

Toggles  
A

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

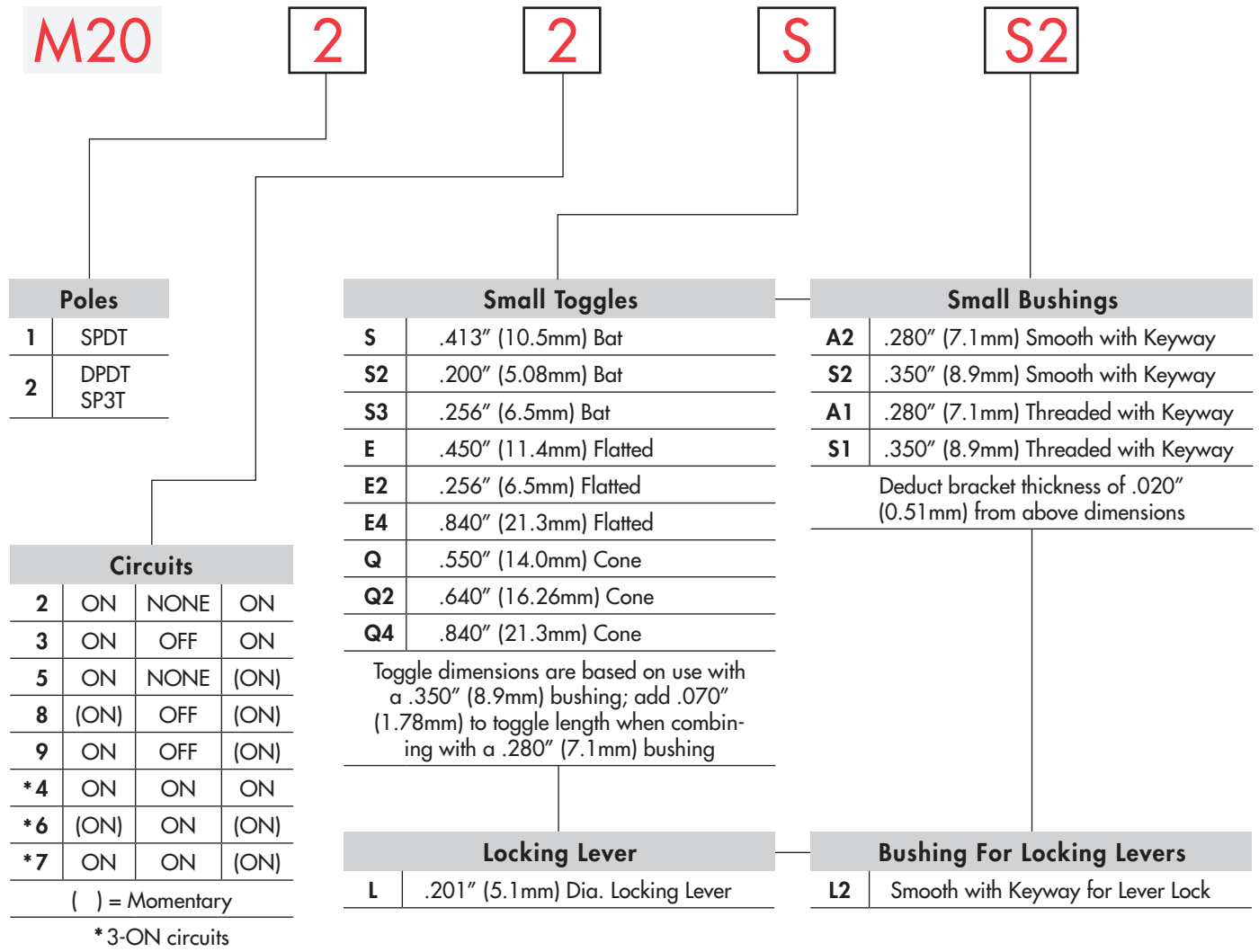
Tilt

Touch

Indicators

Accessories

Supplement



Standard Toggle & Bushing Combinations:

