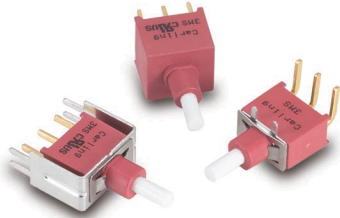
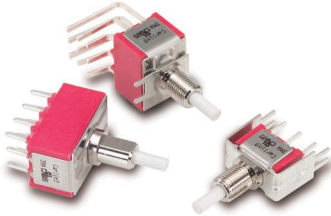




3MN-Series
Snap-Action Miniature Pushbutton Switch



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

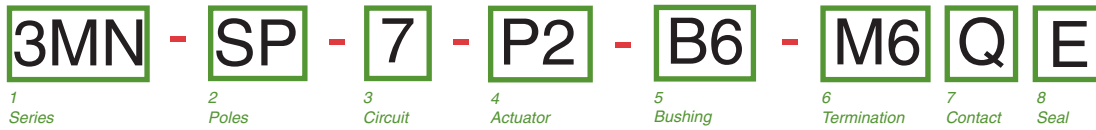
To order caps in bulk, specify the Series, followed by the cap. Ex.) 3MN-C13



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	C6	brass chrome plated (for 3MA w/ PD bushing)
C4	round 5mm dia.		

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 Ordering Scheme
with Square Actuator**

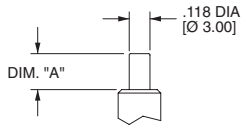
with Plunger Actuator


1 SERIES 3MN Snap-Action Miniature Pushbutton Switch											
2 POLES SP single pole DP double pole											
3 CIRCUIT () - momentary 7 ON (ON)											
4 ACTUATOR¹ SQUARE ACTUATOR (use with Color Options in Selection 5A & 5B.) AP1 square with no frame AP2 square raised above frame AP3 square flush with frame PLUNGER ACTUATOR (use with Bushing Options in Selection 5) P0 2.5mm short plunger(for B6 bushing only) P1 5.2mm plunger(for bushing B10,B11,B20,B21; 7.5mm for B6) P2 2.0mm plunger(for bushing B10,B11,B20,B21; 4.2mm for B6)											
5A ACTUATOR COLOR & 5B FRAME COLOR^{1,2} <table border="0" style="width: 100%;"> <tr> <td>1 white</td> <td>4 orange</td> <td>7 blue</td> </tr> <tr> <td>2 black</td> <td>5 yellow</td> <td>8 brown</td> </tr> <tr> <td>3 red</td> <td>6 green</td> <td>9 gray</td> </tr> </table> <p>1 Black, white and red are standard. Other colors available, consult factory for details. 2 Selection 5B is blank if actuator style is AP1 (no frame)</p> <p style="text-align: center;">OR</p> 5 BUSHING B6 Unthreaded (for terminations VS6-VS9 only) B10 Threaded keyway B11 Threaded with flat B20 Unthreaded keyway B21 Unthreaded with flat NOTE: If ordering optional CAP with bushings B10, B11, B20 or B21, specify actuator P1. For CAP with bushing B6, specify actuator P2. For CAP options, see ordering scheme on page 35.			1 white	4 orange	7 blue	2 black	5 yellow	8 brown	3 red	6 green	9 gray
1 white	4 orange	7 blue									
2 black	5 yellow	8 brown									
3 red	6 green	9 gray									

6 TERMINATION			
M1	Solder Lug		
M2	PCB		
M5-1	Wire Wrap .750 [19.05]		
M5-3	Wire Wrap .425 [10.80]		
M6	PC Mount, 90° horizontal		
M7	PC Mount, 90° vertical		
VS2	PC Mount, U bracket, .620 mounting x .460 high		
VS3	PC Mount, U bracket, .620 mounting x .630 high		
VS4	PC Mount, U bracket, .750 mounting x .460 high		
VS5	PC Mount, U bracket, .750 mounting x .630 high		
VS6	PC Mount, U bracket, .460 high (for B6 bushing only)		
VS7	PC Mount, U bracket, .630 high (for B6 bushing only)		
VS8	PC Mount, U bracket, .460 high (for B6 bushing only)		
VS9	PC Mount, U bracket, .630 high (for B6 bushing only)		
7 CONTACT			
G	Material	Terminal Plating	Rating
Q	silver ¹	gold over silver ³	1A@120VAC or 28VDC
R	gold ²	gold ²	1A@120VAC or 28VDC
			0.4VA max. @20V max (AC/DC)
	NOTE:		
	Tin-lead option available with PC type terminations only.		
	1 Moveable contact & terminals: copper alloy, silver plate		
	2 Moveable contact & terminals: copper alloy with gold plate over nickel plate		
	3 Terminals: silver plate with outer layer in gold plating		
8 EPOXY SEAL			
E	epoxy seal		

