

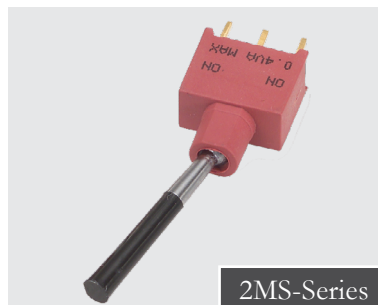
# 2M-Series

## MINIATURE TOGGLES

The 2M family of miniature toggle switches is composed of three switch series; the **2M1-Series** miniature toggle switch, the **2MS-Series** sealed miniature toggle switch, and the **2M1H-Series** premium sealed miniature toggle switch. These series all feature PC mounting and offer a variety of ratings, circuits, contact materials, terminal platings, toggle styles and lengths, and optional color caps.



2M1H-Series



2MS-Series



2M1-Series

### Product Highlights:

- IP67 Sealing
- 8 Single and Double Pole Circuits
- Long, Short and Flatted Bushing Options
- Large Variety of Termination Options
- Available Gold, Silver and Tin Platings
- UL Approved
- Sleek Black Finish

### Typical Applications:

- Telecommunications
- Instrumentation
- Networking
- Medical Equipment
- Military Communications

### Resources:

[Configure a Complete Part](#)

[\*\*Download CAD & Sales Drawing >\*\*](#)



**Carling Technologies®**

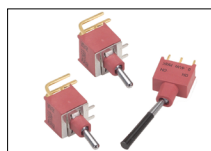
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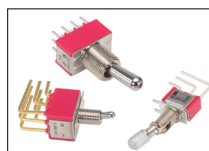
[www.carlingtech.com](http://www.carlingtech.com)



**2M1H-Series**  
Premium Sealed  
Miniature  
Toggle Switch



**2MS-Series**  
Sealed  
Miniature  
Toggle Switch



**2M1-Series**  
Miniature  
Toggle Switch

## Electrical

|                       |                                                                              |
|-----------------------|------------------------------------------------------------------------------|
| Contact Rating        | refer to ordering scheme                                                     |
| Electrical Life       | 50,000 make & break cycles @ full load                                       |
| Contact Resistance    | 10 mΩ max. initial @ 2-4 VDC<br>100mA for both silver & gold plated contacts |
| Insulation Resistance | 1000 MΩ min.                                                                 |
| Dielectric Strength   | 1500 Volts RMS @ sea level                                                   |

## Physical

|                        |                                                     |
|------------------------|-----------------------------------------------------|
| Operating Temperature  | -30°C to +85°C                                      |
| Index of Protection    | <i>2M1H-Series:</i> IP67<br><i>2MS-Series:</i> IP67 |
| Solder Heat Resistance | MIL-STD-202, Method 210                             |
| Actuator Travel        | 25°                                                 |

## Material

|                         |                                                                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Case                    | <i>2M1H-Series &amp; 2M1-Series:</i> Dially phthalate (DAP) (UL 94V-0)<br><i>2MS-Series:</i> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)                              |
| Toggle                  | <i>2M1H-Series:</i> Brass, black finish with o-ring seal<br><i>2MS-Series:</i> Brass, chrome plated, internal o-ring sealed<br><i>2M1-Series:</i> Brass, chrome plated                        |
| Bushing                 | <i>2M1H-Series:</i> Brass, black finish with o-ring seal<br><i>2MS-Series:</i> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)<br><i>2M1-Series:</i> Brass, nickel plated |
| Housing                 | Stainless Steel                                                                                                                                                                               |
| Bracket                 | <i>2MS-Series:</i> Nylon (UL 94V-0)<br><i>2M1-Series:</i> Stainless Steel                                                                                                                     |
| Actuator Pivot Retainer | <i>2MS-Series:</i> Stainless Steel                                                                                                                                                            |
| Switch Support          | Brass, tin plated                                                                                                                                                                             |
| Terminal Seal           | Epoxy                                                                                                                                                                                         |

**2M1H** - **DP1** - **TJ** - **BK** - **M2** **R** **E**

1 Series      2 Pole / Circuit      3 Actuator Style      4 Bushing      5 Termination      6 Contacts      7 Seal

### 1 SERIES

**2M1H** Premium Sealed Miniature Toggle Switch

### 2 POLE / CIRCUIT

( ) - momentary

| Position: | 1        | 2                   | 3        |
|-----------|----------|---------------------|----------|
|           | 2-3, 5-6 | Connected Terminals | 2-1, 5-4 |
| SP1       | ON       | NONE                | ON       |
| SP2       | ON       | NONE                | (ON)     |
| SP3       | ON       | OFF                 | ON       |
| SP4       | (ON)     | OFF                 | (ON)     |
| SP5       | ON       | OFF                 | (ON)     |
| DP1       | ON       | NONE                | ON       |
| DP2       | ON       | NONE                | (ON)     |
| DP3       | ON       | OFF                 | ON       |
| DP4       | (ON)     | OFF                 | (ON)     |
| DP5       | ON       | OFF                 | (ON)     |
| DP6 *     | ON       | ON                  | ON       |
| DP7 *     | (ON)     | ON                  | (ON)     |
| DP8 *     | ON       | ON                  | (ON)     |

\*Center position connects 2-3, 5-4

### 3 ACTUATOR STYLE

**TJ** .709" [18 mm] length      **TK** .512" [13.00 mm] length

### 4 BUSHING

**BK** .386" [9.80 mm] threaded, flat

### 5 TERMINATION <sup>7</sup>

|           |               |            |                                    |
|-----------|---------------|------------|------------------------------------|
| <b>M1</b> | Solder Lug    | <b>M51</b> | Wire Wrap, .750" [19.05mm] length  |
| <b>M2</b> | PCB           | <b>M52</b> | Wire Wrap, .964" [24.48mm] length  |
| <b>M3</b> | Quick Connect | <b>M53</b> | Wire Wrap, .425" [10.80mm] length  |
|           |               | <b>M54</b> | Wire Wrap, 1.062" [25.97mm] length |

### 6 CONTACTS / TERMINALS

|          | Contact Material    | Terminal Plating    | Rating                        | Approvals |
|----------|---------------------|---------------------|-------------------------------|-----------|
| <b>G</b> | silver <sup>1</sup> | gold over silver    | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| <b>K</b> | gold 2,5            | tin 4,7             | 0.4VA max 20V max (AC/DC)     | IP67      |
| <b>P</b> | silver 1,6          | tin 4,7             | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| <b>Q</b> | silver <sup>1</sup> | silver <sup>1</sup> | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| <b>R</b> | gold <sup>2</sup>   | gold <sup>3</sup>   | 0.4VA max 20V max (AC/DC)     | IP67      |

### 7 EPOXY SEAL

**E** Epoxy Seal

#### Notes:

Switches supplied with (1) 2M1-HDW4 hex nut and (1) 3MNH-WCP-0872 O-Ring

- Movable contact and terminal platings: silver over copper alloy
- Movable contact and terminal platings: gold over nickel over copper alloy
- Terminal platings: gold over nickel over copper alloy
- Terminal platings: tin over copper alloy
- Terminal contact platings: gold over nickel alloy
- Terminal contact platings: silver over nickel alloy
- Tin option not available with M1 & M3 terminations.

\*Manufacturer reserves the right to change product specification without prior notice.

