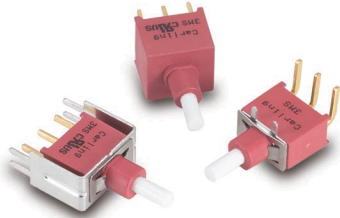
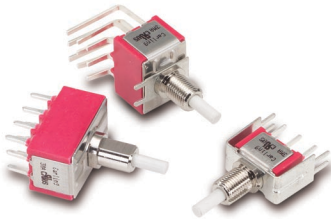




3MN-Series
Snap-Action Miniature Pushbutton Switch



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

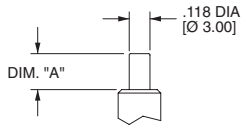


1 SERIES OR SWITCH CATALOG NUMBER 3MN, 3MS or 3MA			
2 CAP SIZE			
C1	round 7.6mm dia.	C5	round 14.5mm dia.
C2	round 9.35 mm dia.	C6	(for 3MA w/ PL bushing)
C3	square 11.7 x 11.7mm	C6	brass chrome plated
C4	round 5mm dia.	C6	(for 3MA w/ PD bushing)

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>			

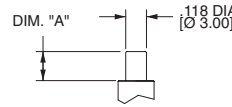
3MN-Series Dimensional Specifications: in. [mm]

PLUNGER



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

FOR B10,B11,B20,B21 ONLY

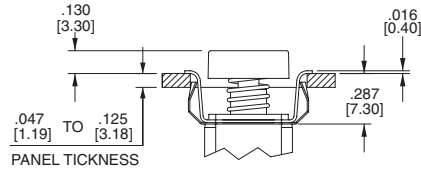
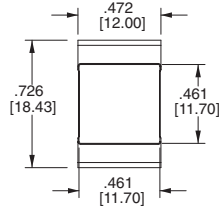


OPTION CODE	DIM. "A"
P0	.098 [2.50]
P1	.295 [7.50]
P2	.165 [4.20]

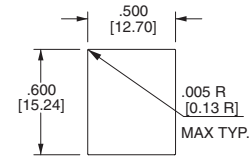
FOR B6 ONLY

ACTUATOR

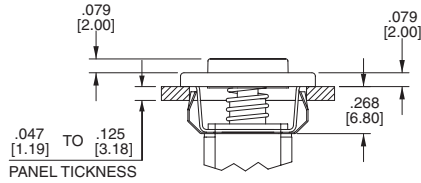
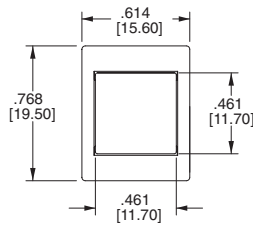
AP1



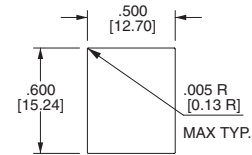
PANEL MOUNTING



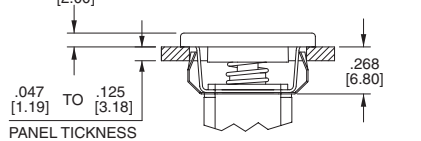
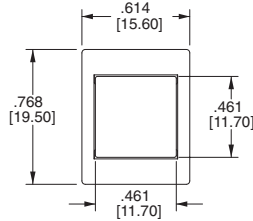
AP2



PANEL MOUNTING

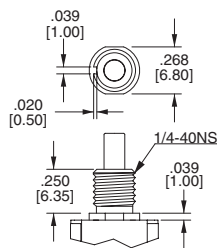


AP3

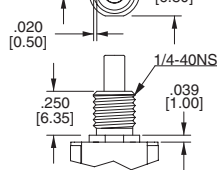


BUSHING

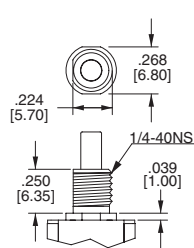
B10
STANDARD KEYWAY
THREADED SHOWN



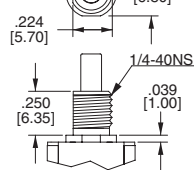
B20
STANDARD KEYWAY
NON-THREADED



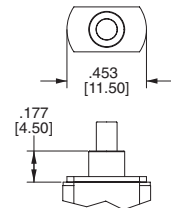
B11
THREADED SHOWN
WITH FLAT



B21
NON-THREADED
WITH FLAT

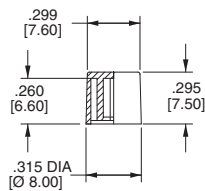


B6
NON-THREADED
(FOR TERMINATION
OPTIONS VS6-VS9 ONLY)

