



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

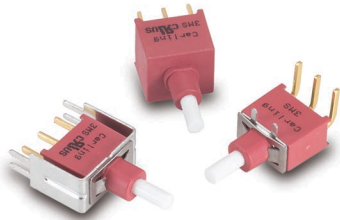
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

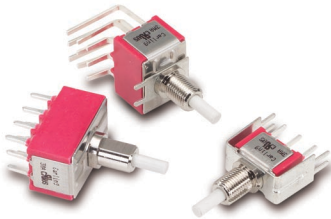




3MN-Series
Snap-Action Miniature Pushbutton Switch



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.	3MN & 3MA-Series: 10 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts. 3MS-Series: 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	3MS -Series: IP68
Cap Installation Support . .	3MS-Series: 10 lbs. max.
Solder Heat Resistance. . .	MIL-STD-202, Method 210
Actuator Travel25°

Materials

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

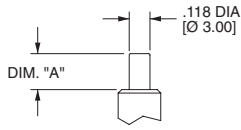
To order caps in bulk, specify the Series, followed by the cap. Ex.) 3MN-C13



1 SERIES OR SWITCH CATALOG NUMBER 3MN, 3MS or 3MA		3 CAP COLOR	
2 CAP SIZE		1 white 2 black 3 red 4 orange	5 yellow 6 green 7 blue
C1 round 7.6mm dia. C2 round 9.35 mm dia. C3 square 11.7 x 11.7mm C4 round 5mm dia.	C5 round 14.5mm dia. (for 3MA w/ PL bushing) C6 brass chrome plated (for 3MA w/ PD bushing)	1 Black, white & red standard. Other colors available. Consult factory.	

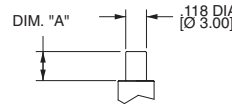
3MN-Series Dimensional Specifications: in. [mm]

PLUNGER



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

FOR B10,B11,B20,B21 ONLY

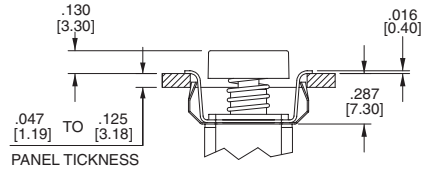
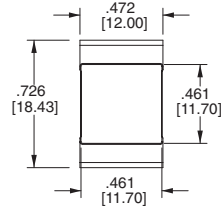


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

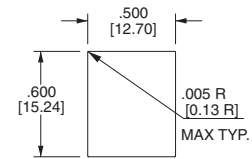
FOR B6 ONLY

ACTUATOR

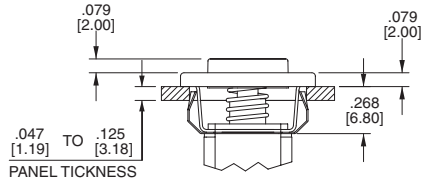
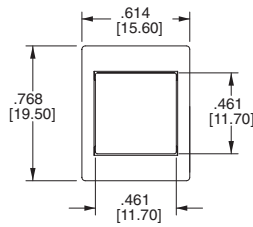
AP1



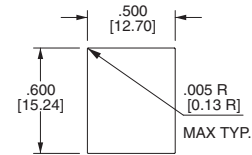
PANEL MOUNTING



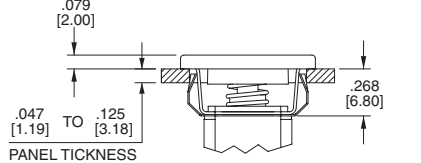
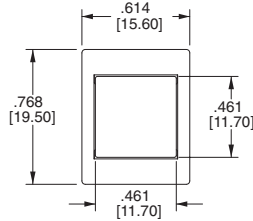
AP2



PANEL MOUNTING

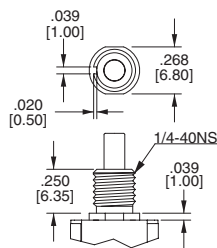


AP3

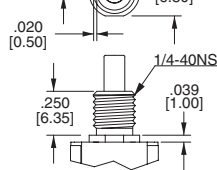


BUSHING

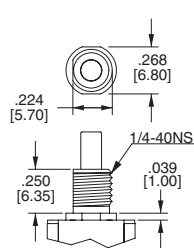
B10
STANDARD KEYWAY
THREADED SHOWN



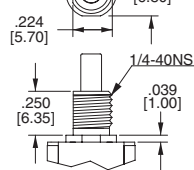
B20
STANDARD KEYWAY
NON-THREADED



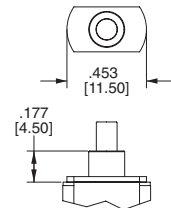
B11
THREADED SHOWN
WITH FLAT



B21
NON-THREADED
WITH FLAT

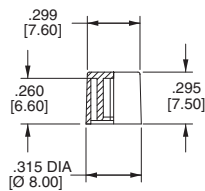


B6
NON-THREADED
(FOR TERMINATION
OPTIONS VS6-VS9 ONLY)

