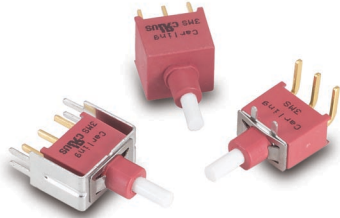
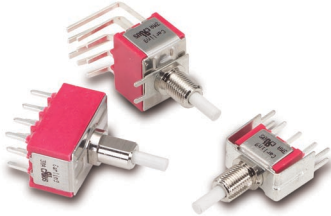




3MN-Series
Snap-Action Miniature Pushbutton Switch



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 & 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 Travel25°

Materials

Case	<i>3MN & 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 & 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 & 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

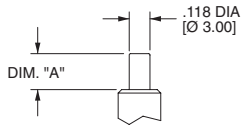


1 SERIES OR SWITCH CATALOG NUMBER 3MN, 3MS or 3MA			
2 CAP SIZE			
C1	round 7.6mm dia.	C5	round 14.5mm dia.
C2	round 9.35 mm dia.	C6	brass chrome plated (for 3MA w/ PL bushing)
C3	square 11.7 x 11.7mm		
C4	round 5mm dia.		(for 3MA w/ PD bushing)

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

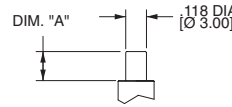
3MN-Series Dimensional Specifications: in. [mm]

PLUNGER



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

FOR B10,B11,B20,B21 ONLY

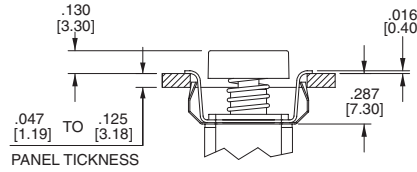
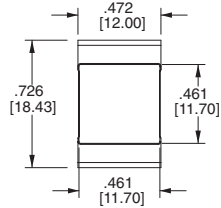


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

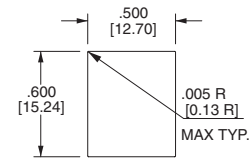
FOR B6 ONLY

ACTUATOR

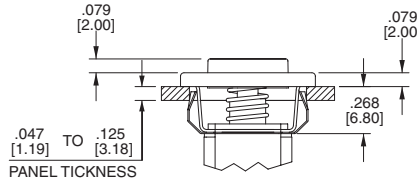
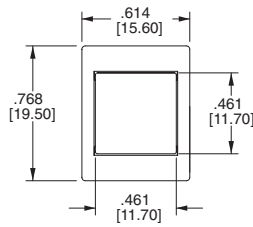
AP1



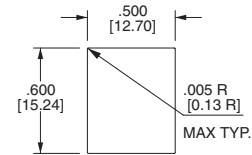
PANEL MOUNTING



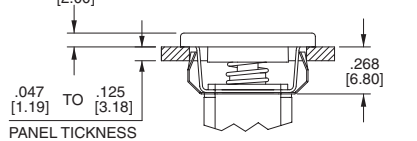
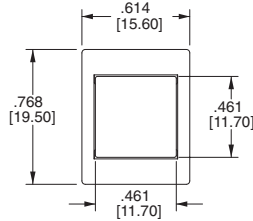
AP2



PANEL MOUNTING

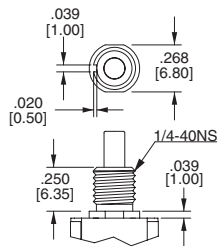


AP3

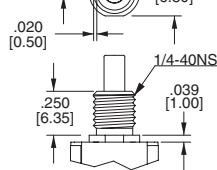


BUSHING

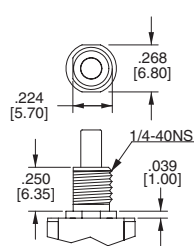
B10
STANDARD KEYWAY
THREADED SHOWN



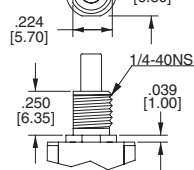
B20
STANDARD KEYWAY
NON-THREADED



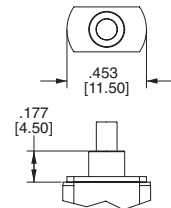
B11
THREADED SHOWN
WITH FLAT



B21
NON-THREADED
WITH FLAT

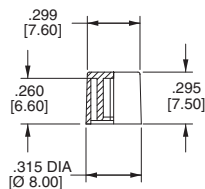


B6
NON-THREADED
(FOR TERMINATION
OPTIONS VS6-VS9 ONLY)

