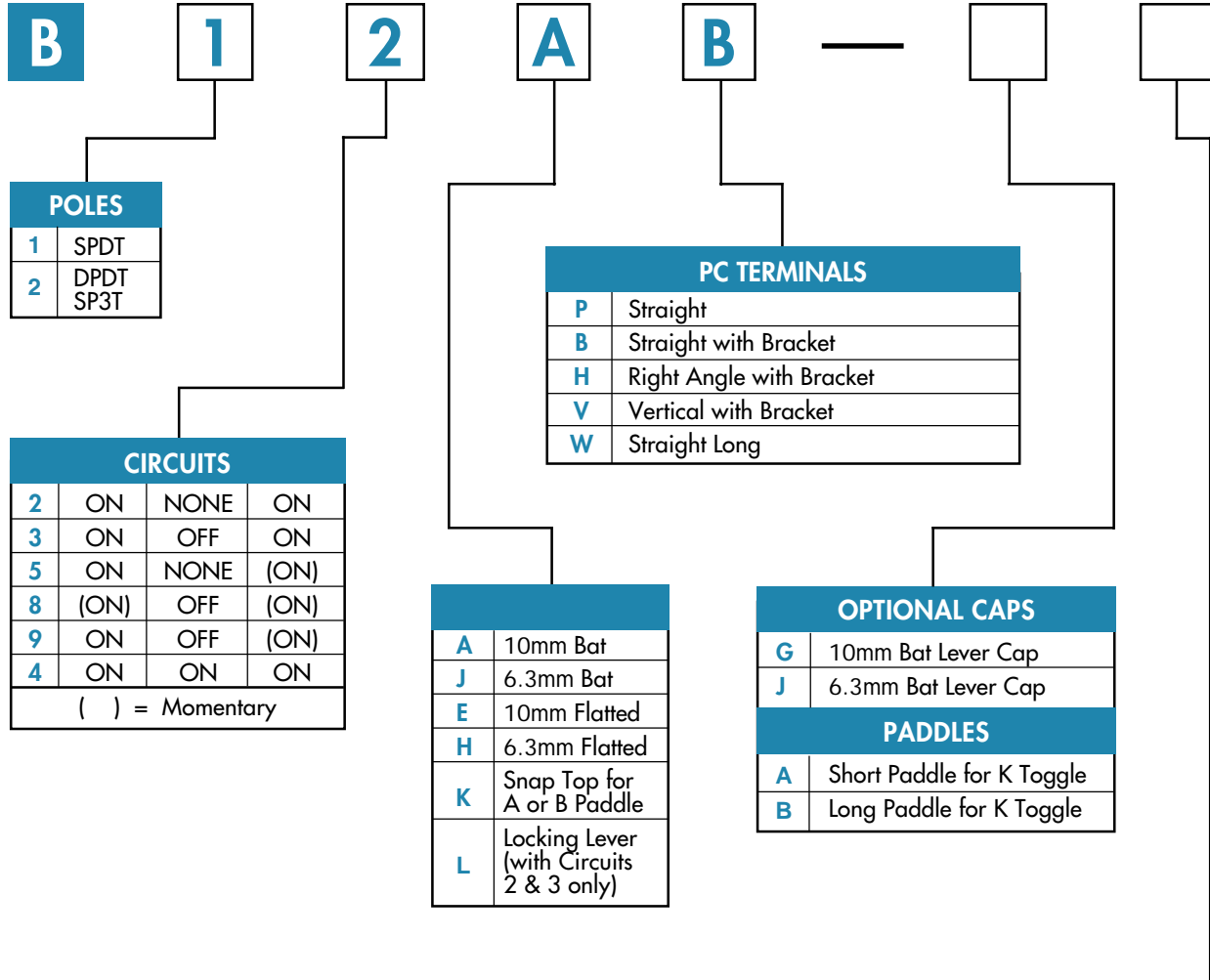




TYPICAL SWITCH ORDERING EXAMPLE



POLES	
1	SPDT
2	DPDT SP3T

CIRCUITS			
2	ON	NONE	ON
3	ON	OFF	ON
5	ON	NONE	(ON)
8	(ON)	OFF	(ON)
9	ON	OFF	(ON)
4	ON	ON	ON
() = Momentary			

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

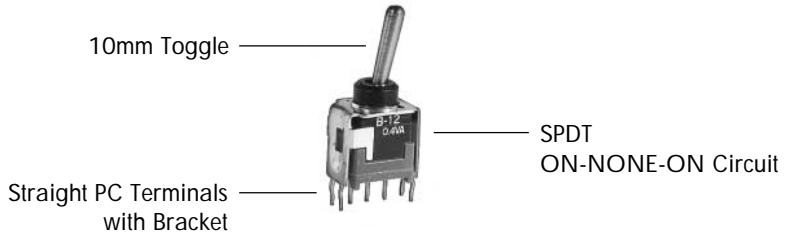
A	10mm Bat
J	6.3mm Bat
E	10mm Flatted
H	6.3mm Flatted
K	Snap Top for A or B Paddle
L	Locking Lever (with Circuits 2 & 3 only)

OPTIONAL CAPS	
G	10mm Bat Lever Cap
J	6.3mm Bat Lever Cap
PADDLES	
A	Short Paddle for K Toggle
B	Long Paddle for K Toggle

CAP COLORS		PADDLE COLORS	
A	Black	A	
B	White	B	
C	Red	C	
---	Yellow	E	
---	Green	F	
---	Blue	G	
---	Gray	H	

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

B12AB





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](#) 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
Mechanical Life: 100,000 operations minimum for On-None-On & On-Off-On
50,000 operations minimum for other circuits
50,000 operations minimum for locking lever models
Electrical Life: 50,000 operations minimum
Static Capability: Withstands 3 kilovolts ESD
Nominal Operating Force: Toggles A & E & K w/Long Paddle: 150 grams (momentary); 120 grams (maintained)
Toggles J & H & K w/Short Paddle: 278 grams (momentary); 188 grams (maintained)
Toggle L: 60 grams
Contact Timing: Nonshorting
Angle of Throw: 26°

Materials & Finishes

Toggle: Nickel plated brass
Bushing: Carbon blended polyamide; nickel plated zinc alloy for locking levers
Case Housing: Glass fiber reinforced polyamide
Support Bracket: Tin plated phosphor bronze
Movable Contact: Phosphor bronze with gold plating over silver plating
