

Toggle Switches

Minature



Specifications:

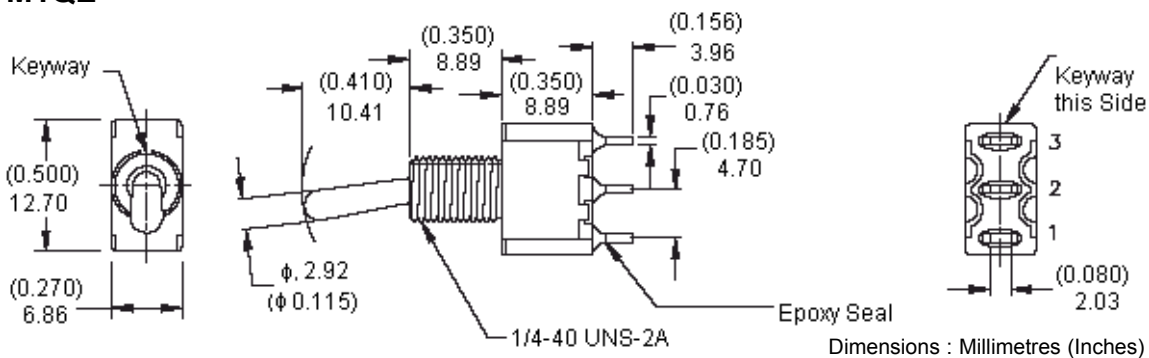
Contact Rating	: 5 amps with resistant load at 120V ac or 28V dc 2 amps with resistant load at 250V ac 0.4 volt-amps (VA) maximum at 20V maximum (AC or DC).
Mechanical Life	: 40,000 make-and-break cycles.
Contact Resistance	: 10mΩ maximum initial at 2 to 4V dc. 100mA for both silver and gold plated contacts.
Minimum Insulation Resistance	: 1,000MΩ.
Dielectric Strength	: 1,000VRMS at sea level.
Operating Temperature	: -30°C to 85°C.

Materials:

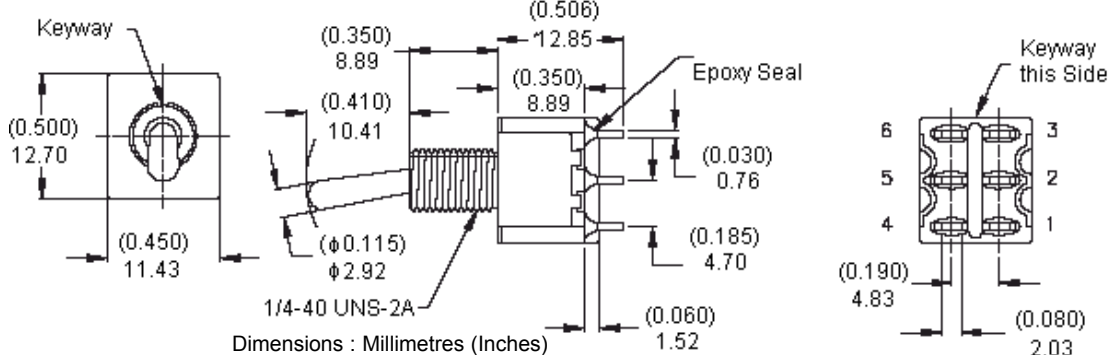
Case	: Diallyl phthalate (DAP).
Actuator	: Brass, chrome plated.
Bushing	: Brass, nickel plated.
Housing	: Stainless steel.
Switch Support	: Brass or steel, tin plated.
Terminal/Contact	: Silver or gold plated.