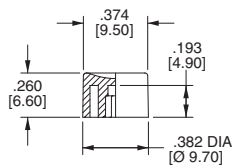


CAP

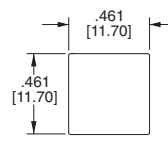
C1



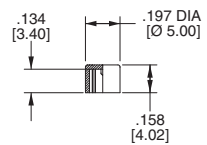
C2



C3



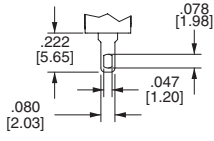
C4



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

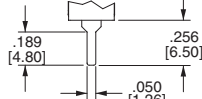
TERMINATION

M1



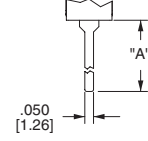
THK .030 [0.75]

M2



THK .030 [0.75]

M5

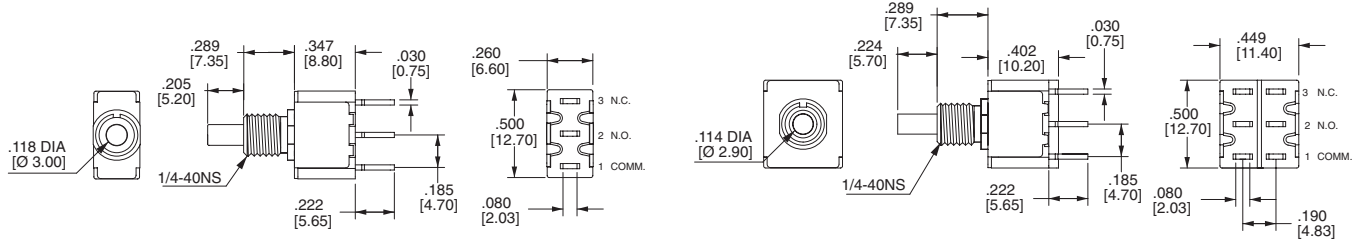


THK .030 [0.75]

