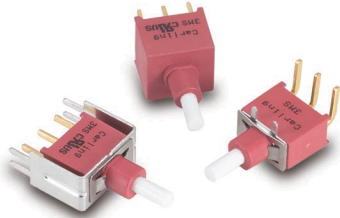
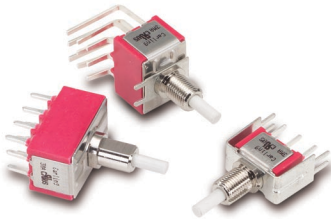




**3MN-Series**  
**Snap-Action** Miniature Pushbutton Switch



**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. . . . .	<i>3MN &amp; 3MA-Series:</i> 10 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts. <i>3MS-Series:</i> 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 . . . . .	<i>3MS -Series:</i> IP68
Cap Installation Support . .	<i>3MS-Series:</i> 10 lbs. max.
Solder Heat Resistance. . .	MIL-STD-202, Method 210
Actuator Travel . . . . .	.25°

### Materials

Case . . . . .	<i>3MN &amp; 3MA-Series:</i> Diallyl phthalate (DAP) (UL 94V-0) <i>3MS-Series:</i> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)
Plunger. . . . .	<i>3MN-Series:</i> Thermoplastic polyester, black <i>3MS &amp; 3MA-Series:</i> Glass filled nylon or glass filled polyester (UL 94V-0)
Bushing . . . . .	<i>3MN-Series:</i> Brass, nickel plated <i>3MA-Series:</i> Zinc, nickel plated
Housing. . . . .	<i>3MN &amp; 3MA-Series:</i> Stainless Steel
Switch Support Retainer . .	<i>3MS-Series:</i> 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>C6</b>	brass chrome plated (for 3MA w/ PD bushing)
<b>C4</b>	round 5mm dia.		

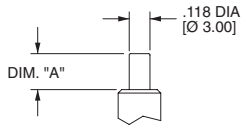
<b>3 CAP COLOR</b>			
<b>1</b>	white	<b>5</b>	yellow
<b>2</b>	black	<b>6</b>	green
<b>3</b>	red	<b>7</b>	blue
<b>4</b>	orange		
<small>1 Black, white &amp; red standard. Other colors available. Consult factory.</small>			





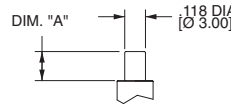
## 3MN-Series Dimensional Specifications: in. [mm]

### PLUNGER



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

FOR B10,B11,B20,B21 ONLY

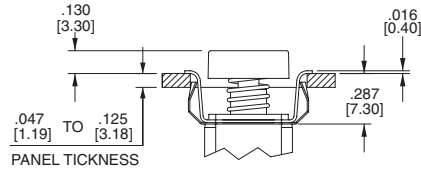
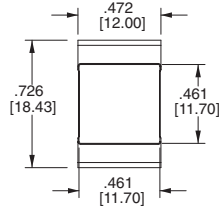


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

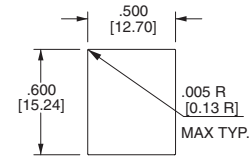
FOR B6 ONLY

### ACTUATOR

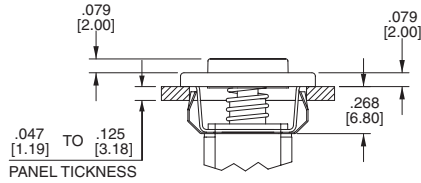
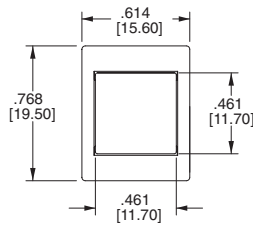
#### AP1



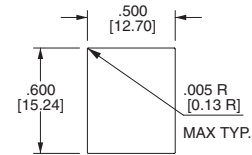
#### PANEL MOUNTING



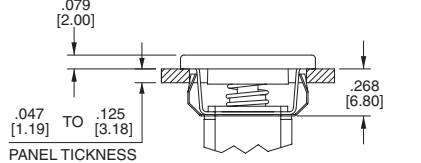
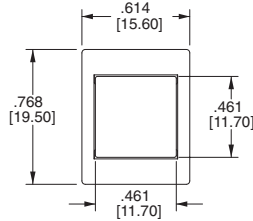
#### AP2



#### PANEL MOUNTING

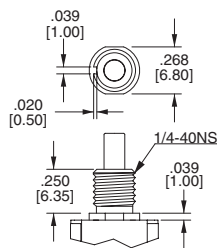


#### AP3

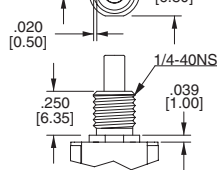


### BUSHING

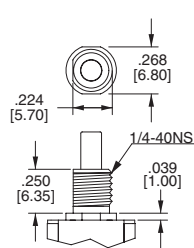
**B10**  
STANDARD KEYWAY  
THREADED SHOWN