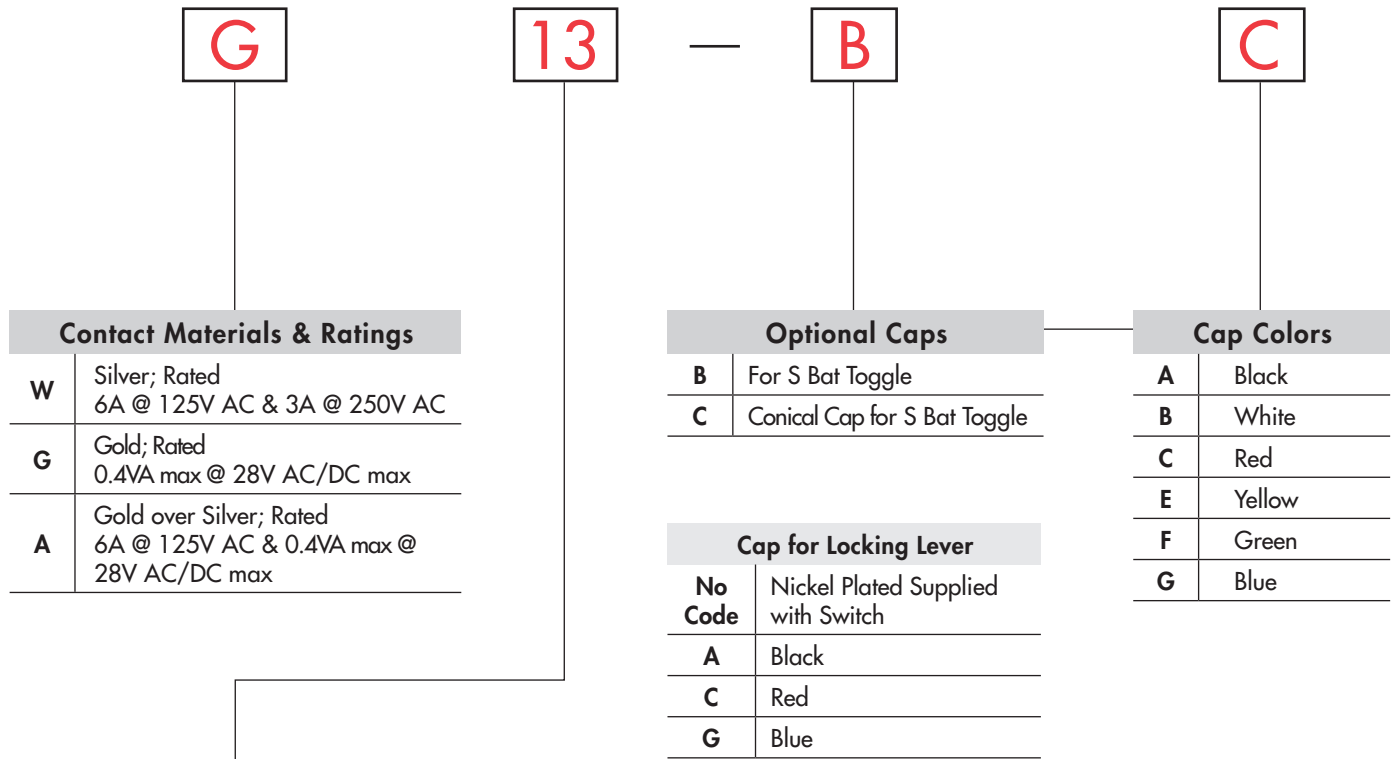
SS2 & S2A2

#### IMPORTANT:



Switches are supplied without UL, cULus & CSA marking unless specified.  
**UL, cULus & CSA recognized only when ordered with marking on the switch.**  
 Specific models, ratings & ordering instructions are noted on the General Specifications page.