# 2MS - WSP 1 - T1 - B4 - M1 G E

1  
Series2  
Poles3  
Circuit4  
Actuator Style5  
Bushing6  
Termination7  
Contacts8  
Seal**1 SERIES****2MS** Sealed Miniature Toggle Switch**2 POLES****WSP** Single pole - uses terminals 1, 2 & 3**WDP** Double pole - uses terminals 1, 2, 3, 4, 5 & 6**W3P** Three pole - uses terminals 1, 2, 3, 4, 5, 6, 7, 8 & 9**3 CIRCUIT**

( ) - momentary

| Position: | 1             | 2                   | 3             |
|-----------|---------------|---------------------|---------------|
|           | 2-3, 5-6, 8-9 | Connected Terminals | 2-1, 5-4, 8-7 |
| 1         | ON            | NONE                | ON            |
| 2         | ON            | NONE                | (ON)          |
| 3         | ON            | OFF                 | ON            |
| 4         | (ON)          | OFF                 | (ON)          |
| 5         | ON            | OFF                 | (ON)          |

**4 ACTUATOR STYLE****T1** Round Bat**T2** Round Short Bat**T9** Long Black Plastic .492" length**P1** Plastic Anti-Static .496" length**P2** Plastic Anti-Static .299" length**5 BUSHING****B1** Threaded, Keyway**B4** Unthreaded, Short, Keyway, Flat

## Notes:

B1 Bushing switches supplied with (2) 2M1-HDW2 nuts, (1) 2M1-HDW11 washer and (1) 2M1-HDW15 locking ring. See page 76-77.

1 Movable contact &amp; terminal platings: silver over copper alloy

2 Movable contact &amp; terminal platings: gold over nickel over copper alloy

3 Terminal platings: tin over nickel over copper alloy

4 Tin option not available with M1 terminal

**6 TERMINATION****M1** <sup>4</sup> Solder Lug**M2** PCB**M3** Quick Connect**M51** Wire Wrap, .750" [19.05mm]**M52** Wire Wrap, .964" [24.48mm]**M53** Wire Wrap, .425" [10.80mm]**M54** Wire Wrap, 1.062" [25.97mm]**M6** Right Angle, PC Thru-Hole**M61** Right Angle, Snap-In**M7** Vertical, Right Angle, PC Thru-Hole**M71** Vertical, Right Angle, Snap-In**VS2** Vertical, .461" [11.70mm]**VS21** Vertical, Snap-In, .460" [11.70mm]**VS3** Vertical, .630" [16mm]**VS31** Vertical, Snap-In, .630" [16mm]**U2** Vertical, .551" [14mm] - only 3PDT**VS4** Vertical, .461" [11.70mm]**VS41** Vertical, Snap-In, .461" [11.70mm]**U4** Vertical, .551" [14mm] - only 3PDT**VS5** Vertical, .630" [16mm]**VS51** Vertical, Snap-In, .630" [16mm]**7 CONTACTS / TERMINALS****Contact Material** **Terminal Plating** **Rating**

| G | silver <sup>1</sup> | gold over silver    | 5A 125VAC or 28VDC, 2A 250VAC | Approvals |
|---|---------------------|---------------------|-------------------------------|-----------|
| K | gold <sup>2</sup>   | tin <sup>3, 4</sup> | 0.4VA max 20V max (AC/DC)     | IP67      |
| P | silver <sup>1</sup> | tin <sup>3, 4</sup> | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| R | gold <sup>2</sup>   | gold <sup>2</sup>   | 0.4VA max 20V max (AC/DC)     | IP67      |

**8 EPOXY SEAL****E** Epoxy Seal**0** without Epoxy Seal

# 2M1 - SP 1 - T1 - B1 - M1 Q E

1  
Series2  
Poles3  
Circuit4  
Actuator Style5  
Bushing6  
Termination7  
Contacts8  
Seal**1 SERIES****2M1** Miniature Toggle Switch**2 POLES****SP** Single pole - uses terminals 1, 2 & 3**DP** Double pole - uses terminals 1, 2, 3, 4, 5 & 6**3P** Three pole - uses terminals 1, 2, 3, 4, 5, 6, 7, 8 & 9**4P** Four pole - uses terminals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 12**3 CIRCUIT**

( ) - momentary

| Position: | 1                    | 2                   | 3                    |
|-----------|----------------------|---------------------|----------------------|
|           | 2-3, 5-6, 8-9, 11-12 | Connected Terminals | 2-1, 5-4, 8-7, 11-10 |
| 1         | ON                   | NONE                | ON                   |
| 2         | ON                   | NONE                | (ON)                 |
| 3         | ON                   | OFF                 | ON                   |
| 4         | (ON)                 | OFF                 | (ON)                 |
| 5         | ON                   | OFF                 | (ON)                 |
| 6*        | ON                   | ON                  | ON                   |
| 7*        | (ON)                 | ON                  | (ON)                 |
| 8*        | ON                   | ON                  | (ON)                 |

\*Available with DP and 4P switches only. Center position connects 2-3, 5-4, 8-9, 11-10

**4 ACTUATOR STYLE****T1** Round Bat**T2** Round Short Bat**T3** Paddle**T4** Medium Paddle**T5** Long Paddle**T6** Flat (B1,B2,B5,BA,BB,BE)**T7** Large Bat (B0 bushing)**T8** X-Large Bat (B0 bushing)**T9** Black Plastic**T0** Rectangular**TA** Locking Lever**TI** Locking Lever**TL** Locking Lever**5 BUSHING****B1** Threaded Standard, keyway**B2** Non-Threaded Standard, keyway**B3** Threaded Short, keyway**B4** Non-Threaded Short, keyway**B5** High Torque, 7.5mm, flat**B6** High Torque, 8.0mm, keyway**B7** Long threaded**B8** Metric**B9** Splashproof**B0** 15/32" Threaded (Standard for T7 & T8 actuator styles)**BA** Threaded for T6**BB** Non-Threaded for T6**BE** Threaded Hi Torque for T6**BL** Threaded, Locking**6 TERMINATION****M1** <sup>4</sup> Solder Lug**M2** PCB**M3** Quick Connect**M51** Wire Wrap, .750" [19.05mm]**M52** Wire Wrap, .964" [24.48mm]**M53** Wire Wrap, .425" [10.80mm]**M54** Wire Wrap, 1.062" [25.97mm]**M6** Right Angle, PC Thru-Hole**M61** Right Angle, Snap-In**M7** Vertical, Right Angle, PC Thru-Hole**M71** Vertical, Right Angle, Snap-In**VS2** Vertical, .461" [11.70mm]**VS21** Vertical, Snap-In, .461" [11.70mm]**VS3** Vertical, .630" [16mm]**VS31** Vertical, Snap-In, .630" [16mm]**VS4** Vertical, .461" [11.70mm]**VS41** Vertical, Snap-In, .461" [11.70mm]**VS5** Vertical, .630" [16mm]**VS51** Vertical, Snap-In, .630" [16mm]**7 CONTACTS / TERMINALS****Contact Material** **Terminal Plating** **Rating**

| G | silver <sup>1</sup> | gold over silver    | 5A 125VAC or 28VDC, 2A 250VAC | Approvals |
|---|---------------------|---------------------|-------------------------------|-----------|
| K | gold <sup>2</sup>   | tin <sup>3, 4</sup> | 0.4VA max 20V max (AC/DC)     | N/A       |
| P | silver <sup>1</sup> | tin <sup>3, 4</sup> | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| Q | silver <sup>1</sup> | silver <sup>1</sup> | 5A 125VAC or 28VDC, 2A 250VAC | IP67      |
| R | gold <sup>2</sup>   | gold <sup>2</sup>   | 0.4VA max 20V max (AC/DC)     | N/A       |

**8 EPOXY SEAL****E** Epoxy Seal**0** without Epoxy Seal

## Notes:

B1 Bushing switches supplied with (2) 2M1-HDW2 nuts, (1) 2M1-HDW11 washer and (1) 2M1-HDW15 locking ring.

