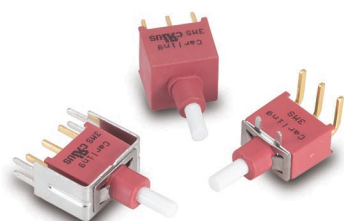
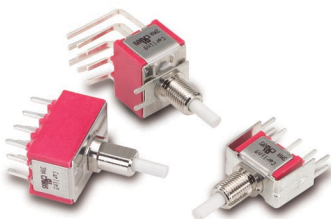




**3MN-Series**  
**Snap-Action** Miniature  
Pushbutton Switch



**3MS-Series**  
**Sealed Snap-Action**  
Miniature Pushbutton  
Switch



**3MA-Series**  
**Alternate Action**  
Miniature Pushbutton  
Switch

### Specifications

|                               |                                                                                                                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact Rating . . . . .      | refer to ordering scheme                                                                                                                                                                                 |
| Electrical Life . . . . .     | 50,000 make & break cycles @ full load                                                                                                                                                                   |
| Contact Resistance. . . . .   | <b>3MN &amp; 3MA-Series:</b> 10 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts.<br><b>3MS-Series:</b> 50 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts. |
| Insulation Resistance . . .   | 1000 MΩ min.                                                                                                                                                                                             |
| Dielectric Strength . . . . . | 1500 Volts RMS @ sea level                                                                                                                                                                               |
| Operating Temperature . . .   | -30°C to +85°C                                                                                                                                                                                           |
| Index of Protection . . . . . | <b>3MS -Series:</b> IP68                                                                                                                                                                                 |
| Cap Installation Support . .  | <b>3MS-Series:</b> 10 lbs. max.                                                                                                                                                                          |
| Solder Heat Resistance. . .   | MIL-STD-202, Method 210                                                                                                                                                                                  |
| Actuator Travel . . . . .     | 25°                                                                                                                                                                                                      |

### Materials

|                             |                                                                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Case . . . . .              | <b>3MN &amp; 3MA-Series:</b> Diallyl phthalate (DAP) (UL 94V-0)<br><b>3MS-Series:</b> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0) |
| Plunger. . . . .            | <b>3MN-Series:</b> Thermoplastic polyester, black<br><b>3MS &amp; 3MA-Series:</b> Glass filled nylon or glass filled polyester (UL 94V-0)                 |
| Bushing . . . . .           | <b>3MN-Series:</b> Brass, nickel plated<br><b>3MA-Series:</b> Zinc, nickel plated                                                                         |
| Housing. . . . .            | <b>3MN &amp; 3MA-Series:</b> Stainless Steel                                                                                                              |
| Switch Support Retainer . . | <b>3MS-Series:</b> Stainless Steel                                                                                                                        |
| Terminal Seal . . . . .     | Epoxy                                                                                                                                                     |

### 3M-Series Optional Cap

To order a cap assembled on a switch, specify the switch number followed by the cap part number and the word "assembled".

Ex: 3MN-SP-7-P2-B6-M6QE-C13ASSEMBLED

To order caps in bulk, specify the Series, followed by the cap. Ex.) 3MN-C13



#### 1 SERIES OR SWITCH CATALOG NUMBER 3MN, 3MS or 3MA

#### 2 CAP SIZE

|           |                      |           |                                                |
|-----------|----------------------|-----------|------------------------------------------------|
| <b>C1</b> | round 7.6mm dia.     | <b>C5</b> | round 14.5mm dia.<br>(for 3MA w/ PL bushing)   |
| <b>C2</b> | round 9.35 mm dia.   | <b>C6</b> | brass chrome plated<br>(for 3MA w/ PD bushing) |
| <b>C3</b> | square 11.7 x 11.7mm |           |                                                |
| <b>C4</b> | round 5mm dia.       |           |                                                |

#### 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   |
| <b>4</b> | orange |          |        |

1 Black, white & red standard. Other colors available. Consult factory.

**3MN-Series Ordering Scheme**
**with Square Actuator**

**with Plunger Actuator**

**1 SERIES**
**3MN** Snap-Action Miniature Pushbutton Switch

**2 POLES**
**SP** single pole **DP** double pole

**3 CIRCUIT**

( ) - momentary

**7** ON (ON)

**4 ACTUATOR<sup>1</sup>**
**SQUARE ACTUATOR** (use with Color Options in Selection 5A & 5B.)

**AP1** square with no frame  
**AP2** square raised above frame  
**AP3** square flush with frame

**PLUNGER ACTUATOR** (use with Bushing Options in Selection 5)

**P0** 2.5mm short plunger(for B6 bushing only)  
**P1** 5.2mm plunger(for bushing B10,B11,B20,B21; 7.5mm for B6)  
**P2** 2.0mm plunger(for bushing B10,B11,B20,B21; 4.2mm for B6)

**5A ACTUATOR COLOR & 5B FRAME COLOR<sup>1,2</sup>**

|                |                 |                |
|----------------|-----------------|----------------|
| <b>1</b> white | <b>4</b> orange | <b>7</b> blue  |
| <b>2</b> black | <b>5</b> yellow | <b>8</b> brown |
| <b>3</b> red   | <b>6</b> green  | <b>9</b> gray  |

1 Black, white and red are standard. Other colors available, consult factory for details.  
 2 Selection 5B is blank if actuator style is AP1 (no frame)

**OR**
**5 BUSHING**
**B6** Unthreaded (for terminations VS6-VS9 only)  
**B10** Threaded keyway  
**B11** Threaded with flat  
**B20** Unthreaded keyway  
**B21** Unthreaded with flat

**NOTE:**

 If ordering optional CAP with bushings B10, B11, B20 or B21, specify actuator P1.  
 For CAP with bushing B6, specify actuator P2.  
 For CAP options, see ordering scheme on page 35.

**6 TERMINATION**

|             |                                                      |
|-------------|------------------------------------------------------|
| <b>M1</b>   | Solder Lug                                           |
| <b>M2</b>   | PCB                                                  |
| <b>M5-1</b> | Wire Wrap .750 [19.05]                               |
| <b>M5-3</b> | Wire Wrap .425 [10.80]                               |
| <b>M6</b>   | PC Mount, 90° horizontal                             |
| <b>M7</b>   | PC Mount, 90° vertical                               |
| <b>VS2</b>  | PC Mount, U bracket, .620 mounting x .460 high       |
| <b>VS3</b>  | PC Mount, U bracket, .620 mounting x .630 high       |
| <b>VS4</b>  | PC Mount, U bracket, .750 mounting x .460 high       |
| <b>VS5</b>  | PC Mount, U bracket, .750 mounting x .630 high       |
| <b>VS6</b>  | PC Mount, U bracket, .460 high (for B6 bushing only) |
| <b>VS7</b>  | PC Mount, U bracket, .630 high (for B6 bushing only) |
| <b>VS8</b>  | PC Mount, U bracket, .460 high (for B6 bushing only) |
| <b>VS9</b>  | PC Mount, U bracket, .630 high (for B6 bushing only) |

**7 CONTACT**

|          | Material            | Terminal Plating              | Rating                      | Approvals |
|----------|---------------------|-------------------------------|-----------------------------|-----------|
| <b>G</b> | silver <sup>1</sup> | gold over silver <sup>3</sup> | 1A@120VAC or 28VDC          | UL, CUL   |
| <b>Q</b> | silver <sup>1</sup> | silver <sup>1</sup>           | 1A@120VAC or 28VDC          | UL, CUL   |
| <b>R</b> | gold <sup>2</sup>   | gold <sup>2</sup>             | 0.4VA max. @20V max (AC/DC) |           |

**NOTE:**

Tin-lead option available with PC type terminations only.