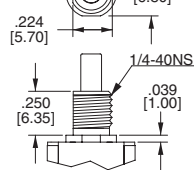
**B20**  
STANDARD KEYWAY  
NON-THREADED



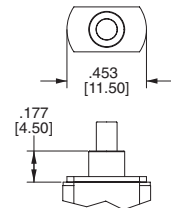
**B11**  
THREADED SHOWN  
WITH FLAT



**B21**  
NON-THREADED  
WITH FLAT

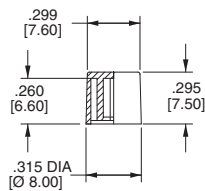


**B6**  
NON-THREADED  
(FOR TERMINATION  
OPTIONS VS6-VS9 ONLY)

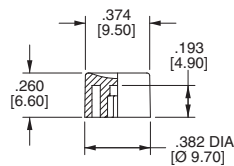


### CAP

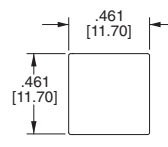
#### C1



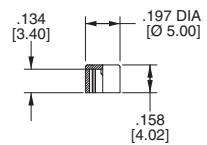
#### C2



#### C3



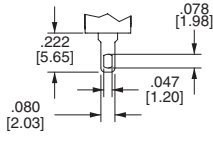
#### C4



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

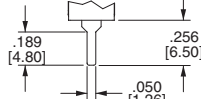
### TERMINATION

**M1**



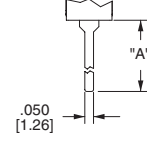
THK .030 [0.75]

**M2**



THK .030 [0.75]

**M5**

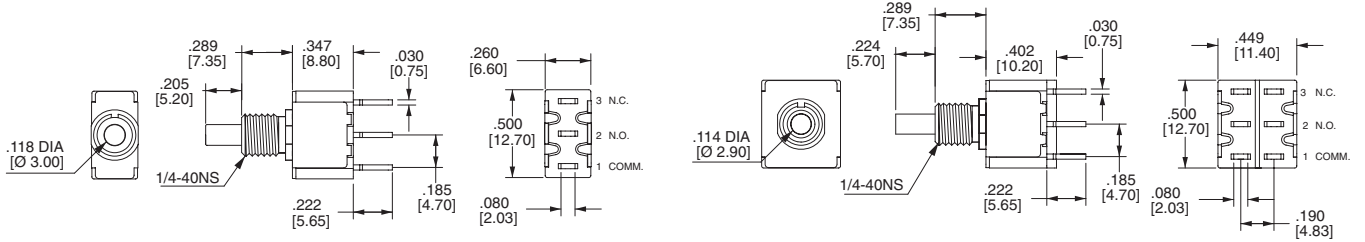


THK .030 [0.75]

