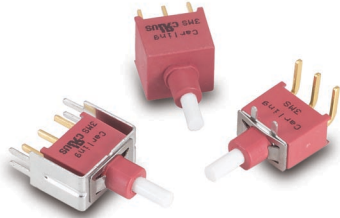
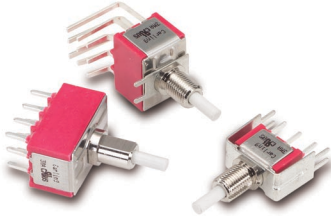




**3MN-Series**  
**Snap-Action** Miniature Pushbutton Switch



**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. <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) <b>3MS-Series:</b> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)
Plunger. . . . .	<b>3MN-Series:</b> Thermoplastic polyester, black <b>3MS &amp; 3MA-Series:</b> Glass filled nylon or glass filled polyester (UL 94V-0)
Bushing . . . . .	<b>3MN-Series:</b> Brass, nickel plated <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



<b>1 SERIES OR SWITCH CATALOG NUMBER</b> 3MN, 3MS or 3MA			
<b>2 CAP SIZE</b>			
<b>C1</b>	round 7.6mm dia.	<b>C5</b>	round 14.5mm dia.
<b>C2</b>	round 9.35 mm dia.	<b>C6</b>	brass chrome plated (for 3MA w/ PL bushing)
<b>C3</b>	square 11.7 x 11.7mm		
<b>C4</b>	round 5mm dia.		(for 3MA w/ PD bushing)

<b>3 CAP COLOR</b>			
<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		
<small>1 Black, white &amp; red standard. Other colors available. Consult factory.</small>			

**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>**

1 white	4 orange	7 blue
2 black	5 yellow	8 brown
3 red	6 green	9 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)	

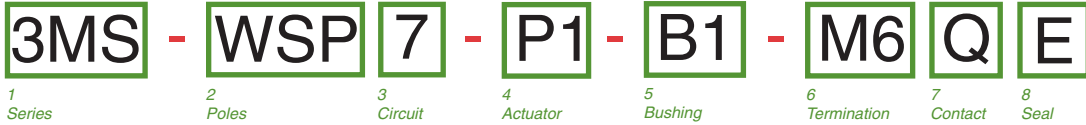
**NOTE:**

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

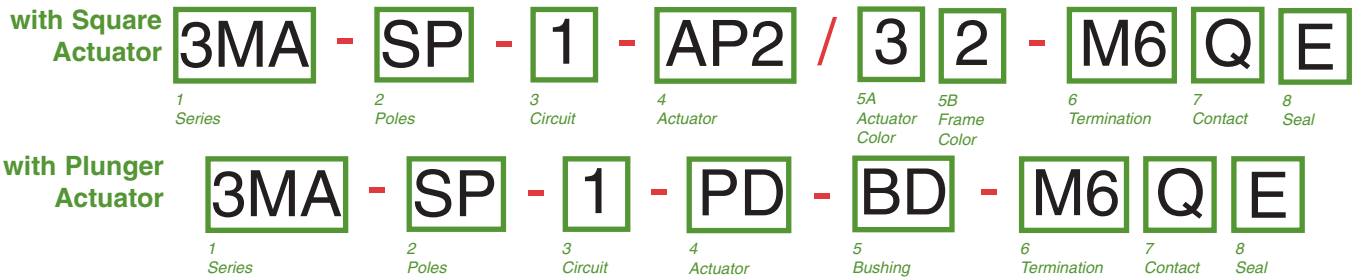
**8 EPOXY SEAL**
**E** epoxy seal

#### 3MS-Series Ordering Scheme



<p><b>1 SERIES</b> 3MS Sealed Snap-Action Miniature Pushbutton Switch</p> <p><b>2 POLES</b> WSP single pole                                  WDP double pole</p> <p><b>3 CIRCUIT</b> ( ) - momentary 7                                  ON                                  (ON)</p> <p><b>4 ACTUATOR</b> 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)</p> <p><b>5 BUSHING</b> B1                                  Threaded B4                                  Unthreaded</p>	<p><b>6 TERMINATION</b></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><b>M1</b> Solder Lug</td> <td style="border: none;"><b>VS21</b> Snap-In, U bracket, .620 mounting x .460 high</td> </tr> <tr> <td style="border: none;"><b>M2</b> PCB</td> <td style="border: none;"><b>VS3</b> PC Mount, U bracket, .620 mounting x .630 high</td> </tr> <tr> <td style="border: none;"><b>M6</b> PC Mount, 90° horizontal</td> <td style="border: none;"><b>VS4</b> PC Mount, U bracket, .750 mounting x .460 high</td> </tr> <tr> <td style="border: none;"><b>M61</b> Snap-In, 90° horizontal</td> <td style="border: none;"><b>VS5</b> PC Mount, U bracket, .750 mounting x .630 high</td> </tr> <tr> <td style="border: none;"><b>M7</b> PC Mount, 90° vertical</td> <td></td> </tr> <tr> <td style="border: none;"><b>M71</b> Snap-In, 90° vertical</td> <td></td> </tr> <tr> <td style="border: none;"><b>VS2</b> PC Mount, U bracket, .620 mounting x .460 high</td> <td></td> </tr> </table> <p><b>7 CONTACT</b></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="border: none;">Material</th> <th style="border: none;">Terminal Plating</th> <th style="border: none;">Rating</th> <th style="border: none;">Approvals</th> </tr> </thead> <tbody> <tr> <td style="border: none;"><b>G</b> silver<sup>1</sup></td> <td style="border: none;">gold over silver<sup>3</sup></td> <td style="border: none;">1A@120VAC or 28VDC</td> <td style="border: none;">UL, CUL IP68</td> </tr> <tr> <td style="border: none;"><b>Q</b> silver<sup>1</sup></td> <td style="border: none;">silver<sup>1</sup></td> <td style="border: none;">1A@120VAC or 28VDC</td> <td style="border: none;">UL, CUL IP68</td> </tr> <tr> <td style="border: none;"><b>R</b> gold<sup>2</sup></td> <td style="border: none;">gold<sup>2</sup></td> <td style="border: none;">0.4VA max. @20V max (AC/DC)</td> <td style="border: none;">IP68</td> </tr> </tbody> </table> <p>NOTE: Tin-lead option available with PC type terminations only. 1 Moveable contact &amp; terminals: copper alloy, silver plate 2 Moveable contact &amp; terminals: copper alloy with gold plate over nickel plate 3 Terminals: silver plate with outer layer in gold plating</p> <p><b>7 EPOXY SEAL</b> E epoxy seal</p>	<b>M1</b> Solder Lug	<b>VS21</b> Snap-In, U bracket, .620 mounting x .460 high	<b>M2</b> PCB	<b>VS3</b> PC Mount, U bracket, .620 mounting x .630 high	<b>M6</b> PC Mount, 90° horizontal	<b>VS4</b> PC Mount, U bracket, .750 mounting x .460 high	<b>M61</b> Snap-In, 90° horizontal	<b>VS5</b> PC Mount, U bracket, .750 mounting x .630 high	<b>M7</b> PC Mount, 90° vertical		<b>M71</b> Snap-In, 90° vertical		<b>VS2</b> PC Mount, U bracket, .620 mounting x .460 high		Material	Terminal Plating	Rating	Approvals	<b>G</b> silver <sup>1</sup>	gold over silver <sup>3</sup>	1A@120VAC or 28VDC	UL, CUL IP68	<b>Q</b> silver <sup>1</sup>	silver <sup>1</sup>	1A@120VAC or 28VDC	UL, CUL IP68	<b>R</b> gold <sup>2</sup>	gold <sup>2</sup>	0.4VA max. @20V max (AC/DC)	IP68
<b>M1</b> Solder Lug	<b>VS21</b> Snap-In, U bracket, .620 mounting x .460 high																														
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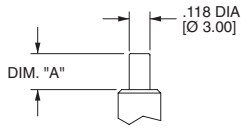
#### 3MA-Series Ordering Scheme