1 Moveable contact & terminals: copper alloy, silver plate  
 2 Moveable contact & terminals: copper alloy with gold plate over nickel plate  
 3 Terminals: silver plate with outer layer in gold plating

**8 EPOXY SEAL**
**E** epoxy seal

### 3MS-Series Ordering Scheme



1 SERIES

3MS Sealed Snap-Action Miniature Pushbutton Switch

2 POLES

WSP single pole

WDP double pole

3 CIRCUIT

( ) - momentary

7

ON

(ON)

4 ACTUATOR

P1 .173" plunger (for B1 bushing); .276" (for B4 bushing)

P2 .220" plunger (for B1 bushing); .327" (for B4 bushing)

P3 .087" plunger (for B1 bushing); .193" (for B4 bushing)

5 BUSHING

B1 Threaded

B4 Unthreaded

6 TERMINATION

M1 Solder Lug

M2 PCB

M6 PC Mount, 90° horizontal

M61 Snap-In, 90° horizontal

M7 PC Mount, 90° vertical

M71 Snap-In, 90° vertical

VS2 PC Mount, U bracket, .620 mounting x .460 high

VS21 Snap-In, U bracket, .620 mounting x .460 high

VS3 PC Mount, U bracket, .620 mounting x .630 high

VS4 PC Mount, U bracket, .750 mounting x .460 high

VS5 PC Mount, U bracket, .750 mounting x .630 high

7 CONTACT

|   | Material            | Terminal Plating              | Rating                       | Approvals    |
|---|---------------------|-------------------------------|------------------------------|--------------|
| G | silver <sup>1</sup> | gold over silver <sup>3</sup> | 1A @ 120VAC or 28VDC         | UL, CUL IP68 |
| Q | silver <sup>1</sup> | silver <sup>1</sup>           | 1A @ 120VAC or 28VDC         | UL, CUL IP68 |
| R | gold <sup>2</sup>   | gold <sup>2</sup>             | 0.4VA max. @ 20V max (AC/DC) | IP68         |

NOTE:

Tin-lead option available with PC type terminations only.

1 Moveable contact & terminals: copper alloy, silver plate

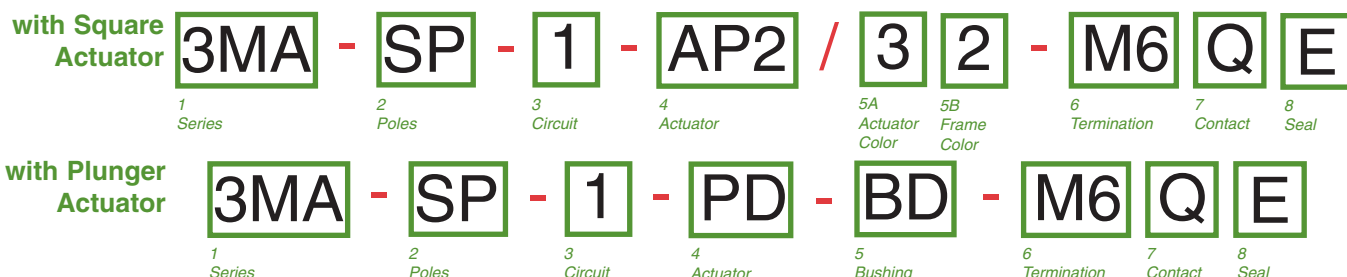
2 Moveable contact & terminals: copper alloy with gold plate over nickel plate