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

### SINGLE POLE

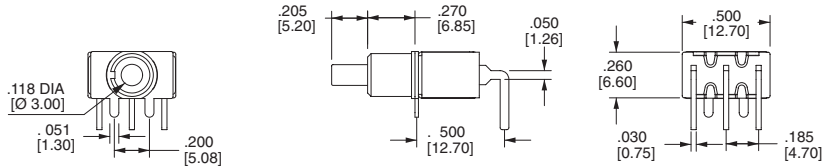
### DOUBLE POLE



**M6**

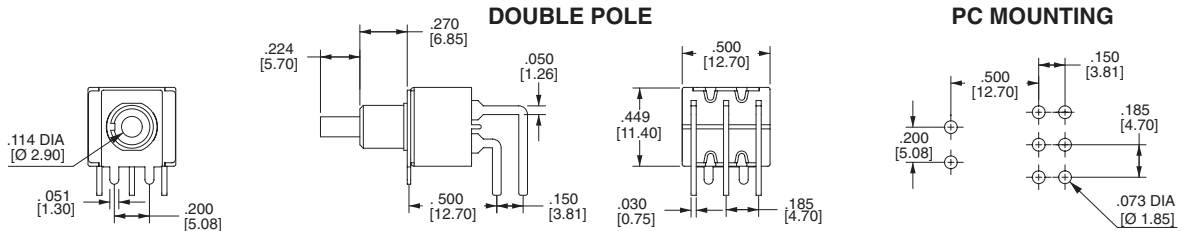
### SINGLE POLE

### PC MOUNTING



### DOUBLE POLE

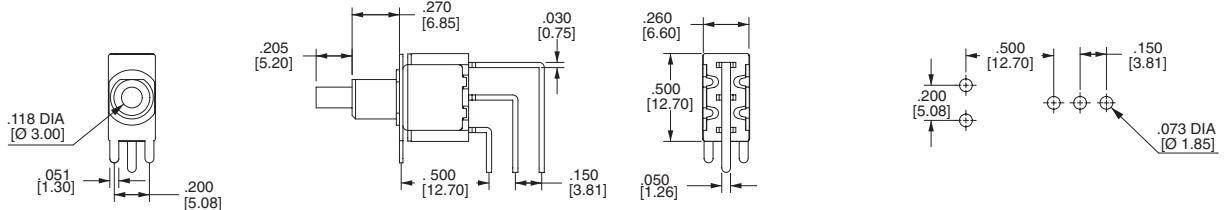
### PC MOUNTING



**M7**

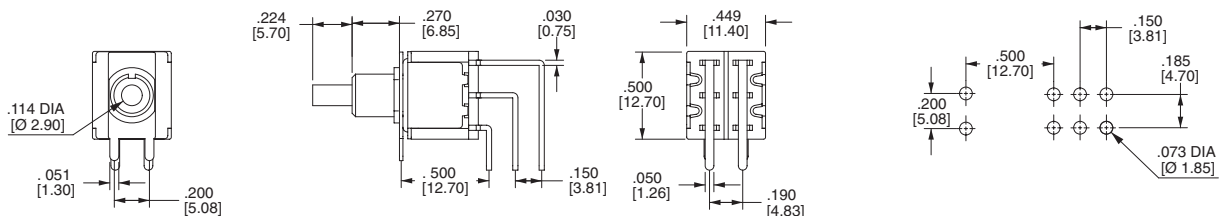
### SINGLE POLE

### PC MOUNTING



### DOUBLE POLE

### PC MOUNTING

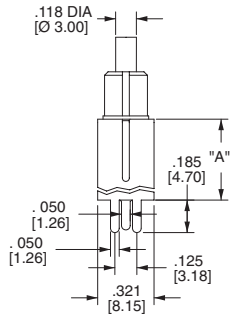


## 3MN-Series Dimensional Specifications: in. [mm]

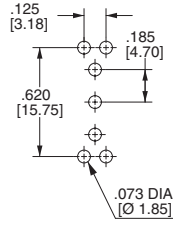
### TERMINATION

#### SINGLE POLE

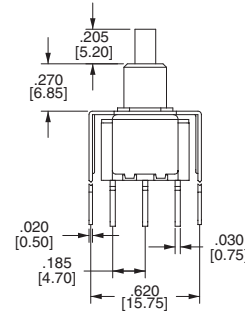
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



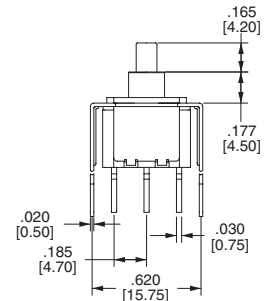
#### PC MOUNTING



#### VS2-VS3

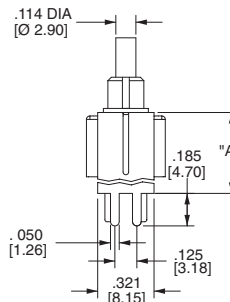


#### VS6-VS7 (For B6 Bushing Only)

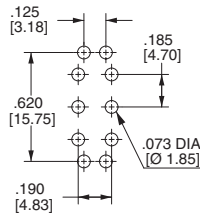


#### DOUBLE POLE

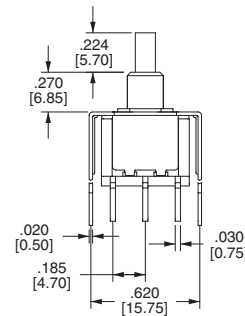
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS6	.630 [16.00]
VS7	[16.00]



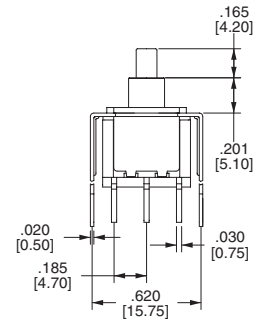
#### PC MOUNTING



#### VS2-VS3

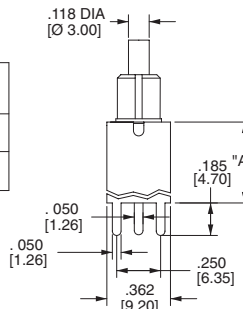


#### VS6-VS7 (For B6 Bushing Only)

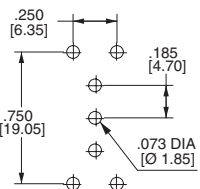


#### SINGLE POLE

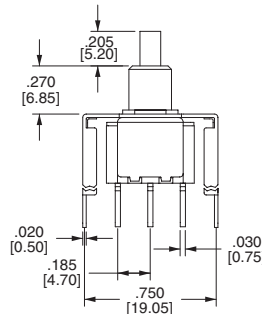
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS8	.630 [16.00]
VS9	[16.00]



