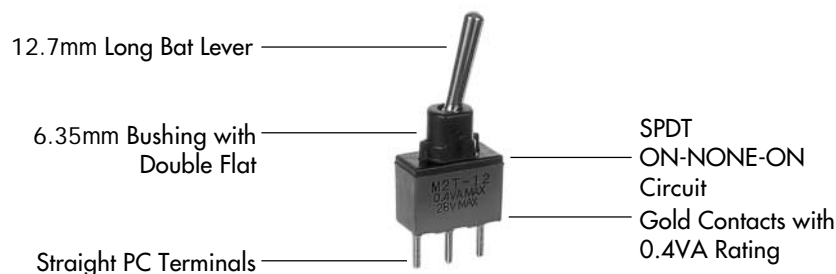
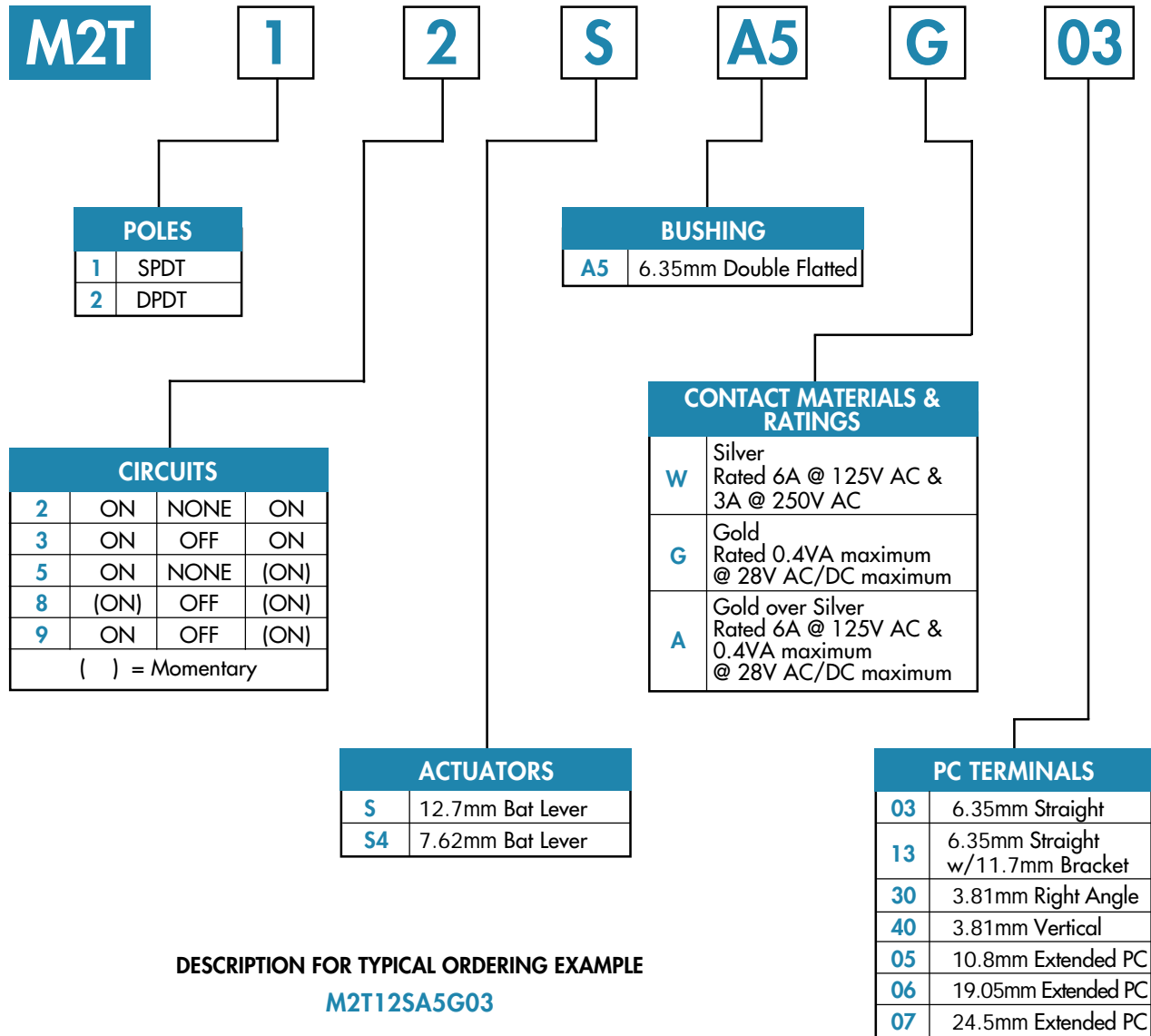




## TYPICAL SWITCH ORDERING EXAMPLE



**IMPORTANT:**

Switches are supplied without UL & CSA marking unless specified. Specific models & ratings noted on General Specifications page.