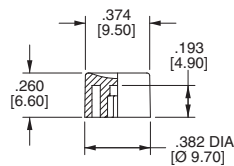


CAP

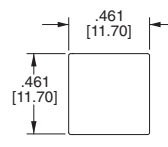
C1



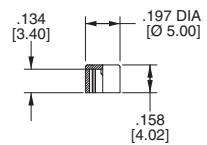
C2



C3



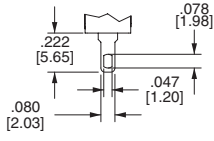
C4



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

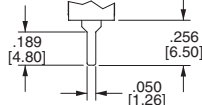
TERMINATION

M1



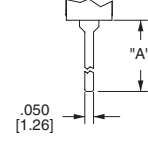
THK .030 [0.75]

M2



THK .030 [0.75]

M5

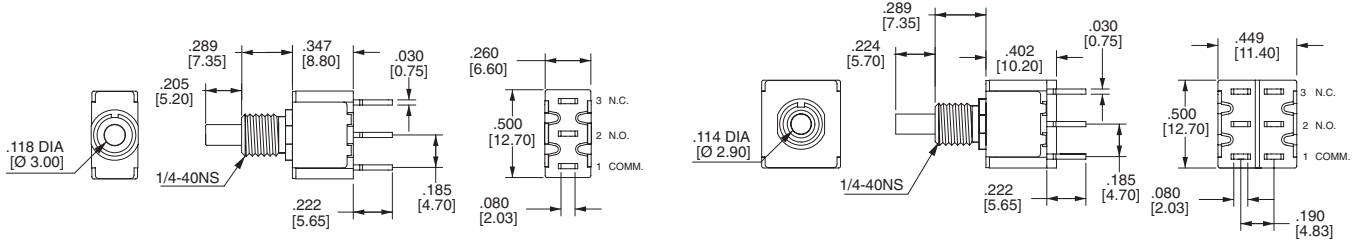


THK .030 [0.75]