<p><b>1 SERIES</b> 3MA Alternate-Action Miniature Pushbutton Switch</p> <p><b>2 POLES</b> SP single pole      DP double pole      3P three pole      4P four pole</p> <p><b>3 CIRCUIT</b> ( ) - momentary <b>Switching Position:</b> 1                                  ON                                  2-3, 5-6, 8-9, 11-12                                  OPEN                                  NONE                                  2-1, 5-4, 8-7, 11-10                                  ON                                  (ON)</p> <p><b>4 ACTUATOR</b> <b>SQUARE ACTUATOR</b> (use with Color Options in Selection 5A &amp; 5B.) AP1 square with no frame AP2 square raised above frame <b>PLUNGER ACTUATOR</b> (use with Bushing Options in Selection 5) PA .118 dia. x .299" plunger length PI .118 dia. x .244" plunger length PL .118 dia. x .327" plunger length PC .315" dia. brass chrome plated plunger (for BD bushing only) PD .242" dia. brass chrome plated plunger (for BD bushing only)</p> <p><b>5A ACTUATOR COLOR &amp; 5B FRAME COLOR<sup>1,2</sup></b> 1 white                                  4 orange                                  7 blue 2 black                                  5 yellow                                  8 brown 3 red                                  6 green                                  9 gray 1 Black, red and white are standard. Other colors available, consult factory for details. 2 Selection 5B is blank if actuator style AP1 (no frame) <b>OR</b></p> <p><b>5 BUSHING</b> BD Big bushing for PC, PD actuator 15/32" B10 Threaded 1/4 - 40 B20 Unthreaded B21 Unthreaded with flat</p> <p>NOTE: For CAP options, see ordering scheme on page 35.</p>	<p><b>6 TERMINATION</b></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><b>M1</b> Solder Lug</td> <td style="border: none;"><b>VS2</b> PC Mount, U bracket, .620 mounting x .460 high</td> </tr> <tr> <td style="border: none;"><b>M2</b> PCB</td> <td style="border: none;"><b>VS3</b> PC Mount, U bracket, .620 mounting x .630 high</td> </tr> <tr> <td style="border: none;"><b>M5-1</b> Wire Wrap .750 [19.05]</td> <td style="border: none;"><b>VS4</b> PC Mount, U bracket, .750 mounting x .460 high</td> </tr> <tr> <td style="border: none;"><b>M5-2</b> Wire Wrap .964 [24.48]</td> <td style="border: none;"><b>VS5</b> PC Mount, U bracket, .750 mounting x .630 high</td> </tr> <tr> <td style="border: none;"><b>M5-3</b> Wire Wrap .425 [10.80]</td> <td></td> </tr> <tr> <td style="border: none;"><b>M5-4</b> Wire Wrap 1.062 [26.87]</td> <td></td> </tr> <tr> <td style="border: none;"><b>M6</b> PC Mount, 90° horizontal</td> <td></td> </tr> <tr> <td style="border: none;"><b>M7</b> PC Mount, 90° vertical</td> <td></td> </tr> </table> <p><b>7 CONTACT</b></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="border: none;">Material</th> <th style="border: none;">Terminal Plating</th> <th style="border: none;">Rating</th> <th style="border: none;">Approvals</th> </tr> </thead> <tbody> <tr> <td style="border: none;"><b>G</b> silver<sup>1</sup></td> <td style="border: none;">gold over silver<sup>3</sup></td> <td style="border: none;">6A@125VAC or 28VDC, 3A@250VAC</td> <td style="border: none;">UL, CUL</td> </tr> <tr> <td style="border: none;"><b>K</b> gold<sup>2</sup></td> <td style="border: none;">tin-lead<sup>4</sup></td> <td style="border: none;">6A@125VAC or 28VDC</td> <td style="border: none;">UL, CUL</td> </tr> <tr> <td style="border: none;"><b>P</b> silver<sup>1</sup></td> <td style="border: none;">tin-lead<sup>4</sup></td> <td style="border: none;">6A@125VAC or 28VDC, 3A@250VAC</td> <td style="border: none;">UL, CUL</td> </tr> <tr> <td style="border: none;"><b>Q</b> silver<sup>1</sup></td> <td style="border: none;">silver<sup>1</sup></td> <td style="border: none;">6A@125VAC or 28VDC, 3A@250VAC</td> <td style="border: none;">UL, CUL</td> </tr> <tr> <td style="border: none;"><b>R</b> gold<sup>2</sup></td> <td style="border: none;">gold<sup>2</sup></td> <td style="border: none;">0.4VA max. @20V max (AC/DC)</td> <td></td> </tr> </tbody> </table> <p>NOTE: Tin-lead option available with PC type terminations only. 1 Moveable contact &amp; terminals: copper alloy, silver plate 2 Moveable contact &amp; terminals: copper alloy with gold plate over nickel plate 3 Terminals: silver plate with outer layer in gold plating 4 Outer terminals: copper alloy with tin-lead over nickel plate</p> <p><b>8 EPOXY SEAL</b> E epoxy seal</p>	<b>M1</b> Solder Lug	<b>VS2</b> PC Mount, U bracket, .620 mounting x .460 high	<b>M2</b> PCB	<b>VS3</b> PC Mount, U bracket, .620 mounting x .630 high	<b>M5-1</b> Wire Wrap .750 [19.05]	<b>VS4</b> PC Mount, U bracket, .750 mounting x .460 high	<b>M5-2</b> Wire Wrap .964 [24.48]	<b>VS5</b> PC Mount, U bracket, .750 mounting x .630 high	<b>M5-3</b> Wire Wrap .425 [10.80]		<b>M5-4</b> Wire Wrap 1.062 [26.87]		<b>M6</b> PC Mount, 90° horizontal		<b>M7</b> PC Mount, 90° vertical		Material	Terminal Plating	Rating	Approvals	<b>G</b> silver <sup>1</sup>	gold over silver <sup>3</sup>	6A@125VAC or 28VDC, 3A@250VAC	UL, CUL	<b>K</b> gold <sup>2</sup>	tin-lead <sup>4</sup>	6A@125VAC or 28VDC	UL, CUL	<b>P</b> silver <sup>1</sup>	tin-lead <sup>4</sup>	6A@125VAC or 28VDC, 3A@250VAC	UL, CUL	<b>Q</b> silver <sup>1</sup>	silver <sup>1</sup>	6A@125VAC or 28VDC, 3A@250VAC	UL, CUL	<b>R</b> gold <sup>2</sup>	gold <sup>2</sup>	0.4VA max. @20V max (AC/DC)	
<b>M1</b> Solder Lug	<b>VS2</b> PC Mount, U bracket, .620 mounting x .460 high																																								
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<b>K</b> gold <sup>2</sup>	tin-lead <sup>4</sup>	6A@125VAC or 28VDC	UL, CUL																																						
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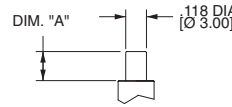
## 3MN-Series Dimensional Specifications: in. [mm]