Pole Option M1QE

SPDT



DPDT



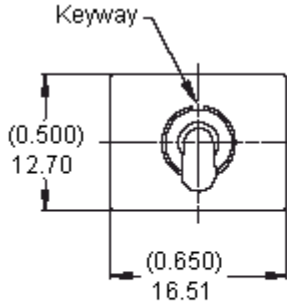
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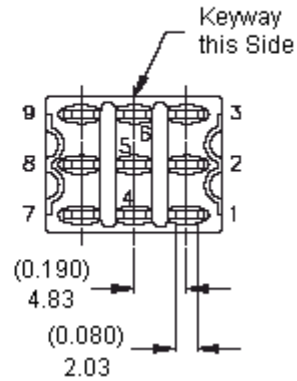
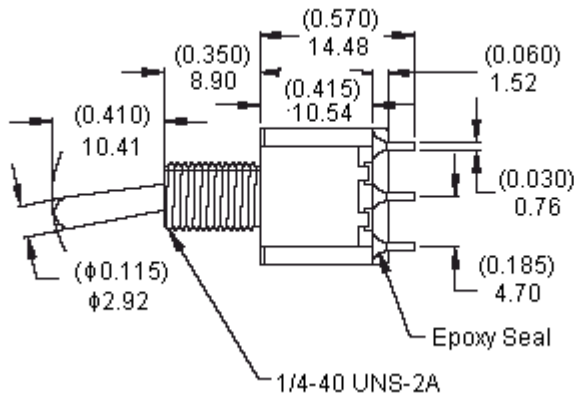


Pole Option

M1QE

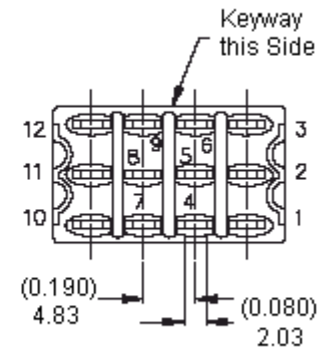
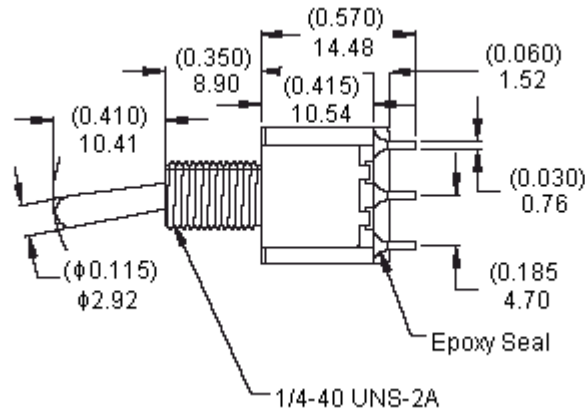
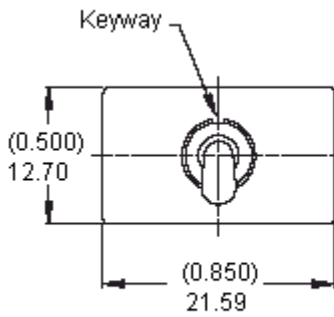


3PDT



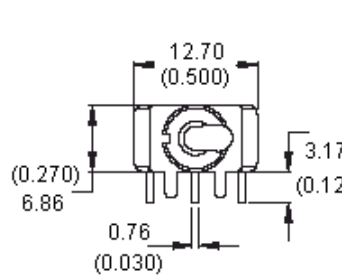
Dimensions : Millimetres (Inches)

4PDT

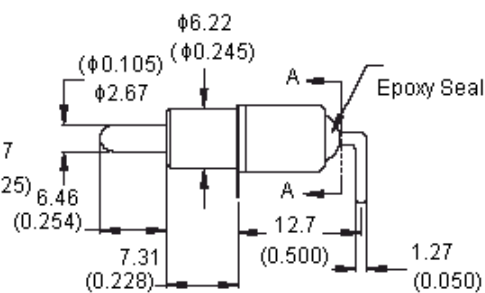


Dimensions : Millimetres (Inches)

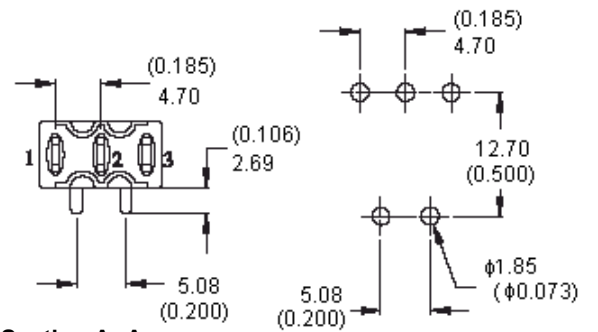
M6RE



SPDT



PCB Mounting



Dimensions : Millimetres (Inches)