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

SINGLE POLE

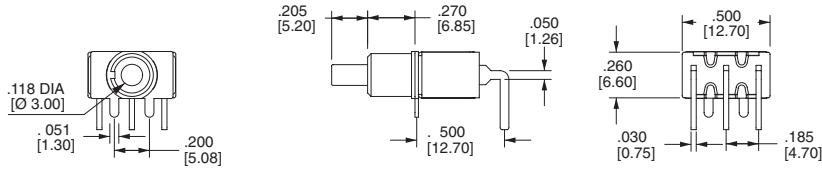
DOUBLE POLE



M6

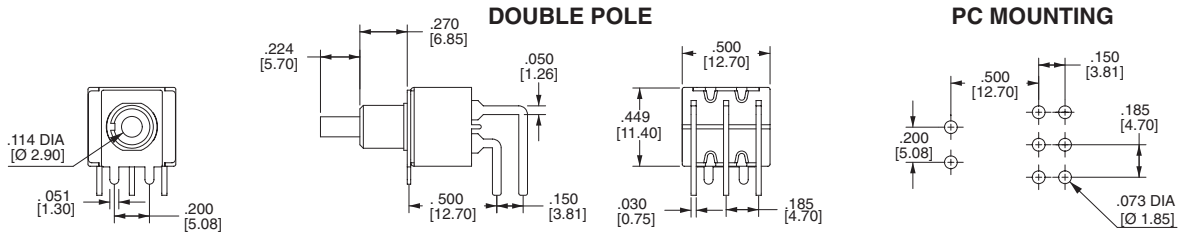
SINGLE POLE

PC MOUNTING



DOUBLE POLE

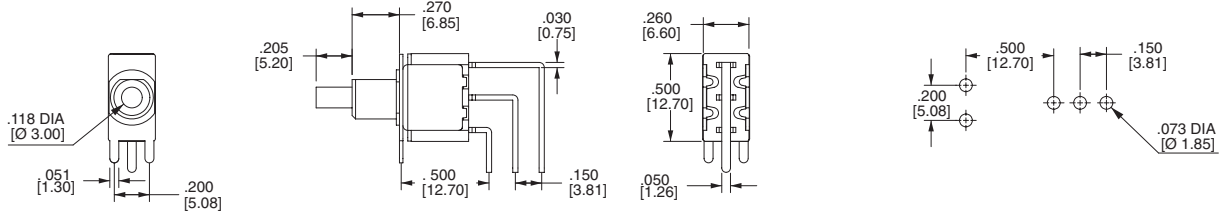
PC MOUNTING



M7

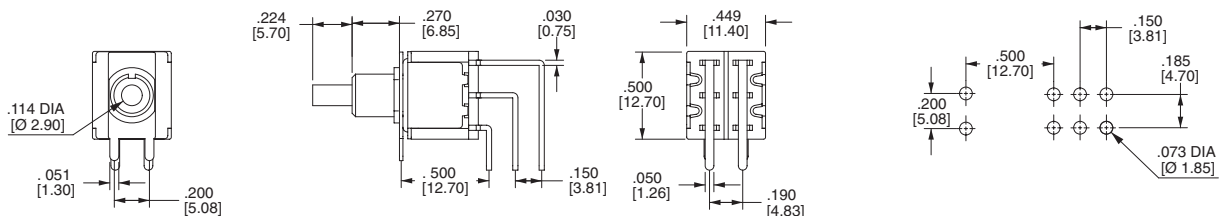
SINGLE POLE

PC MOUNTING



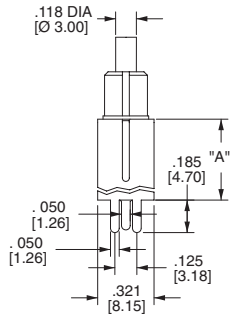
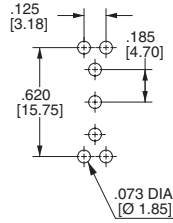
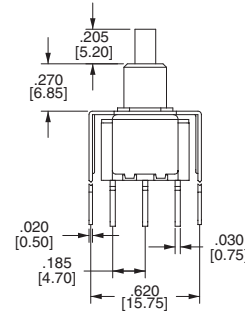
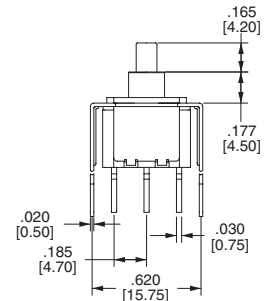
DOUBLE POLE

PC MOUNTING

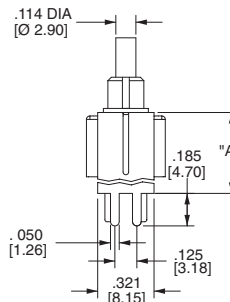
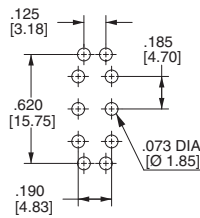
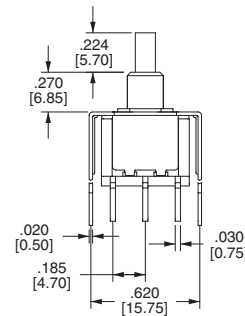
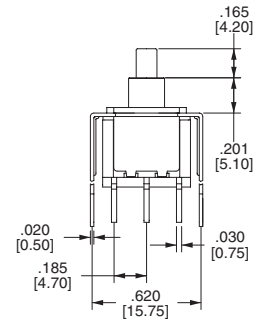


3MN-Series Dimensional Specifications: in. [mm]
TERMINATION
SINGLE POLE

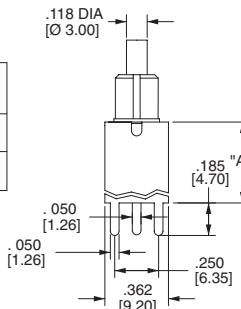
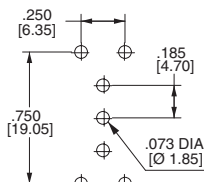
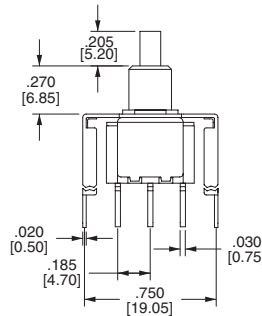
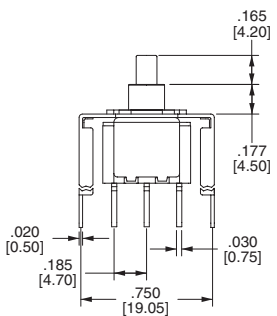
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]
VS7	[16.00]