1 Movable contact &amp; terminal platings: silver over copper alloy

2 Movable contact &amp; terminal platings: gold over nickel over copper alloy

3 Terminal platings: tin over nickel over copper alloy

4 Tin option not available with M1 terminal

**2M-Series Accessories**

To order accessories assembled on a switch, specify the switch number followed by the accessory part number and the word "assembled". Ex: 2M1-SP1-T1-B1-M1QE-T12 ASSEMBLED. To order accessories in bulk, specify the Series, followed by the accessory. Ex: 2M1-T12. See page 76 for dimensional specifications.

**Optional Toggle Cap**

**2M1** – **T1** **2**

<sup>1</sup>  
Series

<sup>2</sup>  
Toggle Cap Size

<sup>3</sup>  
Color

**1 SERIES**

**2M1** Fits 2M1H, 2MS or 2M1

**3 CAP COLOR**

|          |       |          |        |
|----------|-------|----------|--------|
| <b>1</b> | White | <b>5</b> | Yellow |
| <b>2</b> | Black | <b>6</b> | Green  |
| <b>3</b> | Red   | <b>7</b> | Blue   |

**2 TOGGLE CAP SIZE**

**T1** 10.6 mm      **T2** 7.6 mm

**Optional Dress and Knurled Nuts**

**2M1** – **HDW3**

<sup>1</sup>  
Series

<sup>2</sup>  
Nut

**1 SERIES**

**2M1** Fits 2M1H, 2MS or 2M1

**2 NUT**

**HDW3** Dress nut for 1/4" bushing  
**HDW5** Knurled nut for 15/32" bushing (2M1-Series only)

**Optional Rubber Seals**

**2M1** – **E1A**

<sup>1</sup>  
Series

<sup>2</sup>  
Rubber Boot Seal

**1 SERIES**

**2M1** Fits 2M1H, 2MS or 2M1

**2 RUBBER BOOT SEAL**

|             |                                                                        |
|-------------|------------------------------------------------------------------------|
| <b>E1A</b>  | 1/4 - 40" UNS bushing (Not available for B0 bushing option)            |
| <b>K1</b>   | Metric M6 bushing (B8 bushing only)                                    |
| <b>YE1D</b> | 15/32 - 32" UNS bushing (TJ, TK and B0 bushings only)                  |
| <b>YE1E</b> | 15/32 - 32" UNS bushing 1/2 boot (T7, T8, TJ, TK and B0 bushings only) |

**3MNH** – **WCP-0872**

<sup>1</sup>  
Series

<sup>2</sup>  
Rubber O-Ring

**1 SERIES**

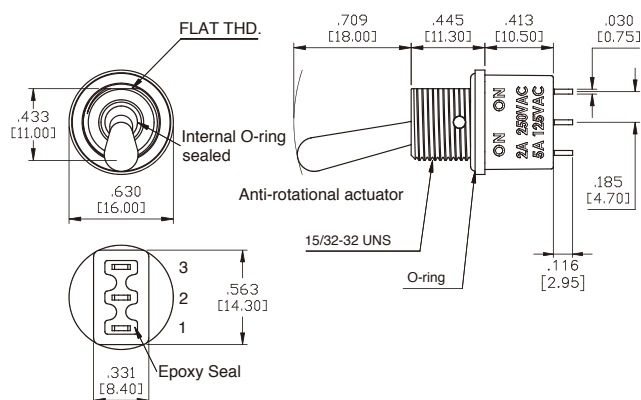
**3MNH** Fits 3MNH or 2M1H

**2 RUBBER O-RING**

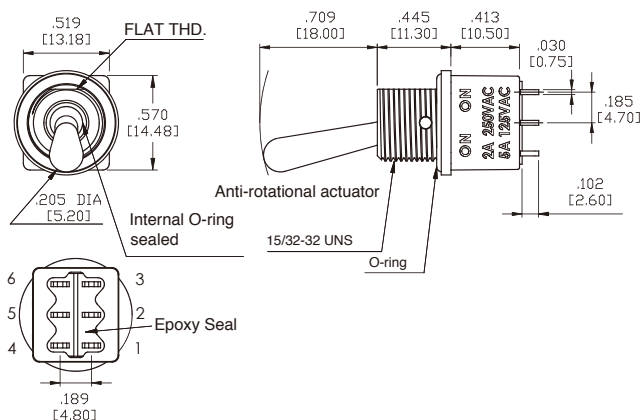
**WCP-0872** For 15/32 bushing option

## 2M1H-Series Dimensional Specifications: in. [mm]

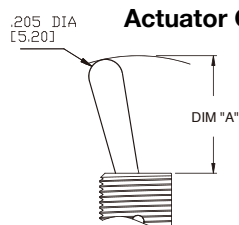
### Single Pole



### Double Pole

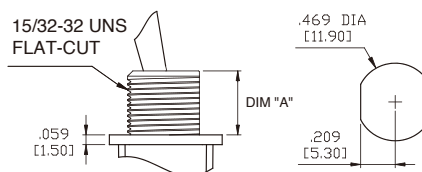


### Actuator Options



| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| TJ          | .709 [18.00] |
| TK          | .512 [13.00] |

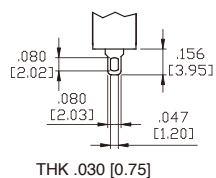
### Bushing Options & Mounting



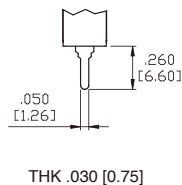
| OPTION CODE | DIM. "A"    |
|-------------|-------------|
| BK          | .386 [9.80] |

### Termination Options

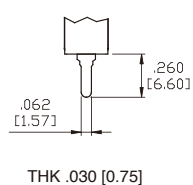
#### M1 Standard Solder Lug



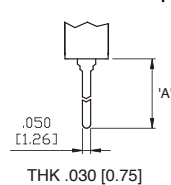
#### M2 PC Thru-Hole



#### M3 Quick Connect



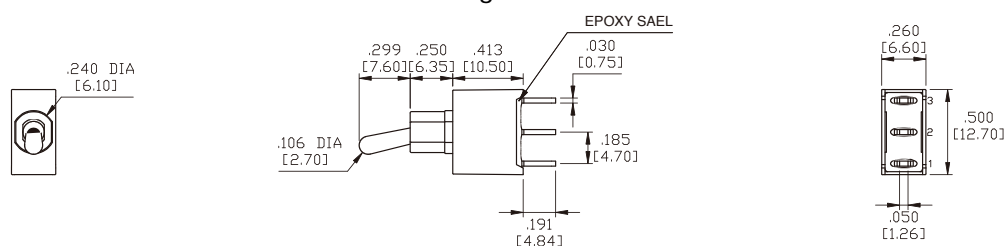
#### M5 Wire Wrap



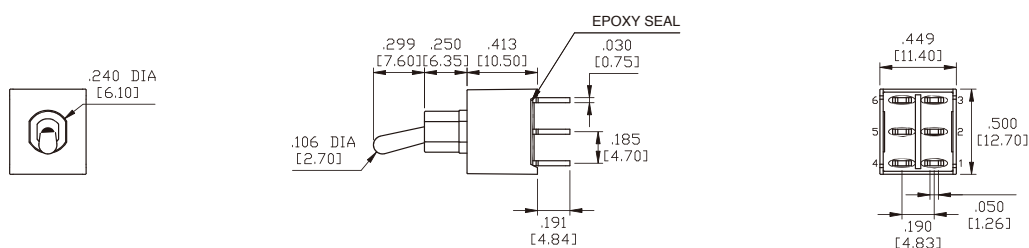
| OPTION CODE | DIM. "A"      |
|-------------|---------------|
| M5-1        | .750 [19.05]  |
| M5-2        | .964 [24.48]  |
| M5-3        | .425 [10.80]  |
| M5-4        | 1.062 [26.97] |