Section A - A
Terminal
Numbers for
Reference Only



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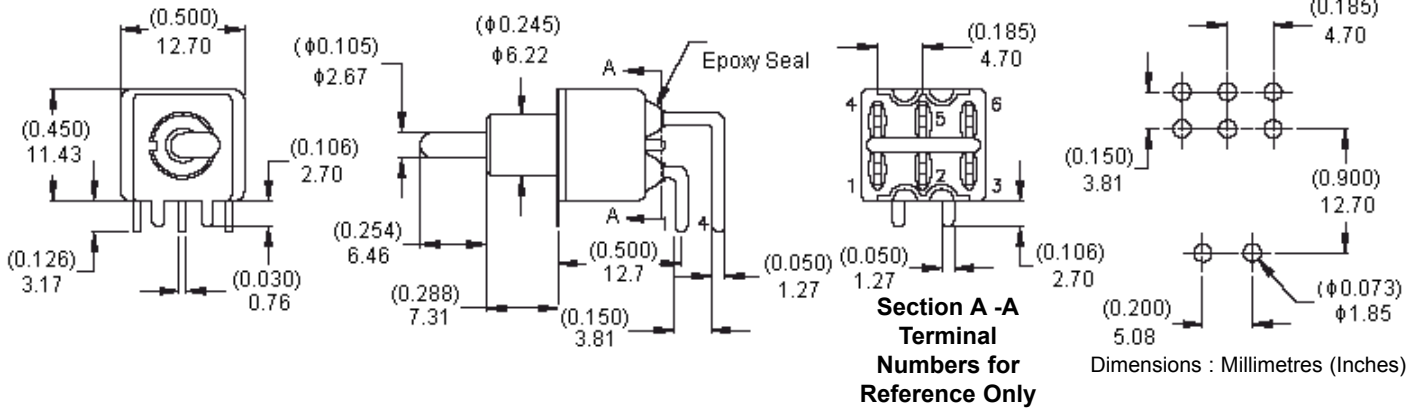