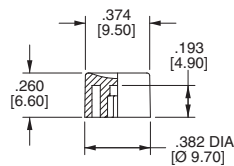


CAP

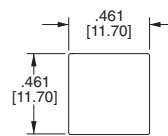
C1



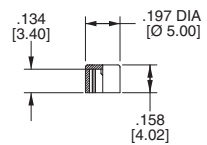
C2



C3



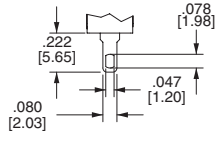
C4



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

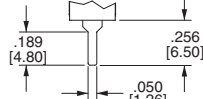
TERMINATION

M1



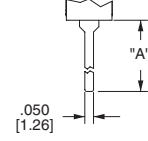
THK .030 [0.75]

M2



THK .030 [0.75]

M5

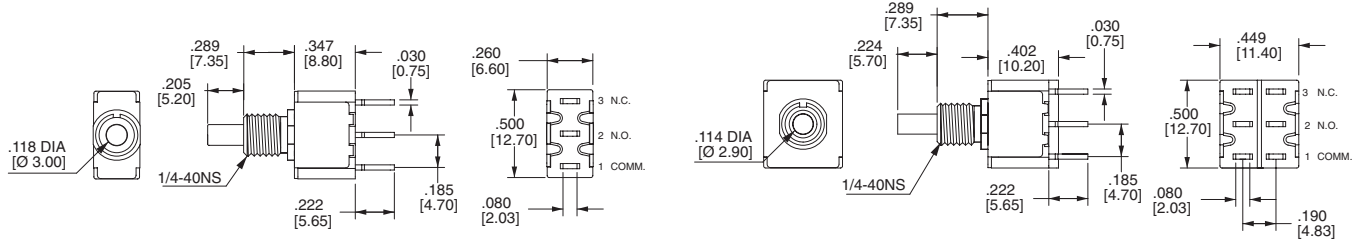


THK .030 [0.75]