## 2MS-Series Dimensional Specifications: in. [mm]

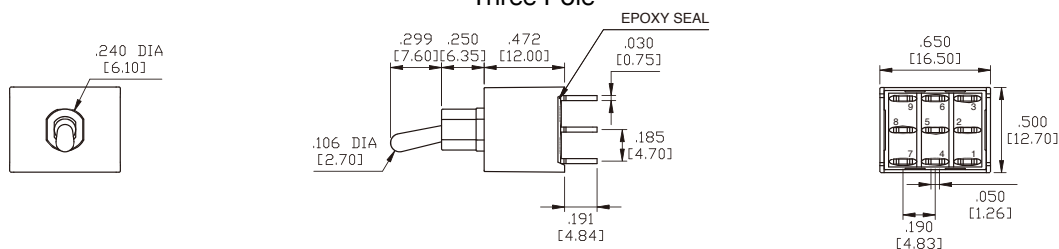
### Single Pole



### Double Pole

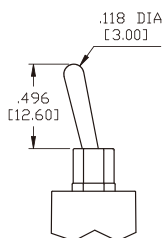


### Three Pole

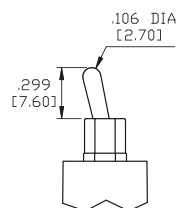


### Actuator Options

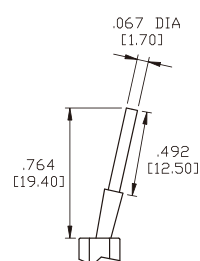
#### T1



#### T2

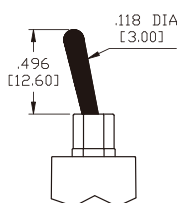


#### T9 with Plastic Cap

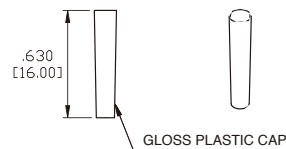
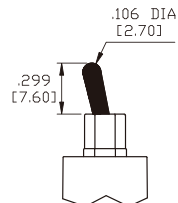


| NO. | COLOR       |
|-----|-------------|
| 1   | White       |
| 2   | Black(std.) |
| 3   | Red         |
| 4   | Orange      |
| 5   | Yellow      |
| 6   | Green       |
| 7   | Blue        |
| 8   | Brown       |
| 9   | Gray        |

#### P1 Plastic Toggle



#### P2 Plastic Toggle

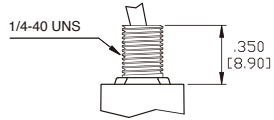


\* Shown with B4 bushing. Subtract .075" (1.90 mm) from actuator height for B1 bushing.

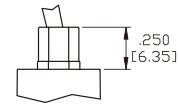
## 2MS-Series Dimensional Specifications: in. [mm]

### Bushing Options

**B1**

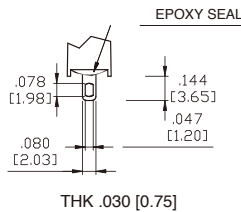


**B4**

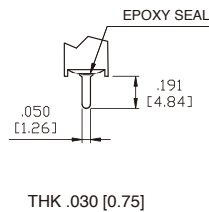


### Termination Options

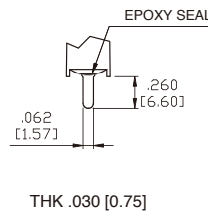
**M1 Standard Solder Lug**



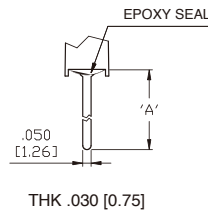
**M2 PC Thru-Hole**



**M3 Quick Connect**

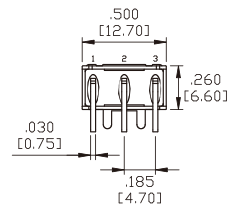
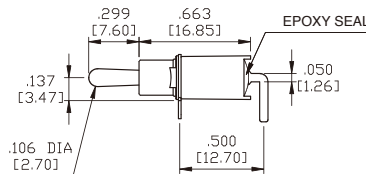
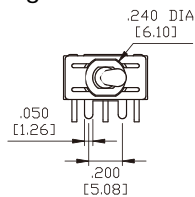


**M5 Wire Wrap**

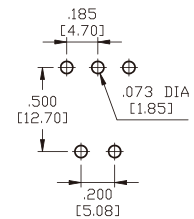


| OPTION CODE | DIM. 'A'      |
|-------------|---------------|
| <b>M5-1</b> | .750 [19.05]  |
| <b>M5-2</b> | .964 [24.48]  |
| <b>M5-3</b> | .425 [10.80]  |
| <b>M5-4</b> | 1.062 [26.97] |

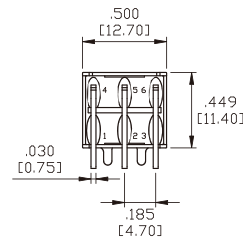
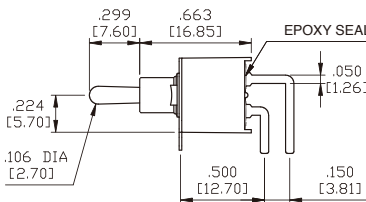
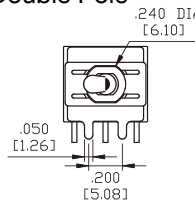
**M6 Single Pole**



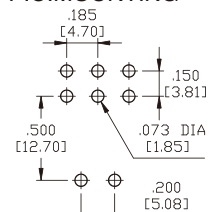
**P.C.MOUNTING**



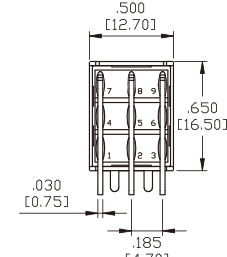
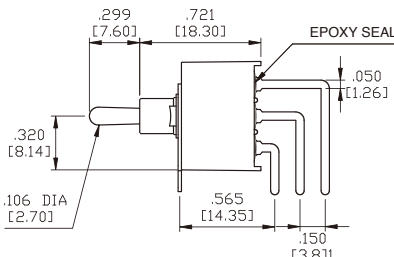
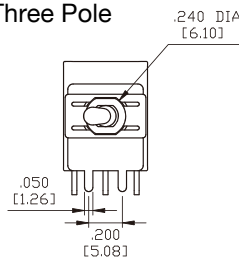
**M6 Double Pole**



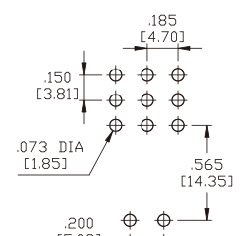
**P.C.MOUNTING**



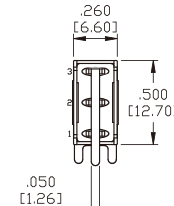
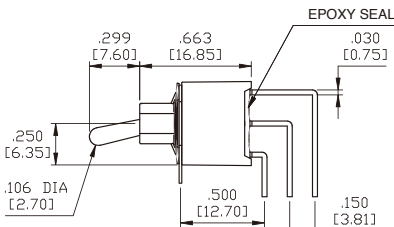
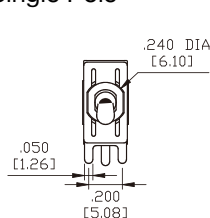
**M6 Three Pole**