PC MOUNTING

VS2-VS3

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

DOUBLE POLE

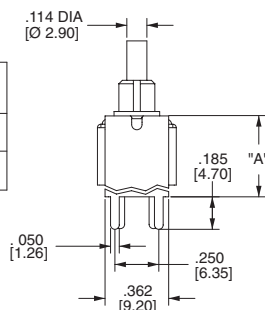
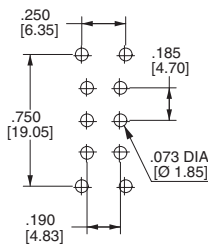
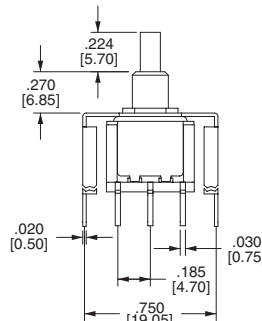
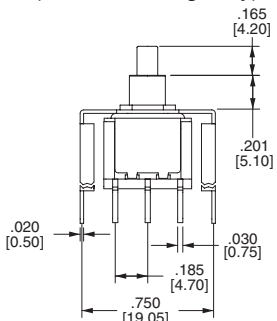
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS6	.630 [16.00]
VS3	[16.00]
VS7	[16.00]


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

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

EPOXY SEAL
THK .030 [0.75]

M2

EPOXY SEAL
THK .030 [0.75]

SINGLE POLE

EPOXY SEAL

DOUBLE POLE

EPOXY SEAL

M6

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

SINGLE POLE

EPOXY SEAL

PC MOUNTING

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

DOUBLE POLE

EPOXY SEAL

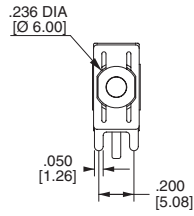
PC MOUNTING

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

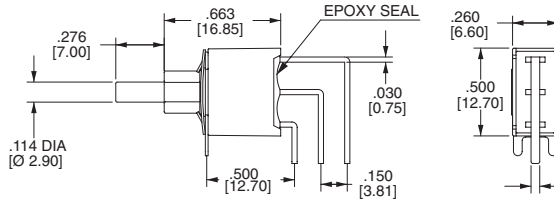
3MS-Series Dimensional Specifications: in. [mm]

TERMINATION

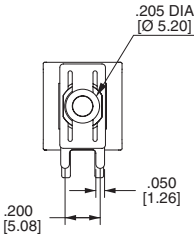
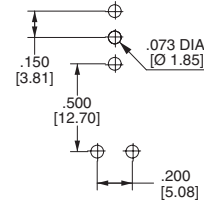
M7