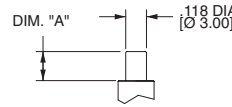
3MN-Series Dimensional Specifications: in. [mm]

PLUNGER



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

FOR B10,B11,B20,B21 ONLY

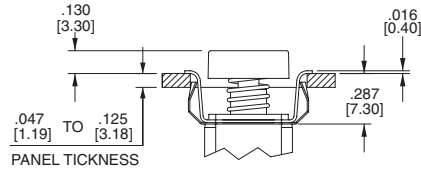
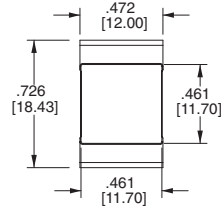


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

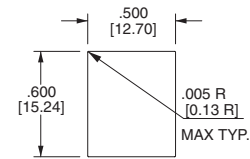
FOR B6 ONLY

ACTUATOR

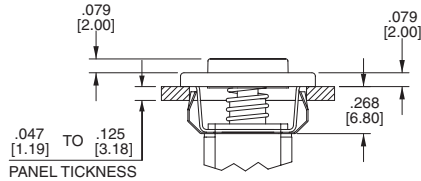
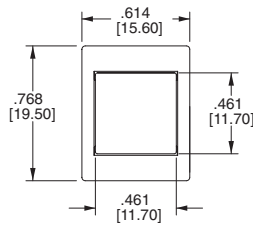
AP1



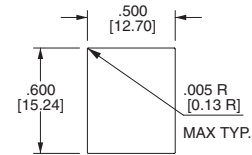
PANEL MOUNTING



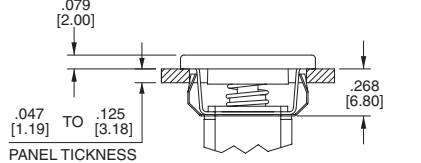
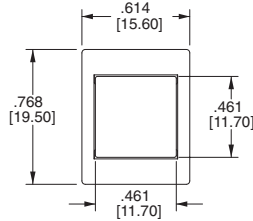
AP2



PANEL MOUNTING

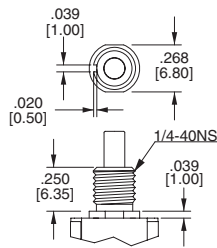


AP3

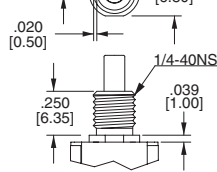


BUSHING

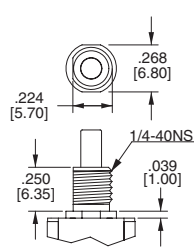
B10 STANDARD KEYWAY THREADED SHOWN



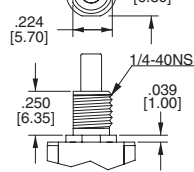
B20 STANDARD KEYWAY NON-THREADED



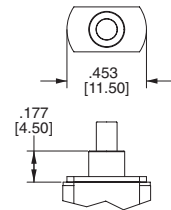
B11 THREADED SHOWN WITH FLAT



B21 NON-THREADED WITH FLAT

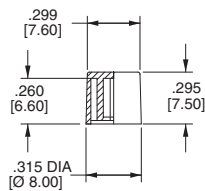


B6 NON-THREADED (FOR TERMINATION OPTIONS VS6-VS9 ONLY)

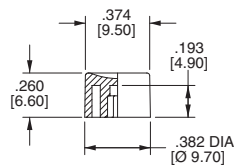


CAP

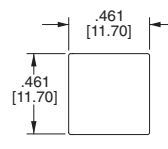
C1



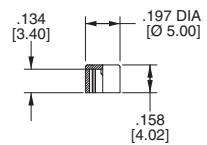
C2



C3



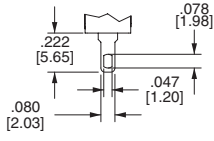
C4



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

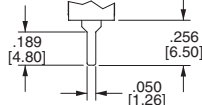
TERMINATION

M1



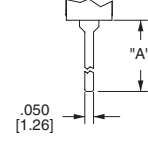
THK .030 [0.75]

M2



THK .030 [0.75]

M5

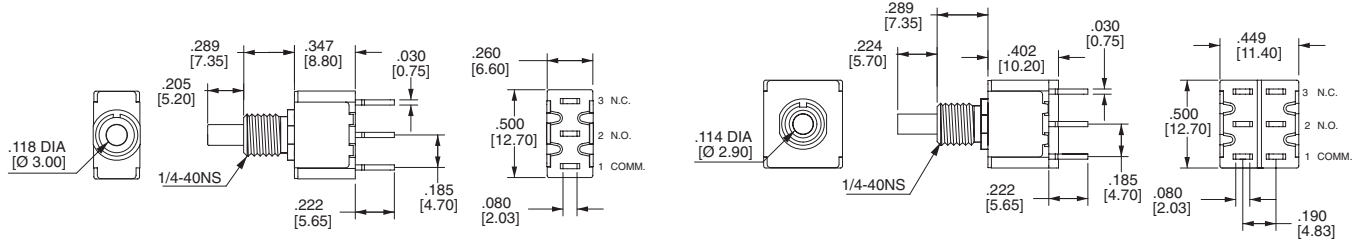


THK .030 [0.75]

