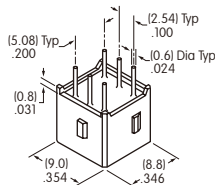


Toggle
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

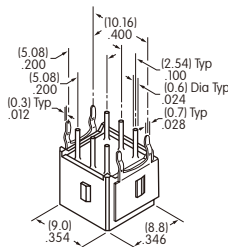
PC TERMINALS

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

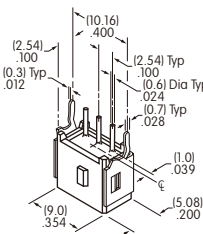
P Straight



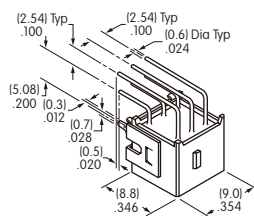
B Straight with Bracket



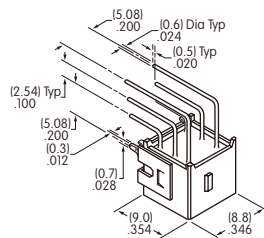
B1 Straight with Inline Bracket Single Pole only



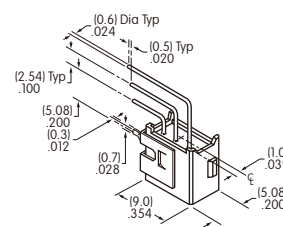
H Right Angle with Bracket



V Vertical with Bracket



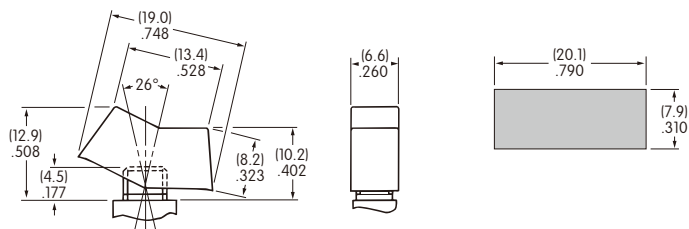
V1 Vertical with Inline Bracket Single Pole only



ROCKERS & COLORS

C AT469
.260" (6.6mm) Wide Rocker

Antirotational
Material: Polyamide
Colors Available:
A, B, C, E, F, G, H



Color Codes:

A Black

B White

C Red

E Yellow

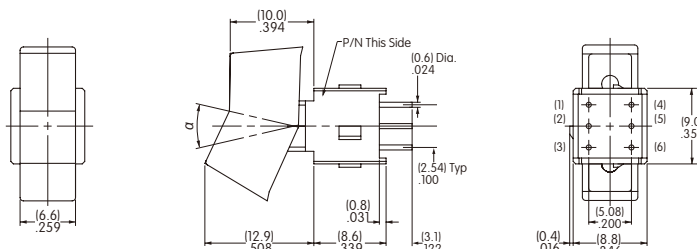
F Green

G Blue

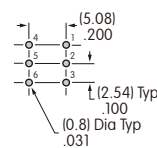
H Gray

TYPICAL SWITCH DIMENSIONS

Double Pole



Straight PC



A22KPCA-CA

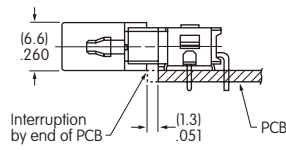
ROCKER MOUNTING PRECAUTION

Rocker switches with vertical and right angle terminals must be mounted so that extension of the PC board beyond the top of the switch housing does not interrupt rocker movement, in turn causing incomplete switching operation.

The MAXIMUM limit of the PC board extension is .051" (1.3mm), as illustrated below.

This precaution does not apply to the double pole switch with right angle terminals due to the extra width of the switch allowing the rocker to clear the PC board.

Side View of Rocker
Right Angle Mounting PC
Single Pole Only



Side View of Rocker
Vertical Mounting PC
Single Pole and
Double Pole

