



**Specifications**

Mechanical Life: 50,000 make-and-break cycles.  
 Electrical Life: 6,000 cycles.  
 Contact Resistance: 20 mΩ max. (initial value) @ 2-4 VDC 100 mA  
 for both silver and gold plated contacts.  
 Insulation Resistance: 1,000 MΩ min. at 1000 VDC  
 Dielectric Strength: 1,000 Vrms min. @ sea level (initial value).  
 Operating Temperature: -40°C to 85°C.

Ingree Protection:

**Contact & Terminal Plating Options:**

Contact Plating	Terminal Plating	Ratings
<b>Q</b> Silver	Silver	3 Amps with resistant load @ 120 VAC or 28 VDC
<b>C</b> Gold over Silver	Gold over silver	1 Amps with resistant load @ 250 VAC
<b>R</b> Gold	Gold	0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC)

Notes: All models with all options when ordered with Q or C contact material.

**Materials**

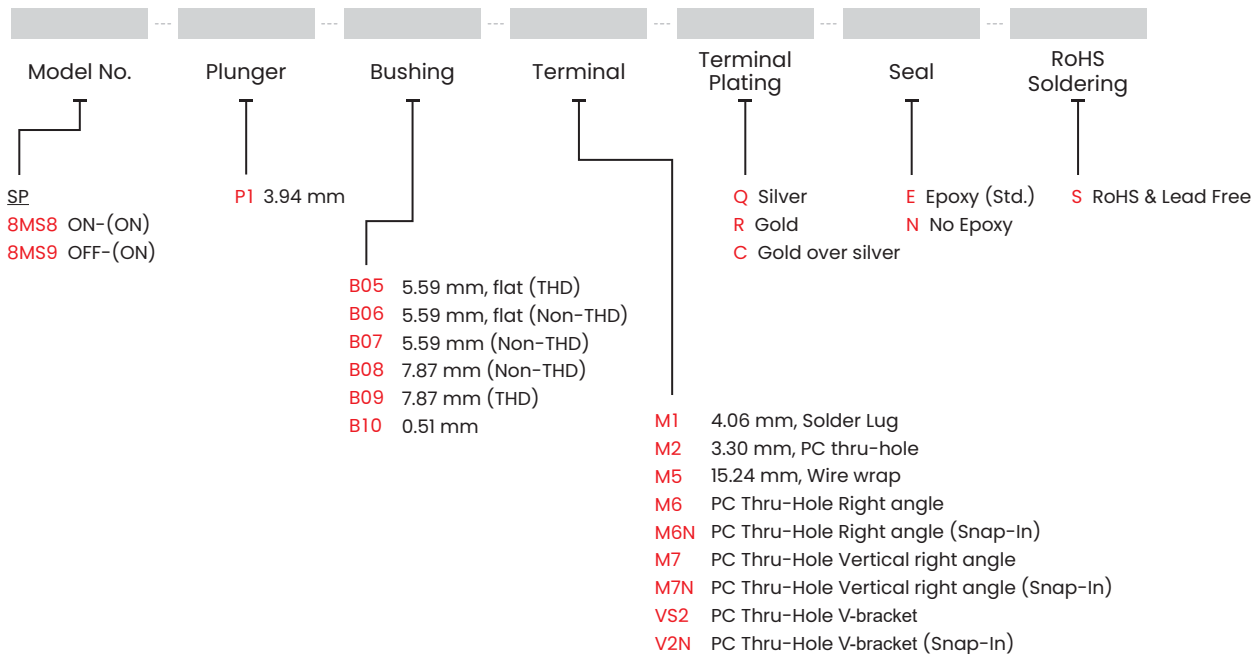
Case: Diallyl phthalate (DAP) (UL 94 V-0).  
 Plunger: Nylon 6/6, black.  
 Bushing: Brass or zinc, nickel plated.  
 Housing: Stainless Steel.  
 Switch Support: Brass, tin plated.  
 Terminal / Contact: Copper or brass with silver or gold plated.

**Soldering Process**

Manual Soldering: Use 30 watts soldering iron and controlled the temperature at 350°.  
 Duration of solder immersion: Max. 5 sec.  
 Wave Soldering: Recommend soldering temperature: 260 ± 5°C  
 Duration of solder immersion: Max. 5 sec.  
 (PCB thickness is 1.6 mm (.063 inch))

**HOW TO ORDER**

Note: Specifications and availability subject to change without notice.



EXAMPLE: 8MS8P1B05M1QES

Note: Plunger cap options see page 115.