### GENERAL SPECIFICATIONS

#### Electrical Capacity (Resistive Load)

- Power Level (code W):** 6A @ 125V AC or 3A @ 250V AC;  
4A @ 30V DC (On-On circuit) & 3A @ 30V DC (all other circuits)
- Logic Level (code G):** 0.4VA maximum @ 28V AC/DC maximum
- Logic/Power Level (code A):** Combines W & G ratings
- Note: See [Supplement Index](#) to find explanation of dual rating & operating range.

#### Other Ratings

- Contact Resistance:** 10 milliohms maximum for silver; 20 milliohms maximum for gold
- Insulation Resistance:** 1,000 megohms minimum @ 500V DC
- Dielectric Strength:** 1,000V AC minimum between contacts; 1,500V AC minimum between contacts & case
- Mechanical Life:** 100,000 operations minimum
- Electrical Life:** 25,000 operations minimum for silver; 50,000 operations minimum for gold
- Contact Timing:** Nonshorting (break-before-make)
- Angle of Throw:** 26°

#### Materials & Finishes

- Toggle/Lever:** Brass with chrome plating
- Support Bracket:** Steel with tin-lead plating for straight PC; brass with tin-lead plating for angle PC
- Bushing/Housing:** Glass fiber reinforced polyamide
- Sealing Ring:** Nitrile butadiene rubber
- Base:** Glass fiber reinforced polyamide
- Movable Contacts:** Silver alloy with silver plating (code W); copper or phosphor bronze with gold plating over nickel plating (code G); or silver alloy with gold plating over nickel plating (code A)
- Stationary Contacts:** Silver alloy with silver plating (code W); copper or brass with gold plating over nickel plating (code G); or silver alloy with gold plating over nickel plating (code A)
- Terminals:** Copper or brass with silver or gold plating

#### Environmental Data

- Operating Temp Range:** -30°C through +85°C (-22°F through +185°F)
- Humidity:** 90 ~ 98% 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 manual soldering or 5 seconds @ 270°C solder pot  
Automated soldering is highly recommended.
- Process Seal:** See [Supplement Index](#) for specific processing data.

#### Standards & Certifications

- Flammability Standards:** Bushing/Housing & Base are UL94V-0 rated
- UL Recognized:** All models recognized at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC or 0.4VA maximum @ 28V AC/DC maximum; UL File No. E44145
- CSA Certified:** All models certified at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC; CSA File No. LR23535



# Series M2

Washable Miniature Toggle Switches

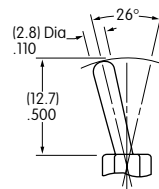
## POLES & CIRCUITS

		Toggle Position ( ) = Momentary			Connected Terminals			Throw & Schematics
Pole	Model	Down	Center	Up	Down	Center	Up	Note: Terminal numbers are not actually on the switch.
SP	M2T12	ON	NONE	ON	2-3	OPEN	2-1	SPDT 
	M2T13	ON	OFF	ON				
	M2T15	ON	NONE	(ON)				
	M2T18	(ON)	OFF	(ON)				
	M2T19	ON	OFF	(ON)				
DP	M2T22	ON	NONE	ON	2-3 5-6	OPEN	2-1 5-4	DPDT 
	M2T23	ON	OFF	ON				
	M2T25	ON	NONE	(ON)				
	M2T28	(ON)	OFF	(ON)				
	M2T29	ON	OFF	(ON)				

## ACTUATORS

### S 12.7mm Bat Lever

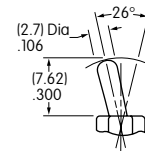
Material:  
Chrome over brass



**Standard Combinations:** S Bat Lever with straight terminals (code 03) with silver or gold contacts.

### S4 7.62mm Bat Lever

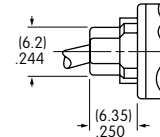
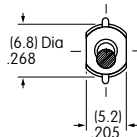
Material:  
Chrome over brass



**Standard Combinations:** S4 Bat Lever with bracketed terminals (codes 13, 30, 40) with gold contacts.

## BUSHING

### A5 6.35mm Double Flatted



## 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 Index](#) 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 Index](#) to find complete explanation of dual rating and operating range.