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

SINGLE POLE

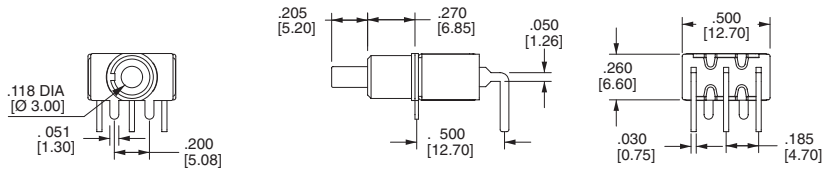
DOUBLE POLE



M6

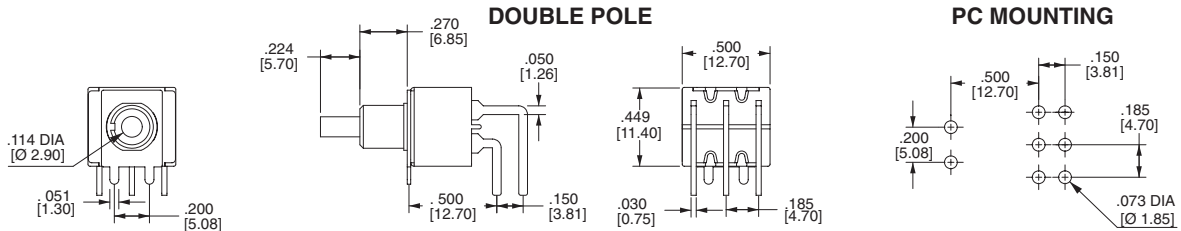
SINGLE POLE

PC MOUNTING



DOUBLE POLE

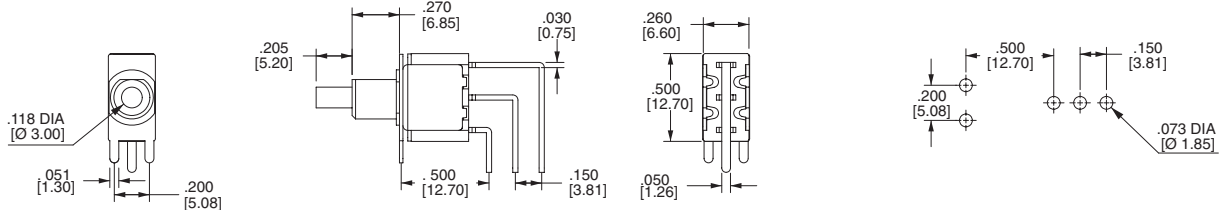
PC MOUNTING



M7

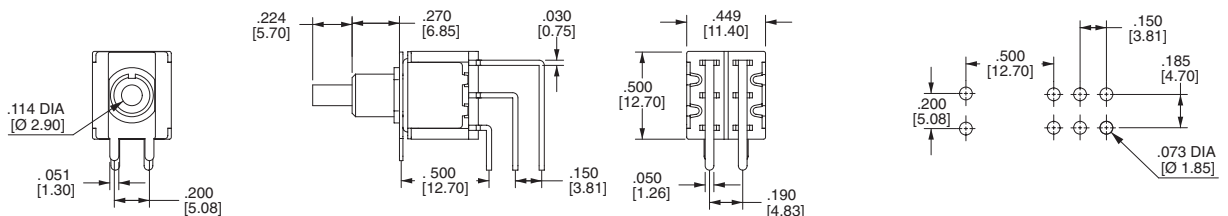
SINGLE POLE

PC MOUNTING



DOUBLE POLE

PC MOUNTING

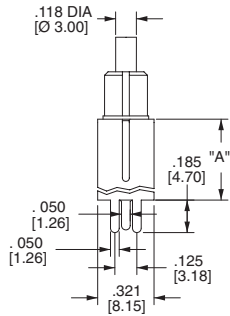


3MN-Series Dimensional Specifications: in. [mm]

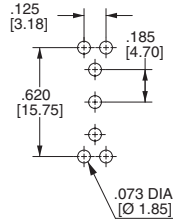
TERMINATION

SINGLE POLE

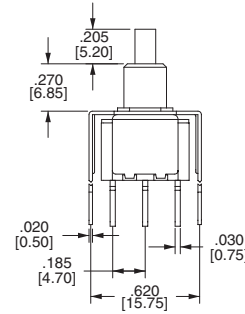
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



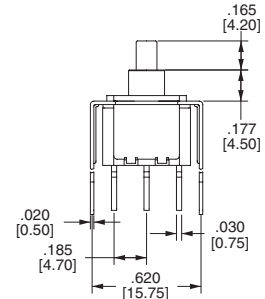
PC MOUNTING



VS2-VS3

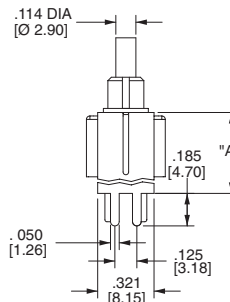


VS6-VS7 (For B6 Bushing Only)

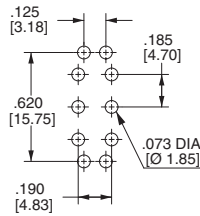


DOUBLE POLE

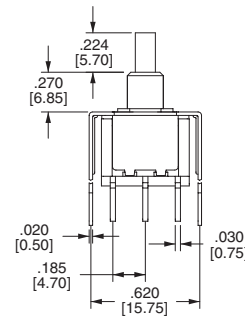
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



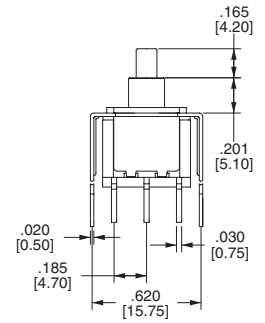
PC MOUNTING



VS2-VS3

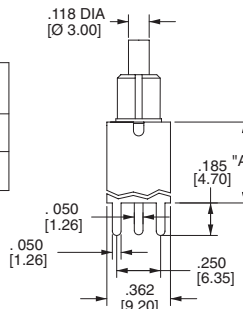


VS6-VS7 (For B6 Bushing Only)

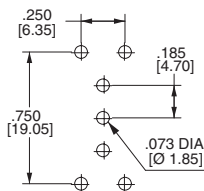


SINGLE POLE

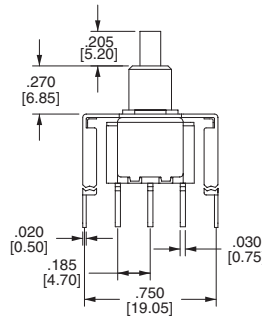
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