### PLUNGER



OPTION CODE	DIM. "A"
P0	.000 [0.00]
P1	.205 [5.20]
P2	.079 [2.00]

FOR B10,B11,B20,B21 ONLY

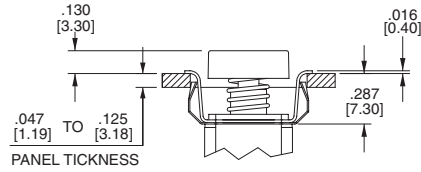
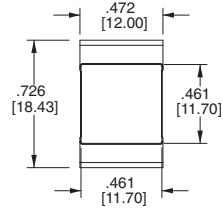


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

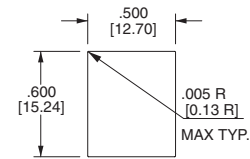
FOR B6 ONLY

### ACTUATOR

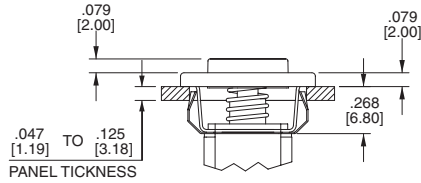
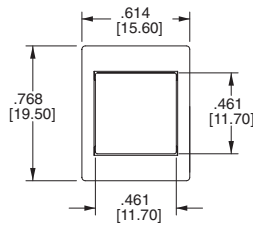
#### AP1



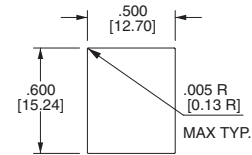
#### PANEL MOUNTING



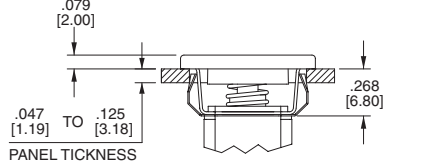
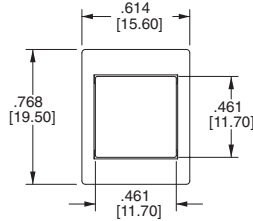
#### AP2



#### PANEL MOUNTING

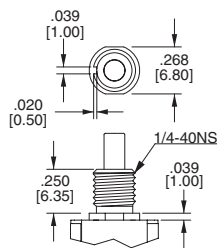


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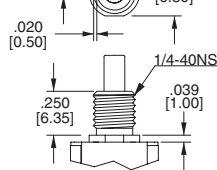


### BUSHING

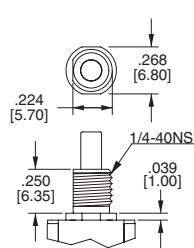
**B10**  
STANDARD KEYWAY  
THREADED SHOWN



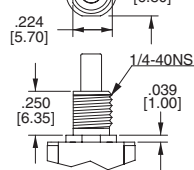
**B20**  
STANDARD KEYWAY  
NON-THREADED



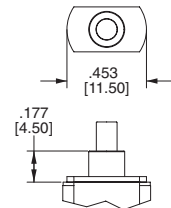
**B11**  
THREADED SHOWN  
WITH FLAT



**B21**  
NON-THREADED  
WITH FLAT

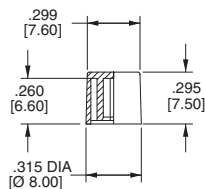


**B6**  
NON-THREADED  
(FOR TERMINATION  
OPTIONS VS6-VS9 ONLY)

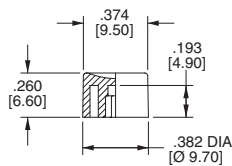


### CAP

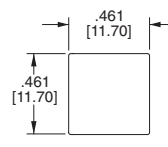
#### C1



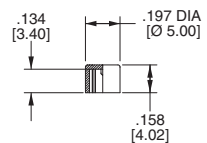
#### C2



#### C3



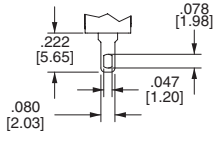
#### C4



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

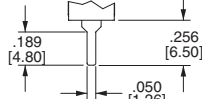
### TERMINATION

**M1**



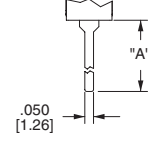
THK .030 [0.75]

**M2**



THK .030 [0.75]

**M5**

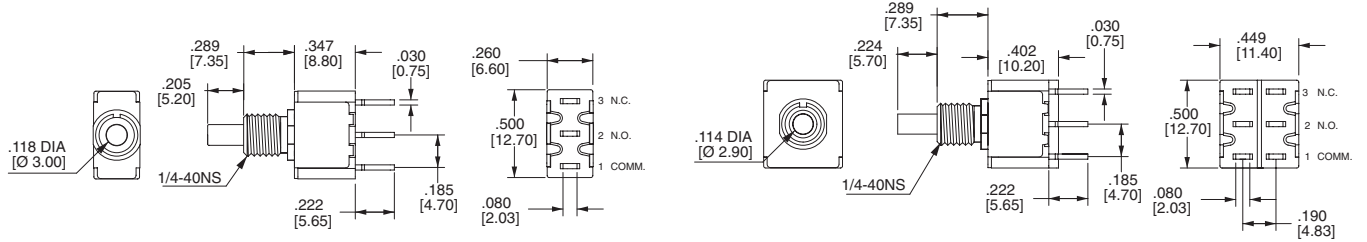


THK .030 [0.75]

OPTION CODE	DIM. "A"
M5-1	.750 [19.05]
M5-3	.425 [10.80]