3 Terminals: silver plate with outer layer in gold plating

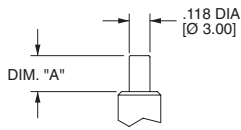
7 EPOXY SEAL

E epoxy seal

### 3MA-Series Ordering Scheme

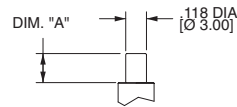


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <b>1 SERIES</b><br><b>3MA</b> Alternate-Action Miniature Pushbutton Switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| <b>2 POLES</b><br><b>SP</b> single pole <b>DP</b> double pole <b>3P</b> three pole <b>4P</b> four pole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| <b>3 CIRCUIT</b><br>( ) - momentary<br><b>Switching Position:</b><br><div> <div>2-3, 5-6, 8-9, 11-12</div> <div>OPEN</div> <div>2-1, 5-4, 8-7, 11-10</div> </div> <div> <div>1</div> <div>ON</div> <div>NONE</div> <div>ON</div> </div> <div> <div>2</div> <div>ON</div> <div>NONE</div> <div>(ON)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| <b>4 ACTUATOR</b><br><b>SQUARE ACTUATOR</b> (use with Color Options in Selection 5A & 5B.)<br><b>AP1</b> square with no frame<br><b>AP2</b> square raised above frame<br><b>PLUNGER ACTUATOR</b> (use with Bushing Options in Selection 5)<br><div> <div>PA</div> <div>.118 dia. x .299" plunger length</div> </div> <div> <div>PI</div> <div>.118 dia. x .244" plunger length</div> </div> <div> <div>PL</div> <div>.118 dia. x .327" plunger length</div> </div> <div> <div>PC</div> <div>.315" dia. brass chrome plated plunger (for BD bushing only)</div> </div> <div> <div>PD</div> <div>.242" dia. brass chrome plated plunger (for BD bushing only)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
| <b>5A ACTUATOR COLOR &amp; 5B FRAME COLOR</b> <sup>1,2</sup><br><div> <div>1 white</div> <div>4 orange</div> <div>7 blue</div> </div> <div> <div>2 black</div> <div>5 yellow</div> <div>8 brown</div> </div> <div> <div>3 red</div> <div>6 green</div> <div>9 gray</div> </div> <div> <div>1</div> <div>Black, red and white are standard. Other colors available, consult factory for details.</div> </div> <div> <div>2</div> <div>Selection 5B is blank if actuator style AP1 (no frame)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
| <b>5 BUSHING</b><br><div> <div>BD</div> <div>Big bushing for PC, PD actuator 15/32"</div> </div> <div> <div>B10</div> <div>Threaded 1/4 - 40</div> </div> <div> <div>B20</div> <div>Unthreaded</div> </div> <div> <div>B21</div> <div>Unthreaded with flat</div> </div> <div> <div>NOTE:</div> <div>For CAP options, see ordering scheme on page 35.</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| <b>6 TERMINATION</b><br><div> <div>M1</div> <div>Solder Lug</div> <div>VS2</div> <div>PC Mount, U bracket, .620 mounting x .460 high</div> </div> <div> <div>M2</div> <div>PCB</div> <div>VS3</div> <div>PC Mount, U bracket, .620 mounting x .630 high</div> </div> <div> <div>M5-1</div> <div>Wire Wrap .750 [19.05]</div> <div>VS4</div> <div>PC Mount, U bracket, .750 mounting x .460 high</div> </div> <div> <div>M5-2</div> <div>Wire Wrap .964 [24.48]</div> <div>VS5</div> <div>PC Mount, U bracket, .750 mounting x .630 high</div> </div> <div> <div>M5-3</div> <div>Wire Wrap .425 [10.80]</div> </div> <div> <div>M5-4</div> <div>Wire Wrap 1.062 [26.87]</div> </div> <div> <div>M6</div> <div>PC Mount, 90° horizontal</div> </div> <div> <div>M7</div> <div>PC Mount, 90° vertical</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| <b>7 CONTACT</b><br><div> <div>G</div> <div>silver<sup>1</sup></div> <div>Terminal Plating</div> <div>gold over silver<sup>3</sup></div> <div>Rating</div> <div>6A @ 125VAC or 28VDC, 3A @ 250VAC</div> <div>Approvals</div> <div>UL, CUL</div> </div> <div> <div>K</div> <div>gold<sup>2</sup></div> <div>tin-lead<sup>4</sup></div> <div>6A @ 125VAC or 28VDC</div> <div>UL, CUL</div> </div> <div> <div>P</div> <div>silver<sup>1</sup></div> <div>tin-lead<sup>4</sup></div> <div>6A @ 125VAC or 28VDC, 3A @ 250VAC</div> <div>UL, CUL</div> </div> <div> <div>Q</div> <div>silver<sup>1</sup></div> <div>silver<sup>1</sup></div> <div>6A @ 125VAC or 28VDC, 3A @ 250VAC</div> <div>UL, CUL</div> </div> <div> <div>R</div> <div>gold<sup>2</sup></div> <div>gold<sup>2</sup></div> <div>0.4VA max. @20V max (AC/DC)</div> </div> <div> <div>NOTE:</div> <div>Tin-lead option available with PC type terminations only.</div> </div> <div> <div>1</div> <div>Moveable contact &amp; terminals: copper alloy, silver plate</div> </div> <div> <div>2</div> <div>Moveable contact &amp; terminals: copper alloy with gold plate over nickel plate</div> </div> <div> <div>3</div> <div>Terminals: silver plate with outer layer in gold plating</div> </div> <div> <div>4</div> <div>Outer terminals: copper alloy with tin-lead over nickel plate</div> </div> |  |  |  |
| <b>8 EPOXY SEAL</b><br><b>E</b> epoxy seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |

**3MN-Series Dimensional Specifications: in. [mm]**
**PLUNGER**


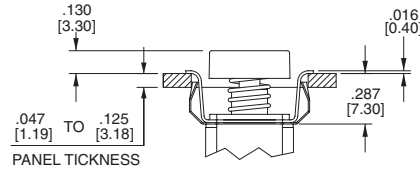
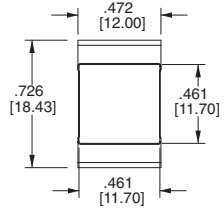
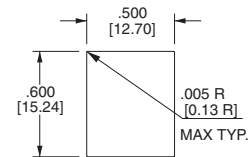
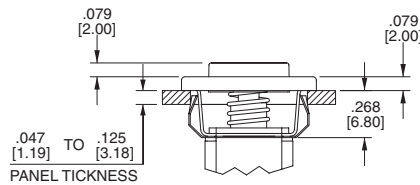
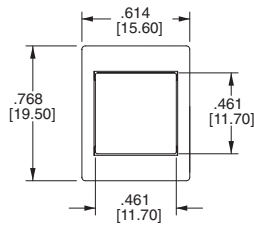
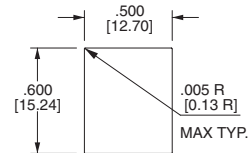
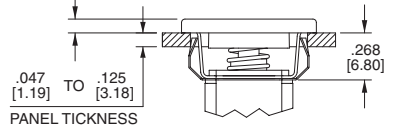
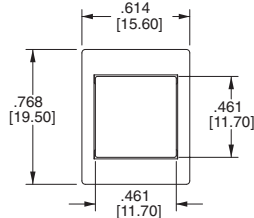
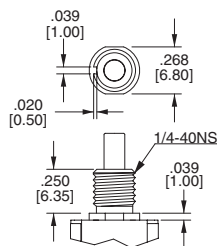
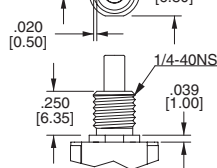
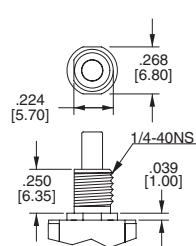
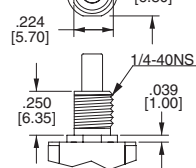
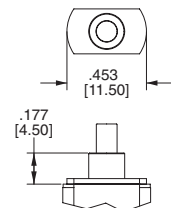
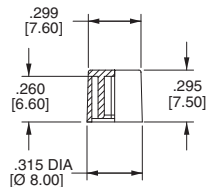
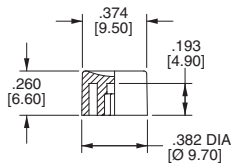
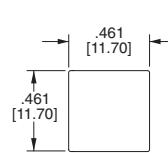
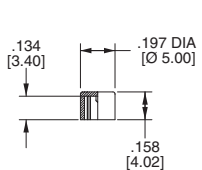
| OPTION CODE | DIM. "A"    |
|-------------|-------------|
| <b>P0</b>   | .000 [0.00] |
| <b>P1</b>   | .205 [5.20] |
| <b>P2</b>   | .079 [2.00] |

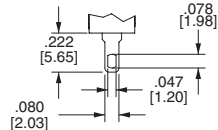
FOR B10,B11,B20,B21 ONLY



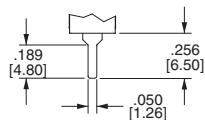
FOR B6 ONLY

| OPTION CODE | DIM. "A"    |
|-------------|-------------|
| <b>P0</b>   | .098 [2.50] |
| <b>P1</b>   | .295 [7.50] |
| <b>P2</b>   | .165 [4.20] |

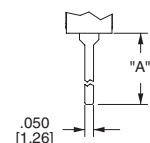
**ACTUATOR**
**AP1**

**PANEL MOUNTING**

**AP2**

**PANEL MOUNTING**

**AP3**

**BUSHING**
**B10  
STANDARD KEYWAY  
THREADED SHOWN**

**B20  
STANDARD KEYWAY  
NON-THREADED**

**B11  
THREADED SHOWN  
WITH FLAT**

**B21  
NON-THREADED  
WITH FLAT**

**B6  
NON-THREADED  
(FOR TERMINATION  
OPTIONS VS6-VS9 ONLY)**

**CAP**
**C1**

**C2**

**C3**

**C4**


**3MN-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**M1**


THK .030 [0.75]