Stationary Contacts: Brass with gold plating over nickel undercoating
Terminals: Brass with gold plating over nickel undercoating

Environmental Data

Operating Temp Range: -30°C through +85°C (-22°F through +185°F)
Humidity: 90 ~ 95% humidity for 96 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 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: See [Supplement Index](#) for specific processing data.

Standards & Certifications

Flammability Standards: UL94V-0 available
IECQ Approved: All toggle models recognized at 0.4VA maximum @ 28V AC/DC maximum
Qualification Approval Number: JP792-4A



Series B

Washable Subminiature Antistatic Toggle Switches

POLES & CIRCUITS

		Toggle Position () = Momentary			Connected Terminals			Throw & Schematics
Pole	Model	Up 	Center 	Down 	Up 	Center 	Down 	Note: Terminal numbers are not actually on the switch.
SP	B12 B13 B15 B18 B19	ON	NONE	ON	2-3	OPEN	2-1	SPDT
DP	B22 B23 B25 B28 B29	ON	NONE	ON	2-3 5-6	OPEN	2-1 5-4	DPDT

For 3 Throw (3-On)

		Connected Terminals			External Connection
Pole	Model	Down	Center	Up	
SP	B24	ON 	ON 	ON 	The SP3T model utilizes a double pole base. External connections must be made during field installation.

TOGGLES

Standard Material & Finish: Brass with Bright Nickel

A 10mm 	J 6.3mm Bat 	E 10mm Flatted
H 6.3mm Flatted 	K Snap Top for Paddles 	L Locking Lever



Series B

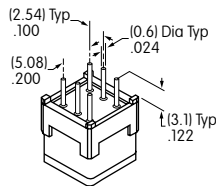
Washable Subminiature Antistatic Toggle Switches

PC TERMINALS

Use of a support bracket or placement of the round bushing in a panel cutout is recommended to increase PCB mounting stability.