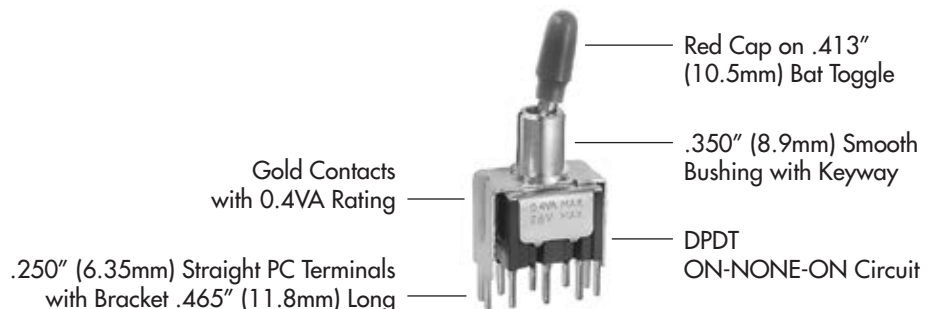
## ORDERING EXAMPLE










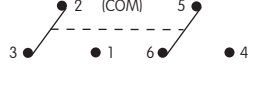
Terminals	
With Bracket	
<b>13</b>	.250" (6.35mm) Straight PC with .465" (11.8mm) Bracket
<b>15</b>	.425" (10.8mm) Straight PC with .630" (16.0mm) Bracket
<b>17</b>	.964" (24.5mm) Straight PC with 1.150" (29.2mm) Bracket
With Reinforced Bracket	
<b>23</b>	.250" (6.35mm) Straight PC with .465" (11.8mm) Bracket
<b>25</b>	.425" (10.8mm) Straight PC with .630" (16.0mm) Bracket
<b>26</b>	.750" (19.05mm) Straight PC with .953" (24.2mm) Bracket

### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

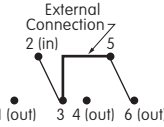
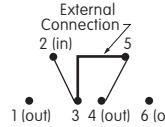
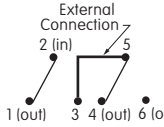
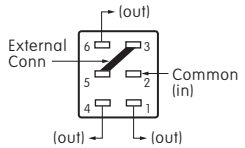
**M2022SS2G13-BC**



### POLES & CIRCUITS

Pole	Model	Toggle Position ( ) = Momentary			Connected Terminals			Throw & Schematics
		Down 	Center 	Up 	Down 	Center 	Up 	
SP	M2012 M2013 M2015 M2018 M2019	ON ON ON (ON) ON	NONE OFF NONE OFF OFF	ON ON (ON) (ON) (ON)	2-3	OPEN	2-1	SPDT 
DP	M2022 M2023 M2025 M2028 M2029	ON ON ON (ON) ON	NONE OFF NONE OFF OFF	ON ON (ON) (ON) (ON)	2-3 5-6	OPEN	2-1 5-4	DPDT 

For 3 Throw (3-On)

Pole	Model	Connected Terminals & Schematics			External Connection
		Down	Center	Up	
SP	M2024 M2026 M2027	ON (ON) ON  	ON ON ON  	ON (ON) (ON)  	The SP3T model utilizes a double pole base.  External connection must be made during field installation. 

### SMALL TOGGLES

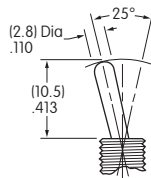
**Important:**

Toggle length changes based on bushing selected. All illustrations are shown with .350" (8.9mm) long bushing. When using a .280" (7.1mm) long bushing, toggle length increases .070" (1.78mm).

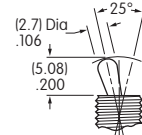
**Standard Material & Finish:**

Brass with Bright Chrome  
Contact factory for optional finishes.

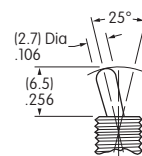
**S** .413" (10.5mm) Bat



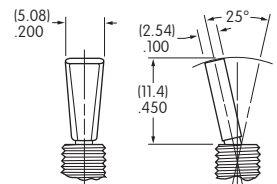
**S2** .200" (5.08mm) Bat



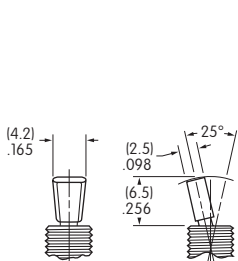
**S3** .256" (6.5mm) Bat



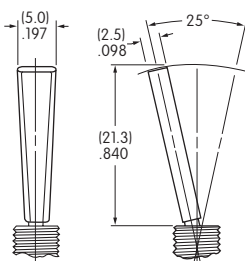
**E** .450" (11.4mm) Flatted



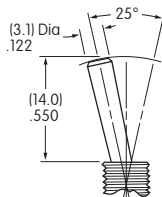
**E2** .256" (6.5mm) Flatted



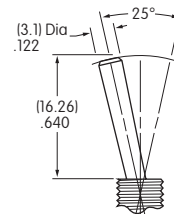
**E4** .840" (21.3mm) Flatted



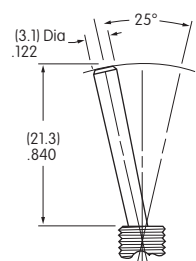
**Q** .550" (14.0mm) Cone



**Q2** .640" (16.26mm) Cone

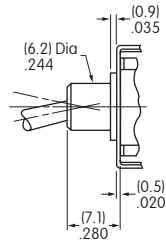
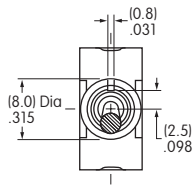