Pole Option

M6RE

DPDT

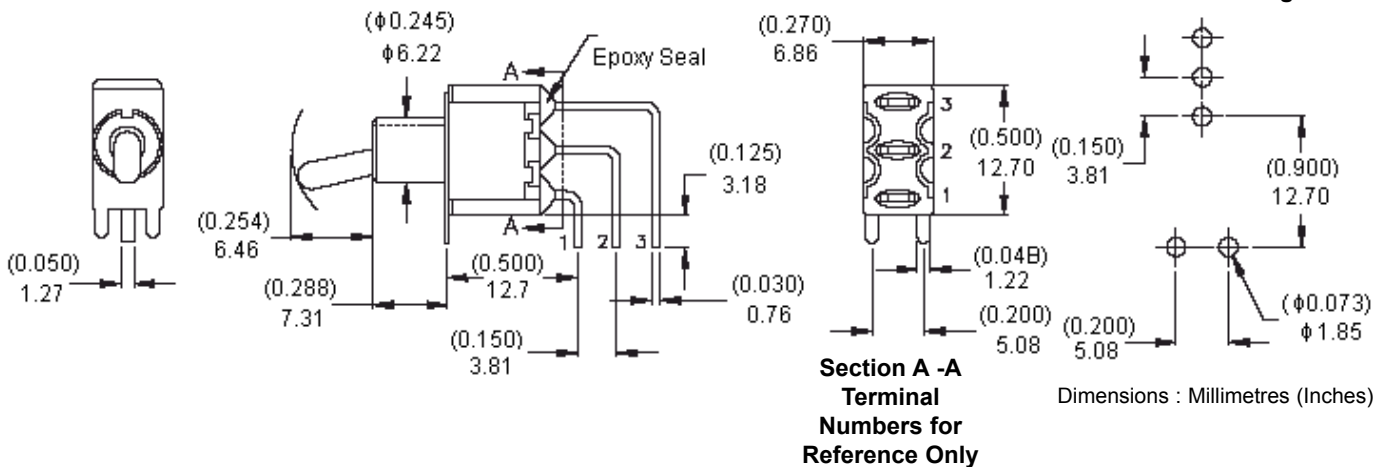
PCB Mounting



M7RE

SPDT

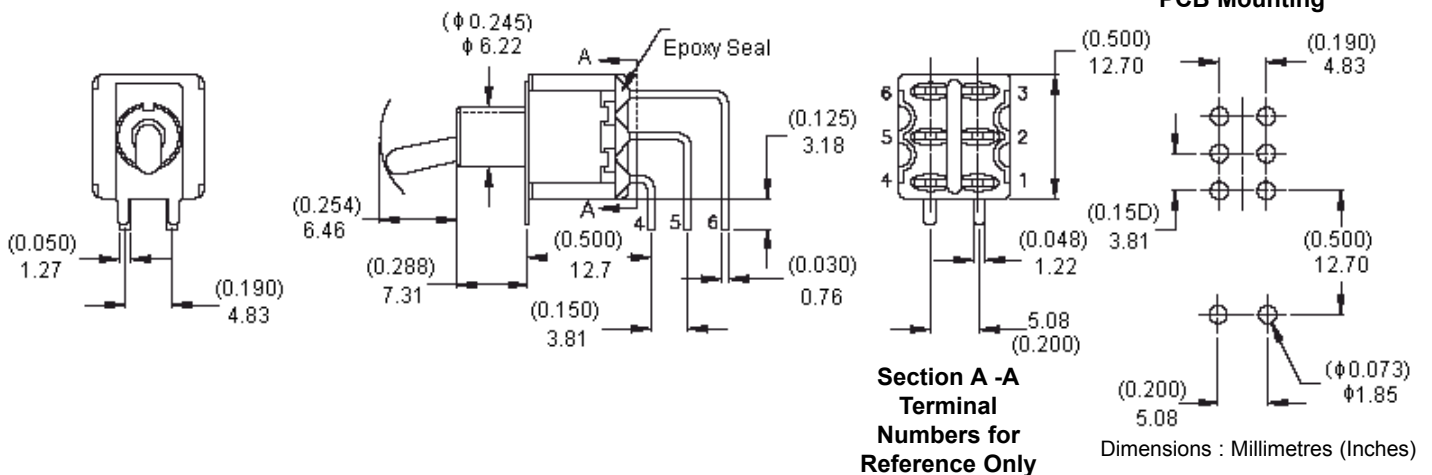
PCB Mounting



M7RE

DPDT

PCB Mounting



Toggle Switches

Minature



Soldering Process:

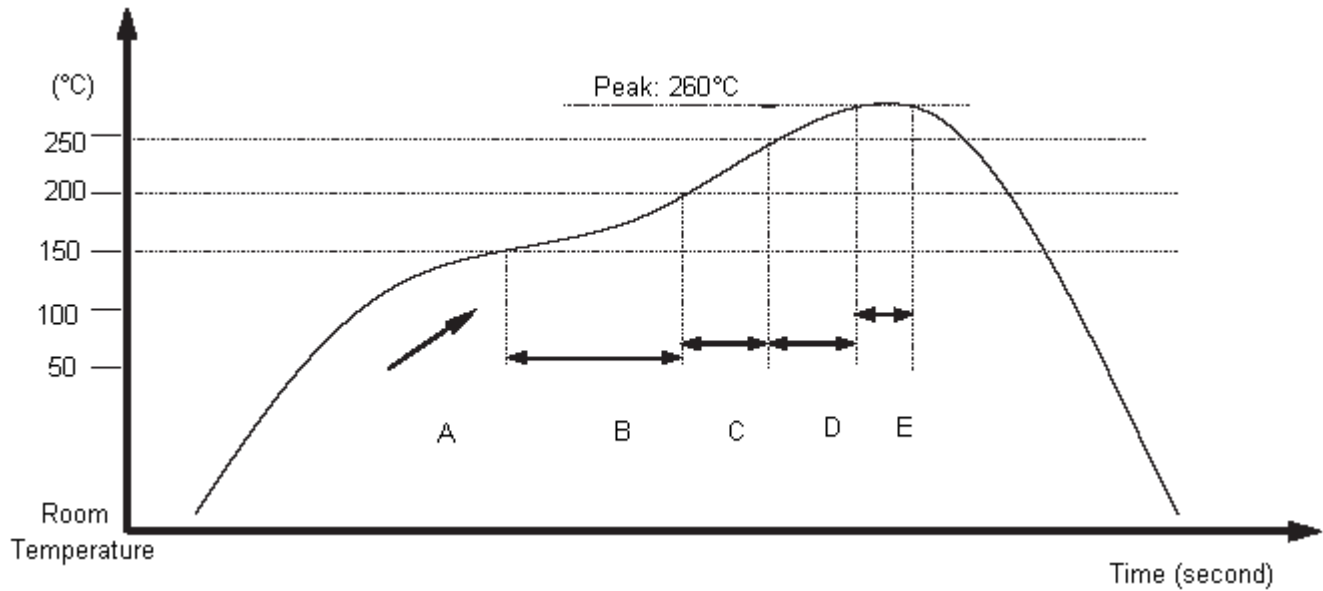
Manual soldering: Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

Wave soldering:

Recommended soldering temperature : Recommended soldering temperature : 260 ±5°C.
Duration of solder immersion : 5 ±seconds (PCB is 1.6mm in thickness).