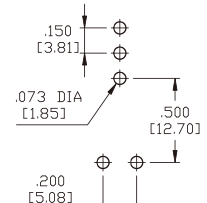
**P.C.MOUNTING**



**M7 Single Pole**



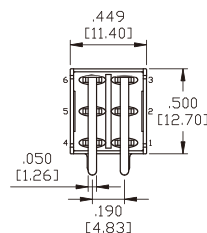
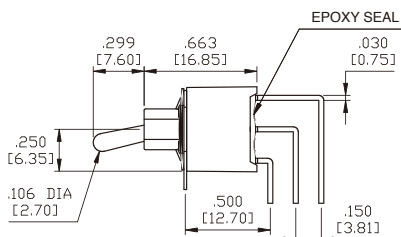
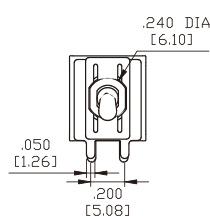
**P.C.MOUNTING**



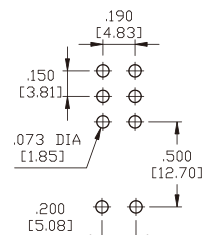
## 2MS-Series Dimensional Specifications: in. [mm]

### Termination Options

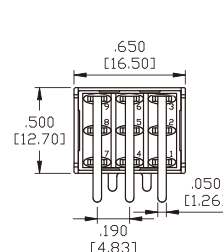
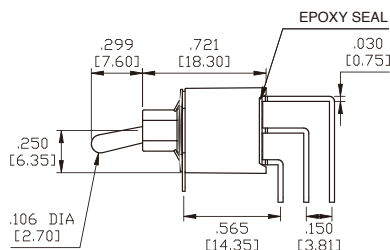
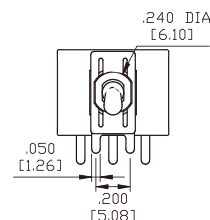
#### M7 Double Pole



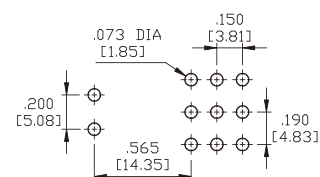
#### P.C.MOUNTING



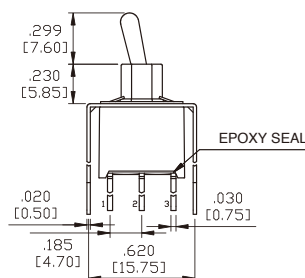
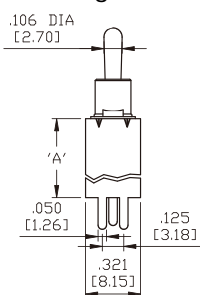
#### M7 Three Pole



#### P.C.MOUNTING

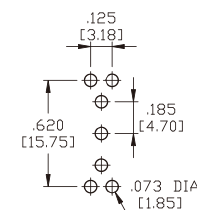


#### VS2-VS3 Single Pole

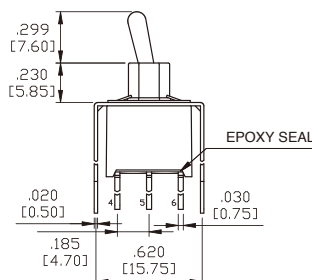
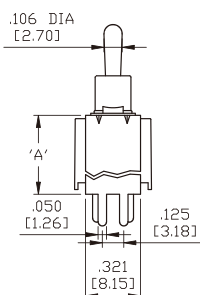


| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>VS2</b>  | .461 [11.70] |
| <b>VS3</b>  | .630 [16.00] |

#### P.C.MOUNTING

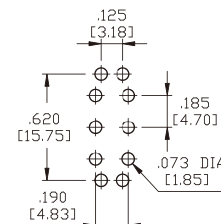


#### VS2-VS3 Double Pole

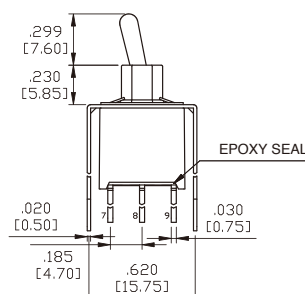
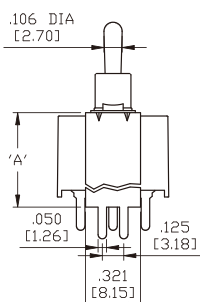


| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>VS2</b>  | .461 [11.70] |
| <b>VS3</b>  | .630 [16.00] |

#### P.C.MOUNTING

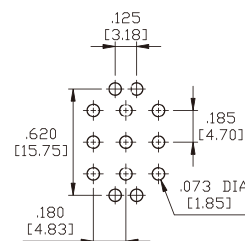


#### U2-VS3 Three Pole



| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>U2</b>   | .551 [14.00] |
| <b>VS3</b>  | .630 [16.00] |

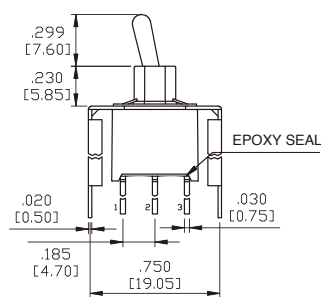
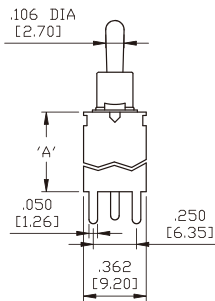
#### P.C.MOUNTING



## 2MS-Series Dimensional Specifications: in. [mm]

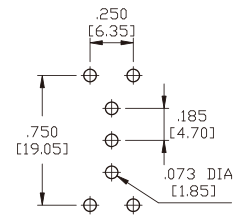
### Termination Options

#### VS4-VS5 Single Pole

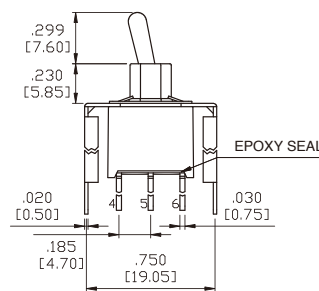
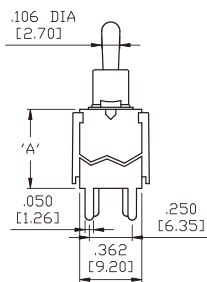


| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>VS4</b>  | .461 [11.70] |
| <b>VS5</b>  | .630 [16.00] |

#### P.C.MOUNTING

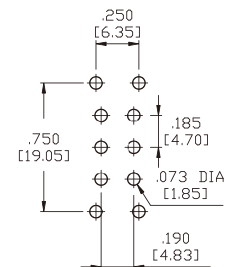


#### VS4-VS5 Double Pole

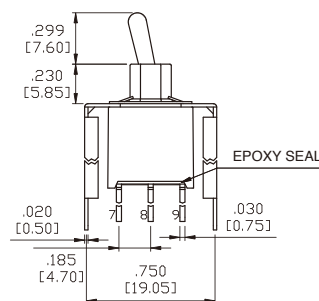
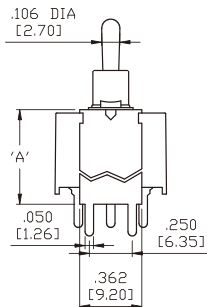


| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>VS4</b>  | .461 [11.70] |
| <b>VS5</b>  | .630 [16.00] |