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

SINGLE POLE

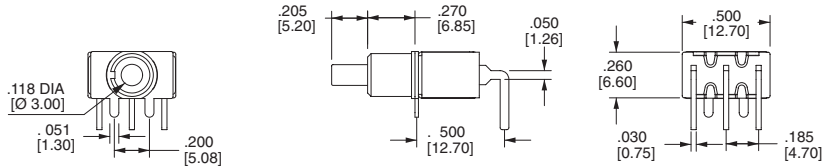
DOUBLE POLE



M6

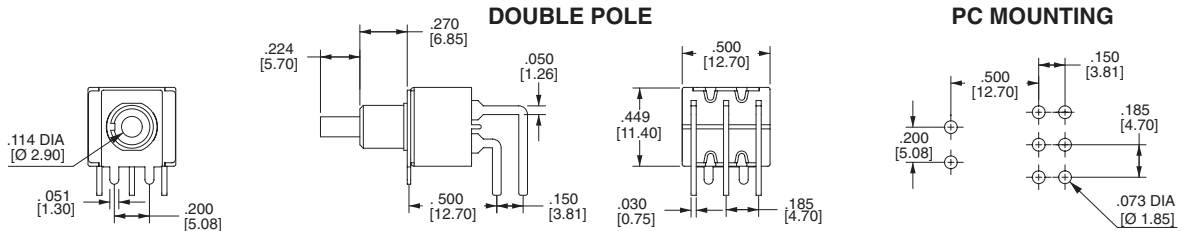
SINGLE POLE

PC MOUNTING



DOUBLE POLE

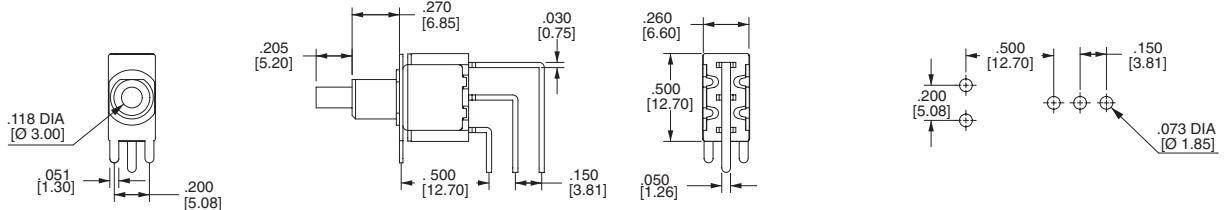
PC MOUNTING



M7

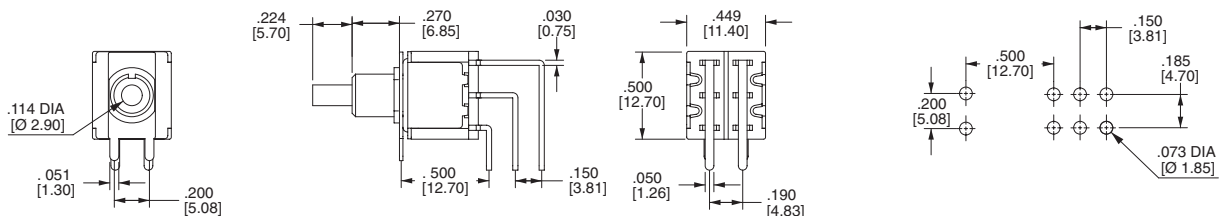
SINGLE POLE

PC MOUNTING



DOUBLE POLE

PC MOUNTING

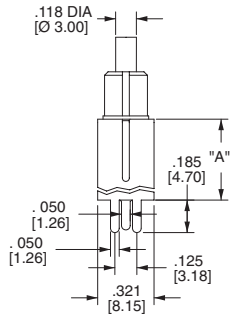


3MN-Series Dimensional Specifications: in. [mm]

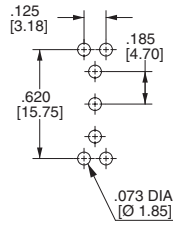
TERMINATION

SINGLE POLE

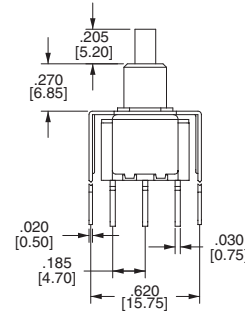
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