### SINGLE POLE

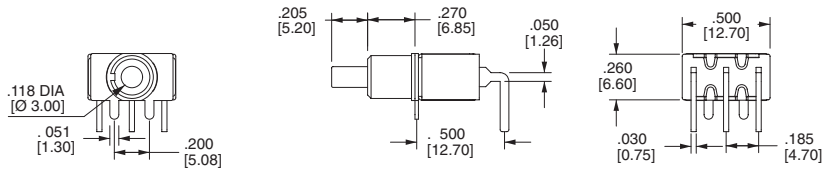
### DOUBLE POLE



**M6**

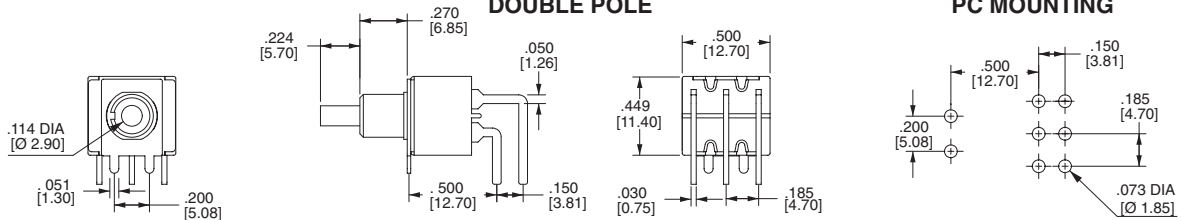
### SINGLE POLE

### PC MOUNTING



### DOUBLE POLE

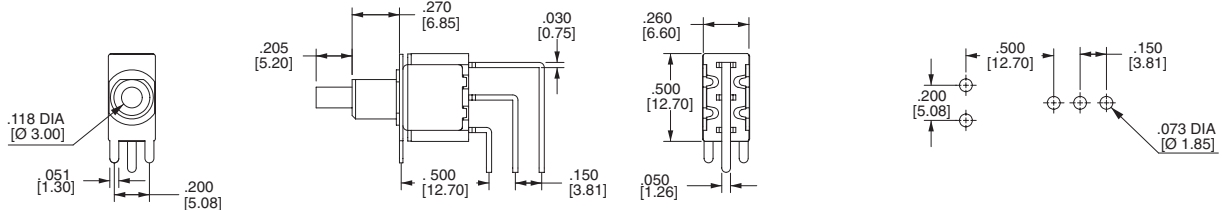
### PC MOUNTING



**M7**

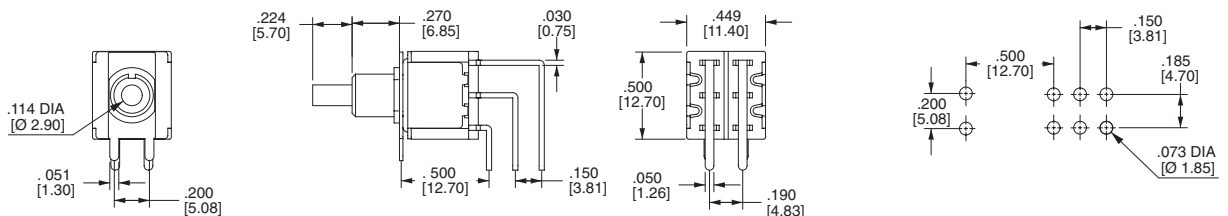
### SINGLE POLE

### PC MOUNTING



### DOUBLE POLE

### PC MOUNTING

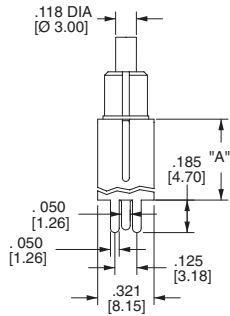


## 3MN-Series Dimensional Specifications: in. [mm]

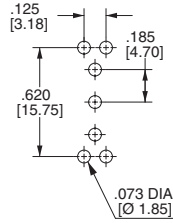
### TERMINATION

#### SINGLE POLE

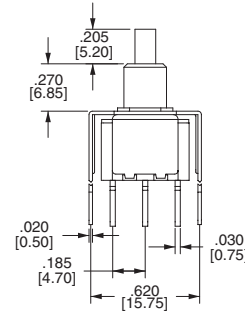
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



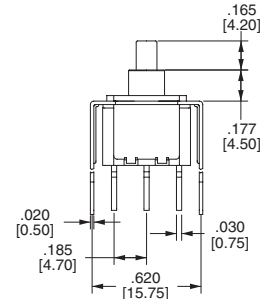
#### PC MOUNTING



#### VS2-VS3

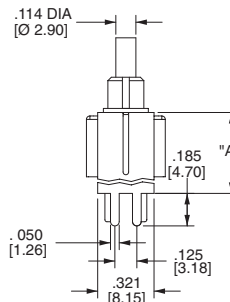


#### VS6-VS7 (For B6 Bushing Only)

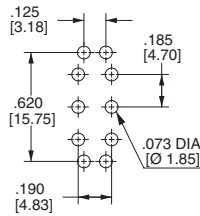


#### DOUBLE POLE

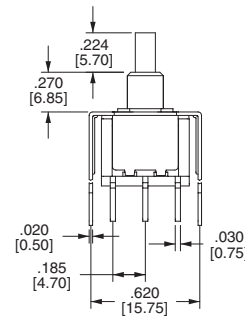
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



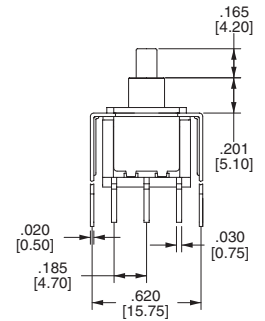
#### PC MOUNTING



#### VS2-VS3

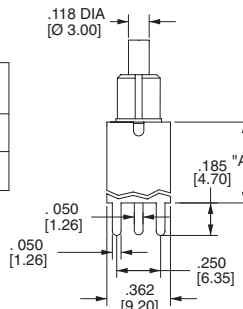


#### VS6-VS7 (For B6 Bushing Only)

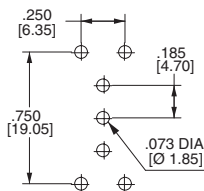


#### SINGLE POLE

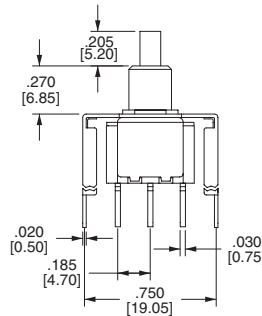
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



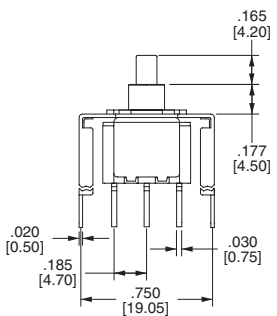
#### PC MOUNTING



#### VS4-VS5

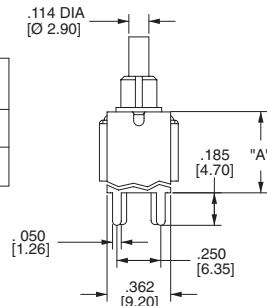


#### VS8-VS9 (For B6 Bushing Only)

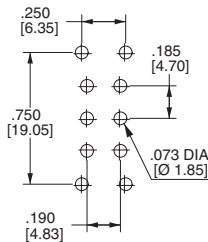


#### DOUBLE POLE

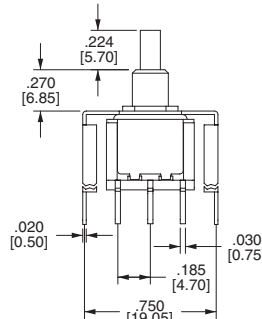
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