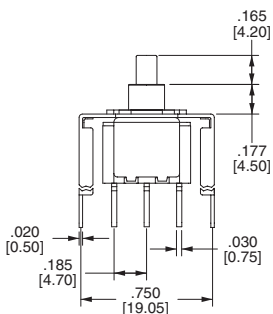
#### PC MOUNTING



#### VS4-VS5

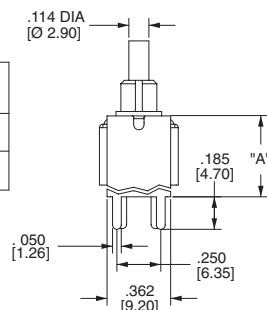


#### VS8-VS9 (For B6 Bushing Only)

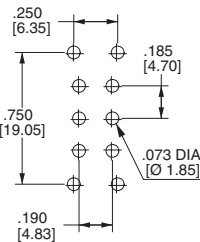


#### DOUBLE POLE

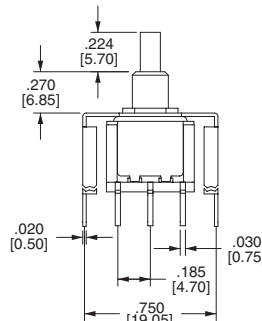
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS8	.630 [16.00]
VS9	[16.00]



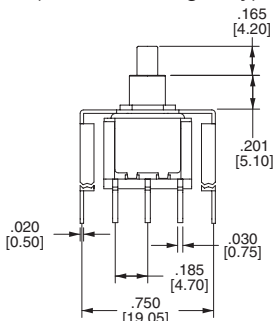
#### PC MOUNTING



#### VS4-VS5



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



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

### PLUNGER

OPTION CODE	DIM. "A"
<b>P1</b>	.173 [4.40]
<b>P2</b>	.220 [5.60]
<b>P3</b>	.087 [2.20]

FOR B1 BUSHING

OPTION CODE	DIM. "A"
<b>P1</b>	.276 [7.00]
<b>P2</b>	.327 [8.30]
<b>P3</b>	.193 [4.90]

FOR B4 BUSHING

### BUSHING

**B1**

1/4-40NS  
.350 [8.90]

**B4**

.250 [6.35]

### TERMINATION

**M1**

EPOXY SEAL  
THK .030 [0.75]

**M2**

EPOXY SEAL  
THK .030 [0.75]

**SINGLE POLE**

EPOXY SEAL

**DOUBLE POLE**

EPOXY SEAL

**M6**

.236 DIA [Ø 6.00]  
.200 [5.08]  
.050 [1.26]

**SINGLE POLE**

EPOXY SEAL

**PC MOUNTING**

.185 [4.70]  
.500 [12.70]  
.073 DIA [Ø 1.85]  
.200 [5.08]