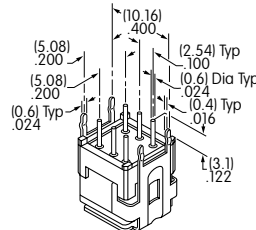
P

Straight



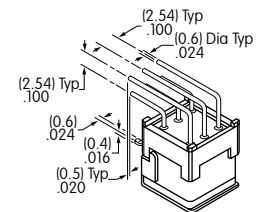
B

Straight with Bracket



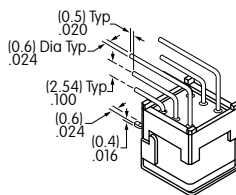
H

Right Angle with Bracket



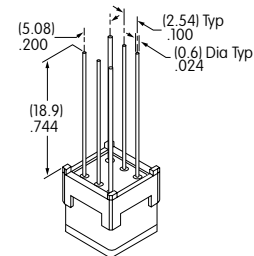
V

Vertical with Bracket



W

Straight Long



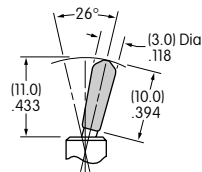
OPTIONAL CAPS

G

**AT4003
10mm Bat Lever Cap**

Material: PVC

Colors Available:
A, B, C

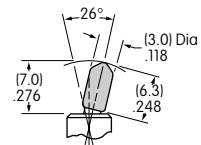


J

**AT4064
6.3mm Bat Lever Cap**

Material: PVC

Colors Available:
A, B, C



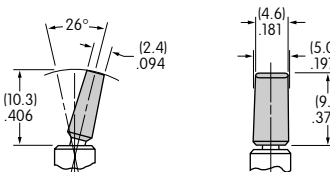
PADDLES

A

**AT467
Short Paddle**

Material: PBT

Colors Available:
A, B, C, E, F, G, H

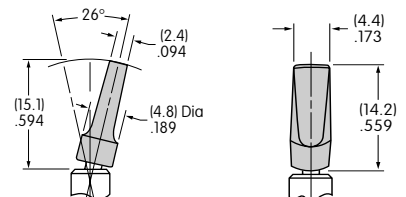


B

**AT468
Long Paddle**

Material: PBT

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



Series B

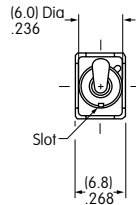
Washable Subminiature Antistatic Toggle Switches

TYPICAL SWITCH DIMENSIONS

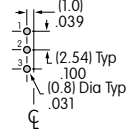
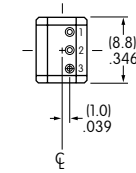
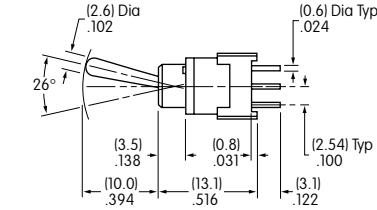
Straight PC



B12AP



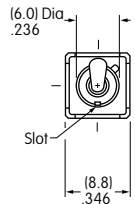
Single Pole



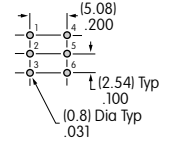
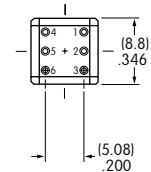
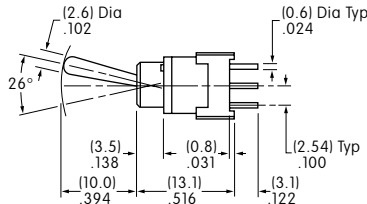
Straight PC



B22AP



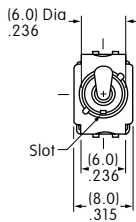
Double Pole



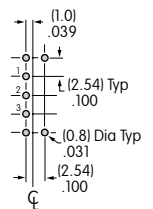
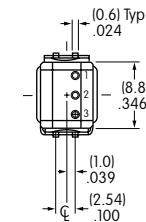
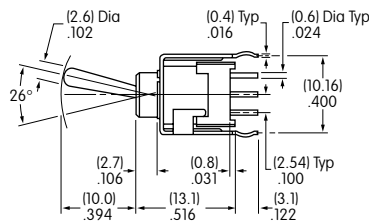
Straight PC • Bracket



B12AB



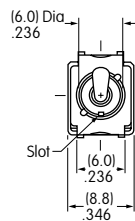
Single Pole



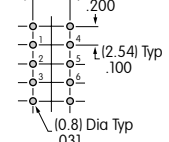
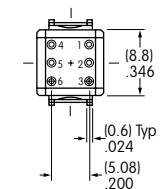
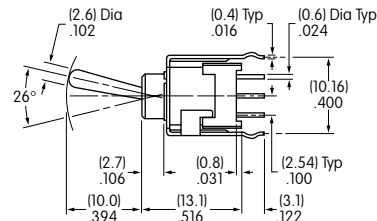
Straight PC • Bracket