#### P.C.MOUNTING

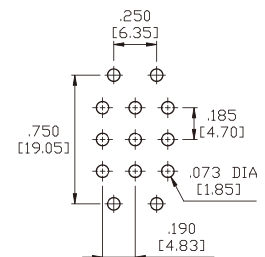


#### U4-VS5 Three Pole



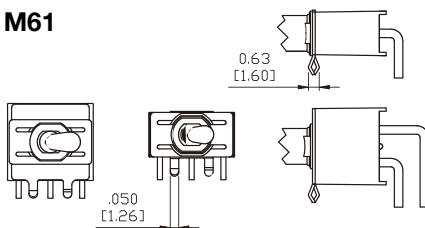
| OPTION CODE | DIM.'A'      |
|-------------|--------------|
| <b>U4</b>   | .551 [14.00] |
| <b>VS5</b>  | .630 [16.00] |

#### P.C.MOUNTING

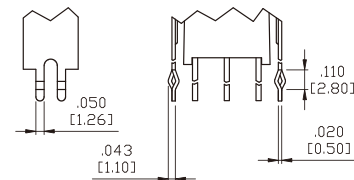


### Snap-In Termination Options

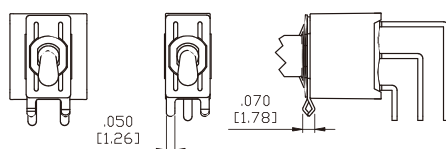
#### M61



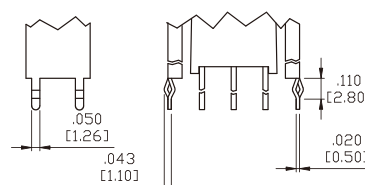
#### VS21, VS31



#### M71

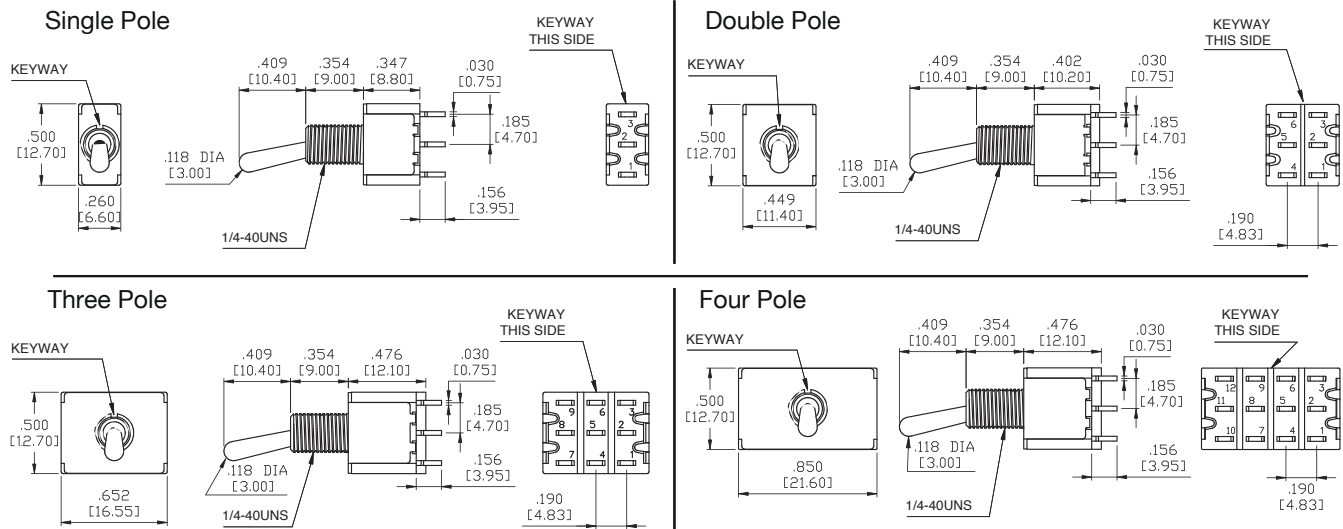


#### VS41, VS51

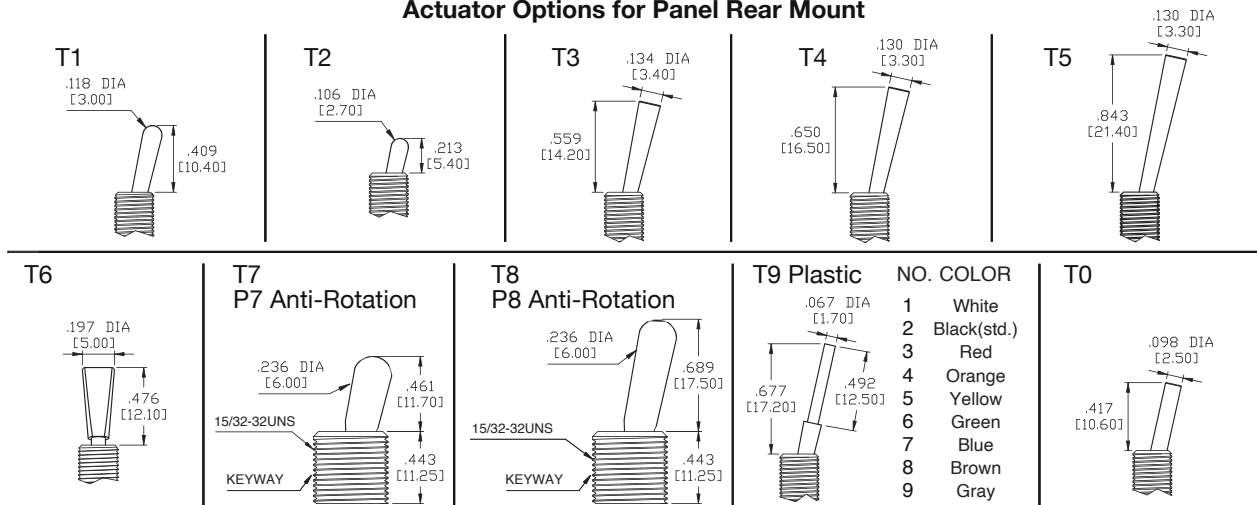


\* PC Mounting for M61, M71, VS21, VS31, VS41, VS51 refer to M6, M7, VS2, VS3, VS4, VS5 respectively.

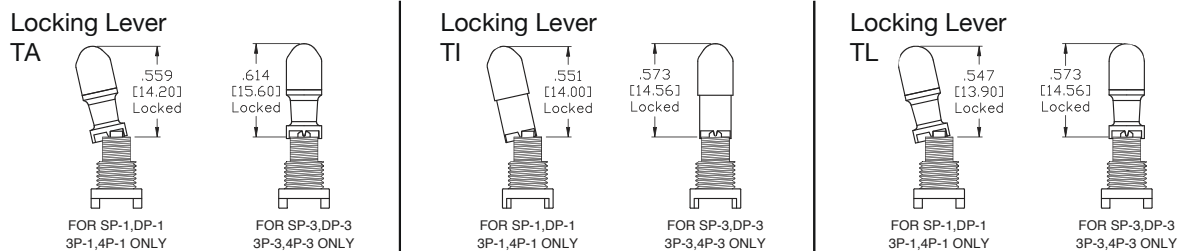
## 2M1-Series Dimensional Specifications: in. [mm]



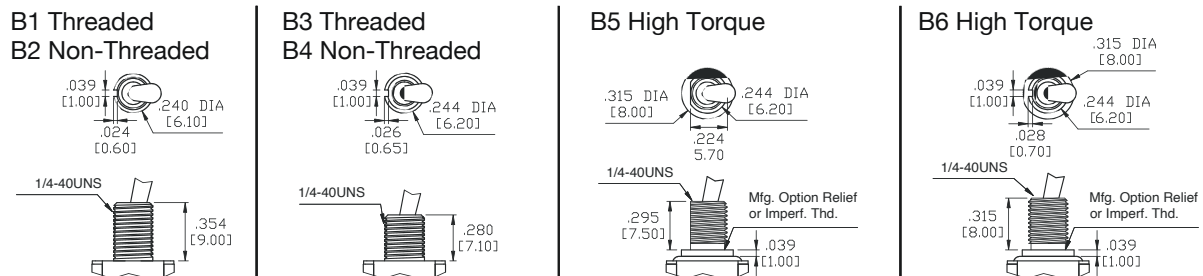
### Actuator Options for Panel Rear Mount



\* T6 actuator is available with B1, B2, B5, B6, BA, BB & BE bushing. Actuator length shown for T1 – T5, T9 and T10 is with B1 bushing. T7, P7, T8 & P8 does not require a bushing code.