**DOUBLE POLE**

EPOXY SEAL

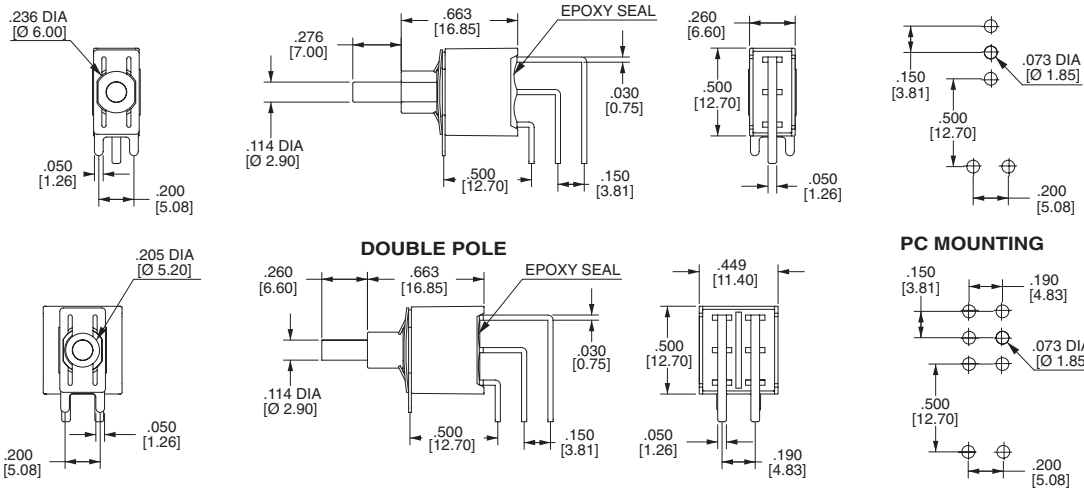
**PC MOUNTING**

.449 [11.40]  
.500 [12.70]  
.030 [0.75]  
.185 [4.70]  
.150 [3.81]  
.073 DIA [Ø 1.85]  
.200 [5.08]

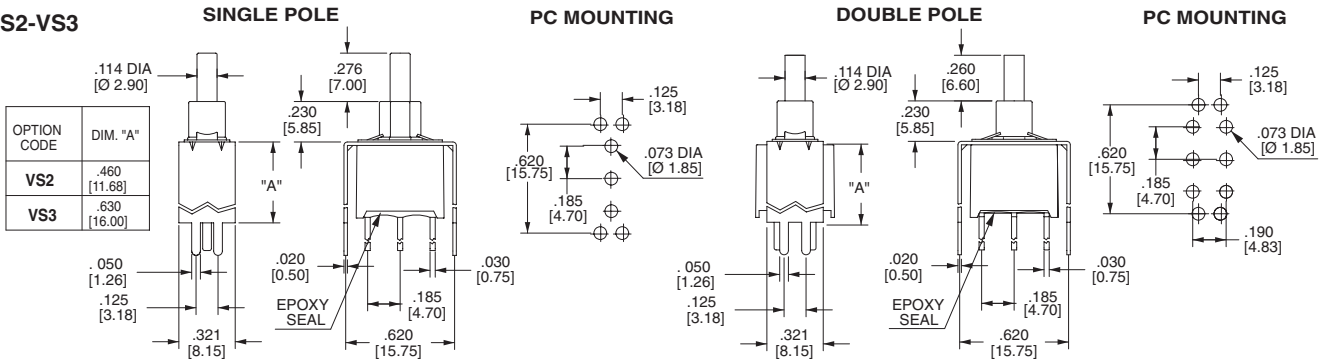
## 3MS-Series Dimensional Specifications: in. [mm]