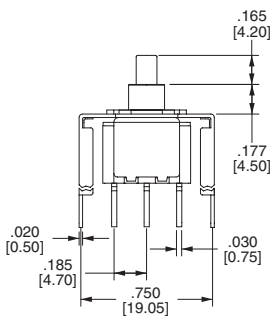
PC MOUNTING



VS4-VS5

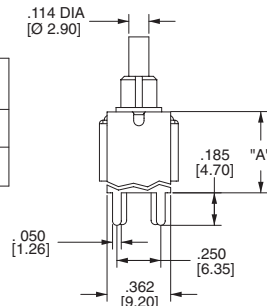


VS8-VS9 (For B6 Bushing Only)

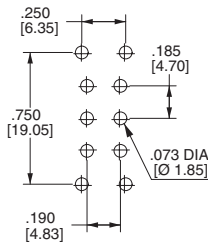


DOUBLE POLE

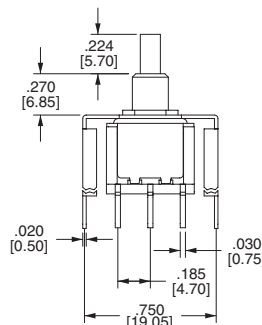
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



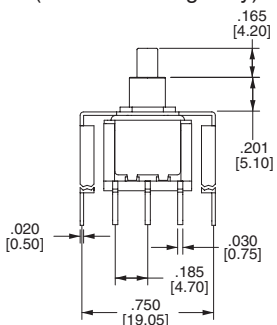
PC MOUNTING



VS4-VS5



VS8-VS9 (For B6 Bushing Only)