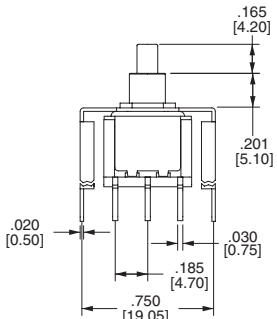
#### PC MOUNTING



#### VS4-VS5

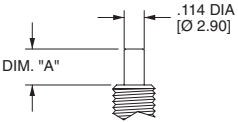


#### VS8-VS9 (For B6 Bushing Only)

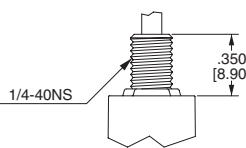
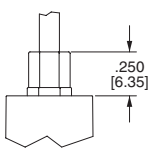


## 3MS-Series Dimensional Specifications: in. [mm]

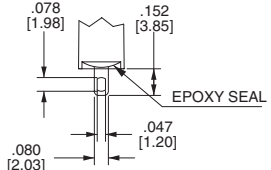
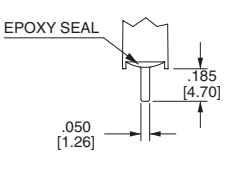
### PLUNGER

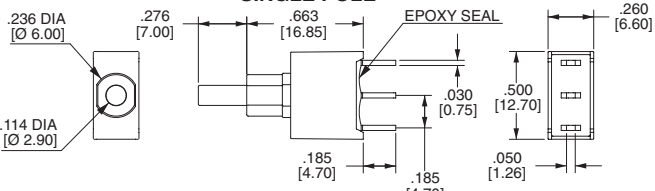
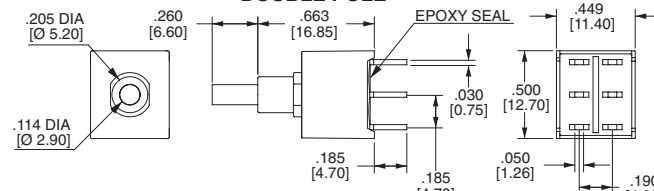
 <p>DIM. "A"</p> <p>.114 DIA [Ø 2.90]</p> <table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM. "A"</th> </tr> </thead> <tbody> <tr> <td><b>P1</b></td> <td>.173 [4.40]</td> </tr> <tr> <td><b>P2</b></td> <td>.220 [5.60]</td> </tr> <tr> <td><b>P3</b></td> <td>.087 [2.20]</td> </tr> </tbody> </table> <p>FOR B1 BUSHING</p>	OPTION CODE	DIM. "A"	<b>P1</b>	.173 [4.40]	<b>P2</b>	.220 [5.60]	<b>P3</b>	.087 [2.20]	 <p>DIM. "A"</p> <p>.114 DIA [Ø 2.90]</p> <table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM. "A"</th> </tr> </thead> <tbody> <tr> <td><b>P1</b></td> <td>.276 [7.00]</td> </tr> <tr> <td><b>P2</b></td> <td>.327 [8.30]</td> </tr> <tr> <td><b>P3</b></td> <td>.193 [4.90]</td> </tr> </tbody> </table> <p>FOR B4 BUSHING</p>	OPTION CODE	DIM. "A"	<b>P1</b>	.276 [7.00]	<b>P2</b>	.327 [8.30]	<b>P3</b>	.193 [4.90]
OPTION CODE	DIM. "A"																
<b>P1</b>	.173 [4.40]																
<b>P2</b>	.220 [5.60]																
<b>P3</b>	.087 [2.20]																
OPTION CODE	DIM. "A"																
<b>P1</b>	.276 [7.00]																
<b>P2</b>	.327 [8.30]																
<b>P3</b>	.193 [4.90]																

### BUSHING

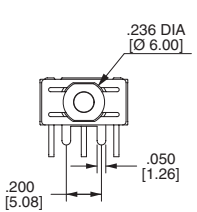
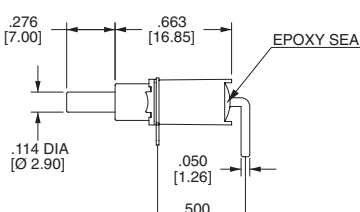
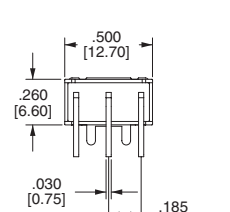
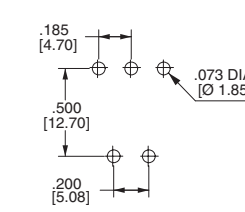
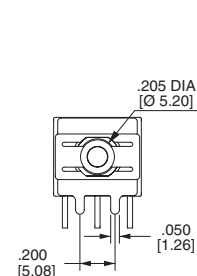
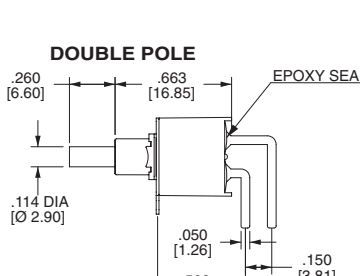
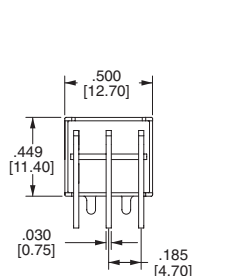
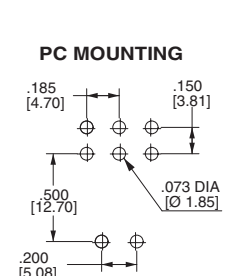
<p><b>B1</b></p>  <p>1/4-40NS</p> <p>.350 [8.90]</p>	<p><b>B4</b></p>  <p>.250 [6.35]</p>
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### TERMINATION

<p><b>M1</b></p>  <p>EPOXY SEAL</p> <p>.078 [1.98]</p> <p>.152 [3.85]</p> <p>.047 [1.20]</p> <p>.080 [2.03]</p> <p>THK .030 [0.75]</p>	<p><b>M2</b></p>  <p>EPOXY SEAL</p> <p>.185 [4.70]</p> <p>.050 [1.26]</p> <p>THK .030 [0.75]</p>
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<p><b>SINGLE POLE</b></p>  <p>.236 DIA [Ø 6.00]</p> <p>.276 [7.00]</p> <p>.663 [16.85]</p> <p>EPOXY SEAL</p> <p>.260 [6.60]</p> <p>.030 [0.75]</p> <p>.500 [12.70]</p> <p>.185 [4.70]</p> <p>.185 [4.70]</p> <p>.050 [1.26]</p>	<p><b>DOUBLE POLE</b></p>  <p>.205 DIA [Ø 5.20]</p> <p>.260 [6.60]</p> <p>.663 [16.85]</p> <p>EPOXY SEAL</p> <p>.449 [11.40]</p> <p>.030 [0.75]</p> <p>.500 [12.70]</p> <p>.185 [4.70]</p> <p>.185 [4.70]</p> <p>.050 [1.26]</p> <p>.190 [4.83]</p>
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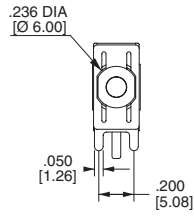
**M6**