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

SINGLE POLE

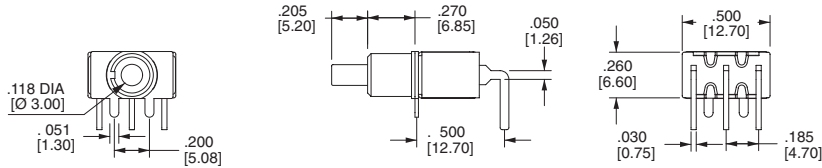
DOUBLE POLE



M6

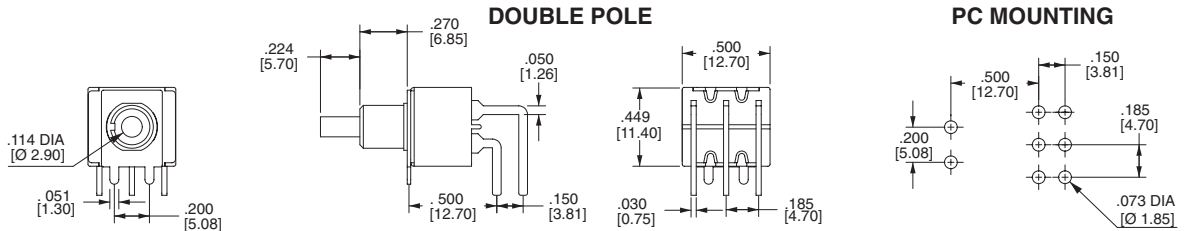
SINGLE POLE

PC MOUNTING



DOUBLE POLE

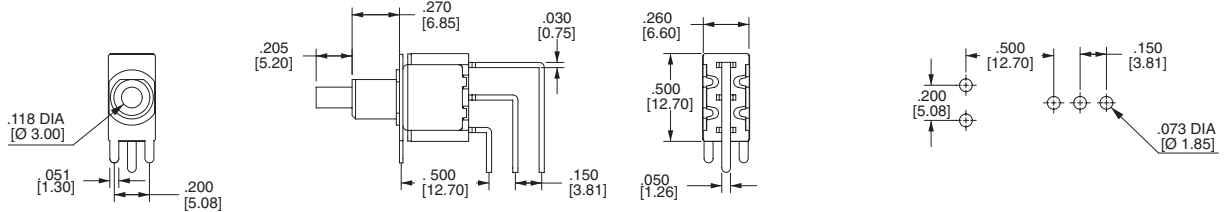
PC MOUNTING



M7

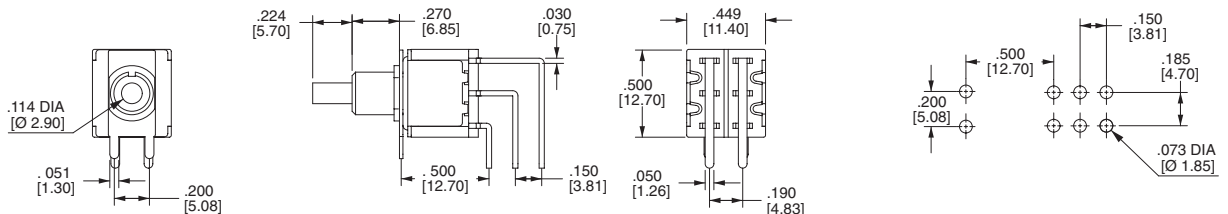
SINGLE POLE

PC MOUNTING



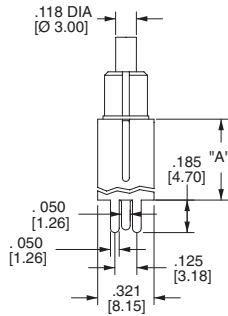
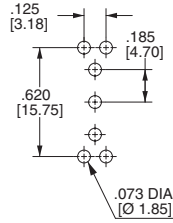
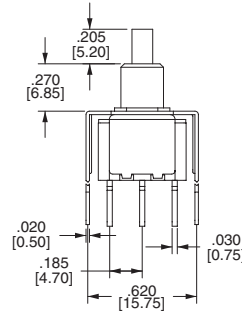
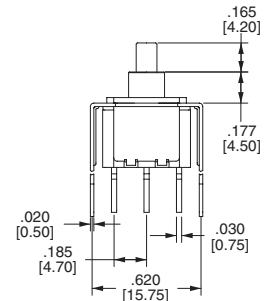
DOUBLE POLE

PC MOUNTING

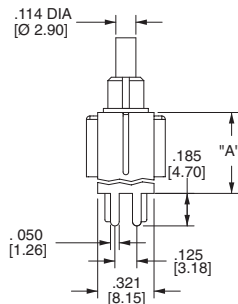
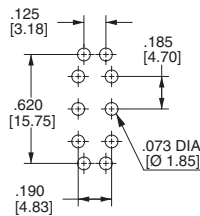
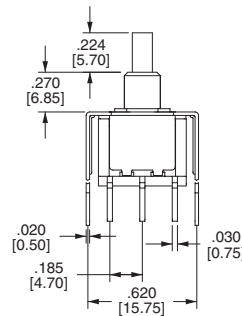
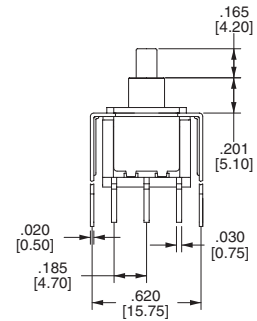


3MN-Series Dimensional Specifications: in. [mm]
TERMINATION
SINGLE POLE

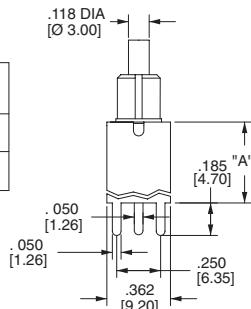
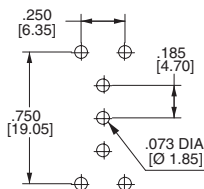
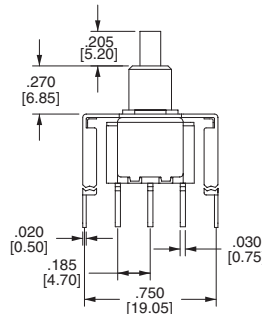
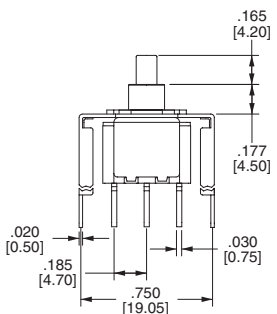
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]


PC MOUNTING

VS2-VS3

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

DOUBLE POLE

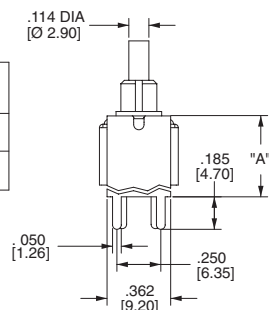
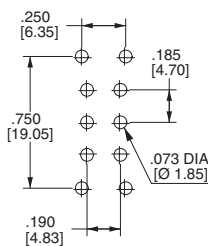
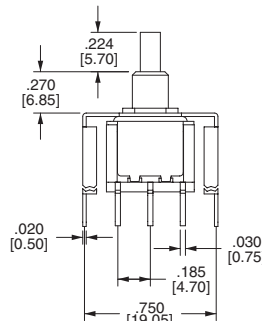
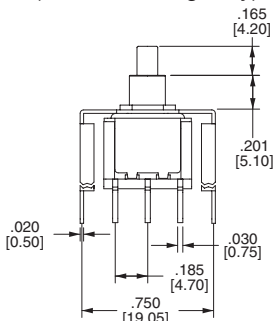
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS6	[11.68]
VS3	.630 [16.00]
VS7	[16.00]