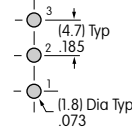
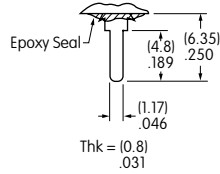


# Series M2

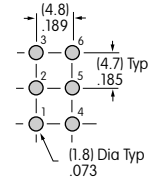
## Washable Miniature Toggle Switches

### TERMINALS

#### 03 6.35mm Straight

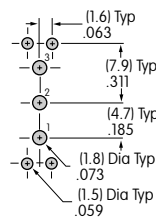
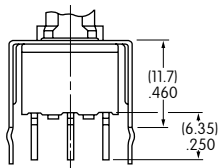


Single Pole

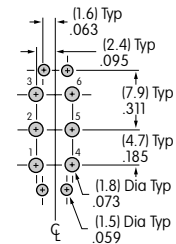


Double Pole

#### 13 6.35mm Straight with 11.7mm Bracket

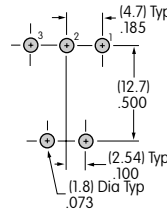
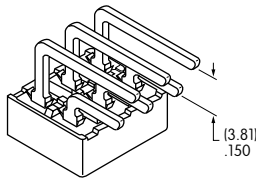


Single Pole

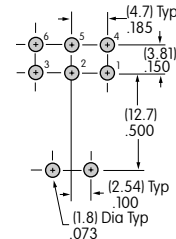


Double Pole

#### 30 3.81mm Right Angle

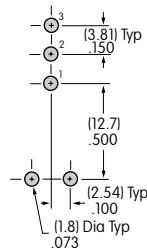
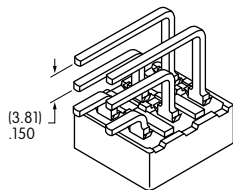


Single Pole

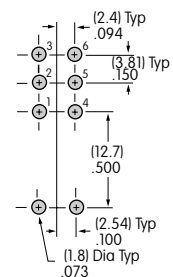


Double Pole

#### 40 3.81mm Vertical

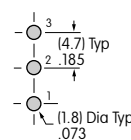
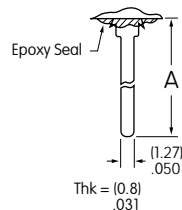


Single Pole

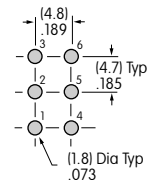


Double Pole

#### 05 10.8mm/.425" Extended PC



Single Pole



Double Pole

#### 06 19.05mm/.750" Extended PC

#### 07 24.5mm/.964" Extended PC

Dimension A = terminal lengths as shown beside the terminal codes at the left.



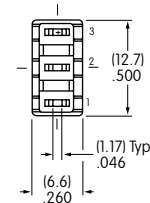
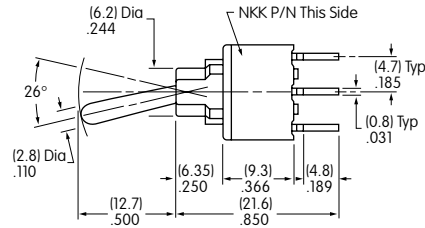
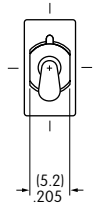
# Series M2

Washable Miniature Toggle Switches

## TYPICAL SWITCH DIMENSIONS

### Straight PC

### Single Pole

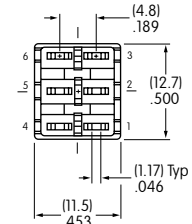
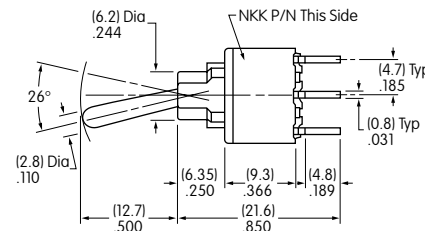
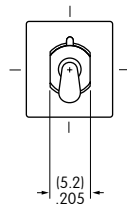


M2T12SA5G03

Actuator in Down position.