 <p>.236 DIA [Ø 6.00]</p> <p>.050 [1.26]</p> <p>.200 [5.08]</p>	<p><b>SINGLE POLE</b></p>  <p>.276 [7.00]</p> <p>.663 [16.85]</p> <p>EPOXY SEAL</p> <p>.114 DIA [Ø 2.90]</p> <p>.050 [1.26]</p> <p>.500 [12.70]</p>	 <p>.500 [12.70]</p> <p>.260 [6.60]</p> <p>.030 [0.75]</p> <p>.185 [4.70]</p>	<p><b>PC MOUNTING</b></p>  <p>.185 [4.70]</p> <p>.500 [12.70]</p> <p>.200 [5.08]</p> <p>.073 DIA [Ø 1.85]</p>
 <p>.205 DIA [Ø 5.20]</p> <p>.050 [1.26]</p> <p>.200 [5.08]</p>	<p><b>DOUBLE POLE</b></p>  <p>.260 [6.60]</p> <p>.663 [16.85]</p> <p>EPOXY SEAL</p> <p>.114 DIA [Ø 2.90]</p> <p>.050 [1.26]</p> <p>.500 [12.70]</p> <p>.150 [3.81]</p>	 <p>.500 [12.70]</p> <p>.449 [11.40]</p> <p>.030 [0.75]</p> <p>.185 [4.70]</p>	<p><b>PC MOUNTING</b></p>  <p>.185 [4.70]</p> <p>.150 [3.81]</p> <p>.500 [12.70]</p> <p>.200 [5.08]</p> <p>.073 DIA [Ø 1.85]</p>

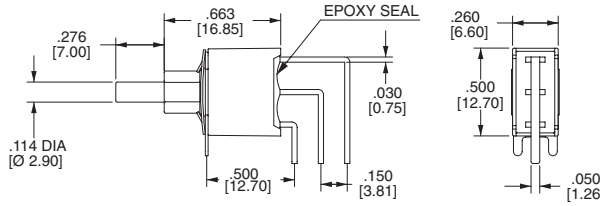
## 3MS-Series Dimensional Specifications: in. [mm]

### TERMINATION

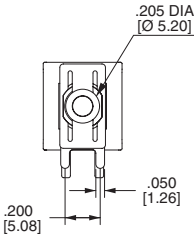
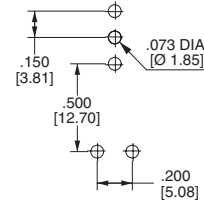
**M7**



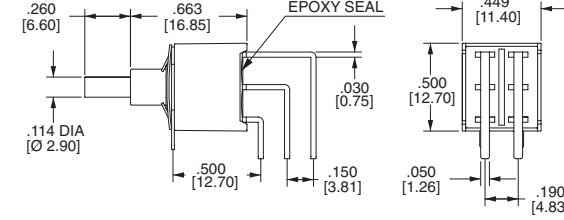
**SINGLE POLE**



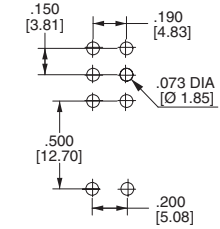
**PC MOUNTING**



**DOUBLE POLE**

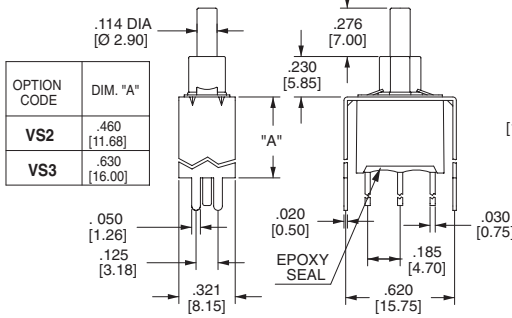


**PC MOUNTING**

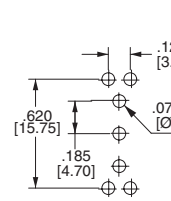


**VS2-VS3**

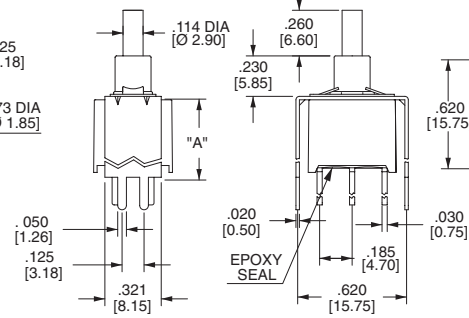
**SINGLE POLE**



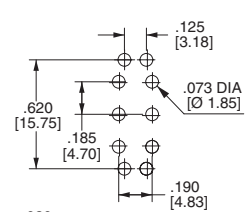
**PC MOUNTING**



**DOUBLE POLE**

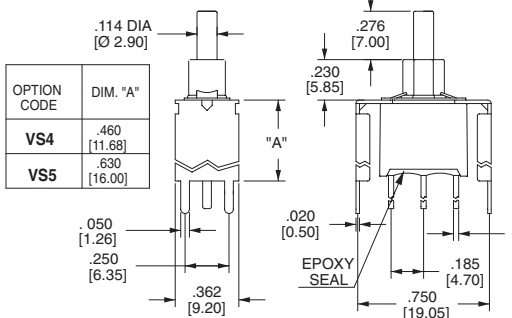


**PC MOUNTING**

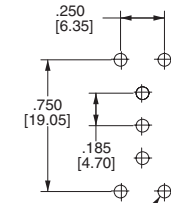


**VS4-VS5**

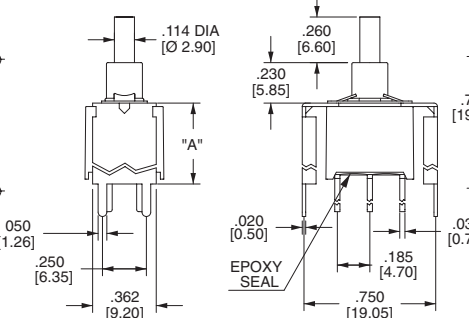
**SINGLE POLE**



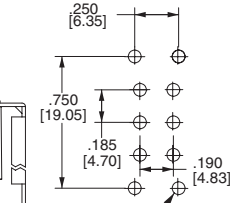
**PC MOUNTING**



**DOUBLE POLE**



**PC MOUNTING**

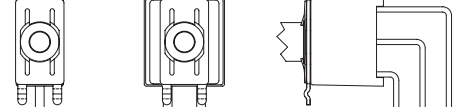


### SNAP-IN TERMINATION OPTIONS

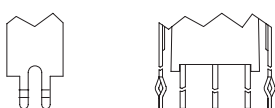
**M61**



**M71**



**VS21, VS31**

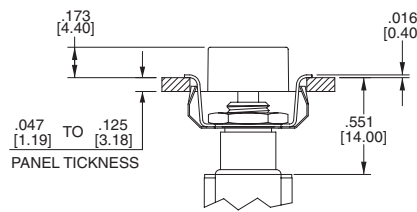
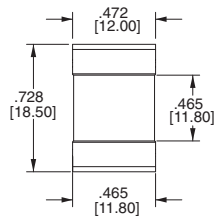
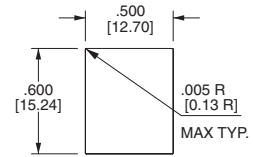
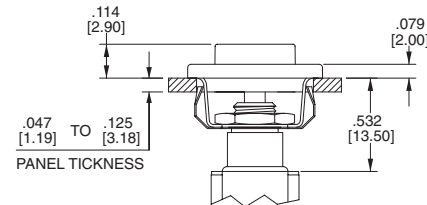
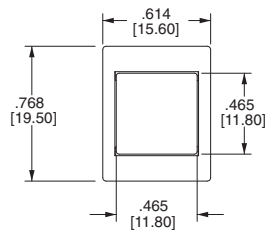
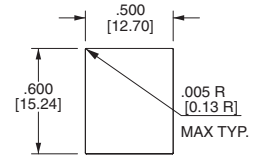
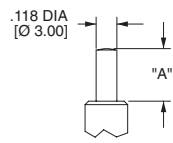