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

PLUNGER

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

FOR B1 BUSHING

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

FOR B4 BUSHING

BUSHING

B1

B4

TERMINATION

M1

M2

SINGLE POLE

DOUBLE POLE

M6

SINGLE POLE

PC MOUNTING

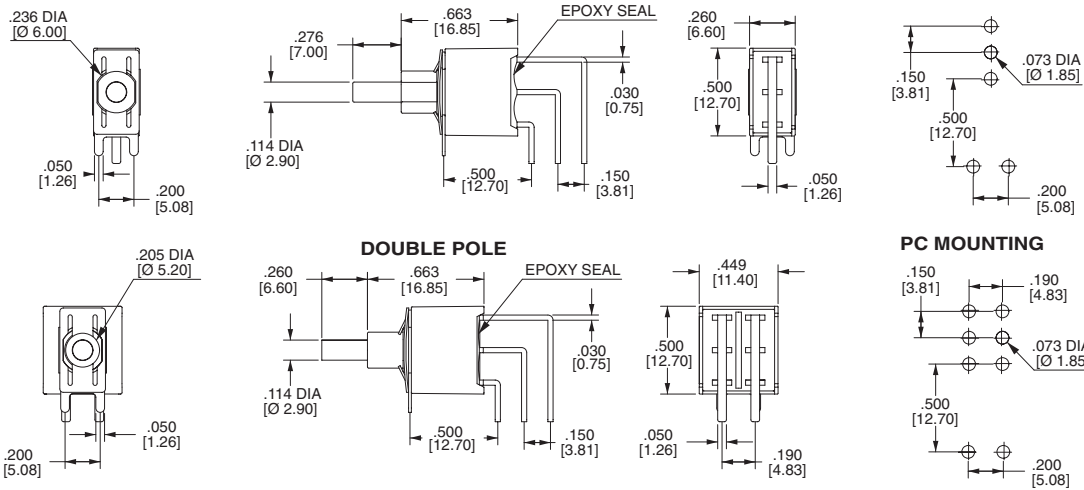
DOUBLE POLE

PC MOUNTING

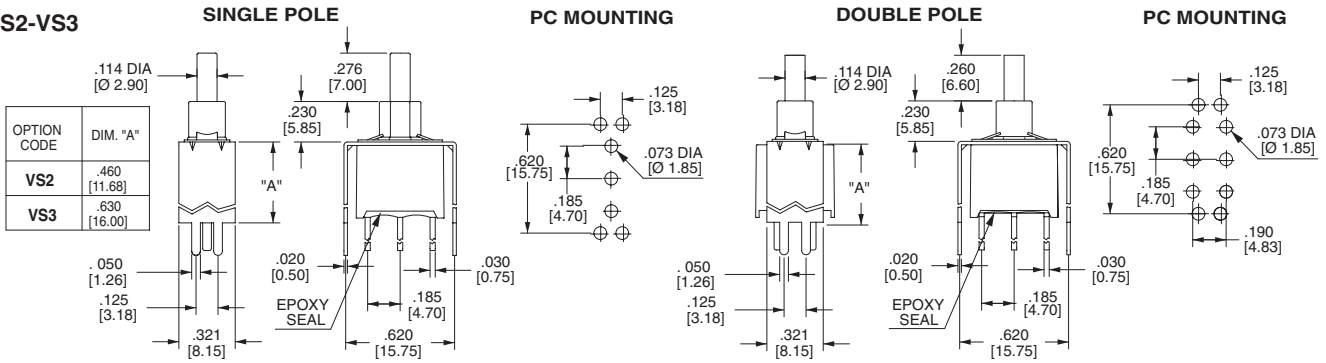
3MS-Series Dimensional Specifications: in. [mm]

TERMINATION

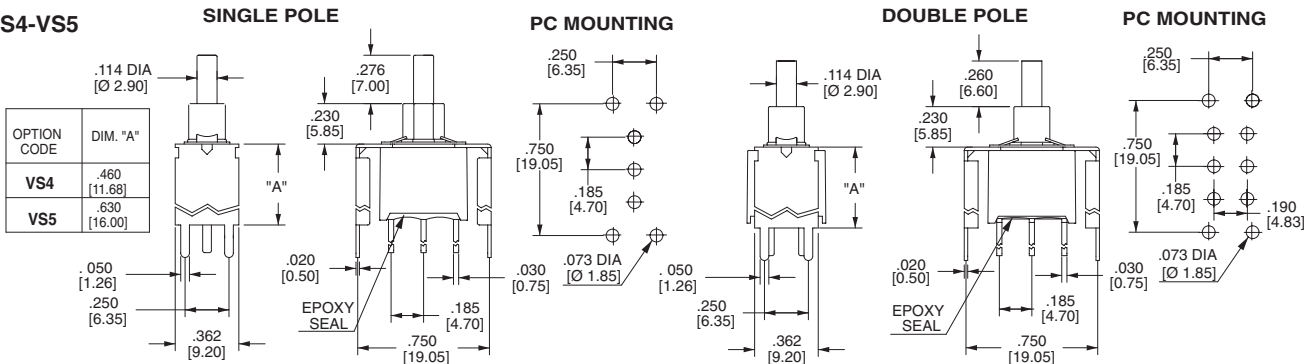
M7



VS2-VS3



VS4-VS5

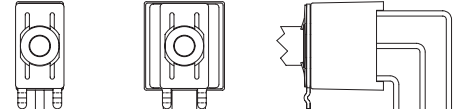


SNAP-IN TERMINATION OPTIONS

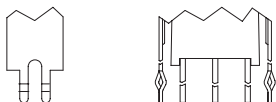
M61



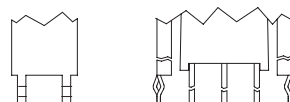
M71



VS21, VS31



VS41, VS51

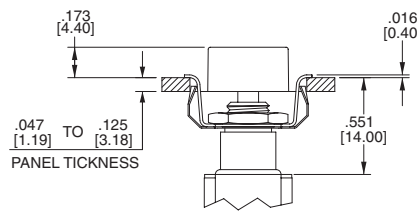
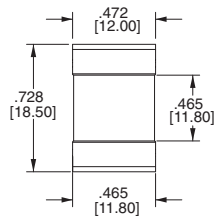


M61, M71, VS21, VS31, VS41, VS51 have the same P.C. mounting but with snap-in bracket.