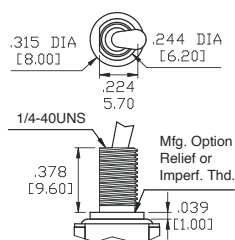
### Bushing Options



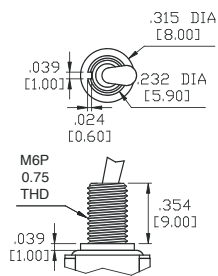
## 2M1-Series Dimensional Specifications: in. [mm]

### Bushing Options

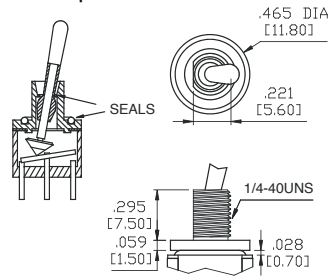
B7 Long



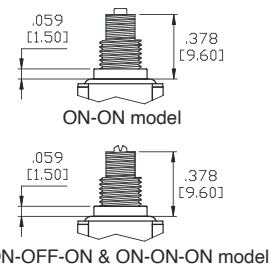
B8 Metric



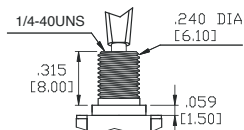
B9 Splash-Proof



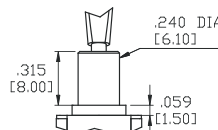
BL Locking Lever



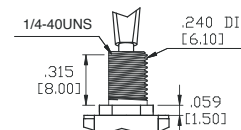
BA Threaded for T6



BB Non-Threaded for T6

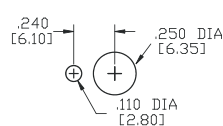
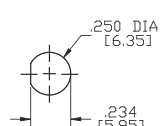
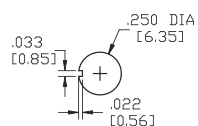


BB High Torque for T6

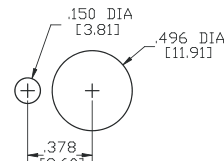
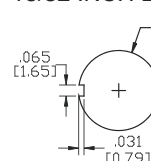


### Panel Mounting

1/4 INCH BUSHING

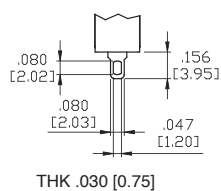


15/32 INCH BUSHING

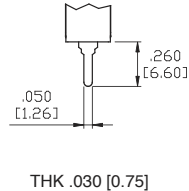


### Termination Options

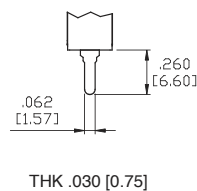
M1 Standard Solder Lug



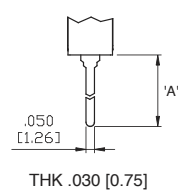
M2 PC Thru-Hole



M3 Quick Connect

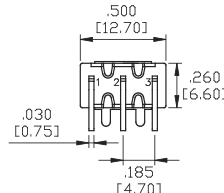
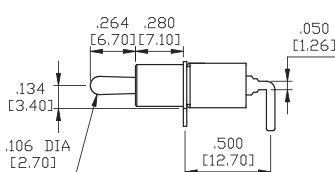
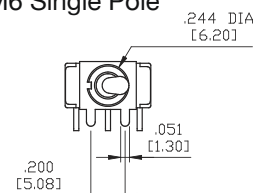


M5 Wire Wrap

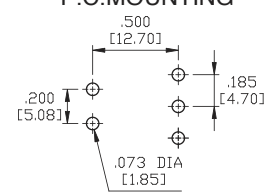


| OPTION CODE | DIM.'A'       |
|-------------|---------------|
| M5-1        | .750 [19.05]  |
| M5-2        | .964 [24.48]  |
| M5-3        | .425 [10.80]  |
| M5-4        | 1.062 [26.97] |

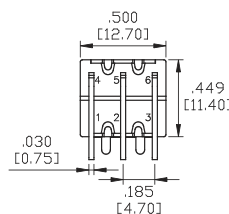
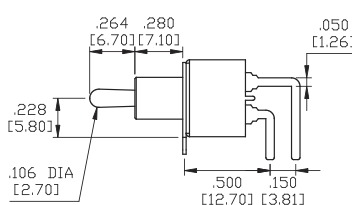
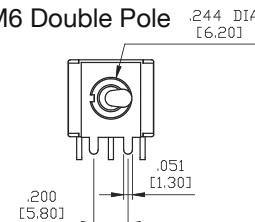
M6 Single Pole



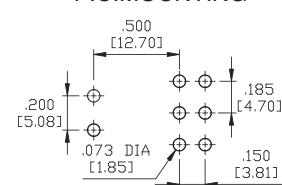
P.C.MOUNTING



M6 Double Pole



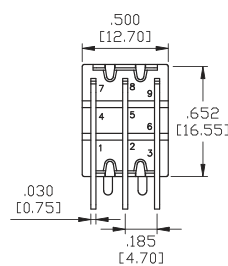
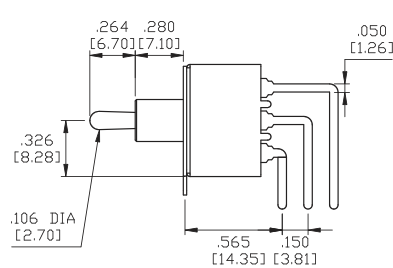
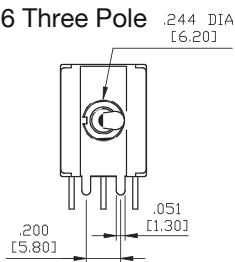
P.C.MOUNTING



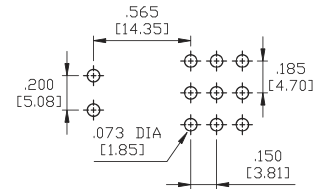
## 2M1-Series Dimensional Specifications: in. [mm]

### Termination Options

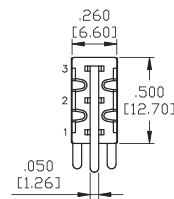
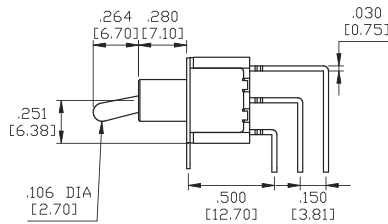
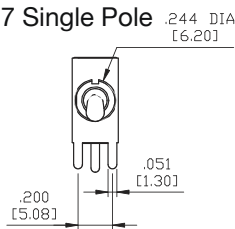
**M6 Three Pole**