**VS41, VS51**

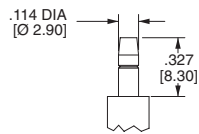
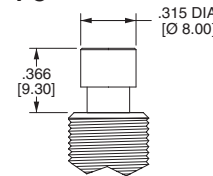
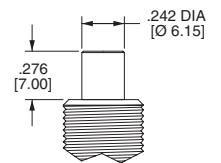
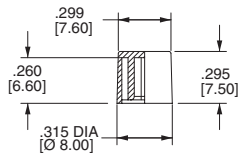
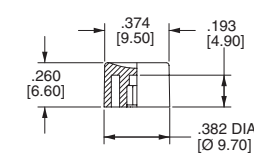
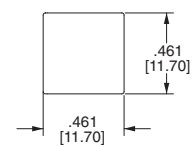
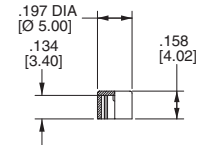
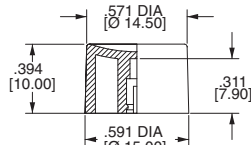
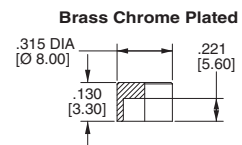
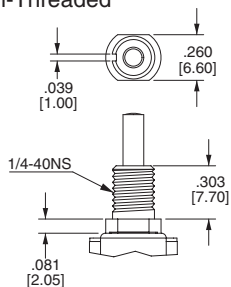
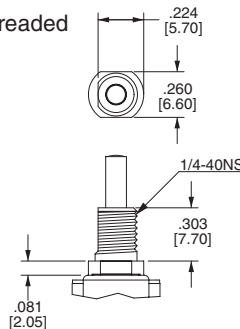
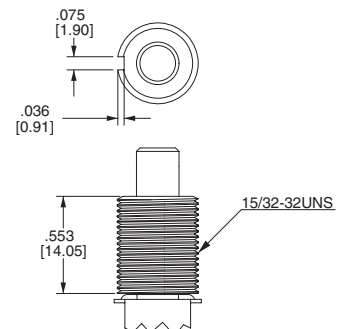


M61, M71, VS21, VS31, VS41, VS51 have the same P.C. mounting but with snap-in bracket.



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

**PANEL MOUNTING**

**AP2**

**PANEL MOUNTING**

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


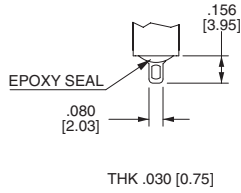
OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

**PL**

**PC**

**Brass Chrome Plated**
**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**


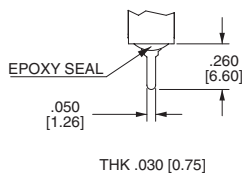
**3MA-Series Dimensional Specifications: in. [mm]**

**TERMINATION**

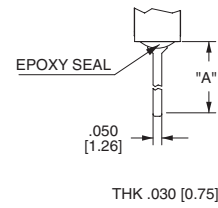
**M1**



**M2**



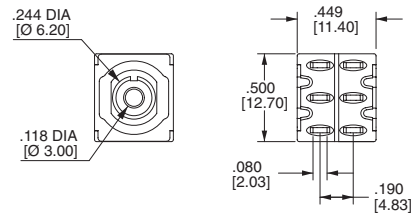
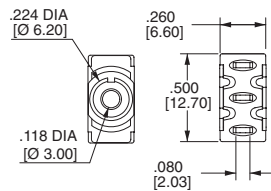
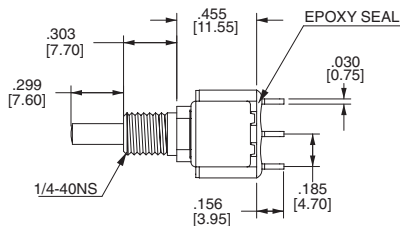
**M5**



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]

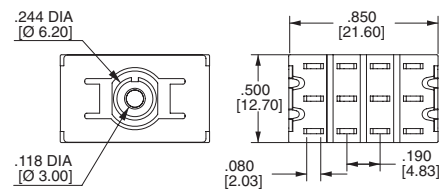
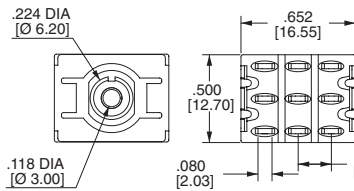
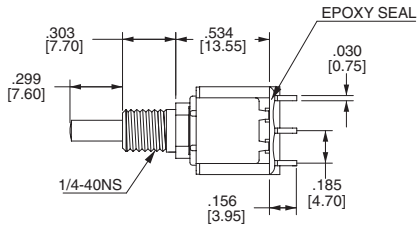
**SINGLE POLE**

**DOUBLE POLE**



**3 POLE**

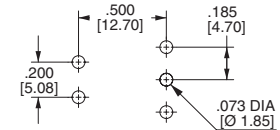
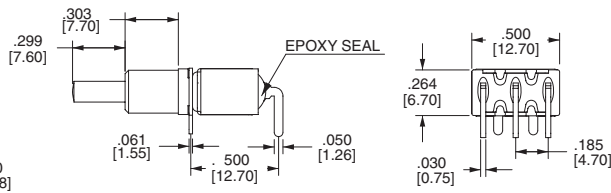
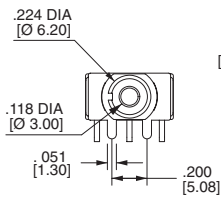
**4 POLE**



**M6**

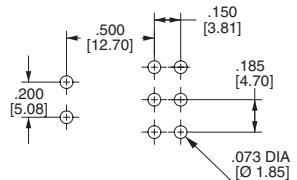
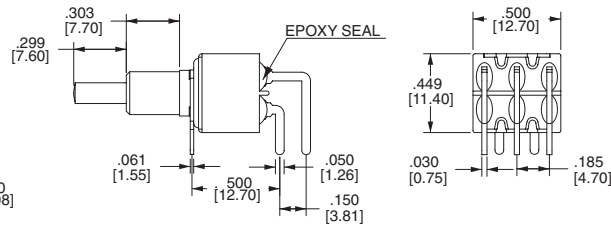
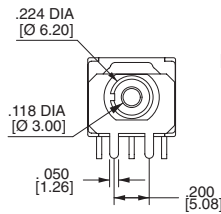
**SINGLE POLE**