**Q4** .840" (21.3mm) Cone

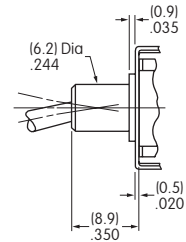
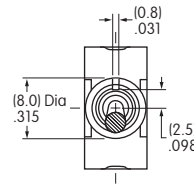


## SMALL BUSHINGS

**A2** .280" (7.1mm)  
Smooth with Keyway

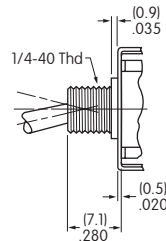
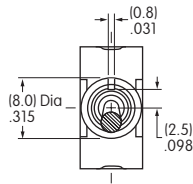


**S2** .350" (8.9mm)  
Smooth with Keyway

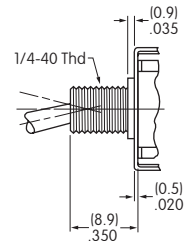
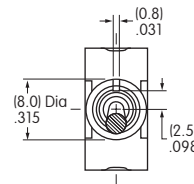


When using this bushing, toggle length is increased by .070" (1.78mm).

**A1** .280" (7.1mm)  
Threaded with Keyway



**S1** .350" (8.9mm)  
Threaded with Keyway

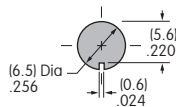


When using this bushing, toggle length is increased by .070" (1.78mm). Maximum Panel Thickness with Standard Hardware: .031" (0.8mm)

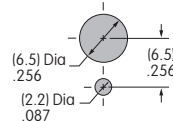
Maximum Panel Thickness with Standard Hardware: .102" (2.6mm)

### Panel Cutouts

For A2, S2, A1, or S1 Bushing with Keyway



For A1 or S1 Bushing with Locking Ring



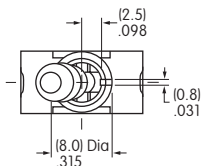
### Standard Hardware:

- 2 Hex Nuts (AT513H)
- 1 Lockwasher (AT509)
- 1 Locking Ring (AT507H)

For dimensions, see Accessories & Hardware section.

## LOCKING LEVER & BUSHING

**LL2** Smooth with Keyway



### Locking Mechanism

on-none-on



2 positions lock

on-none-(on)



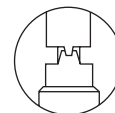
1 position locks

on-off-(on)  
on-on-(on)



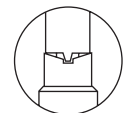
2 positions lock

on-off-on  
on-on-on



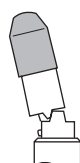
3 positions lock

(on)-off-(on)  
(on)-on-(on)



1 position locks

**No Code**



### Cap for Locking Lever

Supplied with Cap AT427  
Material & Finish:

Brass with Nickel Plating

Lever Material & Finish:

Brass with Chrome Plating

### Color Codes for Optional Anodized Aluminum Caps

**A** Black

**C** Red

**G** Blue

### CONTACT MATERIALS & RATINGS

**W** Silver over Silver      Power Level      6A @ 125V AC & 3A @ 250V AC

**G** Gold over Brass or Copper      Logic Level      0.4VA maximum @ 28V AC/DC maximum

Note: See Supplement section to find complete explanation of operating range.

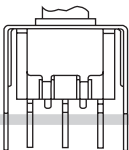
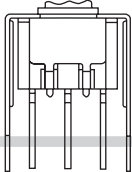
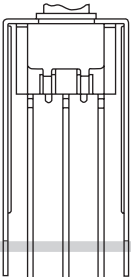
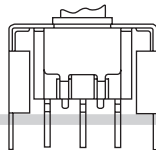
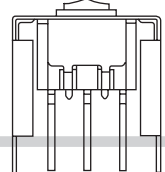
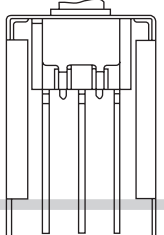
**A** Gold over Silver      Power Level or Logic Level      6A @ 125V AC or 0.4VA maximum @ 28V AC/DC maximum

Note: This dual rated option is suitable when two or more identical switches are used in logic and in power circuits within the same application. See Supplement section to find complete explanation of dual rating and operating range.

