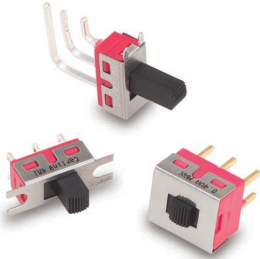


**4S1 & 4SS-Series**  
Sub-Miniature &  
**Sealed** Sub-Miniature  
Slide Switches



**4M1-Series**  
Miniature Slide Switch

### Specifications

Contact Rating . . . . . refer to ordering scheme  
 Electrical Life . . . . . 30,000 make & break cycles at full load  
 Contact Resistance. . . . . 10 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  
 Solder Heat Resistance. . . MIL-STD-202, Method 210  
 Actuator Travel . . . . . 25°

### Materials

Case . . . . . Diallyl phthalate (DAP) (UL 94V-0)  
 Slide Handle. . . . . Nylon  
 Housing. . . . . Stainless Steel  
 Terminal Seal . . . . . Epoxy

### 4S1-Series Ordering Scheme

**4S1** - **FSP** **1** - **M6** **Q** **E**   
 Series Poles Circuit Termination Contact Seal Packaging

#### 1 SERIES

**4S1** Sub-Miniature Slide Switch

#### 2 POLES

**FSP** single pole

#### 3 CIRCUIT

##### Switching Position:

|          | 2-1 | OPEN | 2-3 |
|----------|-----|------|-----|
| <b>1</b> | ON  | NONE | ON  |
| <b>3</b> | ON  | OFF  | ON  |

#### 4 TERMINATION

**M2** PCB  
**M6** PC Mount, 90° horizontal

#### 5 CONTACT

|          | Material            | Terminal Plating              | Rating                            |
|----------|---------------------|-------------------------------|-----------------------------------|
| <b>G</b> | silver <sup>1</sup> | gold over silver <sup>3</sup> | 3A@125VAC or 28VDC; 1.5A @ 250VAC |
| <b>K</b> | gold <sup>2</sup>   | tin-lead <sup>4</sup>         | 0.4VA max. @20V max (AC/DC)       |
| <b>P</b> | silver <sup>1</sup> | tin-lead <sup>4</sup>         | 3A@125VAC or 28VDC; 1.5A @ 250VAC |
| <b>Q</b> | silver <sup>1</sup> | silver <sup>1</sup>           | 3A@125VAC or 28VDC; 1.5A @ 250VAC |
| <b>R</b> | gold <sup>2</sup>   | gold <sup>2</sup>             | 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

#### 6 EPOXY SEAL

**E** epoxy seal

#### 7 PACKAGING

Switches are bulk packed, unless **T/R** is specified at the end of the part number.  
**T/R** tape reel - 500 pieces per reel

### 4SS-Series Ordering Scheme

4SS - FSP 1 - M6 G E

1  
Series
2  
Poles
3  
Circuit
4  
Termination
5  
Contact
6  
Seal
7  
Packaging

#### 1 SERIES

**4SS** Sealed Sub-Miniature Slide Switch

#### 2 POLES

**FSP** single pole

#### 3 CIRCUIT

|   | <b>Switching Position:</b> |      |     |
|---|----------------------------|------|-----|
|   | 2-1                        | OPEN | 2-3 |
| 1 | ON                         | NONE | ON  |
| 3 | ON                         | OFF  | ON  |

#### 4 TERMINATION

**Termination options for switches with brick color actuators**

**M2** PCB

**M6** PC Mount, 90° horizontal

**M7** PC Mount, 90° vertical

**Termination options for switches with white color actuators**

**L6** Surface Mount, 90° flat

**S6** Surface Mount, 90° horizontal

**S7** Surface Mount, 90° vertical

#### 5 CONTACT

|          | <b>Material</b>     | <b>Terminal Plating</b> | <b>Rating</b>                       |
|----------|---------------------|-------------------------|-------------------------------------|
| <b>G</b> | silver <sup>1</sup> | gold over silver        | 3A @ 125VAC or 28VDC; 1.5A @ 250VAC |
| <b>K</b> | gold <sup>2</sup>   | tin-lead <sup>4</sup>   | 0.4VA max. @ 20V max (AC/DC)        |
| <b>P</b> | silver <sup>1</sup> | tin-lead                | 3A @ 125VAC or 28VDC; 1.5A @ 250VAC |
| <b>R</b> | gold <sup>2</sup>   | gold <sup>2</sup>       | 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

4 Outer terminals: copper alloy with tin-lead over nickel plate

#### 6 EPOXY SEAL

**E** epoxy seal

#### 7 PACKAGING

Switches are bulk packed, unless **T/R** is specified at the end of the part number.

**T/R** tape reel - 500 pieces per reel

### 4M1-Series Ordering Scheme

4M1 - SSP 3 - S1 / 2 - M6 Q E

1  
Series
2  
Poles
3  
Circuit
4  
Actuator
5  
Actuator  
Color
6  
Termination
7  
Contact
8  
Seal

#### 1 SERIES

**4M1** Miniature Slide Switch

#### 2 POLES

**SSP** single pole **SDP** double pole

#### 3 CIRCUIT

|   | 2-1, 5-4 | OPEN | 2-3, 5-6 |
|---|----------|------|----------|
| 1 | ON       | NONE | ON       |
| 3 | ON       | OFF  | ON       |

#### 4 ACTUATOR

**S1** .201 [5.10] high

**S2** .285 [7.25] high

**S3** .370 [9.40] high

**S4** .140 [3.55] high

**S5** .053 [1.35] high (for DPDT only)

**S6** .482 [12.25] high

**S7** .311 [7.90] high

**T1** .201 [5.10] high (for DPDT only)

#### 5 ACTUATOR COLOR<sup>1</sup>

|         |          |          |         |        |
|---------|----------|----------|---------|--------|
| 1 white | 3 red    | 5 yellow | 7 blue  | 9 gray |
| 2 black | 4 orange | 6 green  | 8 brown |        |

1 White, black & red are standard. Other colors available for quantities of 5K or more.

#### 6 TERMINATION

**M1** Solder Lug

**M2** PCB

**M3** Quick Connect

**M5-1** Wire Wrap .750 [19.05]

**M5-2** Wire Wrap [24.48]

**M5-3** Wire Wrap [10.80]

**M5-4** Wire Wrap [26.97]

**M6** PC Mount, 90° horizontal

**M7** PC Mount, 90° vertical

**VS2** PC Mount, U bracket,  
.620 mounting x .460 high

#### 7 CONTACT

|          | <b>Material</b>     | <b>Terminal Plating</b>       | <b>Rating</b>                        | <b>Approvals</b> |
|----------|---------------------|-------------------------------|--------------------------------------|------------------|
| <b>G</b> | silver <sup>1</sup> | gold over silver <sup>3</sup> | 5A @ 125VAC or 28VDC;<br>2A @ 250VAC | UL, CSA          |
| <b>K</b> | gold <sup>2</sup>   | tin-lead <sup>4</sup>         | 0.4VA max. @ 20V max (AC/DC)         |                  |
| <b>P</b> | silver <sup>1</sup> | tin-lead <sup>4</sup>         | 5A @ 125VAC or 28VDC;<br>2A @ 250VAC | UL, CSA          |
| <b>Q</b> | silver <sup>1</sup> | silver <sup>1</sup>           | 5A @ 125VAC or 28VDC;<br>2A @ 250VAC | UL, CSA          |
| <b>R</b> | gold <sup>2</sup>   | gold <sup>2</sup>             | 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

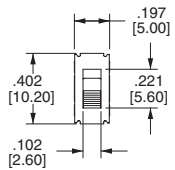
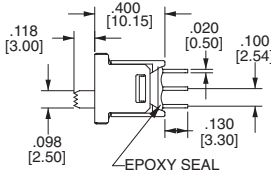
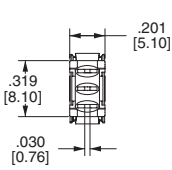
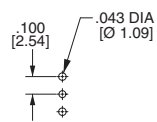
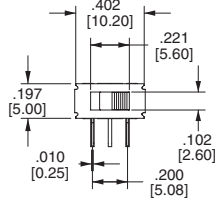
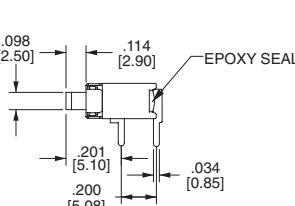
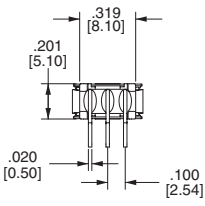
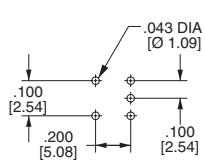
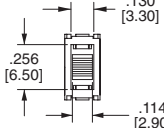
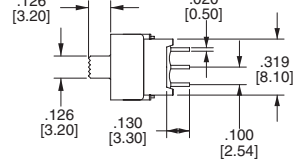
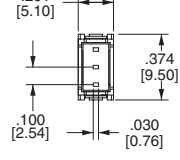
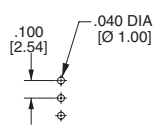
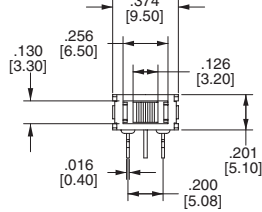
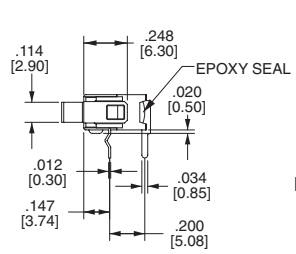
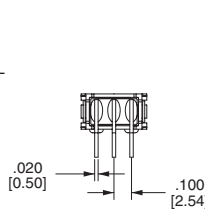
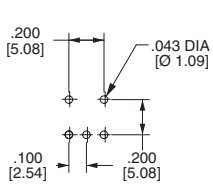
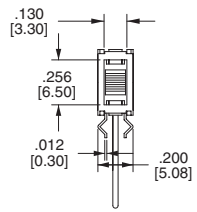
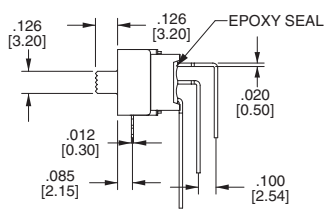
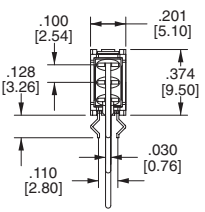
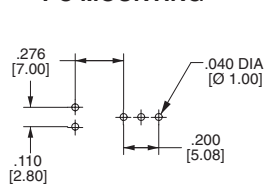
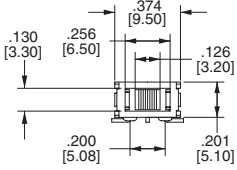
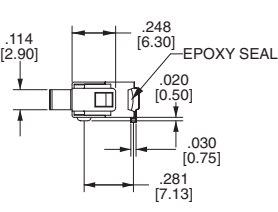
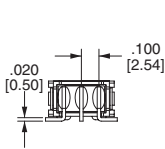
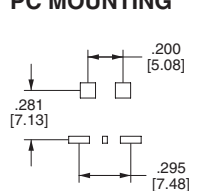
3 Terminals: silver plate with outer layer in gold plating

4 Outer terminals: copper alloy with tin-lead over nickel plate

#### 8 EPOXY SEAL

**E** epoxy seal

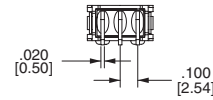
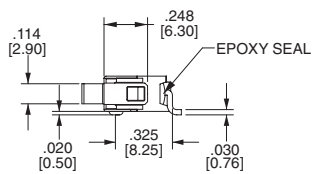
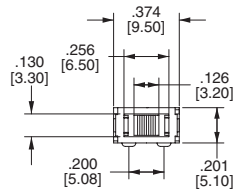
**4S-Series Dimensional Specifications: in. [mm]**

| <b>4S1-Series</b> |                                                                                     | <b>TERMINATION</b>                                                                  |                                                                                      | <b>PC MOUNTING</b>                                                                    |  |
|-------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
| <b>M2</b>         |    |    |    |    |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
| <b>M6</b>         |    |    |    |    |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
| <b>4SS-Series</b> |                                                                                     | <b>TERMINATION</b>                                                                  |                                                                                      | <b>PC MOUNTING</b>                                                                    |  |
| <b>M2</b>         |    |   |   |    |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
| <b>M6</b>         |  |  |  |  |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
| <b>M7</b>         |  |  |  |  |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
| <b>L6</b>         |  |  |  |  |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |
|                   |                                                                                     |                                                                                     |                                                                                      |                                                                                       |  |

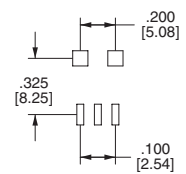
## 4SS-Series Dimensional Specifications: in. [mm]

### TERMINATION

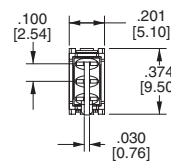
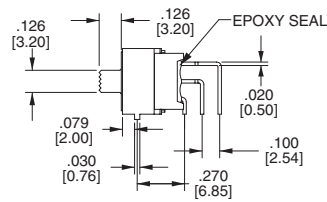
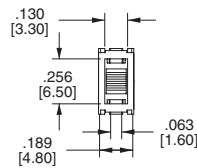
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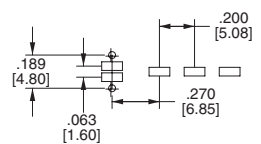
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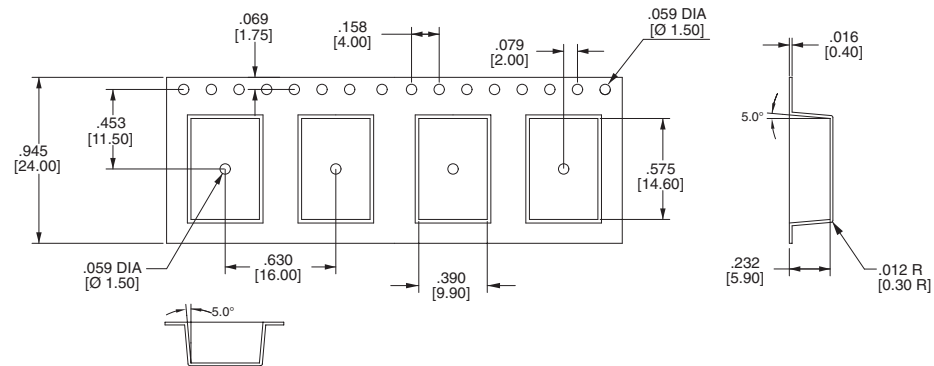
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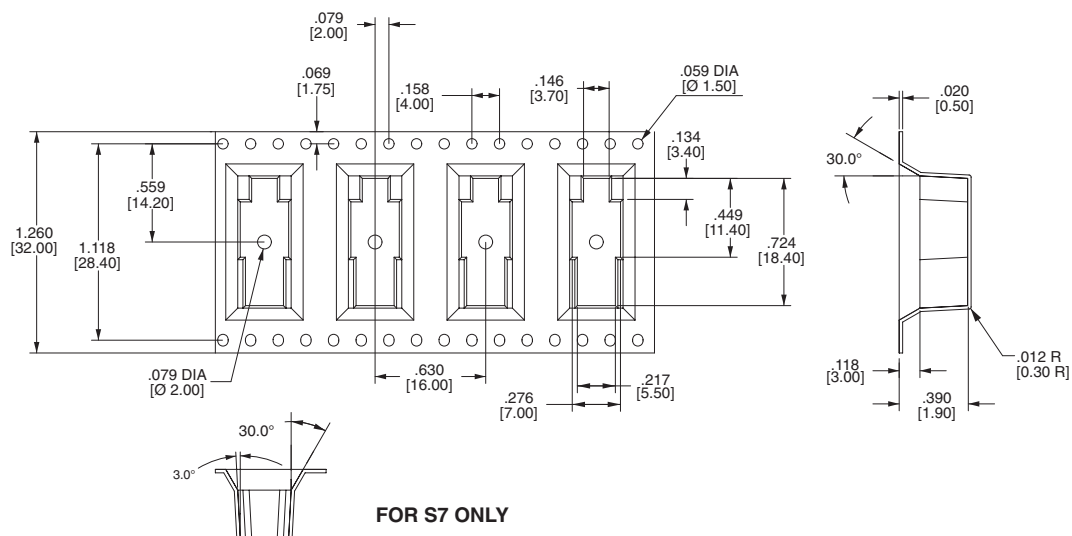
**PC MOUNTING**



### REEL TAPING

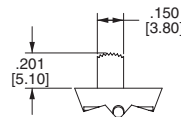
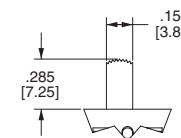
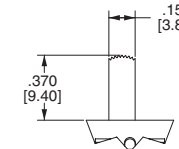
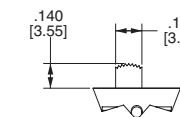
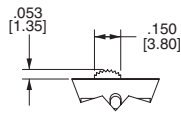
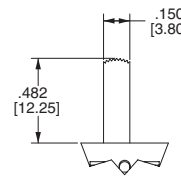
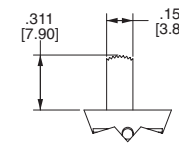
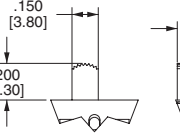


**FOR S6,L6 ONLY**



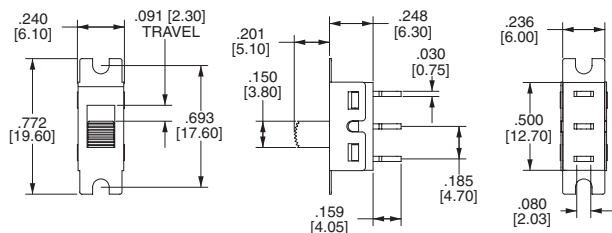
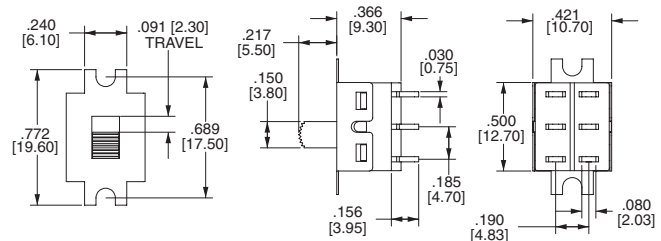
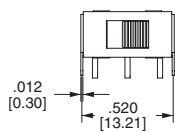
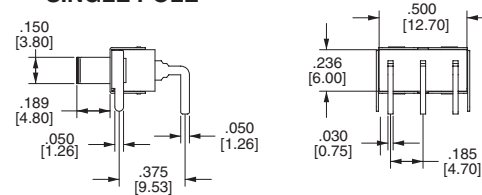
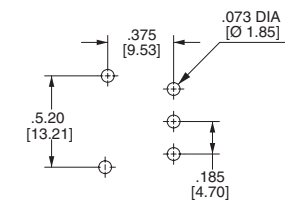
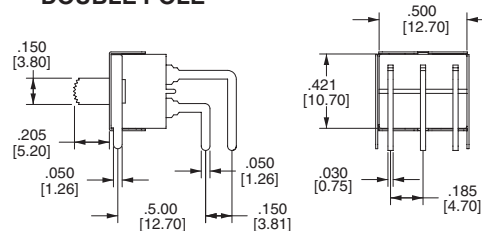
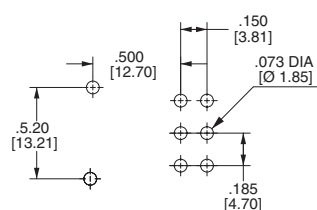
**FOR S7 ONLY**

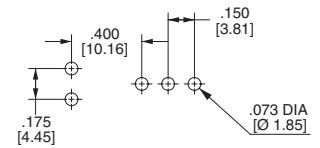
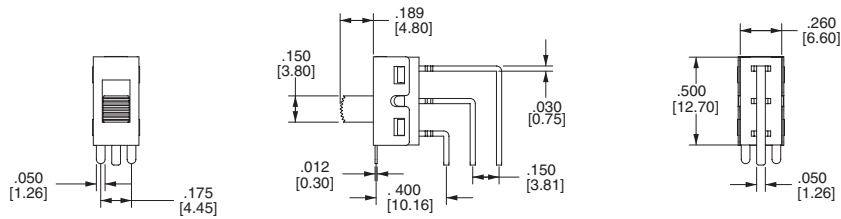
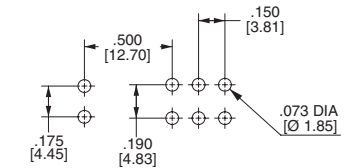
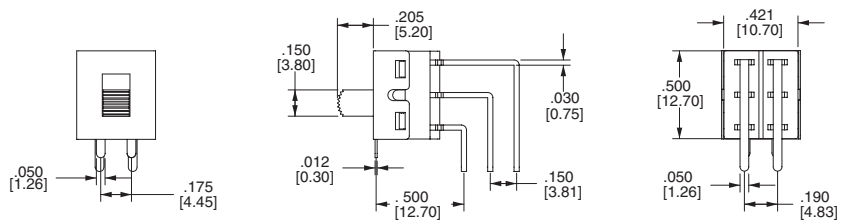
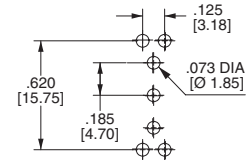
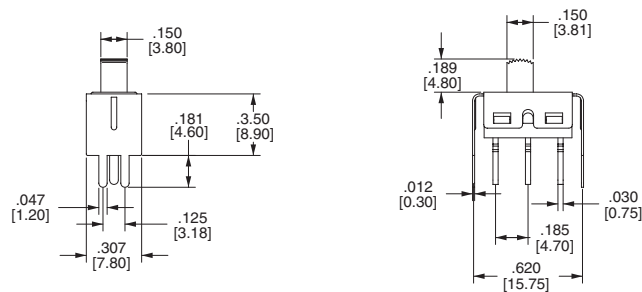
**4M1-Series Dimensional Specifications: in. [mm]**
**ACTUATOR**

|                                                                                                                |                                                                                                |                                                                                                 |                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>S1</b><br>                 | <b>S2</b><br> | <b>S3</b><br> | <b>S4</b><br>                 |
| <b>S5 (For DPDT Only)</b><br> | <b>S6</b><br> | <b>S7</b><br> | <b>T1 (For DPDT Only)</b><br> |

**TERMINATION**

| <div><div><div><div><div><div></div><div>M1</div><div>STANDARD</div></div></div><div></div></div></div></div> | <div><div><div><div><div></div><div>M2</div></div></div><div></div></div></div> | <div><div><div><div><div></div><div>M3</div><div>QUICK CONNECT</div></div></div><div></div></div></div> | <div><div><div><div><div></div><div>M5</div></div></div><div></div></div></div> | <table><tr><th>OPTION CODE</th><th>DIM. "A"</th></tr><tr><td>M5-1</td><td>.750 [19.05]</td></tr><tr><td>M5-2</td><td>.964 [24.48]</td></tr><tr><td>M5-3</td><td>.425 [10.80]</td></tr><tr><td>M5-4</td><td>1.062 [26.97]</td></tr></table> | 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] |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------|--------------|------|--------------|------|--------------|------|---------------|
| 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**

**M6**

**SINGLE POLE**

**PC MOUNTING**

**DOUBLE POLE**

**PC MOUNTING**


**4M1-Series Dimensional Specifications: in. [mm]**
**TERMINATION**
**M7**
**SINGLE POLE**
**PC MOUNTING**

**DOUBLE POLE**
**PC MOUNTING**

**VS2**
**SINGLE POLE**
**PC MOUNTING**

**DOUBLE POLE**
**PC MOUNTING**