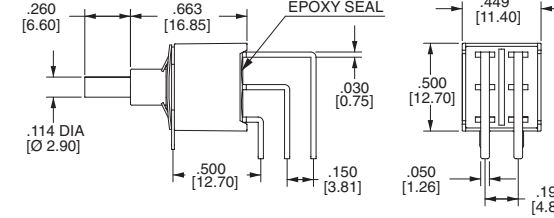
SINGLE POLE



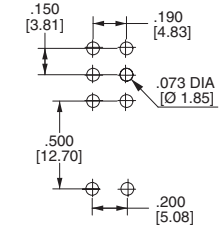
PC MOUNTING



DOUBLE POLE

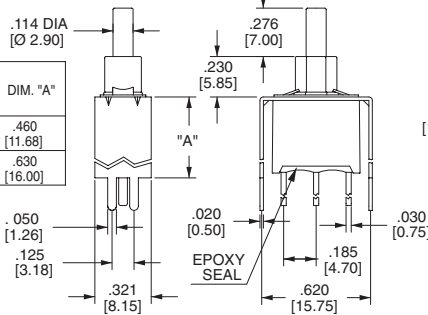


PC MOUNTING

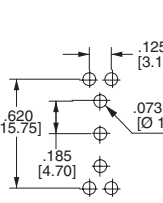


VS2-VS3

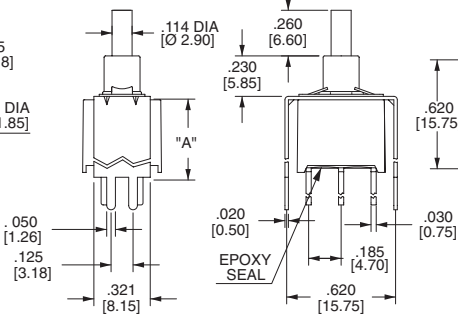
SINGLE POLE



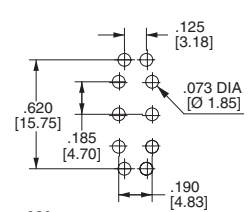
PC MOUNTING



DOUBLE POLE



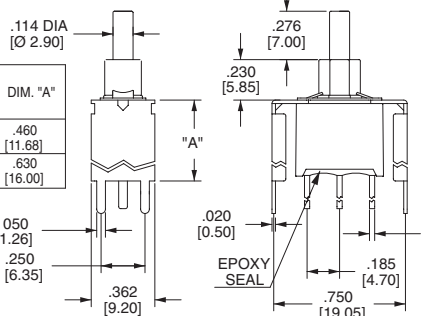
PC MOUNTING



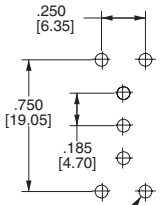
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]

VS4-VS5

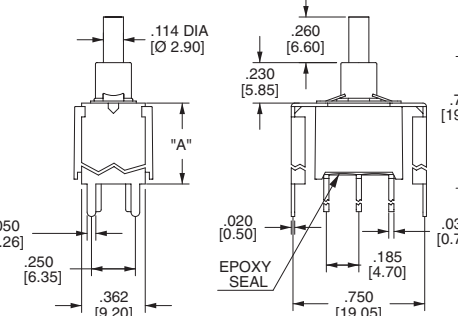
SINGLE POLE



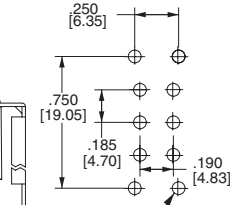
PC MOUNTING



DOUBLE POLE



PC MOUNTING



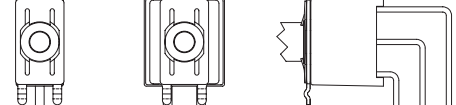
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]

SNAP-IN TERMINATION OPTIONS

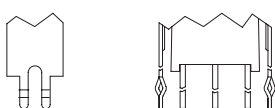
M61



M71



VS21, VS31



VS41, VS51

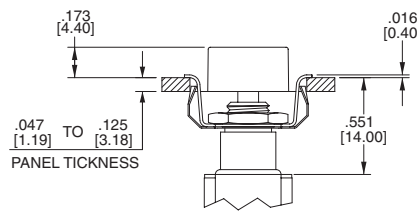
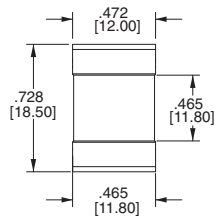


M61, M71, VS21, VS31, VS41, VS51 have the same P.C. mounting but with snap-in bracket.

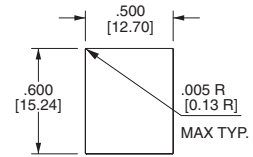
3MA-Series Dimensional Specifications: in. [mm]

ACTUATOR

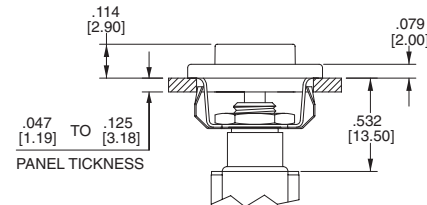
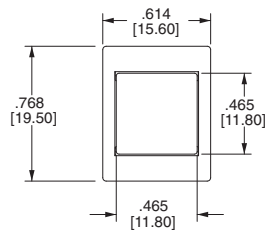
AP1



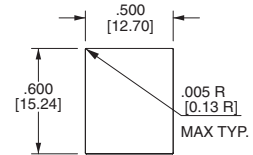
PANEL MOUNTING



AP2

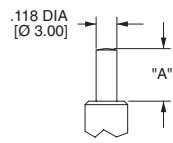


PANEL MOUNTING



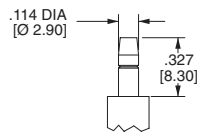
PLUNGER

PA,PI

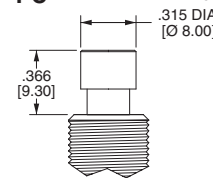


OPTION CODE	DIM. "A"
PA	.299 [7.60]
PI	.244 [6.20]