### TERMINALS

#### Straight PC Mount with Bracket

#### Straight PC Mount with Reinforced Bracket

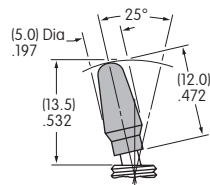
13	15	17	23	25	26
.250" (6.35mm) Terminal with .465" (11.8mm) Bracket	.425" (10.8mm) Terminal with .630" (16.0mm) Bracket	.964" (24.5mm) Terminal with 1.150" (29.2mm) Bracket	.250" (6.35mm) Terminal with .465" (11.8mm) Bracket	.425" (10.8mm) Terminal with .630" (16.0mm) Bracket	.750" (19.05mm) Terminal with .953" (24.2mm) Bracket
					

PCB footprints are on the following Typical Switch Dimension page.

### OPTIONAL CAPS & CAP COLORS

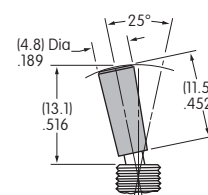
**B** \* AT415  
for S Bat Toggle

Material:  
Polyethylene



**C** \* AT444  
Conical Cap for  
S Bat Toggle

Material:  
Polyethylene



\* AT415 and AT444 for use with S toggles only, not S2 or S3 toggles.

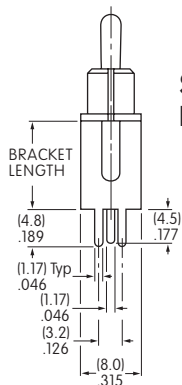
Cap Colors  
Available:

**A** Black    **B** White    **C** Red    **E** Yellow    **F** Green    **G** Blue

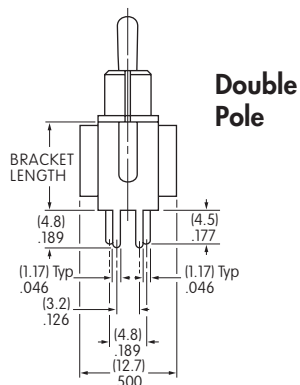
Toggles A  
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 Slides  
 Tactiles  
 Tilt  
 Touch  
 Indicators  
 Accessories  
 Supplement

## TYPICAL SWITCH DIMENSIONS

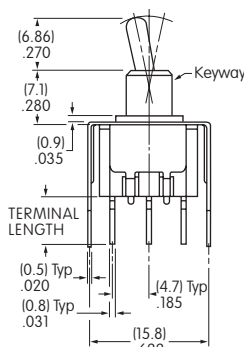
Straight PC • Bracket



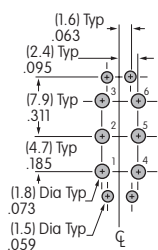
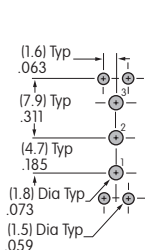
Single Pole



Double Pole

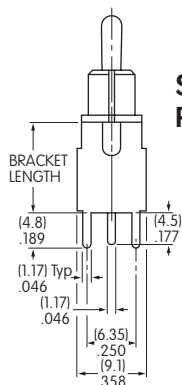


M2012S2A2G13

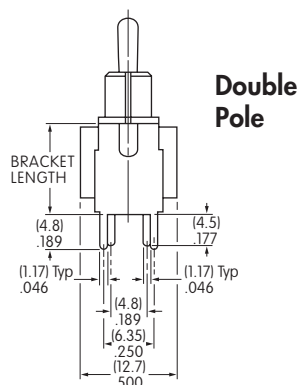


Terminal Code:	Terminal Length:	Bracket Length:
13	.250" (6.35mm)	.465" (11.8mm)
15	.425" (10.8mm)	.630" (16.0mm)
17	.964" (24.5mm)	1.150" (29.2mm)

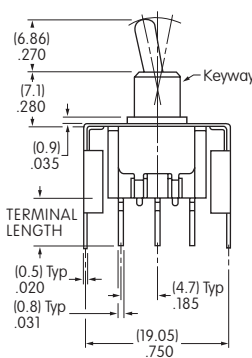
Straight PC • Reinforced Bracket



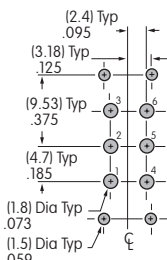
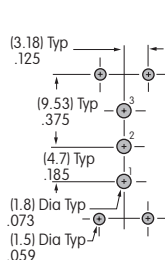
Single Pole



Double Pole



M2012S2A2G23



Terminal Code:	Terminal Length:	Bracket Length:
23	.250" (6.35mm)	.465" (11.8mm)
25	.425" (10.8mm)	.630" (16.0mm)
26	.750" (19.05mm)	.953" (24.2mm)