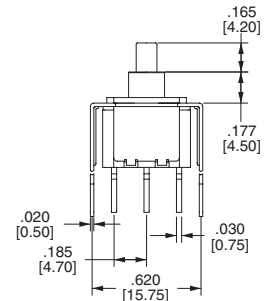
PC MOUNTING



VS2-VS3

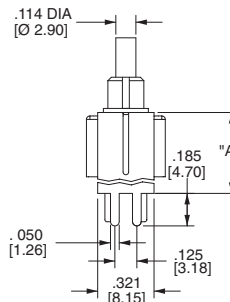


VS6-VS7 (For B6 Bushing Only)

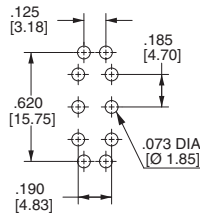


DOUBLE POLE

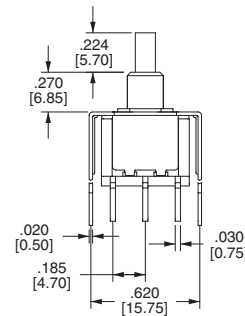
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]



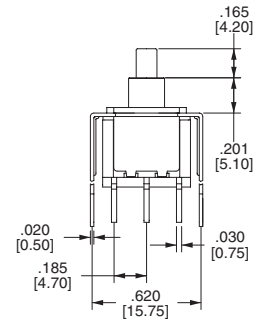
PC MOUNTING



VS2-VS3

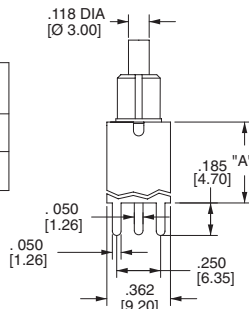


VS6-VS7 (For B6 Bushing Only)

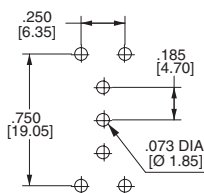


SINGLE POLE

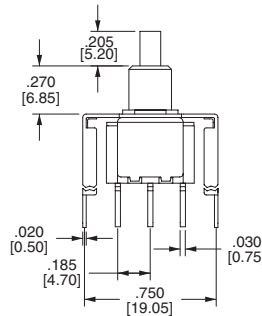
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



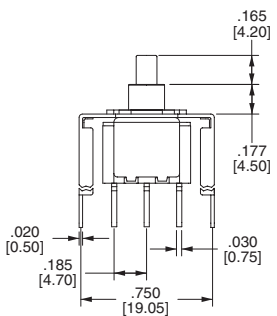
PC MOUNTING



VS4-VS5

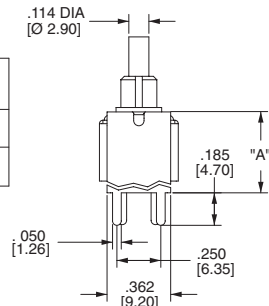


VS8-VS9 (For B6 Bushing Only)

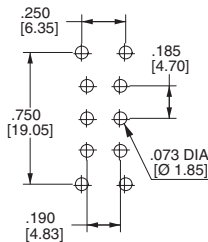


DOUBLE POLE

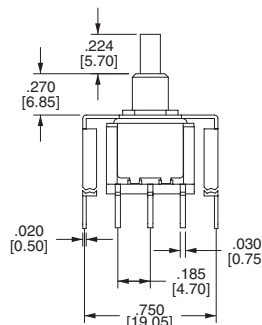
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]
VS9	[16.00]



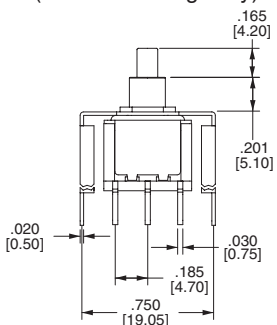
PC MOUNTING



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

1/4-40NS
.350 [8.90]

B4

.250 [6.35]

TERMINATION

M1

.078 [1.98]
.152 [3.85]
EPOXY SEAL
.080 [2.03]
.047 [1.20]
THK .030 [0.75]

M2

EPOXY SEAL
.185 [4.70]
.050 [1.26]
THK .030 [0.75]

SINGLE POLE

.236 DIA [Ø 6.00]
.276 [7.00]
.663 [16.85]
EPOXY SEAL
.260 [6.60]
.030 [0.75]
.500 [12.70]
.185 [4.70]
.185 [4.70]
.050 [1.26]

DOUBLE POLE

.205 DIA [Ø 5.20]
.260 [6.60]
.663 [16.85]
EPOXY SEAL
.449 [11.40]
.030 [0.75]
.500 [12.70]
.185 [4.70]
.185 [4.70]
.050 [1.26]
.190 [4.83]

M6

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

SINGLE POLE

.276 [7.00]
.663 [16.85]
EPOXY SEAL
.114 DIA [Ø 2.90]
.050 [1.26]
.500 [12.70]

PC MOUNTING

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

.205 DIA [Ø 5.20]
.200 [5.08]
.050 [1.26]