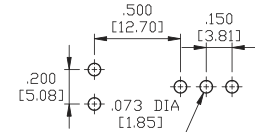
**P.C.MOUNTING**



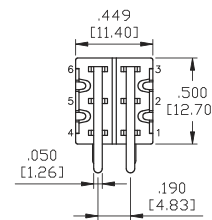
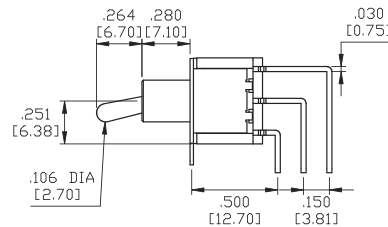
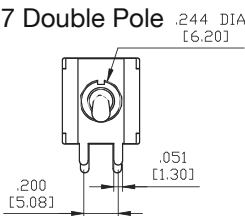
**M7 Single Pole**



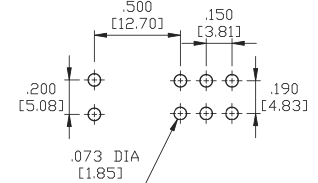
**P.C.MOUNTING**



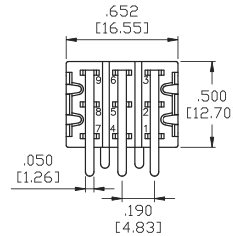
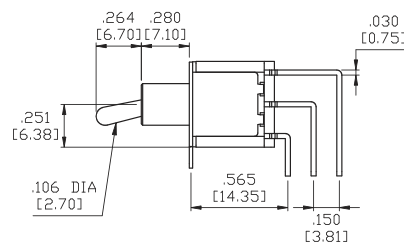
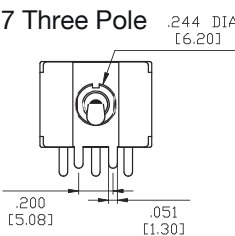
**M7 Double Pole**



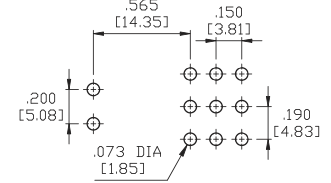
**P.C.MOUNTING**



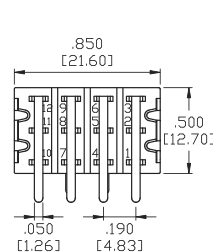
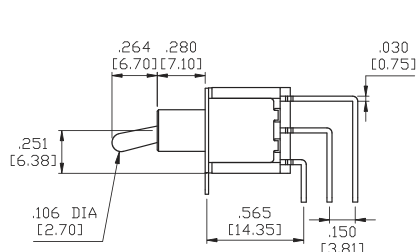
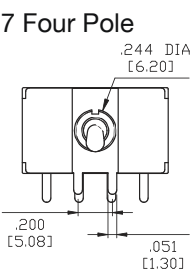
**M7 Three Pole**



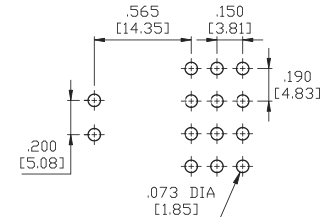
**P.C.MOUNTING**



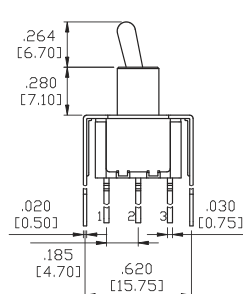
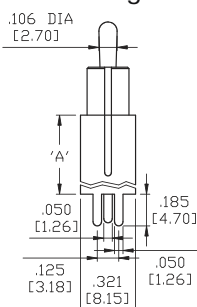
**M7 Four Pole**



**P.C.MOUNTING**

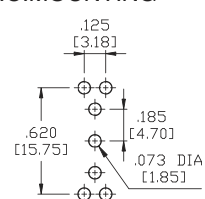


**VS2-VS3 Single Pole**



| OPTION CODE | DIM. 'A'     |
|-------------|--------------|
| VS2         | .461 [11.70] |
| VS3         | .630 [16.00] |

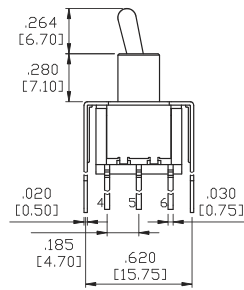
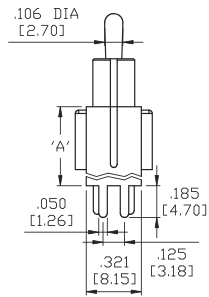
**P.C.MOUNTING**



## 2M1-Series Dimensional Specifications: in. [mm]

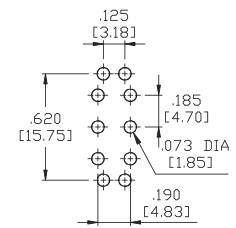
### Termination Options

#### VS2-VS3 Double Pole

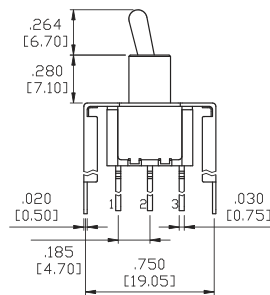
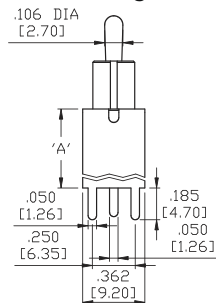


| OPTION CODE | DIM. 'A'     |
|-------------|--------------|
| VS2         | .461 [11.70] |
| VS3         | .630 [16.00] |

#### P.C.MOUNTING

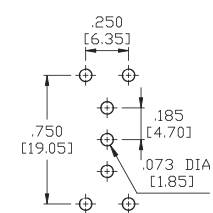


#### VS4-VS5 Single Pole

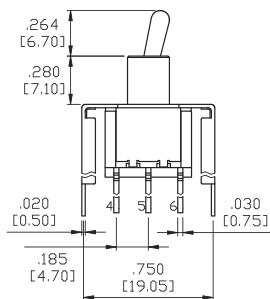
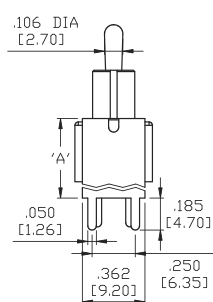


| OPTION CODE | DIM. 'A'     |
|-------------|--------------|
| VS4         | .461 [11.70] |
| VS5         | .630 [16.00] |

#### P.C.MOUNTING

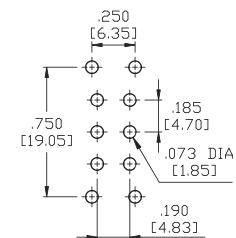


#### VS4-VS5 Double Pole



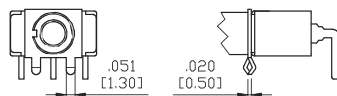
| OPTION CODE | DIM. 'A'     |
|-------------|--------------|
| VS4         | .461 [11.70] |
| VS5         | .630 [16.00] |

#### P.C.MOUNTING

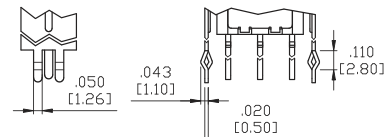


### Snap-In Termination Options

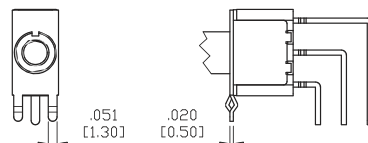
#### M61 (available with SP & DP)



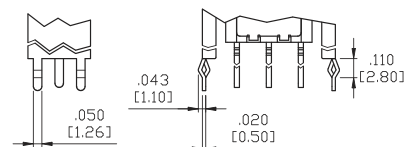
#### VS21, VS31



#### M71 (available with SP & DP)



#### VS41, VS51



\* PC Mounting for M61,M71,VS21,VS31,VS41,VS51 refer to M6,M7,VS2,VS3,VS4,VS5 respectively.

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