### TERMINATION

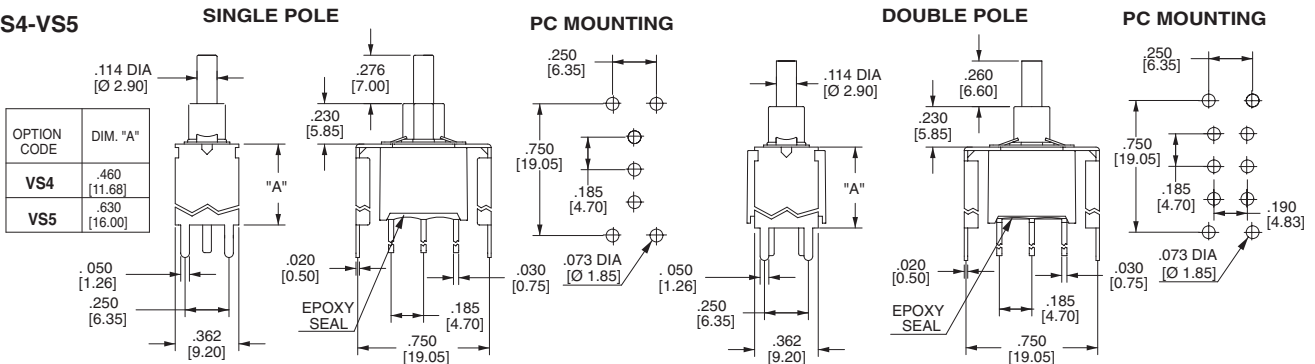
M7



VS2-VS3



VS4-VS5

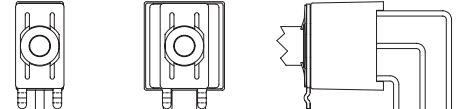


### SNAP-IN TERMINATION OPTIONS

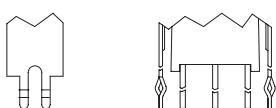
M61



M71



VS21, VS31

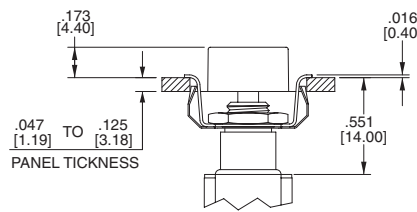
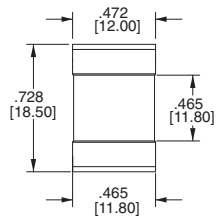
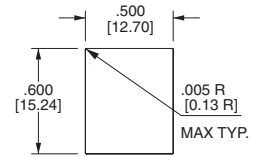
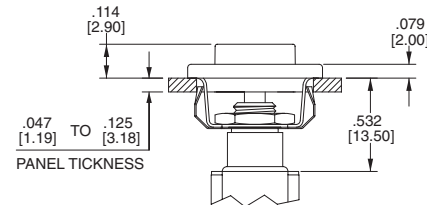
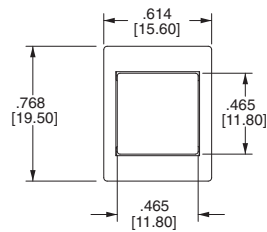
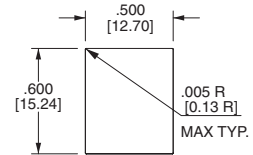
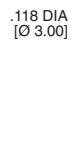


VS41, VS51

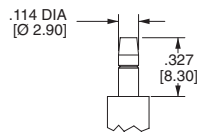
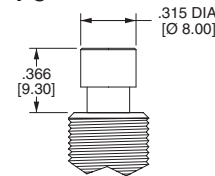
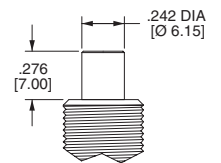
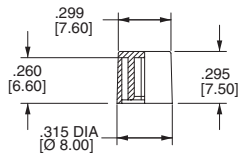
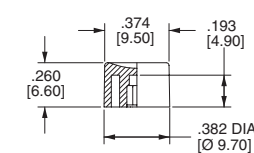
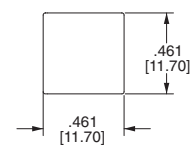
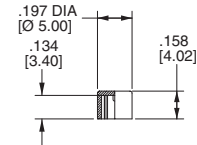
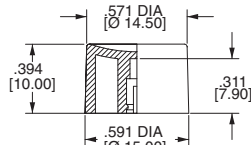
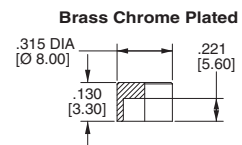
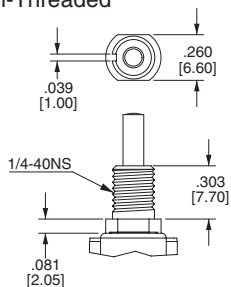
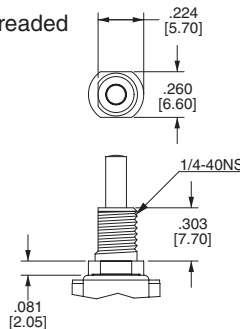
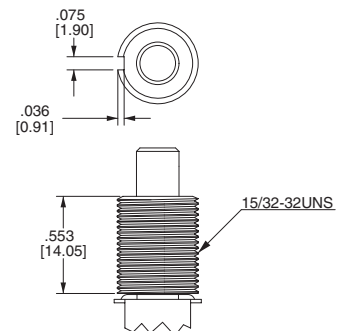


M61, M71, VS21, VS31, VS41, VS51 have the same P.C. mounting but with snap-in bracket.



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

**PANEL MOUNTING**

**AP2**

**PANEL MOUNTING**

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


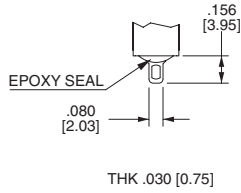
OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

**PL**

**PC**

**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**


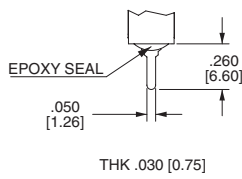
**3MA-Series Dimensional Specifications: in. [mm]**

**TERMINATION**

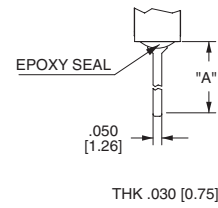
**M1**



**M2**



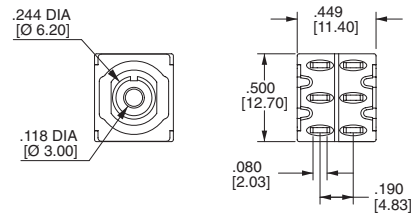
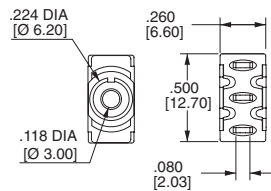
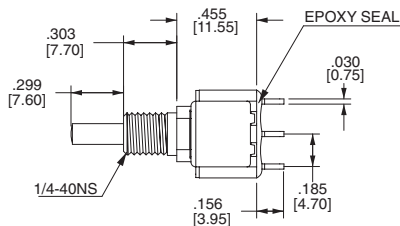
**M5**