DOUBLE POLE

.260 [6.60]
.663 [16.85]
EPOXY SEAL
.114 DIA [Ø 2.90]
.050 [1.26]
.500 [12.70]
.150 [3.81]

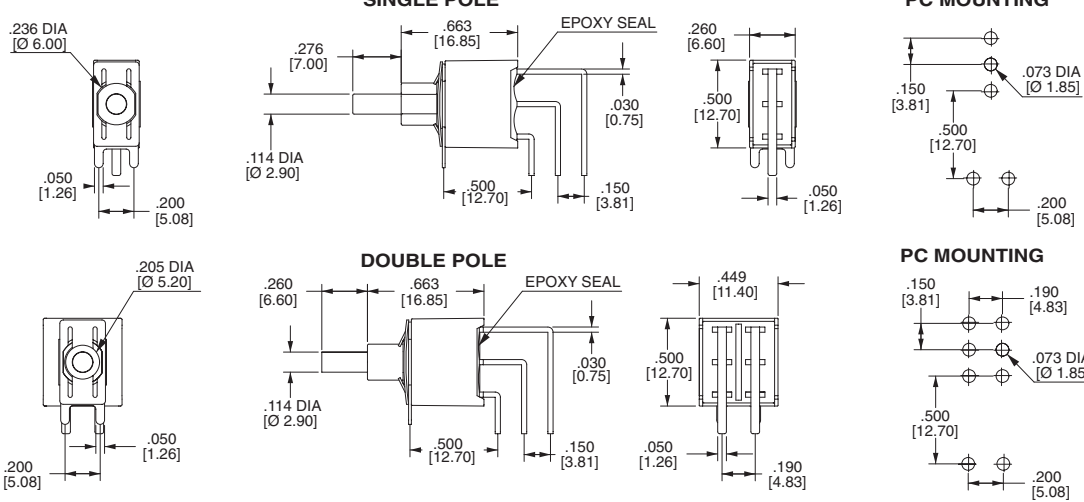
PC MOUNTING

.185 [4.70]
.150 [3.81]
.500 [12.70]
.073 DIA [Ø 1.85]
.200 [5.08]

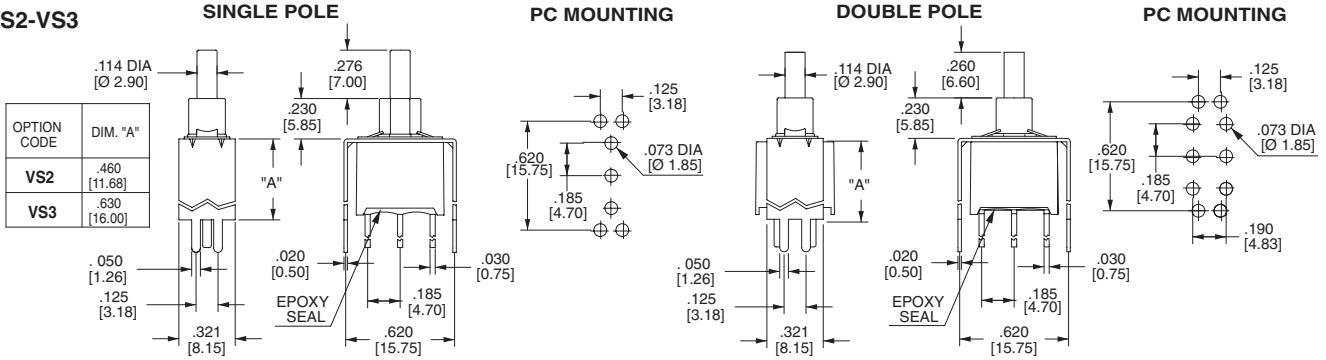
3MS-Series Dimensional Specifications: in. [mm]