**PC MOUNTING**



**DOUBLE POLE**

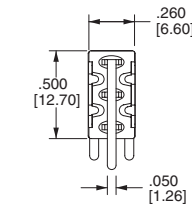
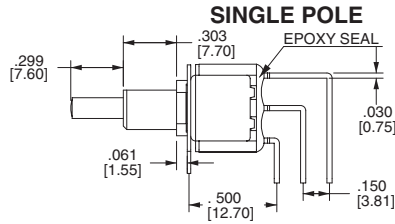
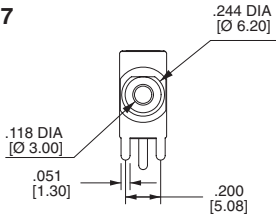
**PC MOUNTING**



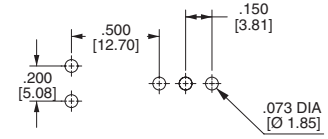
## 3MA-Series Dimensional Specifications: in. [mm]

### TERMINATION

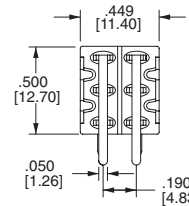
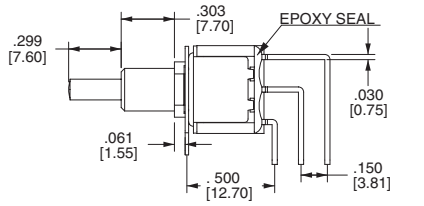
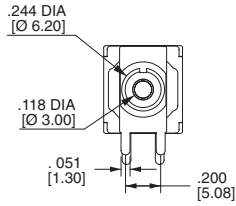
M7



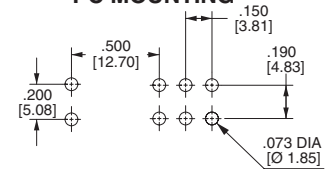
PC MOUNTING



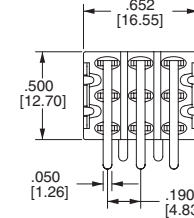
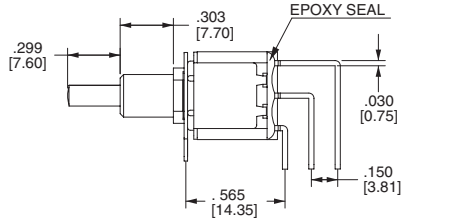
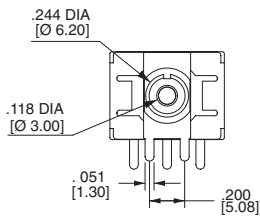
DOUBLE POLE



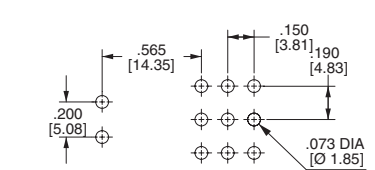
PC MOUNTING



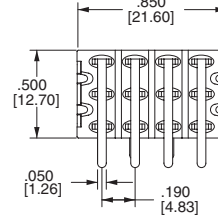
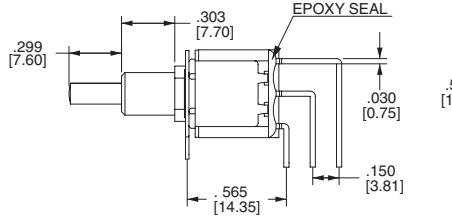
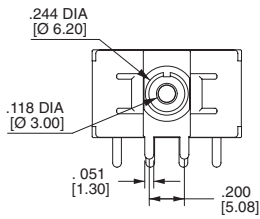
THREE POLE



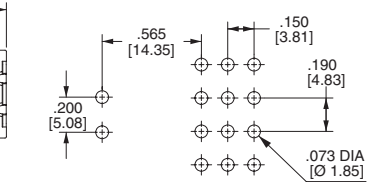
PC MOUNTING



FOUR POLE

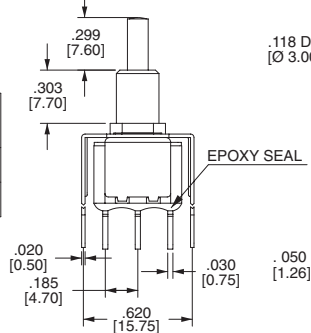


PC MOUNTING

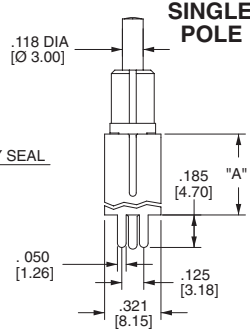


VS2-VS3

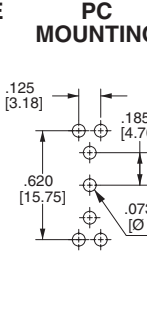
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



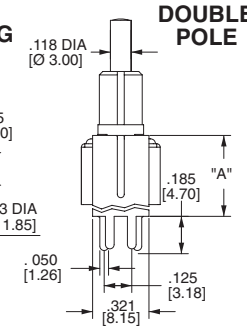
SINGLE POLE



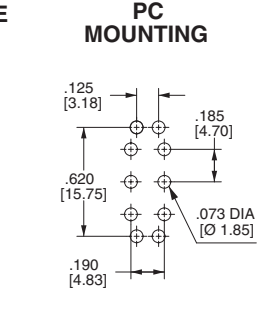
PC MOUNTING



DOUBLE POLE

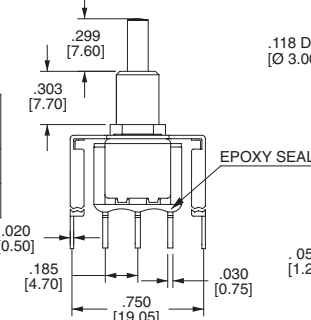


PC MOUNTING

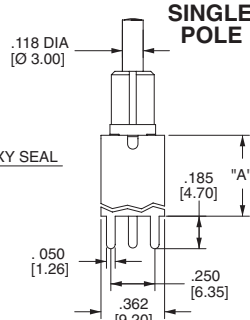


VS4-VS5

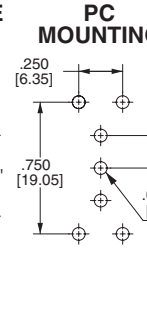
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



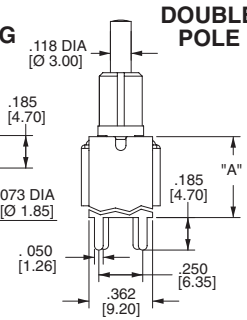
SINGLE POLE



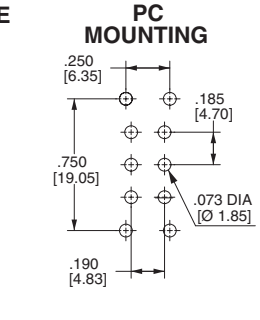
PC MOUNTING



DOUBLE POLE



PC MOUNTING



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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