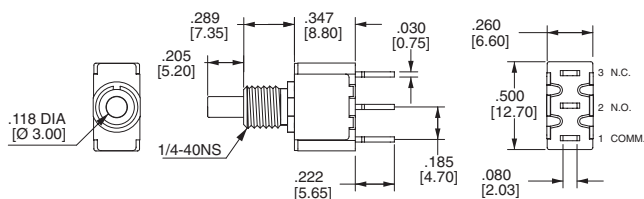
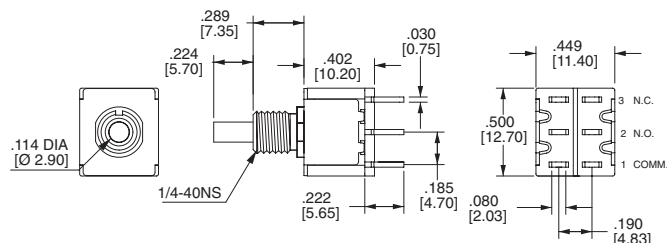
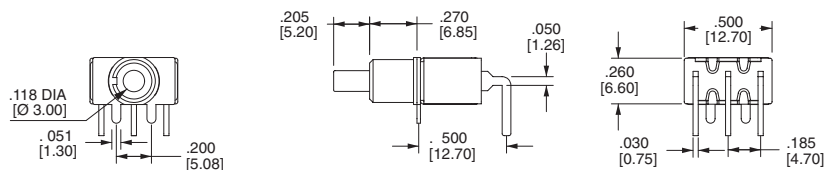
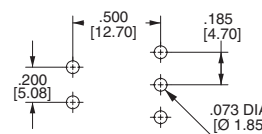
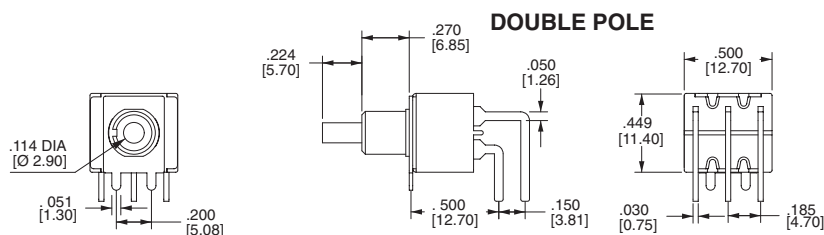
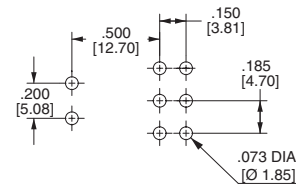
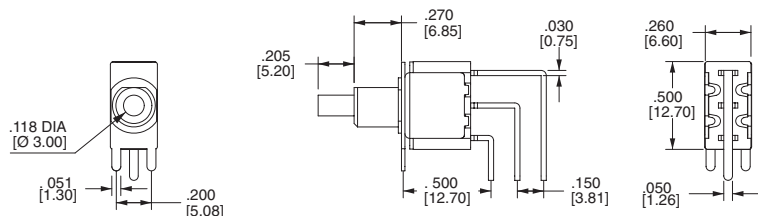
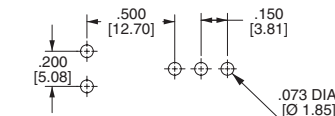
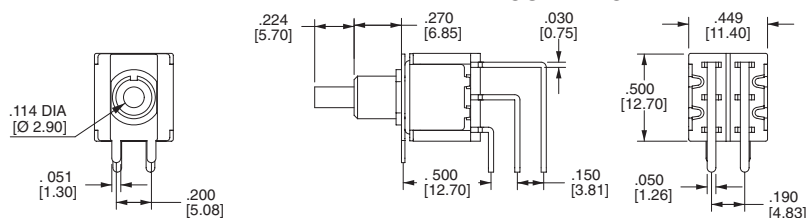
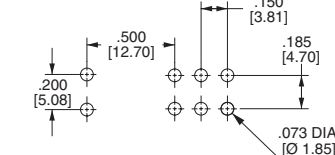
**M2**


THK .030 [0.75]

**M5**


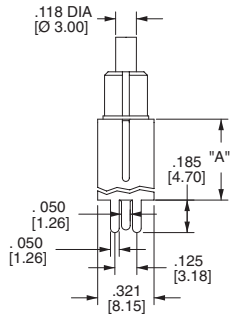
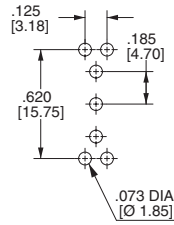
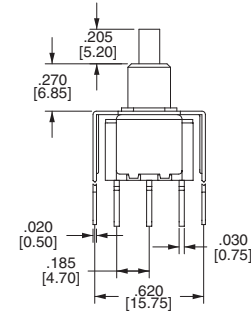
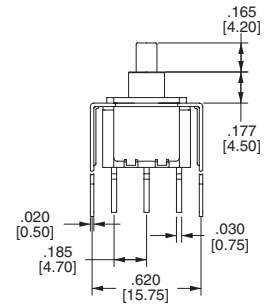
THK .030 [0.75]

| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| <b>M5-1</b> | .750 [19.05] |
| <b>M5-3</b> | .425 [10.80] |

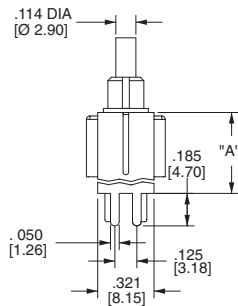
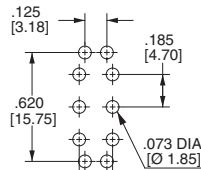
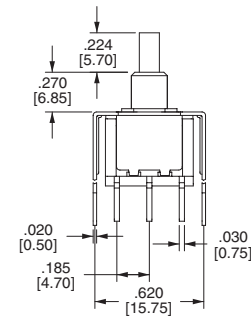
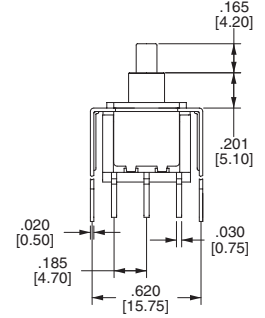
**SINGLE POLE**

**DOUBLE POLE**

**M6**
**SINGLE POLE**

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**

**M7**
**SINGLE POLE**

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**


**3MN-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**SINGLE POLE**

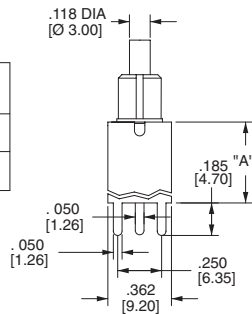
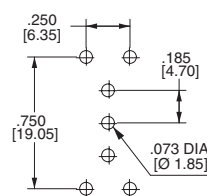
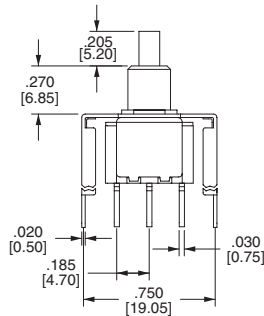
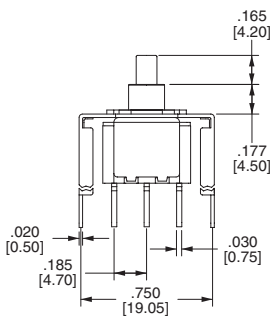
| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| <b>VS2</b>  | .460 [11.68] |
| <b>VS6</b>  | .630 [16.00] |
| <b>VS3</b>  | .630 [16.00] |
| <b>VS7</b>  | .630 [16.00] |