PL

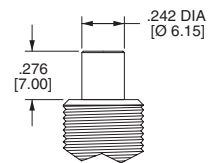


PC



Brass Chrome Plated

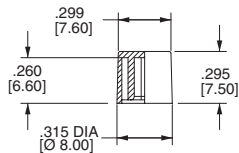
PD



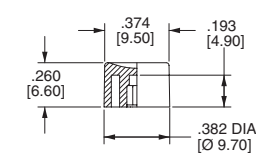
PC, PD Plunger must fit with BD bushing

CAP

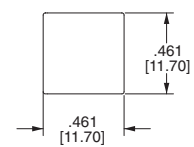
C1



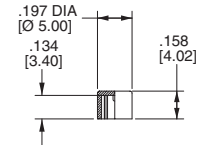
C2



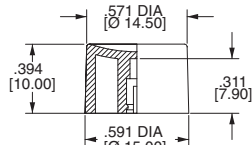
C3



C4

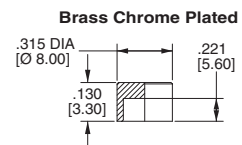


C5



For PL Bushing Only

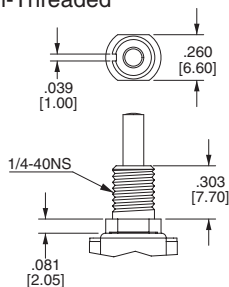
C6



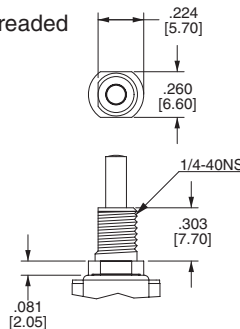
For PD Bushing Only

BUSHING

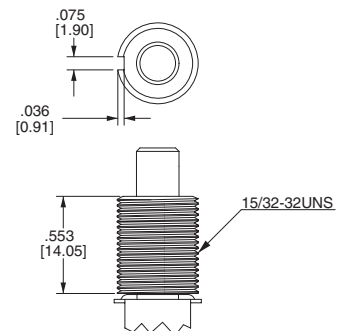
B10 Threaded
B20 Non-Threaded



B21 Non-Threaded



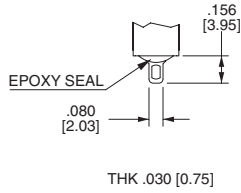
BD



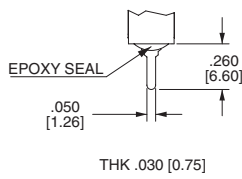
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

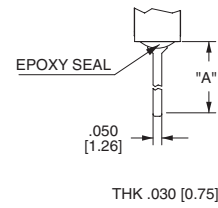
M1



M2



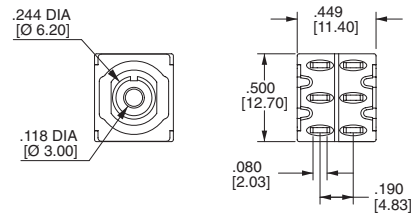
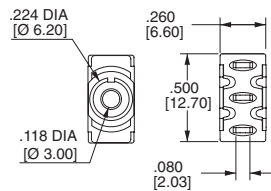
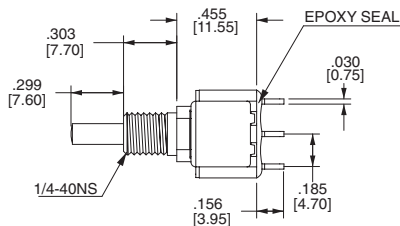
M5



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]

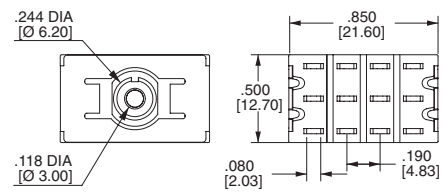
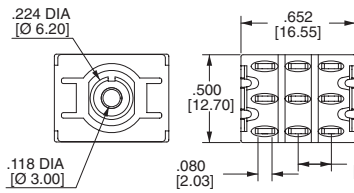
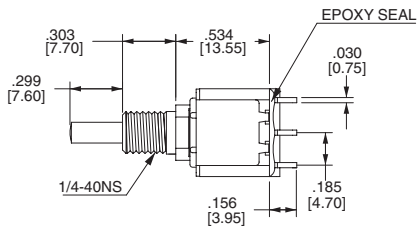
SINGLE POLE