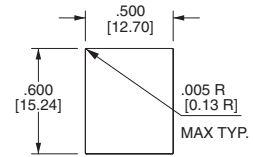
3MA-Series Dimensional Specifications: in. [mm]

ACTUATOR

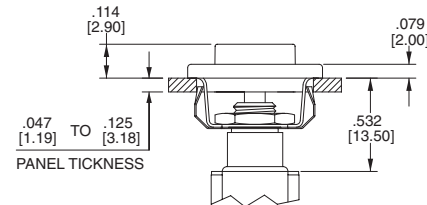
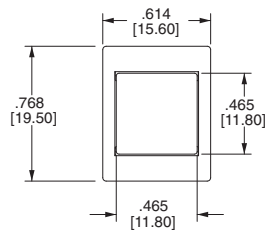
AP1



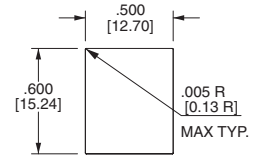
PANEL MOUNTING



AP2

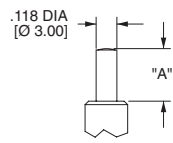


PANEL MOUNTING



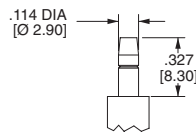
PLUNGER

PA,PI

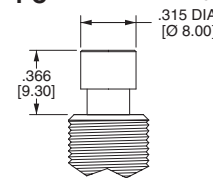


OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

PL

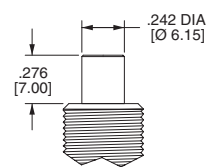


PC



Brass Chrome Plated

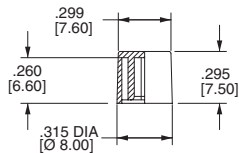
PD



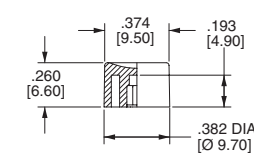
PC, PD Plunger must fit with BD bushing

CAP

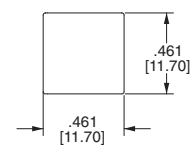
C1



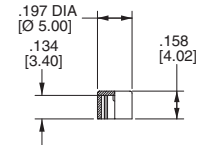
C2



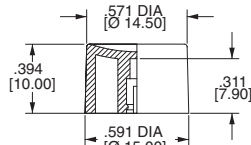
C3



C4

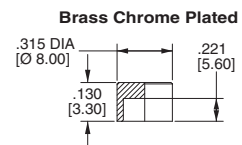


C5



For PL Bushing Only

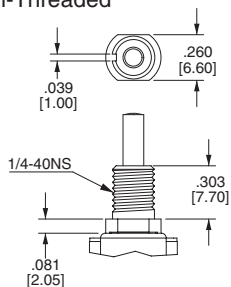
C6



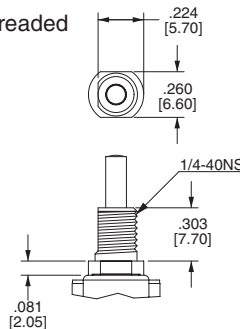
For PD Bushing Only

BUSHING

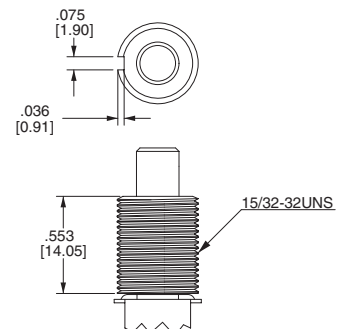
B10 Threaded
B20 Non-Threaded



B21 Non-Threaded



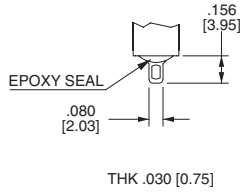
BD



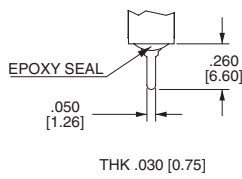
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

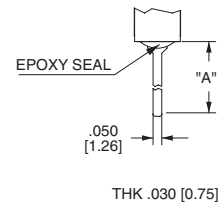
M1



M2



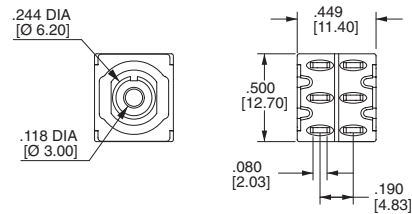
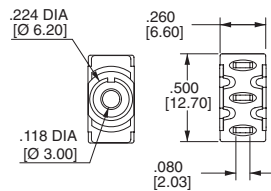
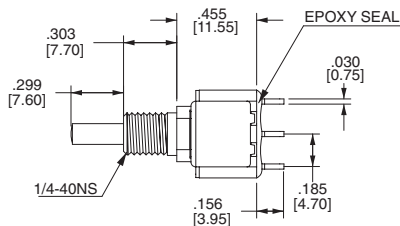
M5