**PC MOUNTING**

**VS2-VS3**

**VS6-VS7  
(For B6 Bushing Only)**

**DOUBLE POLE**

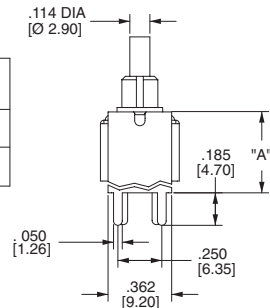
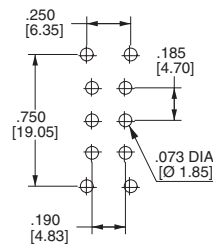
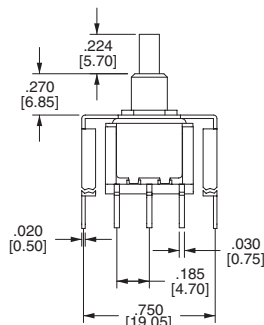
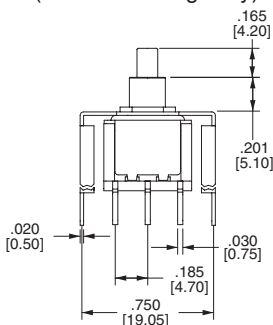
| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| <b>VS2</b>  | .460 [11.68] |
| <b>VS6</b>  | .630 [16.00] |
| <b>VS3</b>  | .630 [16.00] |
| <b>VS7</b>  | .630 [16.00] |


**PC MOUNTING**

**VS2-VS3**

**VS6-VS7  
(For B6 Bushing Only)**

**SINGLE POLE**

| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| <b>VS4</b>  | .460 [11.68] |
| <b>VS8</b>  | .630 [16.00] |
| <b>VS5</b>  | .630 [16.00] |
| <b>VS9</b>  | .630 [16.00] |

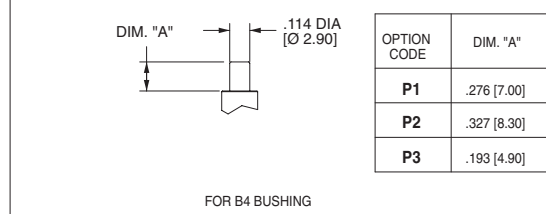
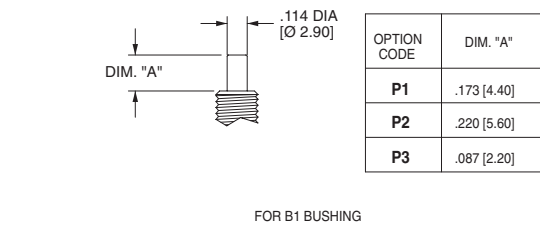

**PC MOUNTING**

**VS4-VS5**

**VS8-VS9  
(For B6 Bushing Only)**

**DOUBLE POLE**

| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| <b>VS4</b>  | .460 [11.68] |
| <b>VS8</b>  | .630 [16.00] |
| <b>VS5</b>  | .630 [16.00] |
| <b>VS9</b>  | .630 [16.00] |

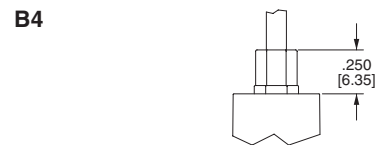
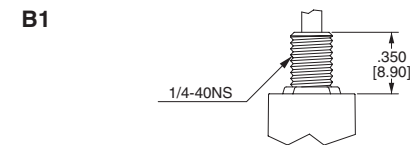

**PC MOUNTING**

**VS4-VS5**

**VS8-VS9  
(For B6 Bushing Only)**


## 3MS-Series Dimensional Specifications: in. [mm]

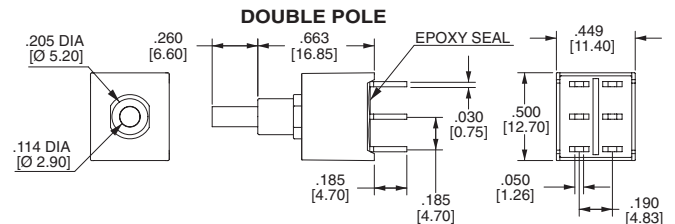
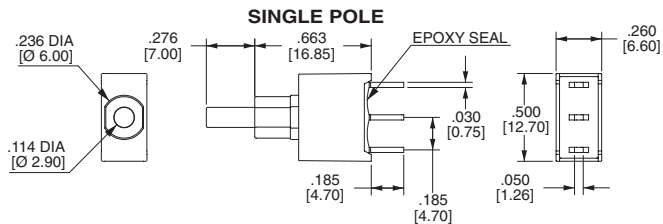
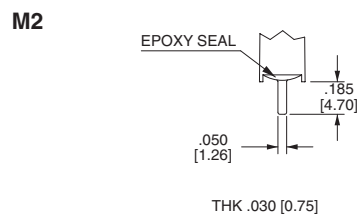
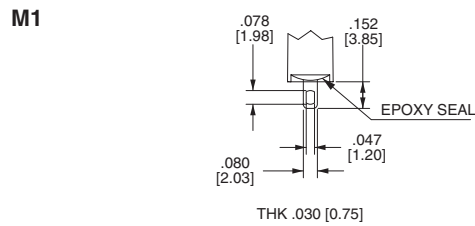
### PLUNGER



### BUSHING

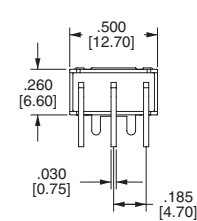
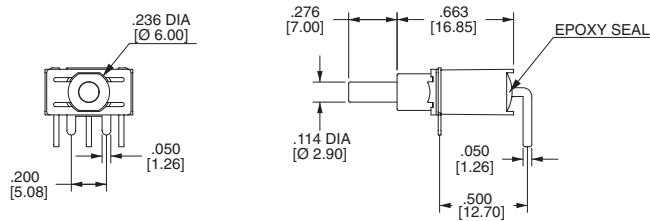


### TERMINATION

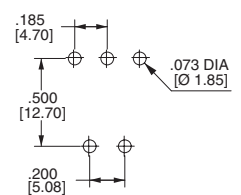


### M6

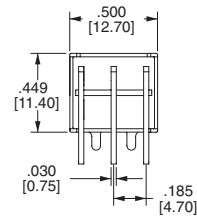
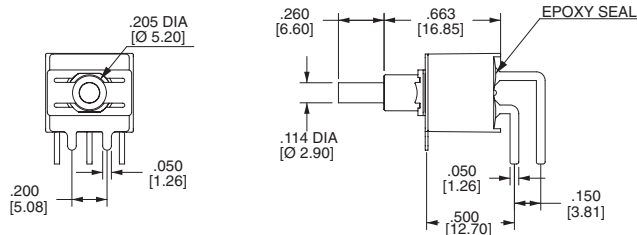
#### SINGLE POLE