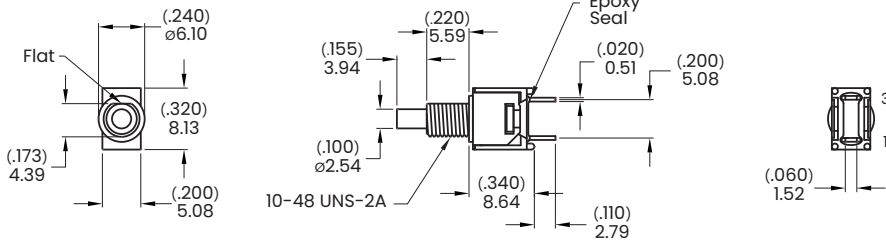


▼ SWITCH FUNCTION

NO. POLES	UL/CSA Model No.	Model No.	Switch Function		Connected Terminals / Schematic			
			POS.1	POS.2	POS.1		POS.2	
SP	Q2818	8MS8	ON	(ON)	2-1		2-3	
	Q2819	8MS9	OFF	(ON)	OPEN		1-3	

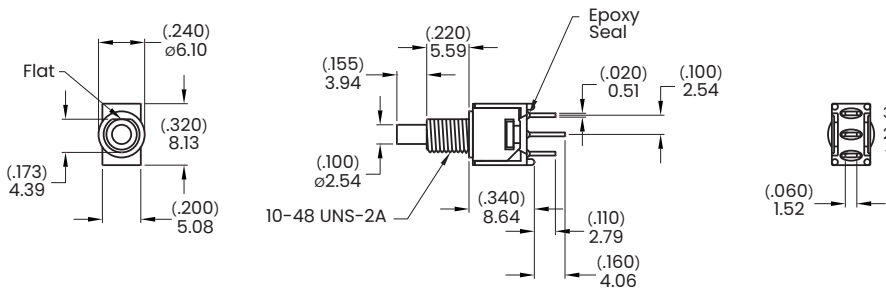
( ) =Momentary

▼ POLE OPTIONS



**SPST**

Model name. 8MS9PIB05MIQES



**SPDT**

Model name. 8MS8PIB05MIQES

▼ PLUNGER AND BUSHING OPTIONS

**B05 THD \***

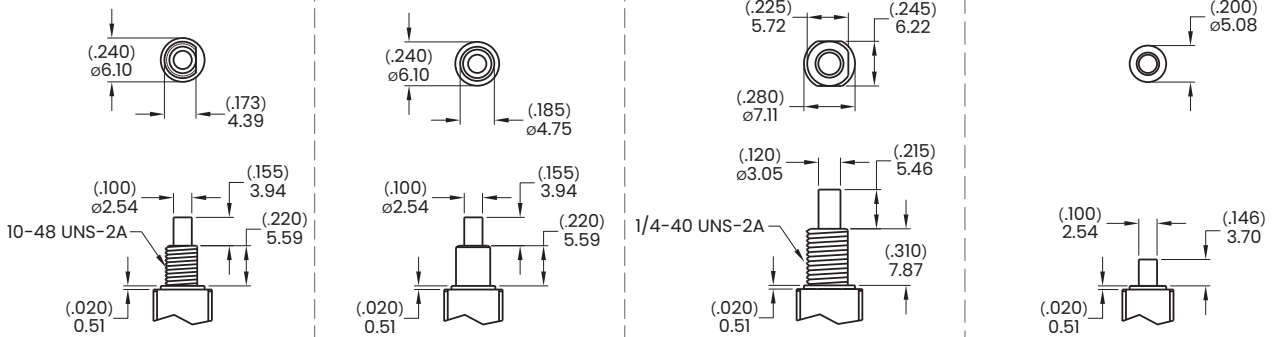
**B06 Non-THD \***

**B07 Non-THD \***

**B08 Non-THD \*\***

**B09 THD \*\***

**B10**



Note: Standard hardware see page 115.

\* B05, B06, B07 Bushings with terminals M6, M6N, M7, VS2 plunger: -0.40 mm (.016 inch)

\*\* Plunger are shown with 8MS9 (standard) and available with terminals M1, M2, M5

1.For 8MS8: -0.31 mm (.012 inch)

2.For plunger with terminals M6, M6N, M7, VS2:

SPST: -0.41 mm (.016 inch)

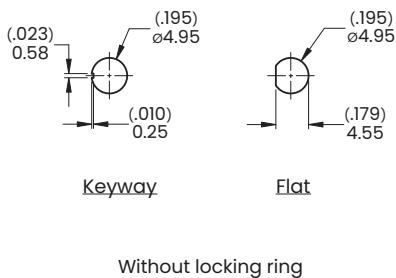
SPDT: -0.71 mm (.028 inch)

Note:

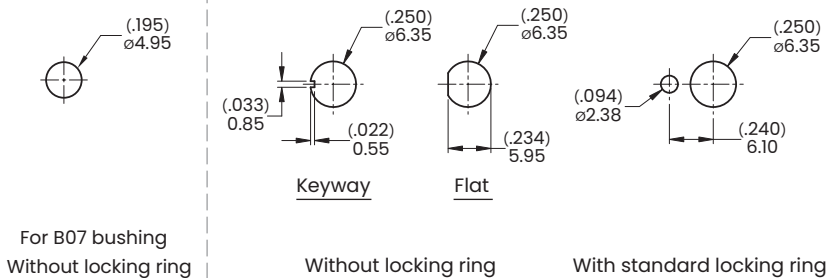
For plunger with terminals M6, M6N, M7, VS2: 0.40 mm (-.016 inch)

▼ **PANEL MOUNTING**

**10-48 Inch Bushing**

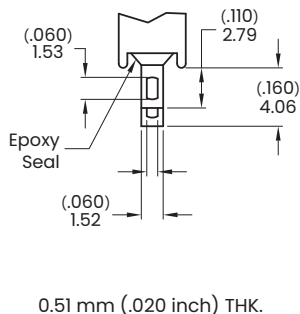


**1/4-40 Inch Bushing**

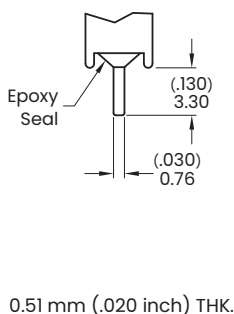


▼ **TERMINAL OPTIONS**

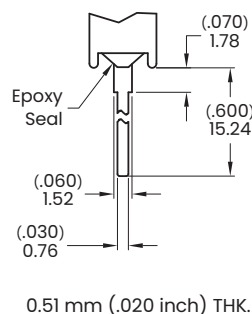
**M1 Solder lug**



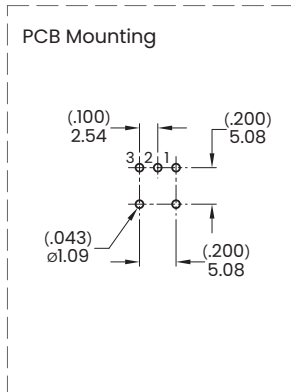
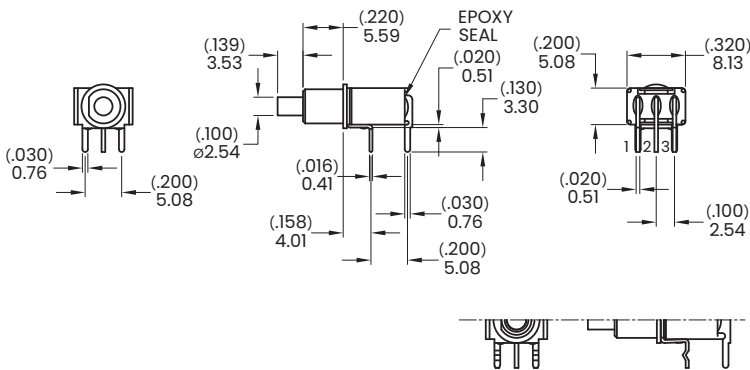
**M2 PC Thru-hole**



**M5 Wire Wrap**



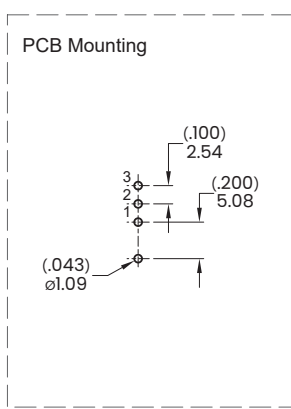
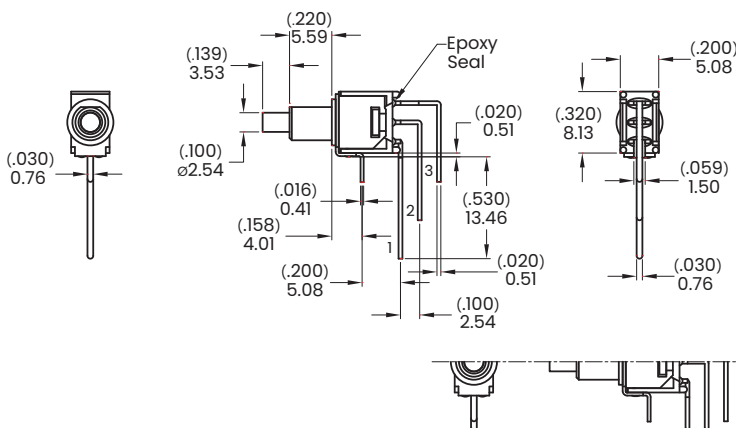
**M6**