### Straight PC

### Double Pole

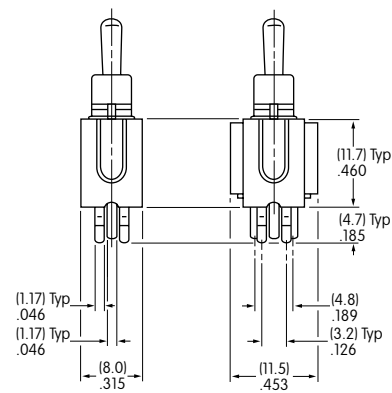
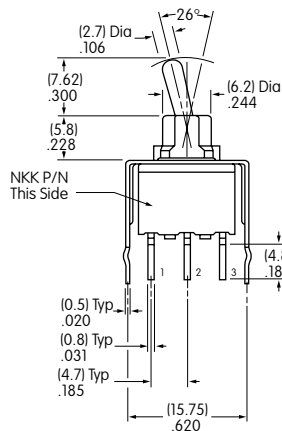


M2T22SA5G03

Actuator in Down position.

### Straight PC • Bracket

### Single & Double Pole



M2T12SA4A5G13

Actuator in Down position.

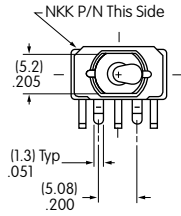


# Series M2

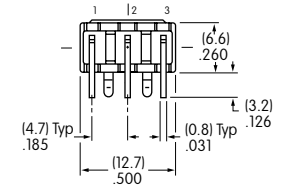
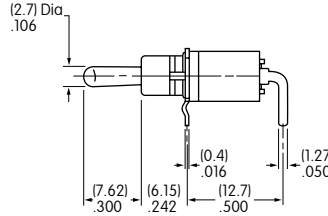
Washable Miniature Toggle Switches

## TYPICAL SWITCH DIMENSIONS

### Right Angle PC



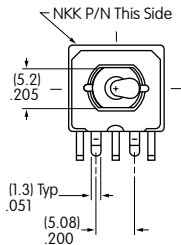
### Single Pole



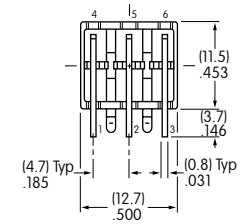
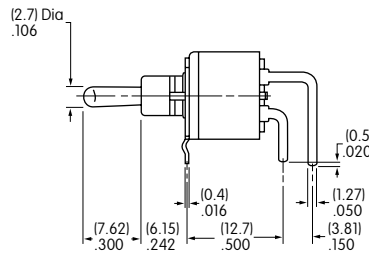
M2T12S4A5G30

Actuator in Down position.

### Right Angle PC



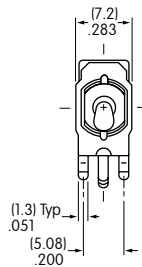
### Double Pole



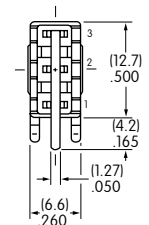
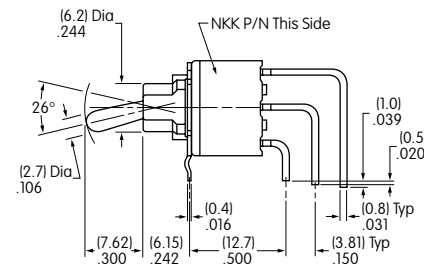
M2T22S4A5G30

Actuator in Down position.

### Vertical PC



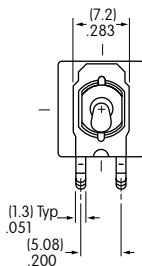
### Single Pole



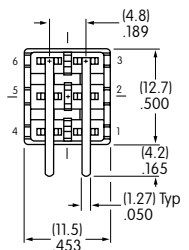
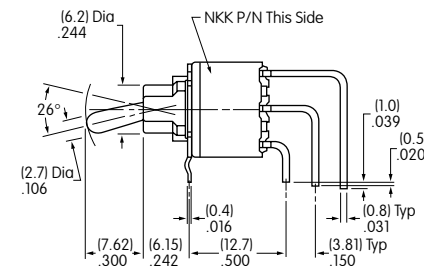
M2T12S4A5G40

Actuator in Down position.

### Vertical PC



### Double Pole



M2T22S4A5G40

Actuator in Down position.