PC MOUNTING

VS2-VS3

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

SINGLE POLE

OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS8	[11.68]
VS5	.630 [16.00]
VS9	[16.00]

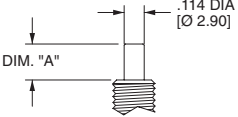
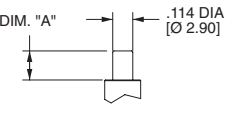

PC MOUNTING

VS4-VS5

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

DOUBLE POLE

OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS8	[11.68]
VS5	.630 [16.00]
VS9	[16.00]

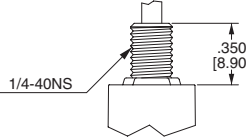
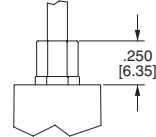

PC MOUNTING

VS4-VS5

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


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

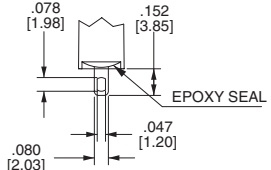
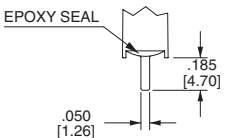
PLUNGER

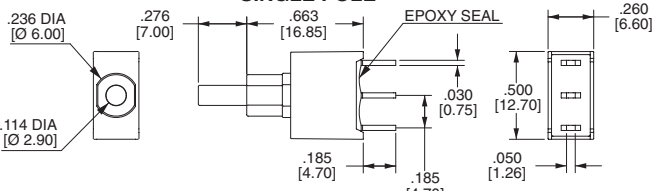
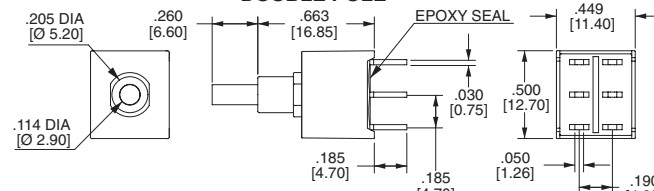
 <p>DIM. "A"</p> <p>FOR B1 BUSHING</p>	<table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM. "A"</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>.173 [4.40]</td> </tr> <tr> <td>P2</td> <td>.220 [5.60]</td> </tr> <tr> <td>P3</td> <td>.087 [2.20]</td> </tr> </tbody> </table>	OPTION CODE	DIM. "A"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

BUSHING

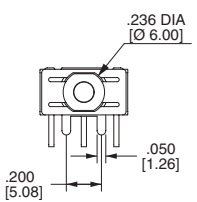
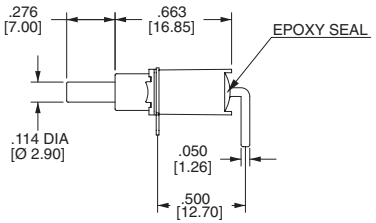
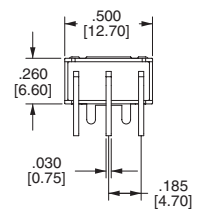
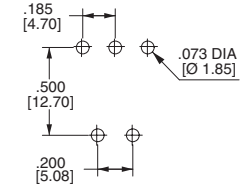
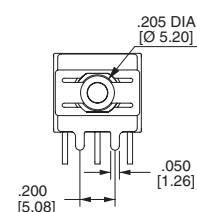
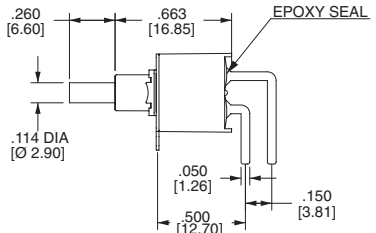
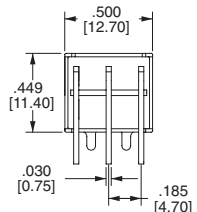
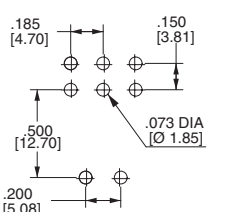
<p>B1</p>  <p>1/4-40NS</p> <p>.350 [8.90]</p>	<p>B4</p>  <p>.250 [6.35]</p>
---	---

TERMINATION

<p>M1</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>M2</p>  <p>EPOXY SEAL</p> <p>.185 [4.70]</p> <p>.050 [1.26]</p> <p>THK .030 [0.75]</p>
--	---

<p>SINGLE POLE</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>DOUBLE POLE</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>
--	---