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]

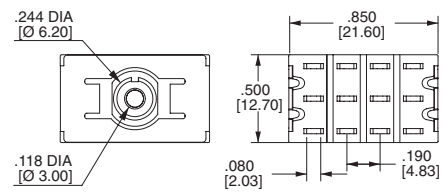
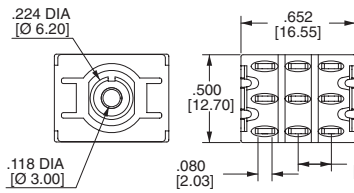
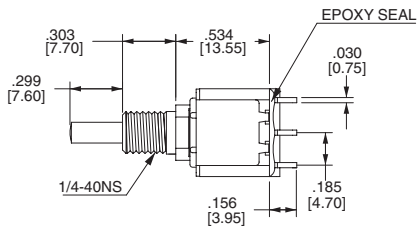
**SINGLE POLE**

**DOUBLE POLE**



**3 POLE**

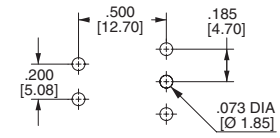
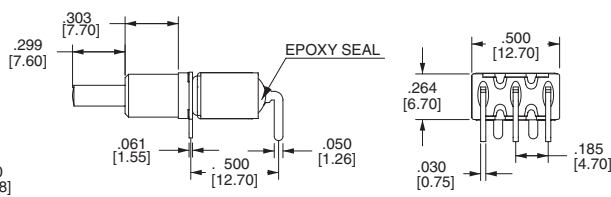
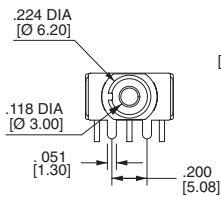
**4 POLE**



**M6**

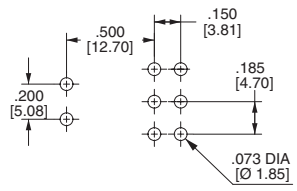
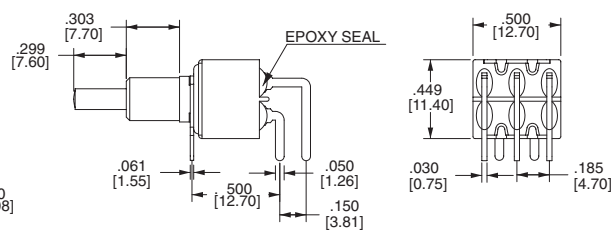
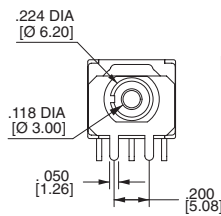
**SINGLE POLE**

**PC MOUNTING**



**DOUBLE POLE**

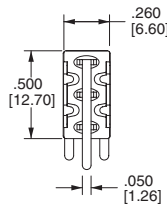
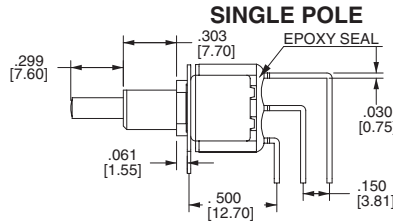
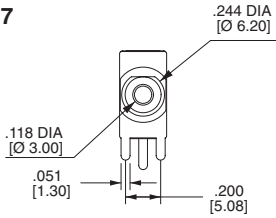
**PC MOUNTING**



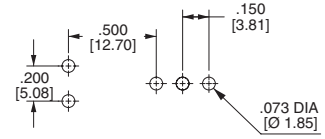
## 3MA-Series Dimensional Specifications: in. [mm]

### TERMINATION

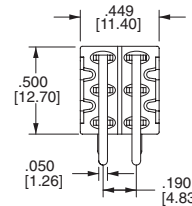
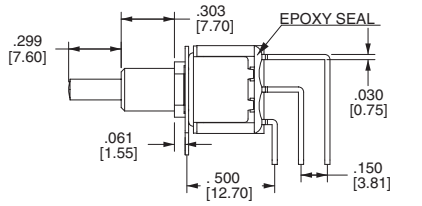
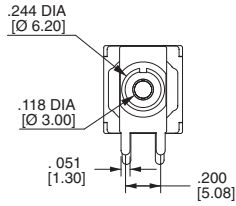
M7