Soldering: Vapour phase.

Temperature Profile		
Zone	Room Temperature (°C)	Time (seconds)
Pre-heat (A)	150°C	Minimum 120
Soak (B)	180°C to 200°C	Minimum 150
Peak (C)	200°C to 235°C	Minimum 30
Peak (D)	235°C to 260°C	Minimum 40
Peak (E)	260°C	Maximum 10



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Specifications

Number of Poles	Switch Function			Connected Terminals/Schematic			Model Number
	Position 1	Position 2	Position 3	Position 1	Position 2	Position 3	
SP	On	None	Mom	2 - 3	N/A	2 - 1	1MS2
	Mom	Off	Mom	2 (Comm) 1 - 3	Open	2 (Comm) 1 - 3	1MS4
	On		Mom	1 - 3		1MS5	
DP	On	None	Mom	2 - 3, 5 - 6 2 (Comm) 1 - 3 4 - 6	N/A	2 - 1, 5 - 4 2 (Comm) 1 - 3 4 - 6	1MD2
	On	Off	On		Open		1MD3
	Mom	Off	Mom				1MD4
	On	Off	Mom				1MD5
	On	On	On				2 - 3, 5 - 6
3P	On	None	On	2 - 3, 5 - 6, 8 - 9 2 5 (Comm) 8 1 - 3 4 - 6 7 - 9	N/A	2 - 1, 5 - 4, 8 - 7 2 5 (Comm) 8 1 - 3 4 - 6 7 - 9	1M31
	On	None	Mom				Open
	On	Off	On		1M33		
	Mom	Off	Mom		1M34		
	On	Off	Mom		1M35		
4P	On	None	On	5 (Comm) 2 8 11 1 - 3 4 - 6 7 - 9 10 - 12	N/A	5 (Comm) 2 8 11 1 - 3 4 - 6 7 - 9 10 - 12	1M41
	On	None	Mom				Open
	On	Off	On		1M43		
	Mom	Off	Mom		1M44		
	On	Off	Mom		1M45		

Mom = Momentary

Specification Table

Description	Part Number
Switch, PCB, DPDT, Vertical, On-Mom	1MD2T2B4V3RE
Switch, PCB, DPDT, Vertical, Mom-Off-Mom	1MD4T2B4V3RE
Switch, PCB, DPDT, Vertical, On-Off-On	1MD3T2B4V3RE
Switch, PCB, DPDT, Vertical, On-Off-Mom	1MD5T2B4V3RE
Switch, PCB, DPDT, Vertical, On-On-On	1MD6T2B4V3RE
Switch, PCB, SPDT, Horizontal R/A, On-Mom	1MS2T2B4M6RE
Switch, PCB, SPDT, Horizontal R/A, On-Off-Mom	1MS5T2B4M6RE