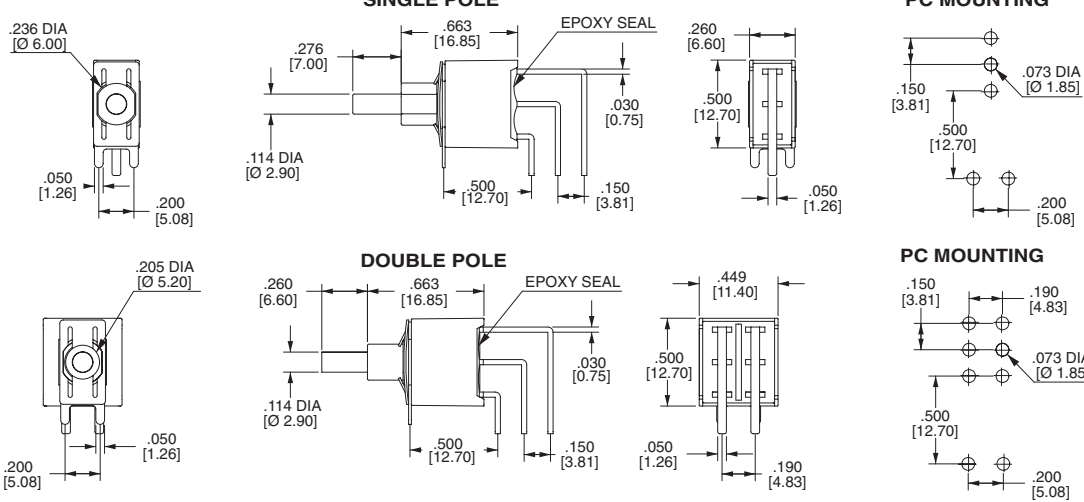
M6

 <p>.236 DIA [Ø 6.00]</p> <p>.050 [1.26]</p> <p>.200 [5.08]</p>	<p>SINGLE POLE</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>PC MOUNTING</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>DOUBLE POLE</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>PC MOUNTING</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>

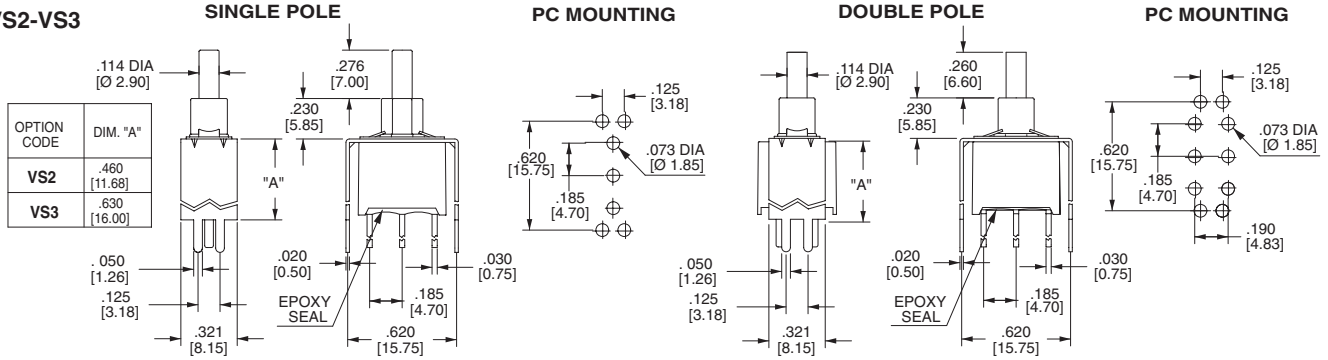
3MS-Series Dimensional Specifications: in. [mm]