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

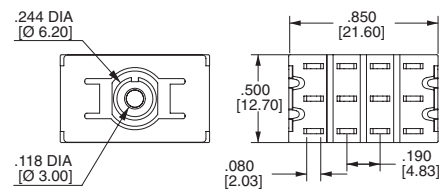
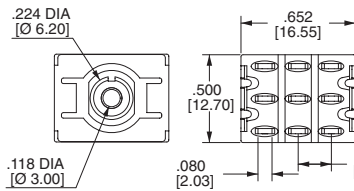
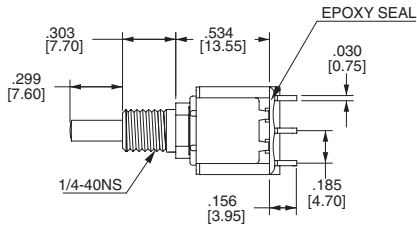
SINGLE POLE

DOUBLE POLE



3 POLE

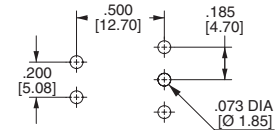
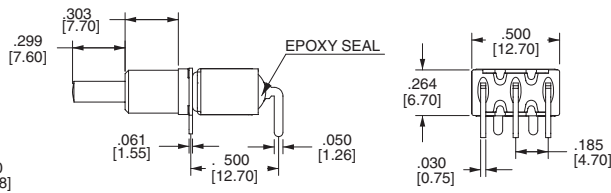
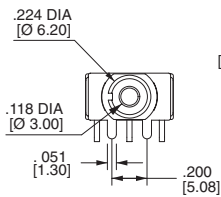
4 POLE



M6

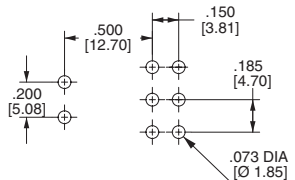
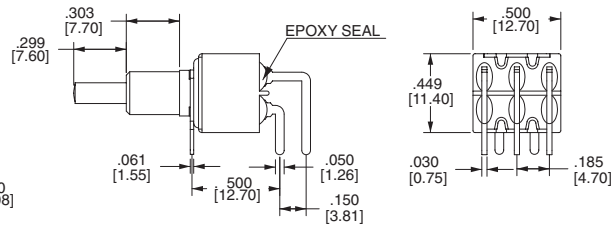
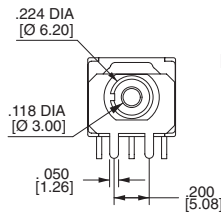
SINGLE POLE

PC MOUNTING



DOUBLE POLE

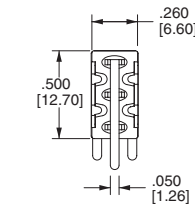
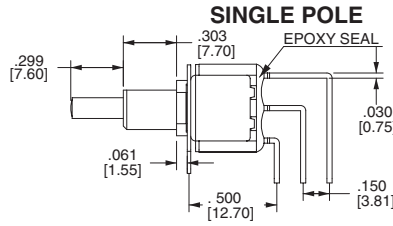
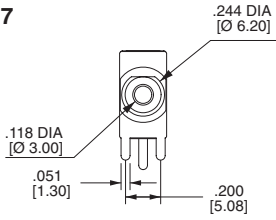
PC MOUNTING



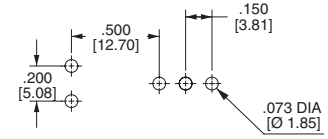
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

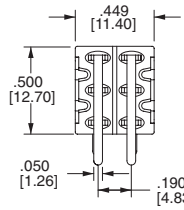
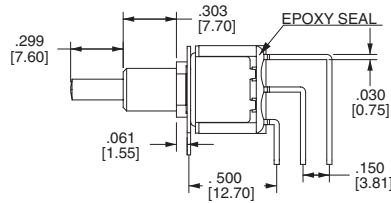
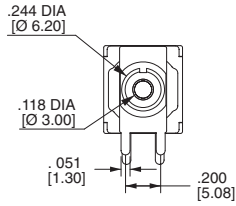
M7