DOUBLE POLE



3 POLE

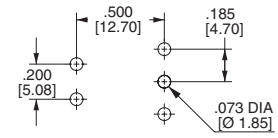
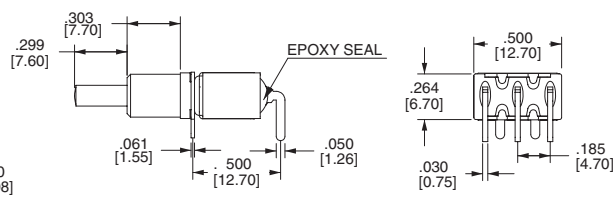
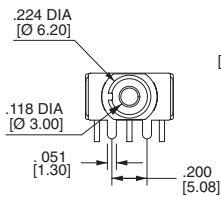
4 POLE



M6

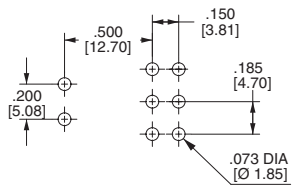
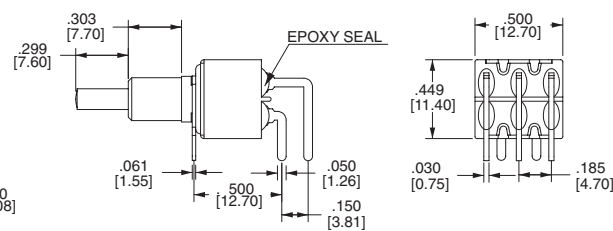
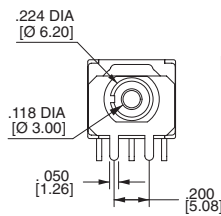
SINGLE POLE

PC MOUNTING



DOUBLE POLE

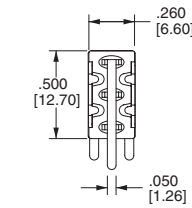
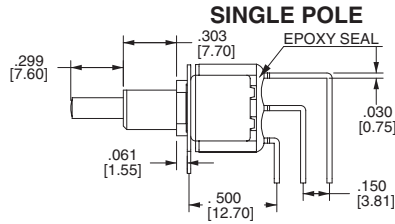
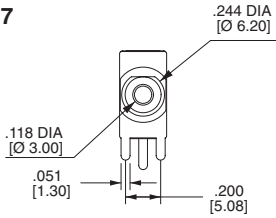
PC MOUNTING



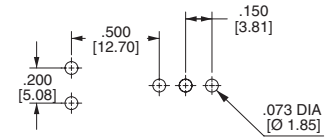
3MA-Series Dimensional Specifications: in. [mm]

TERMINATION

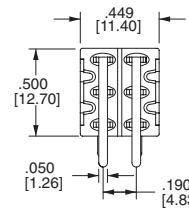
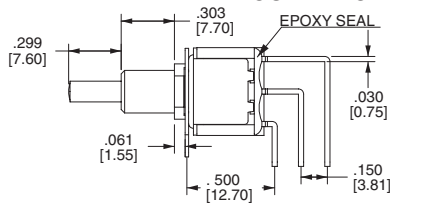
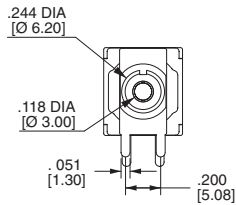
M7



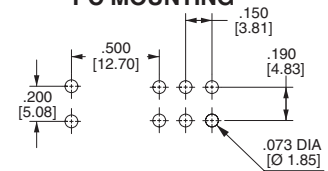
PC MOUNTING



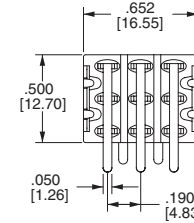
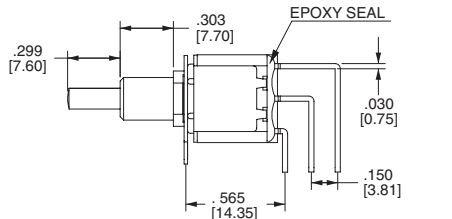
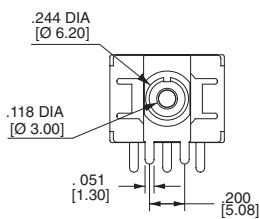
DOUBLE POLE