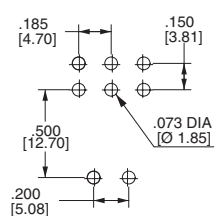
#### PC MOUNTING

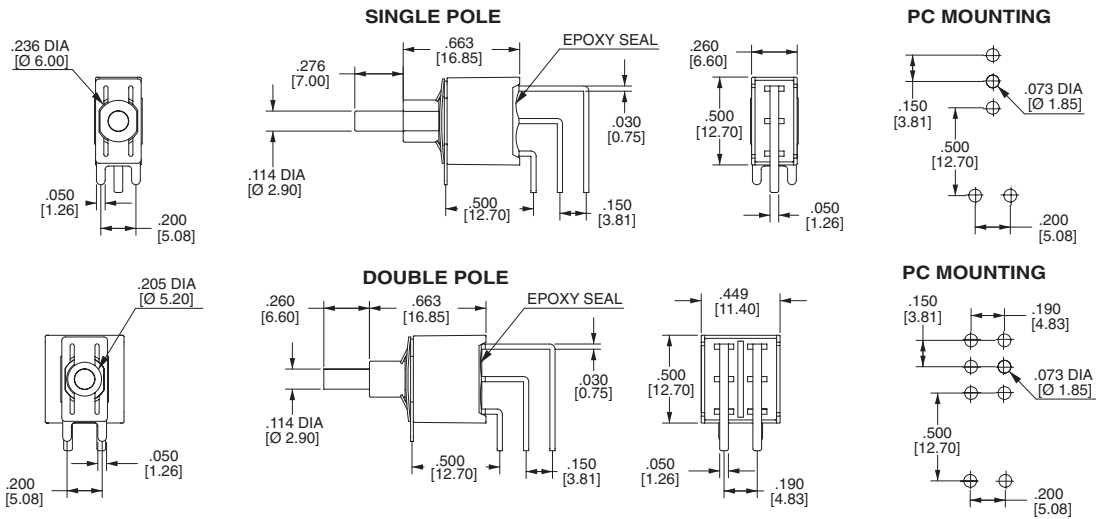
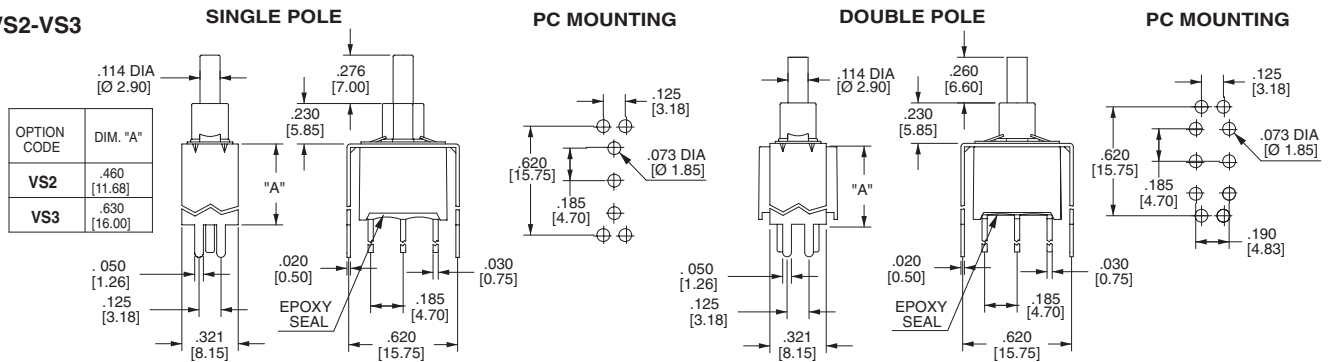
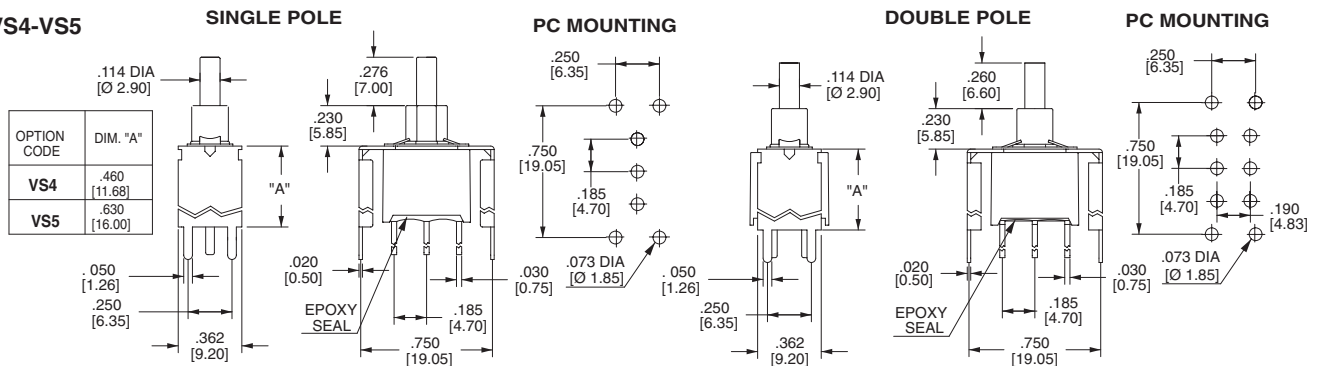


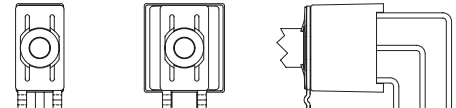
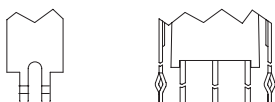
#### DOUBLE POLE



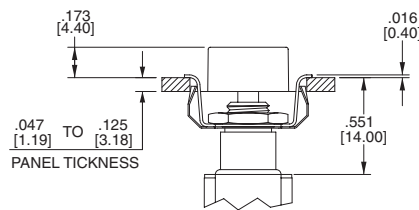
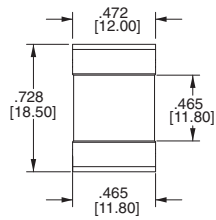
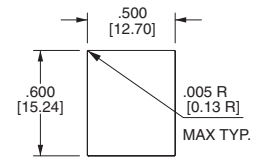
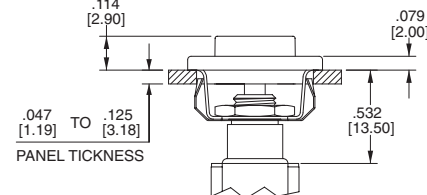
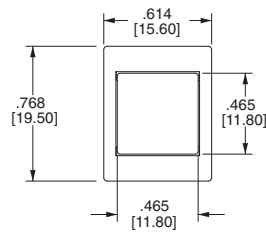
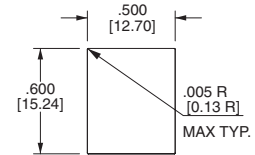
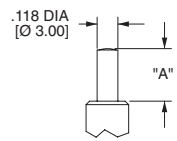
#### PC MOUNTING