TERMINATION

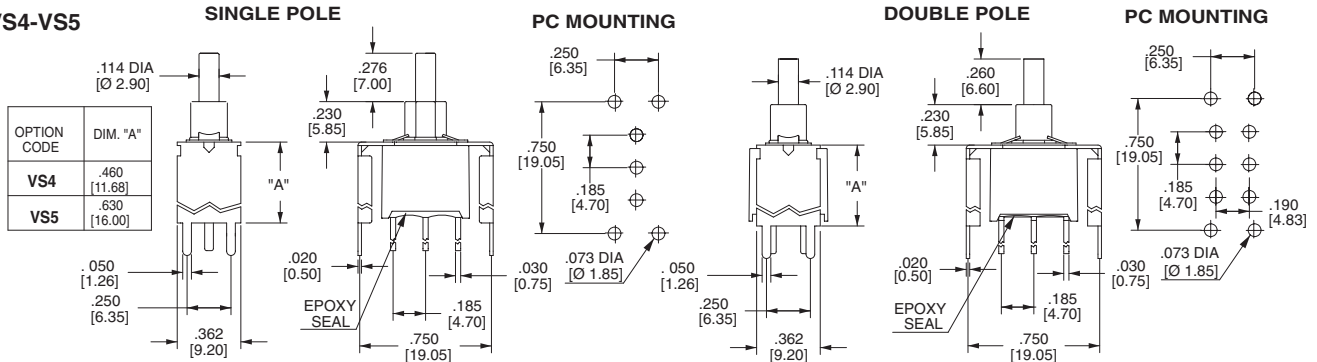
M7



VS2-VS3



VS4-VS5

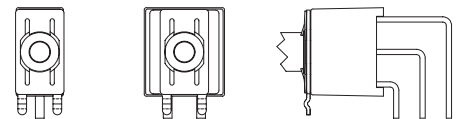


SNAP-IN TERMINATION OPTIONS

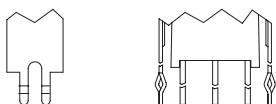
M61



M71



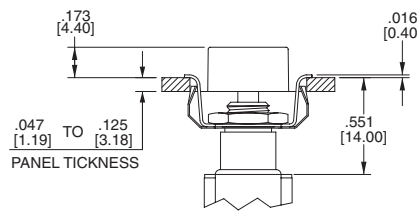
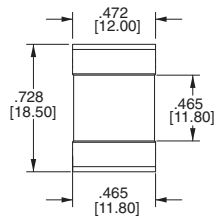
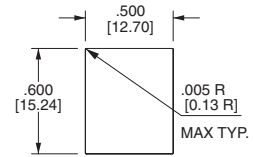
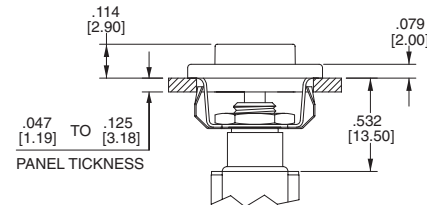
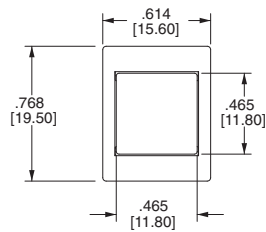
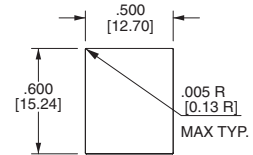
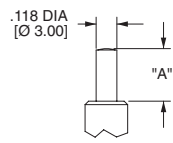
VS21,VS31



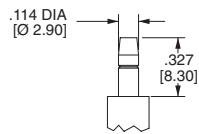
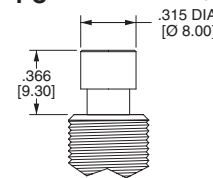
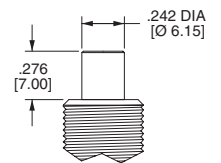
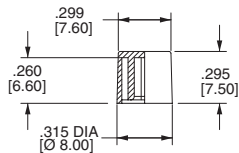
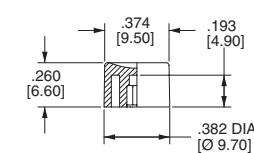
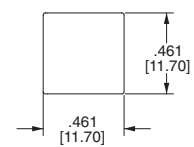
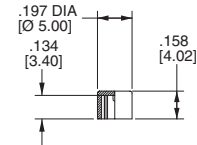
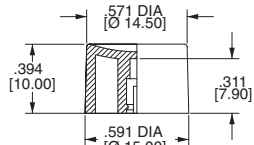
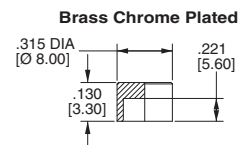
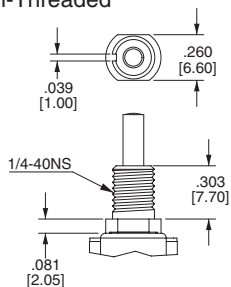
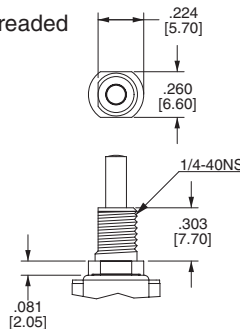
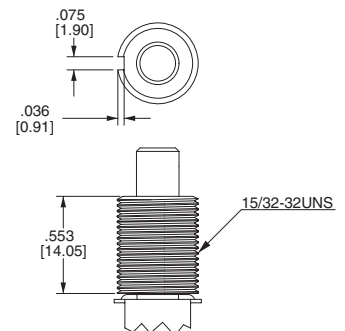
VS41,VS51



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


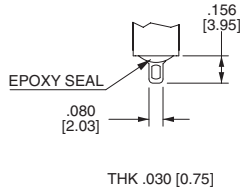
OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

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

Brass Chrome Plated
For PD Bushing Only
BUSHING
**B10 Threaded
B20 Non-Threaded**

B21 Non-Threaded

BD


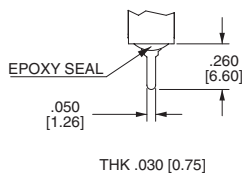
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