B22AB



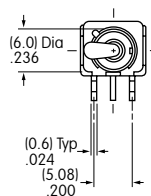
Double Pole



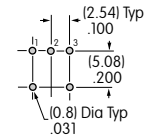
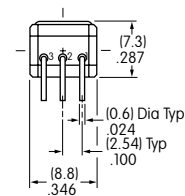
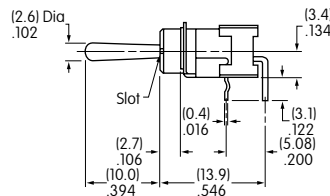
Right Angle PC



B12AH



Single Pole





Series B

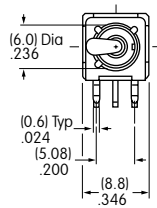
Washable Subminiature Antistatic Toggle Switches

TYPICAL SWITCH DIMENSIONS

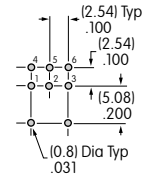
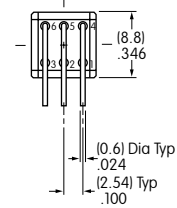
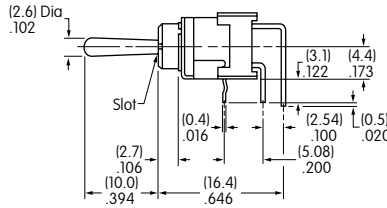
Right Angle PC



B22AH



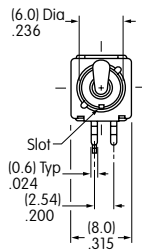
Double Pole



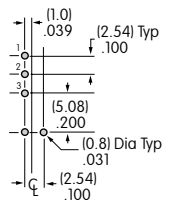
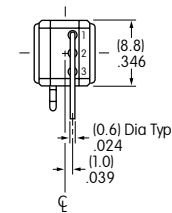
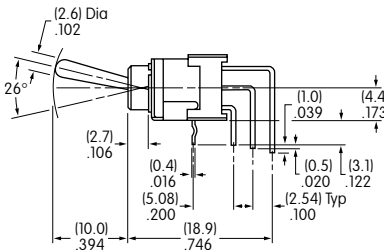
Vertical PC



B12AV



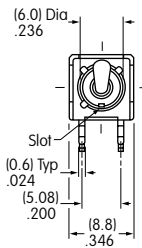
Single Pole



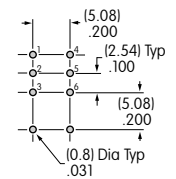
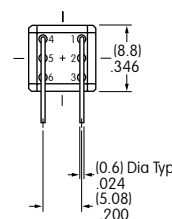
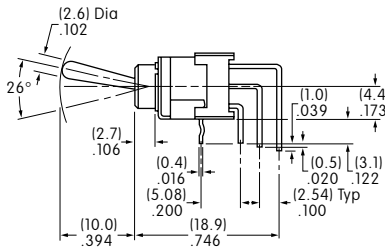
Vertical PC



B22AV



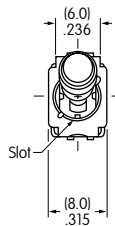
Double Pole



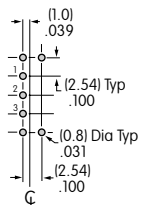
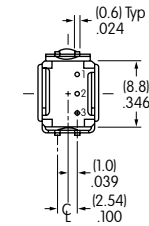
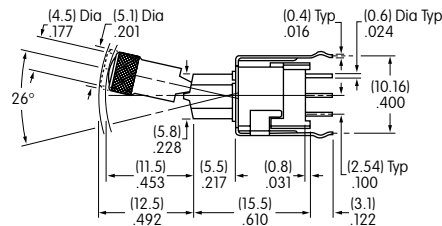
Locking Lever • Straight PC • Bracket



B12LB



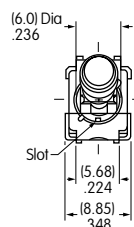
Single Pole



Locking Lever • Straight PC • Bracket



B22LB



Double Pole