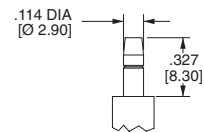
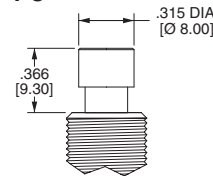
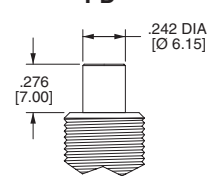
**3MS-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**M7**

**VS2-VS3**

**VS4-VS5**

**SNAP-IN TERMINATION OPTIONS**
**M61**

**M71**

**VS21,VS31**

**VS41,VS51**

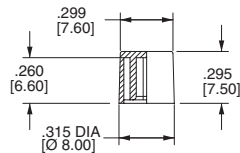
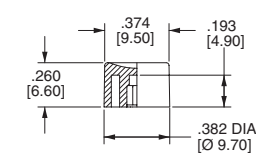
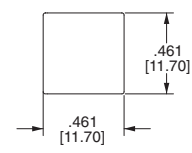
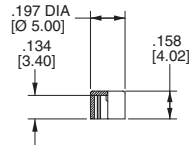
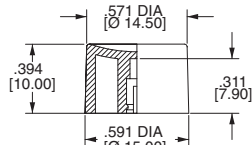

M61,M71,VS21,VS31,VS41,VS51 have the same P.C. mounting but with snap-in bracket.

**3MA-Series Dimensional Specifications: in. [mm]**
**ACTUATOR**
**AP1**

**PANEL MOUNTING**

**AP2**

**PANEL MOUNTING**

**PLUNGER**
**PA,PI**


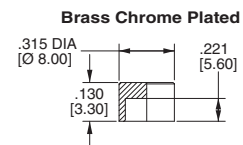
| OPTION CODE | DIM. "A"    |
|-------------|-------------|
| PA          | .299 [7.60] |
| PI          | .244 [6.20] |

**PL**

**PC**

**PD**


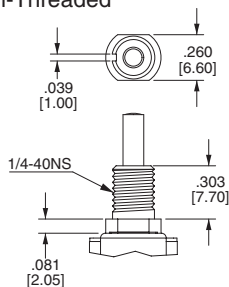
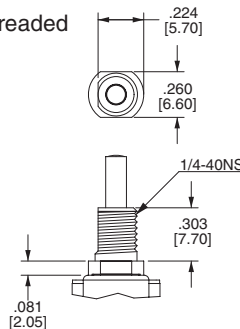
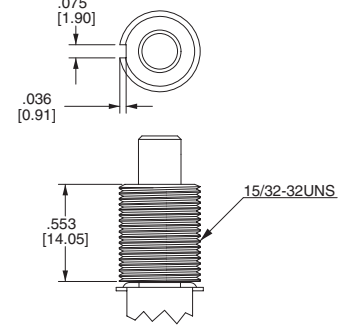
PC, PD Plunger must fit with BD bushing

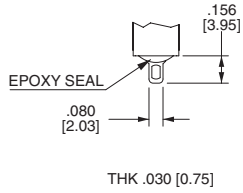
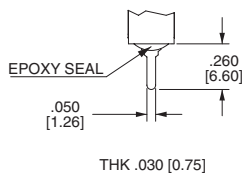
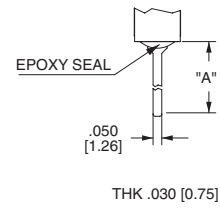
**CAP**
**C1**

**C2**

**C3**

**C4**

**C5**


For PL Bushing Only

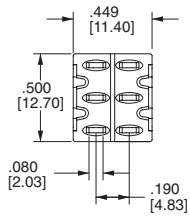
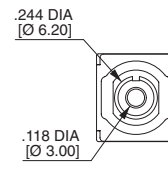
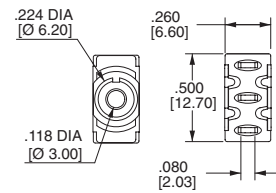
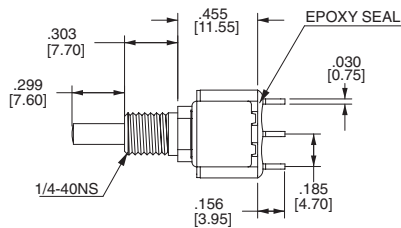
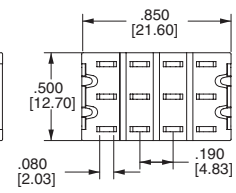
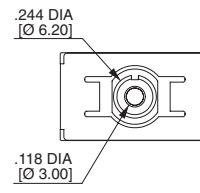
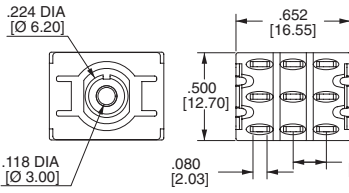
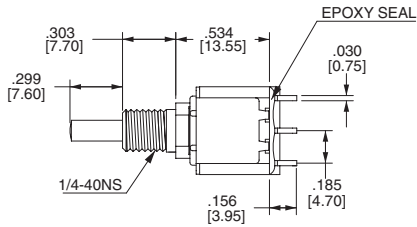
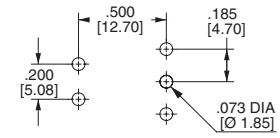
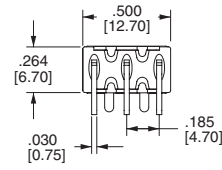
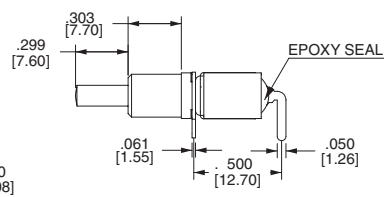
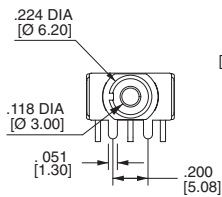
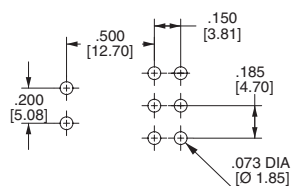
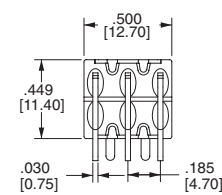
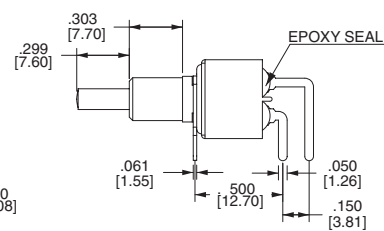
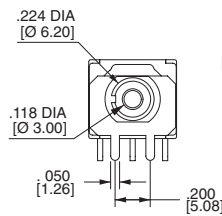
**C6**