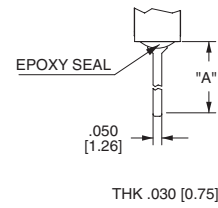
M1



M2



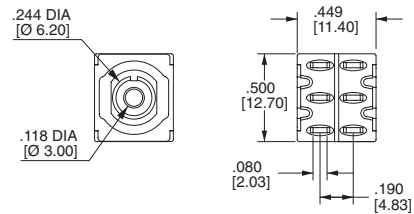
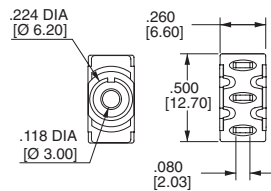
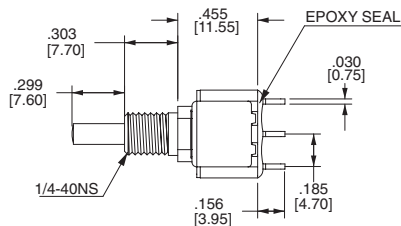
M5



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

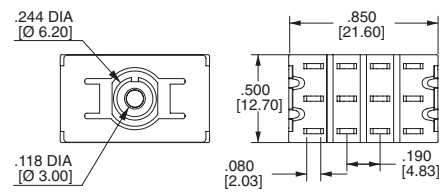
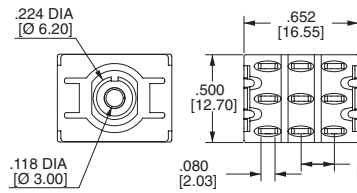
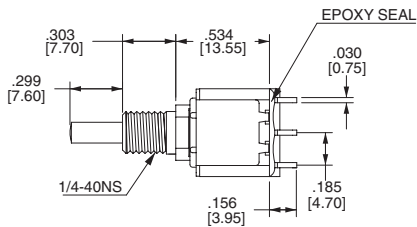
SINGLE POLE

DOUBLE POLE



3 POLE

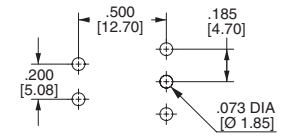
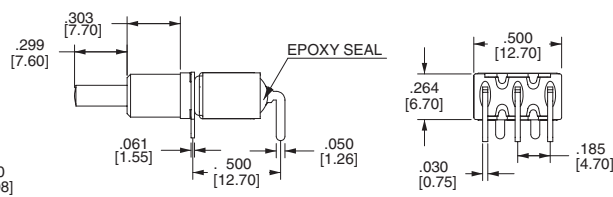
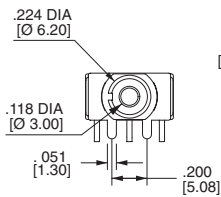
4 POLE



M6

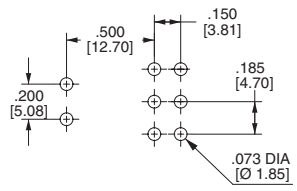
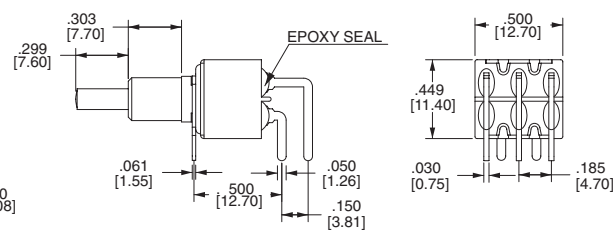
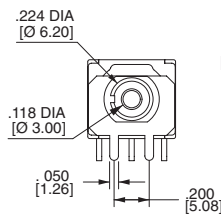
SINGLE POLE

PC MOUNTING



DOUBLE POLE

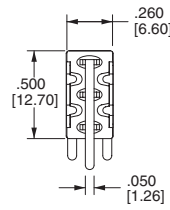
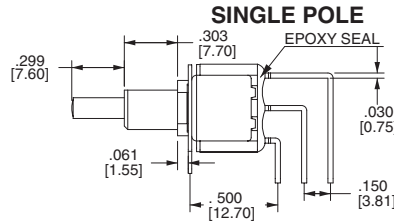
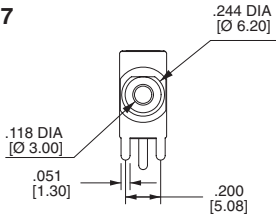
PC MOUNTING



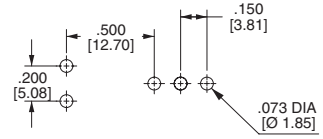
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

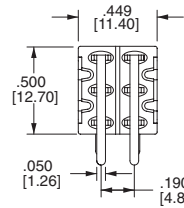
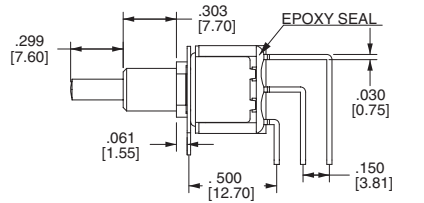
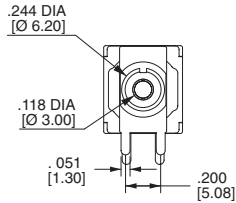
M7