TERMINATION

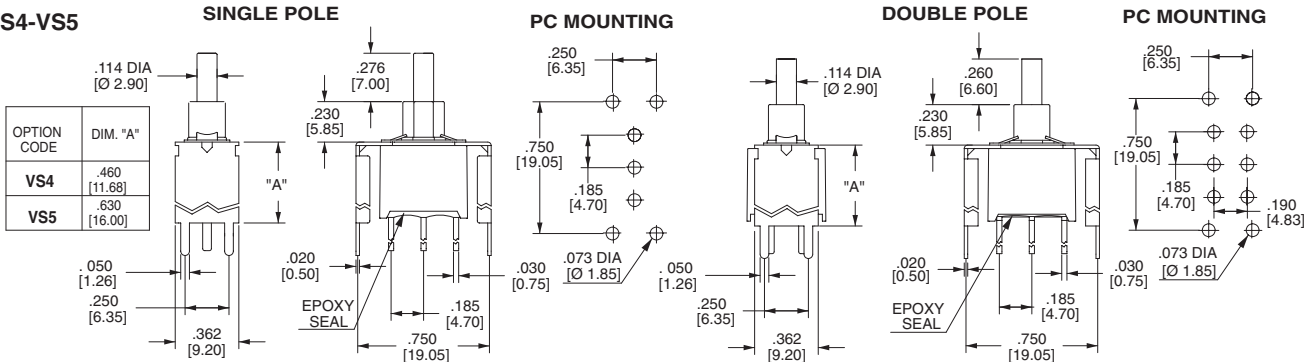
M7



VS2-VS3



VS4-VS5

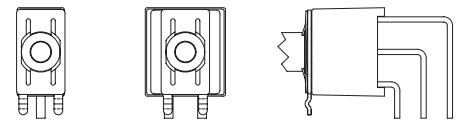


SNAP-IN TERMINATION OPTIONS

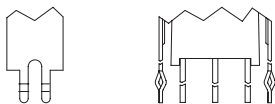
M61



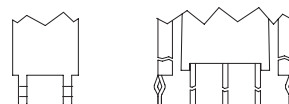
M71



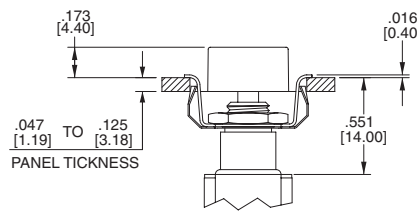
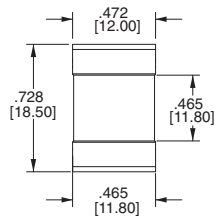
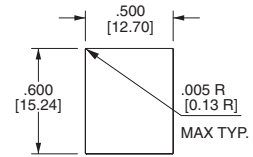
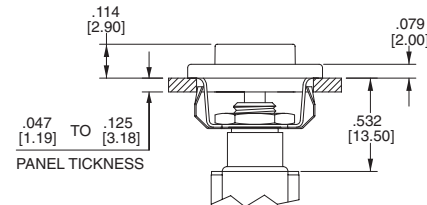
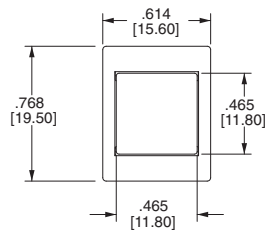
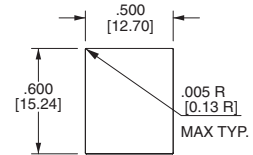
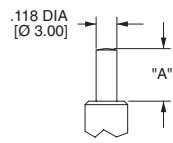
VS21, VS31



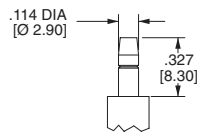
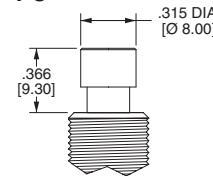
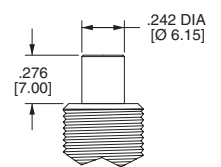
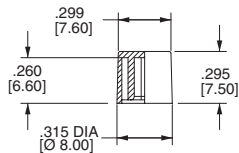
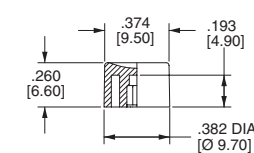
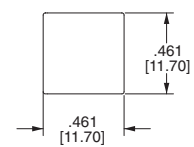
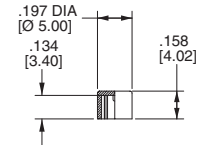
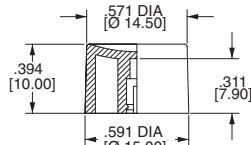
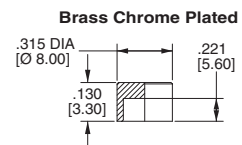
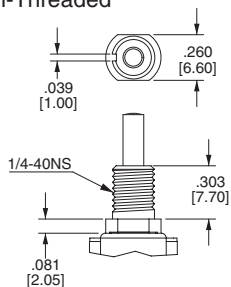
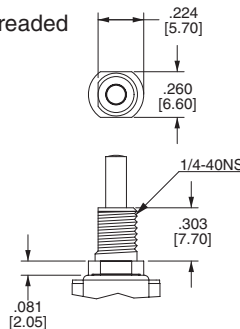
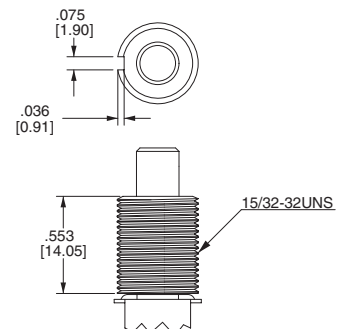
VS41, VS51



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


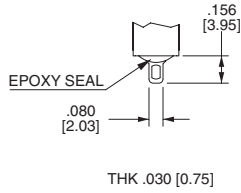
OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