**SPDT**

Model name. 8MS8PIB06M6QES

**M7**



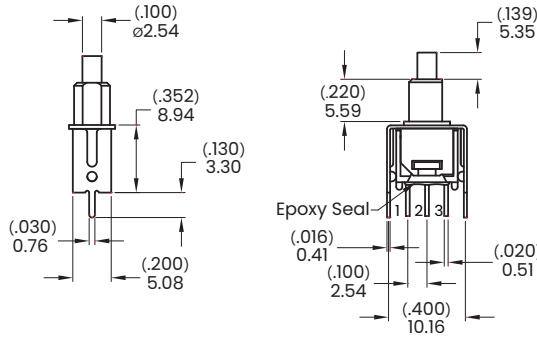
**SPDT**

Model name. 8MS8PIB06M7QES

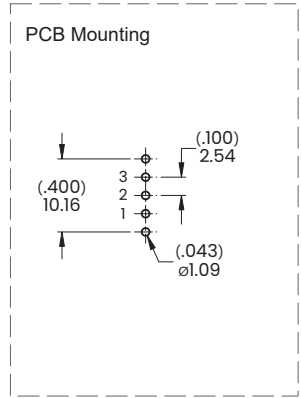
**M7N (Snap-In)**



**VS2**



**V2N (Snap-In)**

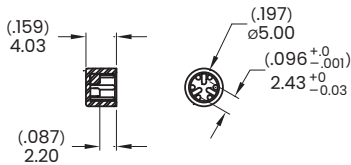


**SPDT**

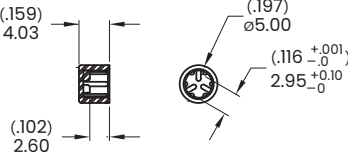
Model name. 8MS8P1B06VS2QES

**▼ PLUNGER CAP OPTIONS**

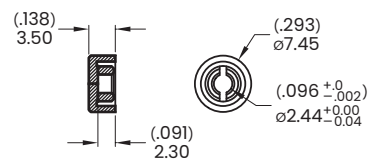
**C1** Not available with bushings B8, B9 type plunger



**C3** Available with bushing B8, B9 only plunger



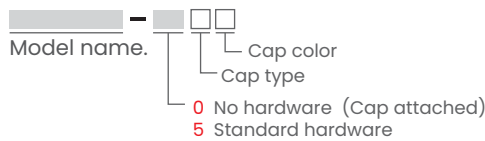
**C4** Not available with bushing B8, B9 type plunger



Cap Color :

ITEM NO.	COLOR
1	White (Std.)
2	Black (Std.)
3	Red (Std.)
5	Yellow
6	Green (Std.)
7	Blue
9	Gray

EXAMPLE:



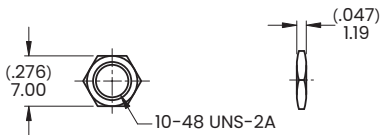
Note: Except standard color, for other colors information please consult sales representative.

**▼ HARDWARE**

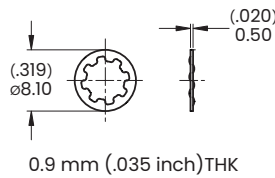
EXAMPLE: Model name. [Hardware] 5 Standard hardware

\* Standard for B05 bushing: 2 Nuts, 1 Lock Washer  
 \* Standard for B09 bushing: 2 Nuts, 1 Locking Ring, 1 Lock Washer

**Hex Nut Standard**  
Model name. MNU-2M01

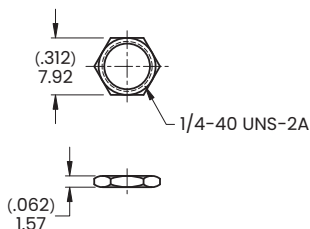


**Lock Washer Standard**  
Model name. MNU-2M03

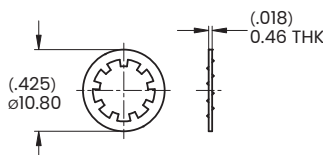


Available with bushing B05 only.

**Hex Nut Standard**  
Model name. MNU-1M01A

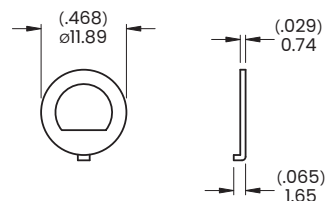


**Lock Washer Standard**  
Model name. MNU-1M03



Available with bushing B09 only.

**Locking Ring Standard**  
Model name. MNU-1M11



Available with bushing B09 only.