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Specification Table

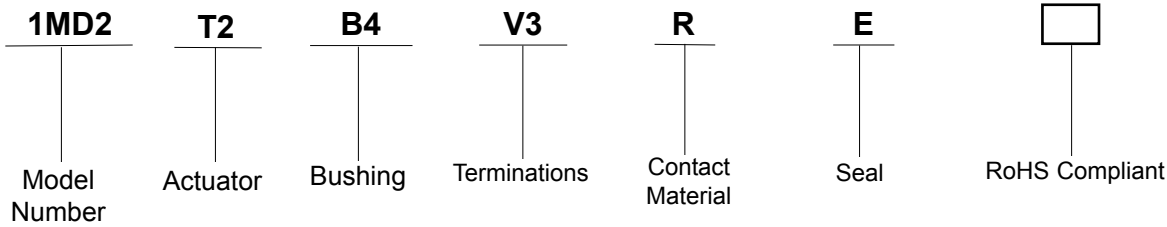
Description	Part Number
Switch, PCB, DPDT, Horizontal R/A, On-Mom	1MD2T2B4M6RE
Switch, PCB, DPDT, Horizontal R/A, Mom-Off-Mom	1MD4T2B4M6RE
Switch, PCB, DPDT, Horizontal R/A, On-Off-Mom	1MD5T2B4M6RE
Switch, PCB, DPDT, Horizontal R/A, On-On-On	1MD6T2B4M6RE
Switch, PCB, SPDT, Vertical R/A, On-Mom	1MS2T2B4M7RE
Switch, PCB, SPDT, Vertical R/A, Mom-Off-Mom	1MS4T2B4M7RE
Switch, PCB, SPDT, Vertical R/A, On-Off-Mom	1MS5T2B4M7RE
Switch, PCB, DPDT, Vertical R/A, On-Mom	1MD2T2B4M7RE
Switch, PCB, DPDT, Vertical R/A, Mom-Off-Mom	1MD4T2B4M7RE
Switch, PCB, DPDT, Vertical R/A, On-Off-On	1MD3T2B4M7RE
Switch, PCB, DPDT, Vertical R/A, On-Off-Mom	1MD5T2B4M7RE
Switch, PCB, DPDT, Vertical R/A, On-On-On	1MD6T2B4M7RE
Switch, Solder Tag, SPDT, On-Mom	1MS2T1B5M1QE
Switch, Solder Tag, SPDT, Mom-Off-Mom	1MS4T1B5M1QE
Switch, Solder Tag, SPDT, On-Off-Mom	1MS5T1B5M1QE
Switch, Solder Tag, DPDT, On-Mom	1MD2T1B5M1QE
Switch, Solder Tag, DPDT, Mom-Off-Mom	1MD4T1B5M1QE
Switch, Solder Tag, DPDT, On-Off-Mom	1MD5T1B5M1QE
Switch, Solder Tag, DPDT, On-On-On	1MD6T1B5M1QE
Switch, Solder Tag, 3PDT, On-Mom	1M32T1B5M1QE
Switch, Solder Tag, 3PDT, On-On	1M31T1B5M1QE
Switch, Solder Tag, 3PDT, Mom-Off-Mom	1M34T1B5M1QE
Switch, Solder Tag, 3PDT, On-Off-On	1M33T1B5M1QE
Switch, Solder Tag, 3PDT, On-Off-Mom	1M35T1B5M1QE
Switch, Solder Tag, 4PDT, On-Mom	1M42T1B5M1QE
Switch, Solder Tag, 4PDT, On-On	1M41T1B5M1QE
Switch, Solder Tag, 4PDT, Mom-Off-Mom	1M44T1B5M1QE
Switch, Solder Tag, 4PDT, On-Off-On	1M43T1B5M1QE
Switch, Solder Tag, 4PDT, On-Off-Mom	1M45T1B5M1QE
Switch, Solder Tag, 4PDT, On-On-On	1M46T1B5M1QE

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Part Number Explanation:



- Model Number** : 1MS2 = SP On-None-Mom, 1MS4 = SP Mom-Off-Mom, 1MS5 = SP On-Off-Mom, 1MD2 = DP On-None-Mom, 1MD3 = DP On-Off-On, 1MD4 = DP Mom-Off-Mom, 1MD5 = DP On-Off-Mom, 1MD6 = DP On-On-On, 1M31 = 3P On-None-On, 1M32 = 3P On-None-Mom, 1M33 = 3P On-Off-On, 1M34 = 3P Mom-Off-Mom, 1M35 = 3P On-Off-Mom, 1M41 = 4P On-None-On, 1M42 = 4P On-None-Mom, 1M43 = 4P On-Off-On, 1M44 = 4P Mom-Off-Mom and 1M45 = 4P On-Off-Mom.
- Actuator** : T1 = 10.41 High and T2 = 6.08 High.
- Bushing** : B4 = 7.10 High, Keyway (Non-THD) and B5 = 7.52 High, Flat (Torque).
- Terminations** : M1 = Solder Lug, M6 = Right Angle, PVC Through Hole and M7 = Vertical Right Angle, PVC Through Hole, V3 = 16.00 High, V-bracket.
- Contact Material** : R = Gold and Q = Silver.
- Seal** : E = Epoxy (STD).

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Notes:

International Sales Offices:

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