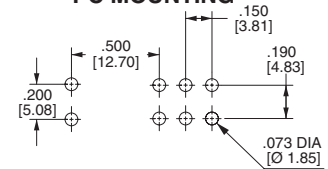
PC MOUNTING



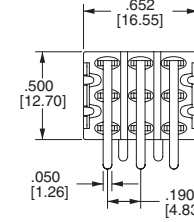
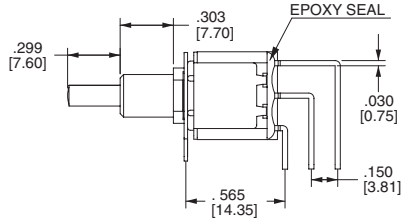
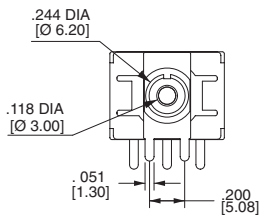
DOUBLE POLE



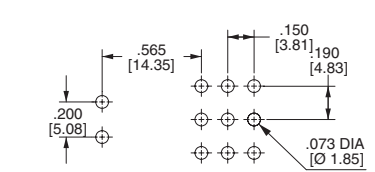
PC MOUNTING



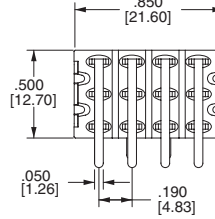
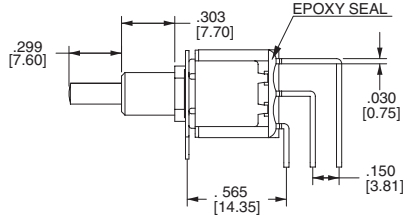
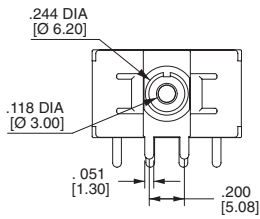
THREE POLE



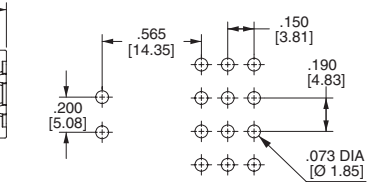
PC MOUNTING



FOUR POLE

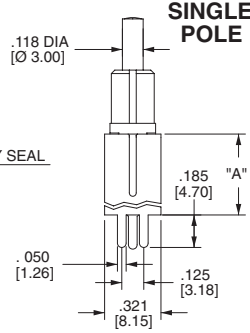
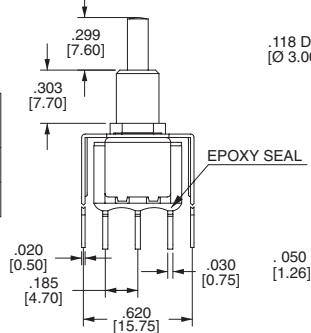


PC MOUNTING

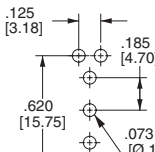


VS2-VS3

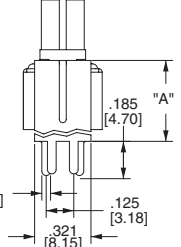
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



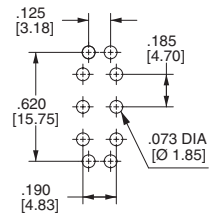
SINGLE POLE PC MOUNTING



DOUBLE POLE

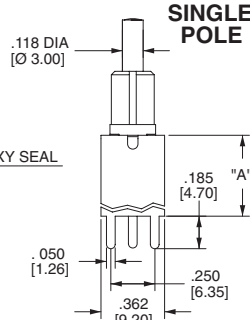
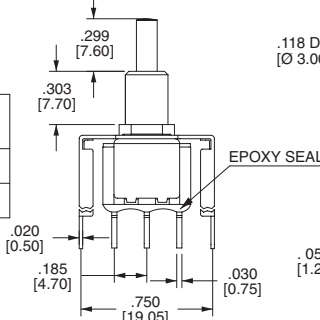


PC MOUNTING

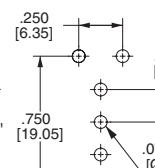


VS4-VS5

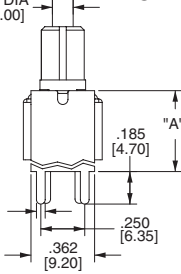
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



SINGLE POLE PC MOUNTING



DOUBLE POLE



PC MOUNTING