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


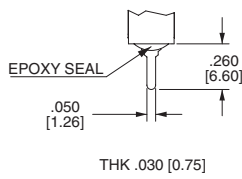
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

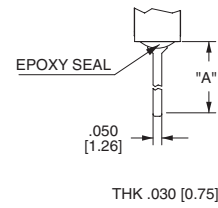
M1



M2



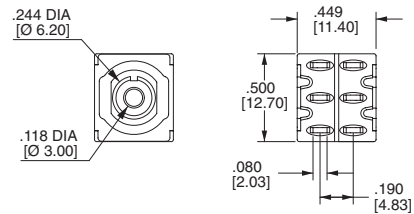
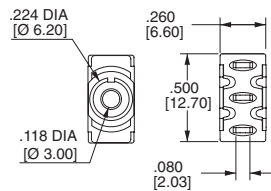
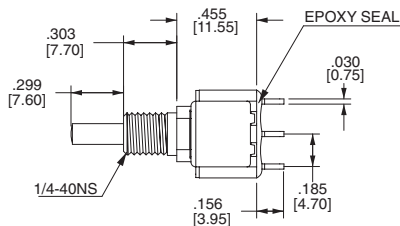
M5



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

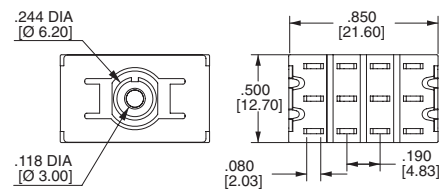
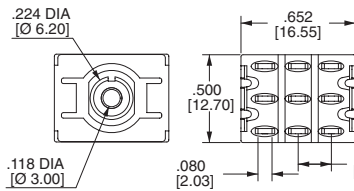
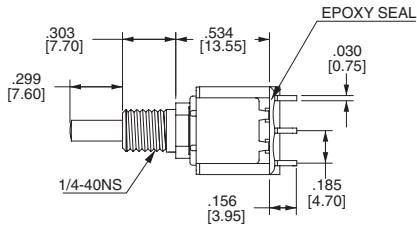
SINGLE POLE

DOUBLE POLE



3 POLE

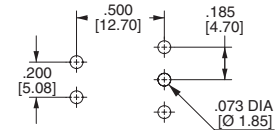
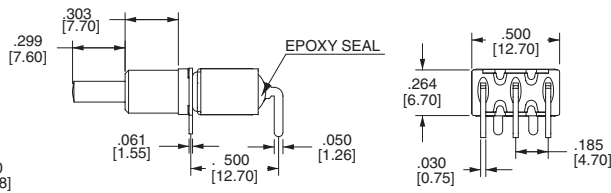
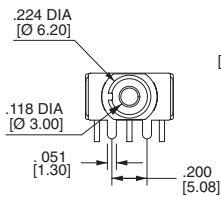
4 POLE



M6

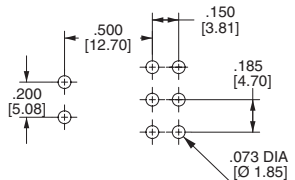
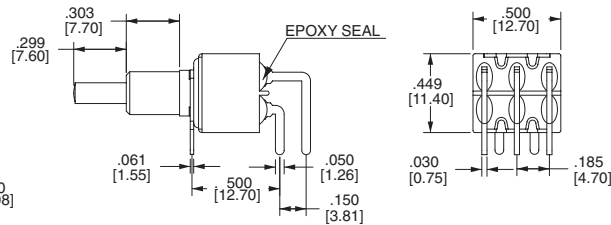
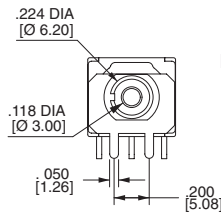
SINGLE POLE

PC MOUNTING



DOUBLE POLE

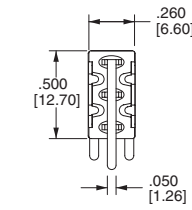
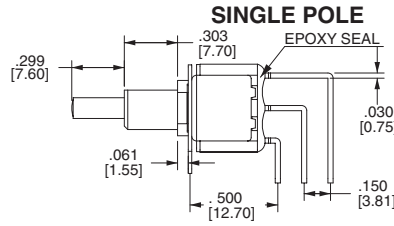
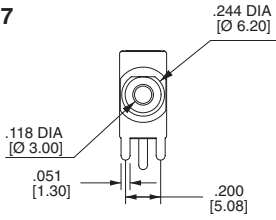
PC MOUNTING



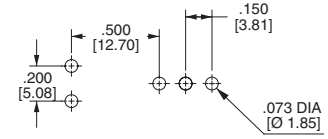
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