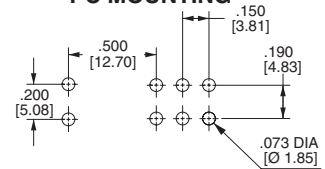
PC MOUNTING



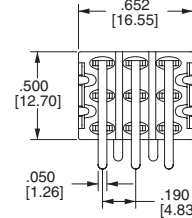
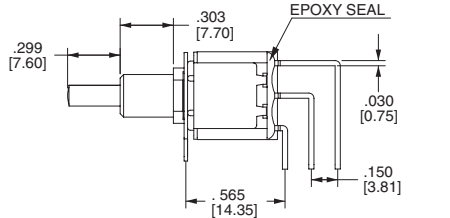
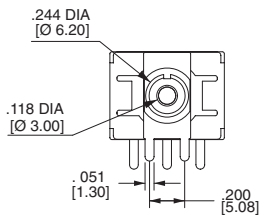
DOUBLE POLE



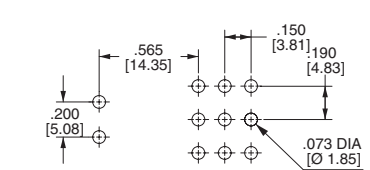
PC MOUNTING



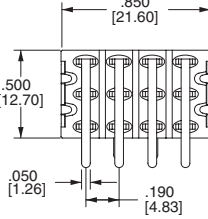
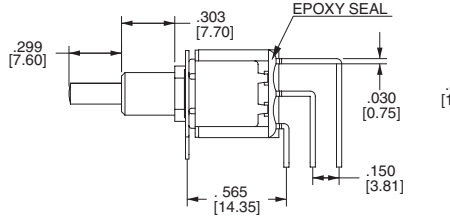
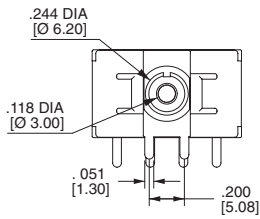
THREE POLE



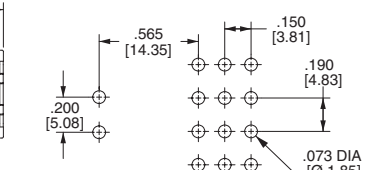
PC MOUNTING



FOUR POLE

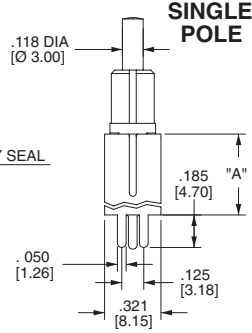
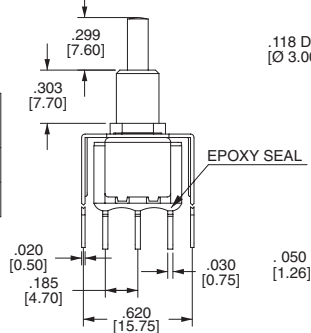


PC MOUNTING

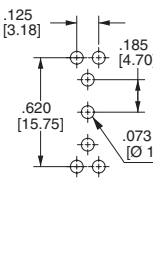


VS2-VS3

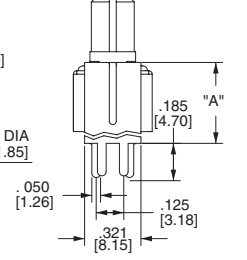
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



SINGLE POLE PC MOUNTING

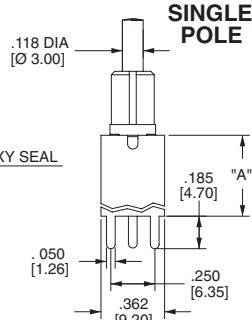
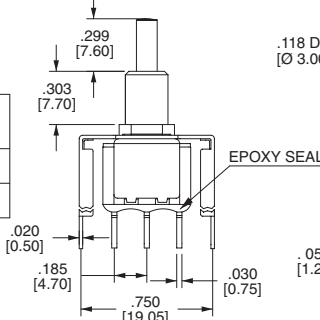


DOUBLE POLE PC MOUNTING

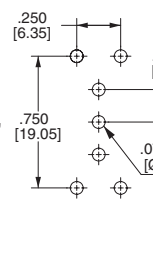


VS4-VS5

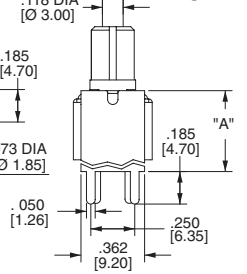
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



SINGLE POLE PC MOUNTING



DOUBLE POLE PC MOUNTING





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

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