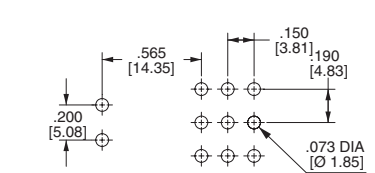
PC MOUNTING



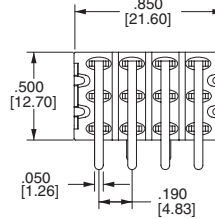
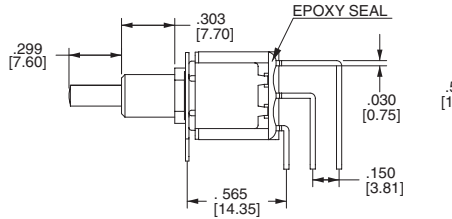
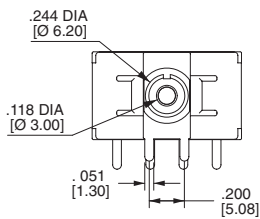
THREE POLE



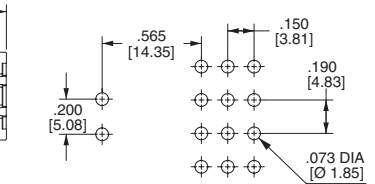
PC MOUNTING



FOUR POLE

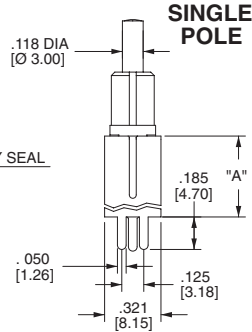
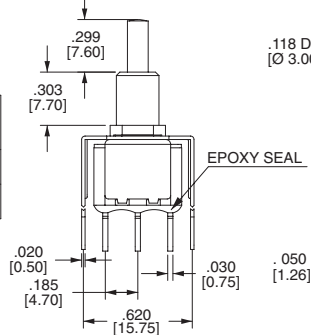


PC MOUNTING

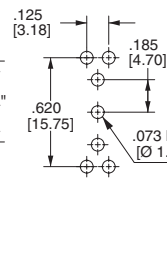


VS2-VS3

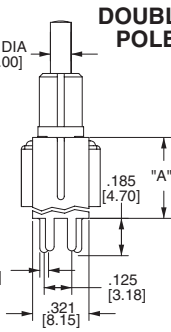
OPTION CODE	DIM. "A"
VS2	.460 [11.68]
VS3	.630 [16.00]



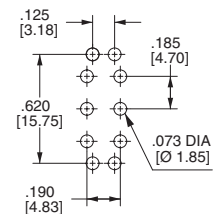
PC MOUNTING



DOUBLE POLE

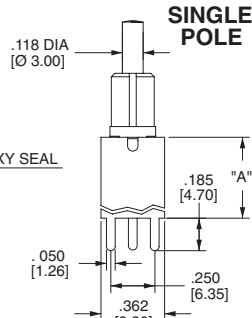
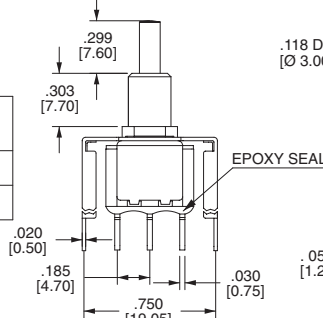


PC MOUNTING

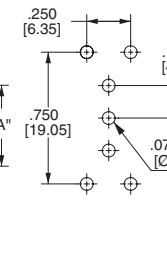


VS4-VS5

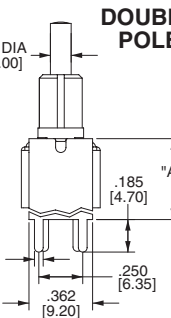
OPTION CODE	DIM. "A"
VS4	.460 [11.68]
VS5	.630 [16.00]



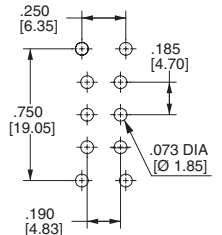
PC MOUNTING



DOUBLE POLE



PC MOUNTING



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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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