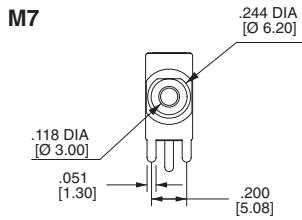
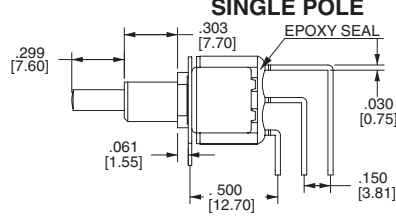
For PD Bushing Only

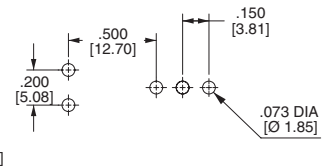
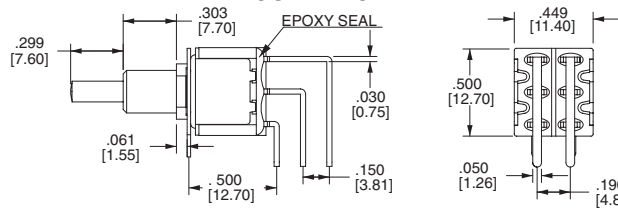
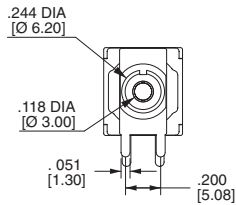
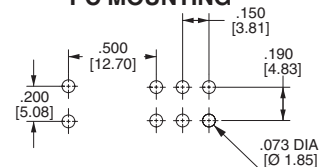
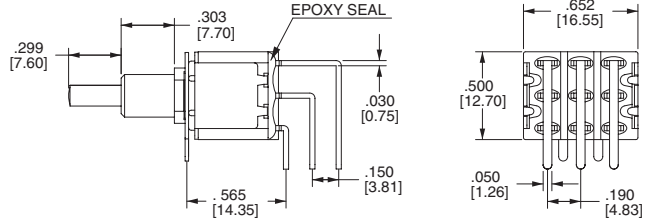
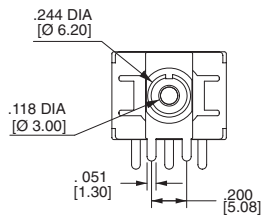
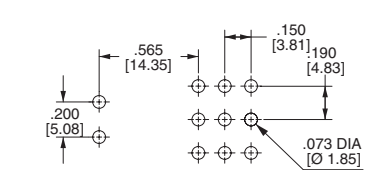
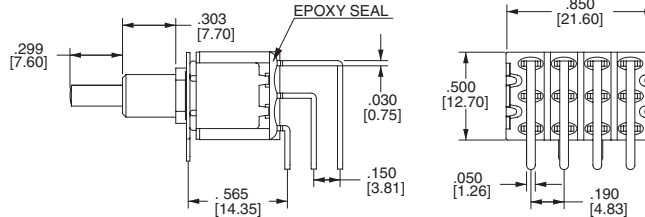
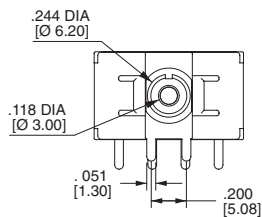
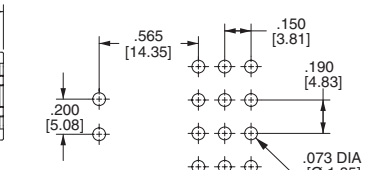
**BUSHING**
**B10 Threaded  
B20 Non-Threaded**

**B21 Non-Threaded**

**BD**


**3MA-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**M1**

**M2**

**M5**


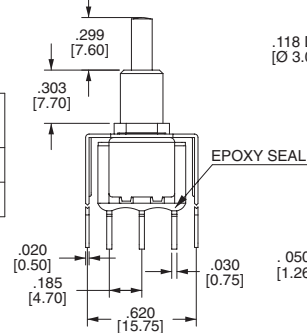
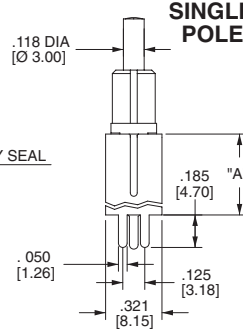
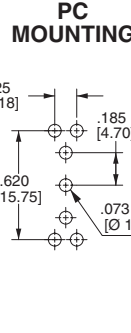
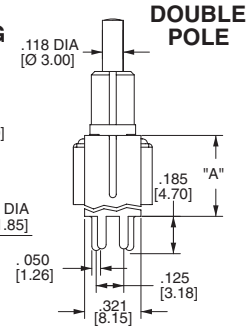
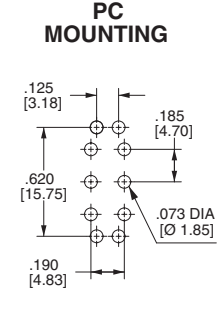
| OPTION CODE | DIM. "A"      |
|-------------|---------------|
| <b>M5-1</b> | .750 [19.05]  |
| <b>M5-2</b> | .964 [24.48]  |
| <b>M5-3</b> | .425 [10.80]  |
| <b>M5-4</b> | 1.062 [26.97] |

**SINGLE POLE**
**DOUBLE POLE**

**3 POLE**
**4 POLE**

**M6**
**SINGLE POLE**
**PC MOUNTING**

**DOUBLE POLE**
**PC MOUNTING**


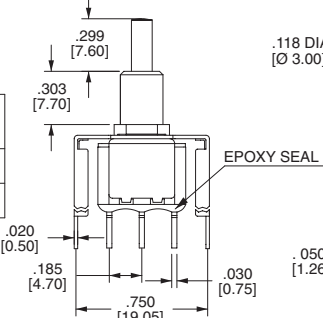
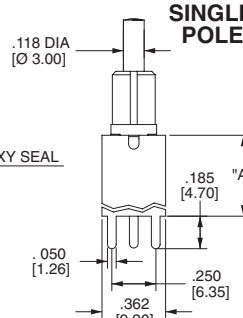
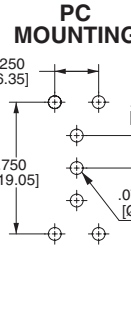
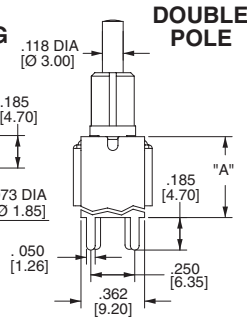
**3MA-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**M7**

**SINGLE POLE**

.260  
[6.60]

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**

**THREE POLE**

**PC MOUNTING**

**FOUR POLE**

**PC MOUNTING**

**VS2-VS3**

| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| VS2         | .460 [11.68] |
| VS3         | .630 [16.00] |


**SINGLE POLE**

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**

**VS4-VS5**

| OPTION CODE | DIM. "A"     |
|-------------|--------------|
| VS4         | .460 [11.68] |
| VS5         | .630 [16.00] |


**SINGLE POLE**

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**