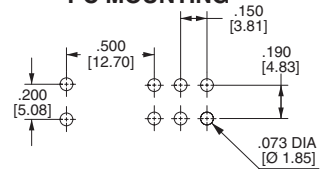
PC MOUNTING



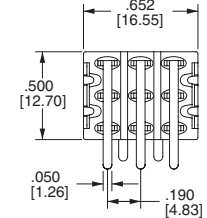
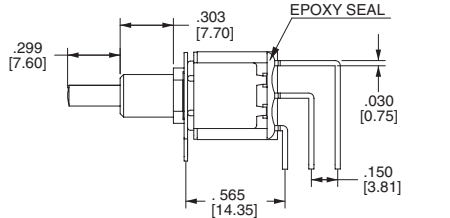
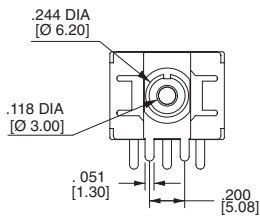
DOUBLE POLE



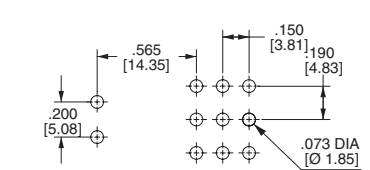
PC MOUNTING



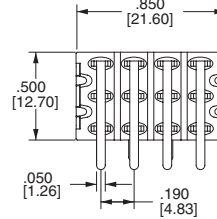
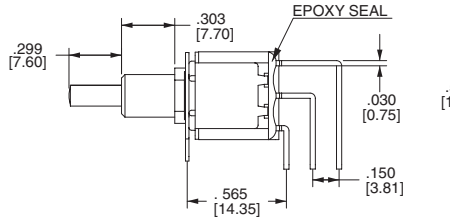
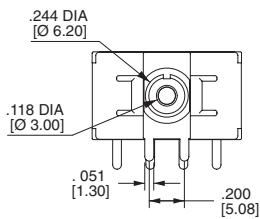
THREE POLE



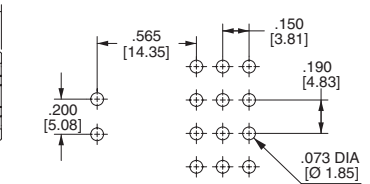
PC MOUNTING



FOUR POLE

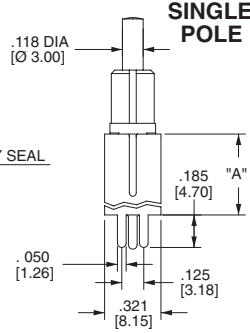
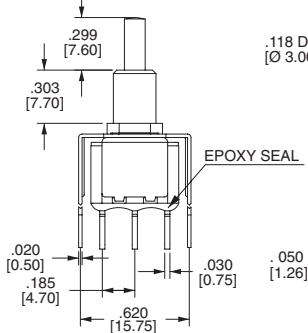


PC MOUNTING

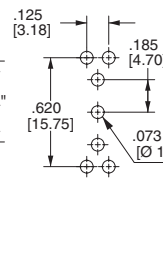


VS2-VS3

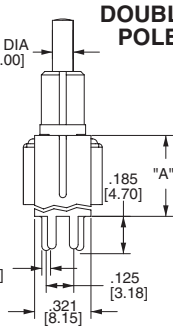
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



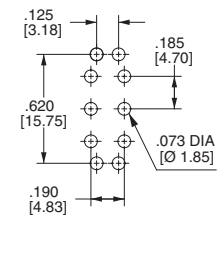
SINGLE POLE PC MOUNTING



DOUBLE POLE

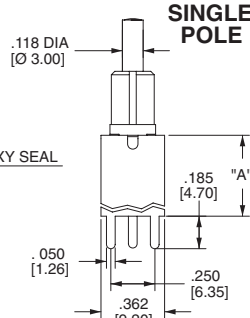
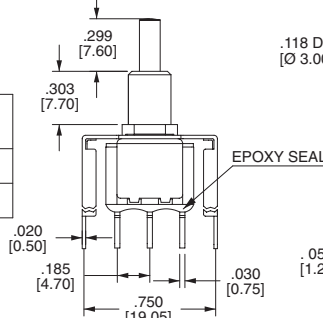


PC MOUNTING

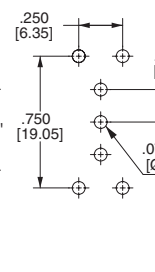


VS4-VS5

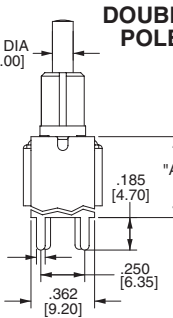
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



SINGLE POLE PC MOUNTING



DOUBLE POLE



PC MOUNTING