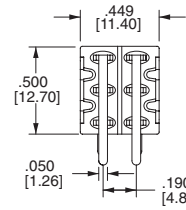
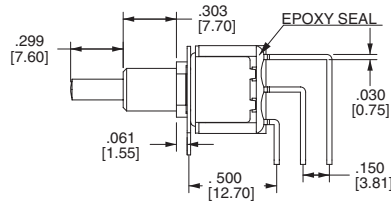
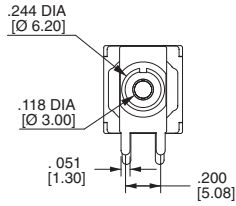
M7



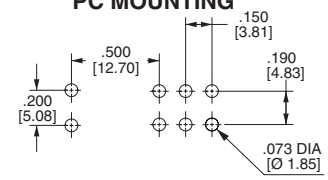
PC MOUNTING



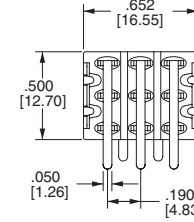
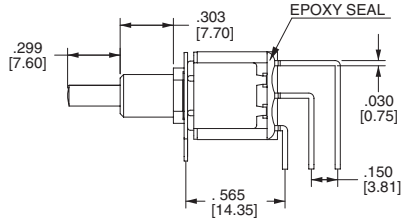
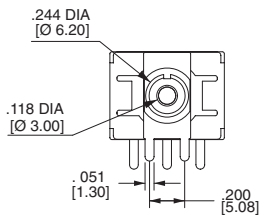
DOUBLE POLE



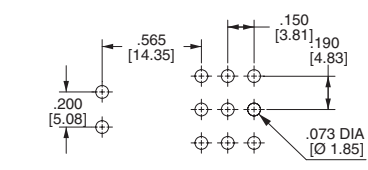
PC MOUNTING



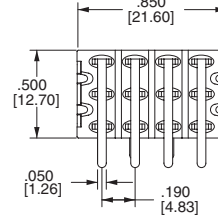
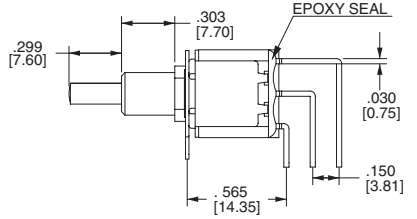
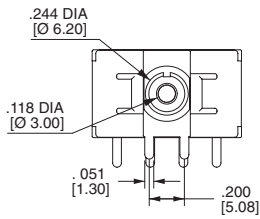
THREE POLE



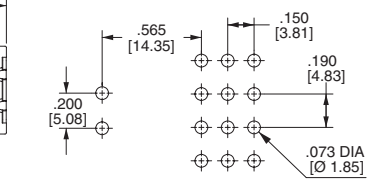
PC MOUNTING



FOUR POLE

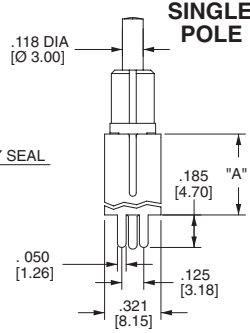
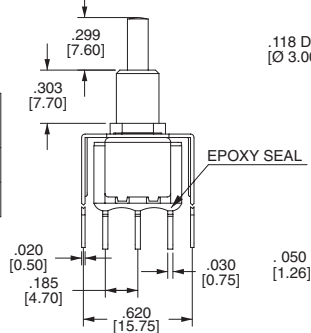


PC MOUNTING

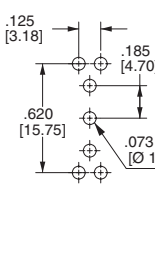


VS2-VS3

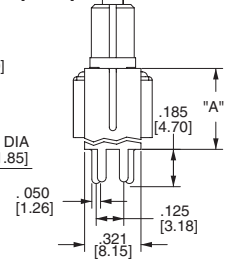
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



SINGLE POLE PC MOUNTING

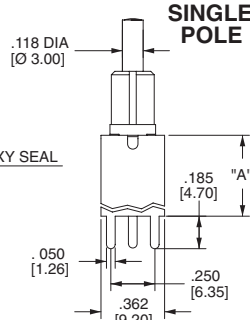
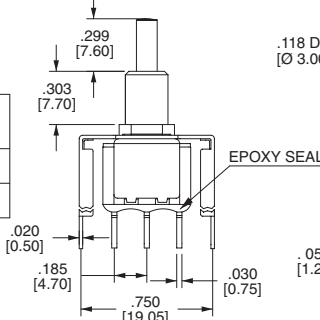


DOUBLE POLE PC MOUNTING

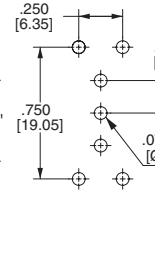


VS4-VS5

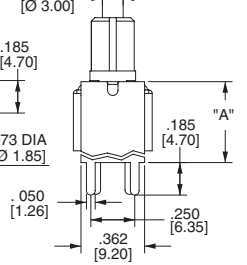
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



SINGLE POLE PC MOUNTING



DOUBLE POLE PC MOUNTING



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru