



## PCB SWITCH SELECTION GUIDE

<p><b>ZP</b></p> <ul style="list-style-type: none"> <li>• Metal bushing</li> <li>• Single pole, double throw</li> <li>• Solder lug or PC terminals</li> <li>• Gold or silver plated contacts</li> <li>• Epoxy sealed terminals</li> </ul> 	<p><b>SP</b></p> <ul style="list-style-type: none"> <li>• Plain or threaded bushing</li> <li>• Washable snap-action momentary pushbutton</li> <li>• Single or double pole</li> <li>• Silver or gold plated contacts</li> <li>• Internally sealed bushing with epoxy sealed terminals</li> </ul> 	<p><b>9100/9200/9500</b></p> <ul style="list-style-type: none"> <li>• Plain or threaded bushing</li> <li>• Horizontal or vertical mounting</li> <li>• Single pole momentary with several plunger options</li> <li>• Gold plated brass contacts</li> <li>• Epoxy and O-ring sealed</li> </ul> 	<p><b>18000</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Snap action momentary</li> <li>• Tactile feedback</li> <li>• Gold plated contacts</li> <li>• Many terminal, mounting and special options available</li> </ul> 
<p><b>SMT TP</b></p> <ul style="list-style-type: none"> <li>• Surface mount, single pole</li> <li>• Available with or without positioning pins</li> <li>• Reflow solderable</li> <li>• Protected against electrostatic discharge (ESD) up to 10KV</li> <li>• Washable: Epoxy and O-ring sealed</li> </ul> 	<p><b>TP</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Washable momentary pushbutton with single piece case</li> <li>• Several contacts and terminal materials available</li> <li>• Epoxy and O-ring sealed</li> </ul> 	<p><b>TL</b></p> <ul style="list-style-type: none"> <li>• Single or double pole with gold or silver plating</li> <li>• Several lever and case styles to choose from</li> <li>• Washable with single piece case: Epoxy and O-ring sealed</li> </ul> 	<p><b>SMT TL</b></p> <ul style="list-style-type: none"> <li>• Surface mount, single pole with standard gold plated brass contacts</li> <li>• With or without positioning pins</li> <li>• Reflow solderable</li> <li>• Protected against electrostatic discharge (ESD) up to 10KV</li> <li>• Washable</li> </ul> 
<p><b>S and SF</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Plain or insulated threaded bushing</li> <li>• Gold or silver plated contact</li> <li>• Optional ESD protection</li> <li>• Internally sealed bushing</li> <li>• Epoxy sealed terminals</li> </ul> 	<p><b>21000N</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Threaded or smooth bushings, both with mounting plate</li> <li>• Low profile – same height for single or double pole</li> <li>• Silver or gold plated brass contacts</li> <li>• Epoxy sealed terminals</li> </ul> 	<p><b>ZL</b></p> <ul style="list-style-type: none"> <li>• Single pole and threaded bushing</li> <li>• Solder lug and straight PC terminals</li> <li>• Gold plated or silver plated contacts</li> <li>• Epoxy sealed terminals</li> </ul> 	<p><b>7000</b></p> <ul style="list-style-type: none"> <li>• 1, 2, 3 or 4 pole</li> <li>• Several mounting configurations</li> <li>• Wide variety of actuators</li> <li>• Silver or gold plated contacts with ratings up to 6 amps</li> <li>• VDE, UL and CSA approved</li> </ul> 
<p><b>S and SR</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Straight or right angle PC terminals</li> <li>• Washable: epoxy sealed</li> <li>• Silver or gold plated contacts</li> <li>• Rocker or paddle actuators available in a variety of colors</li> </ul> 	<p><b>TR</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Variety of contact materials</li> <li>• Straight, right angle or wire-wrap PC terminals</li> <li>• Washable: epoxy and O-ring sealed</li> </ul> 	<p><b>SMT TR</b></p> <ul style="list-style-type: none"> <li>• Surface mount, single pole</li> <li>• With or without positioning pins</li> <li>• Reflow solderable</li> <li>• Protected against electrostatic discharge (ESD) up to 10KV</li> <li>• Washable</li> </ul> 	<p><b>MBZ</b></p> <ul style="list-style-type: none"> <li>• Movement differential <math>\leq 0.13\text{mm}</math></li> <li>• Available in NO, NC and change-over functions</li> <li>• Solder lug or PC terminals</li> <li>• Wide variety of actuators</li> </ul> 
<p><b>MAB</b></p> <ul style="list-style-type: none"> <li>• Movement differential <math>\leq 0.4\text{mm}</math></li> <li>• Available in NO, NC and change-over functions</li> <li>• Solder lug, quick connect, PCB and screw terminals available</li> <li>• Wide variety of actuator styles</li> </ul> 	<p><b>MBB and MDB</b></p> <ul style="list-style-type: none"> <li>• Movement differential <math>\leq 0.2\text{mm}</math></li> <li>• Available in NO, NC and change-over functions</li> <li>• Solder lug, PC or quick connect terminals</li> <li>• Plunger, hinge lever or roller lever actuators available</li> </ul> 	<p><b>G</b></p> <ul style="list-style-type: none"> <li>• Single or double pole, 2 or 3 positions</li> <li>• Solder lug, straight PC or right angle terminals</li> <li>• 6 different actuator length available</li> <li>• Wide variety of contact materials</li> </ul> 	<p><b>25000N</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• PC terminals only</li> <li>• Wide selection of actuator shapes and lengths</li> <li>• UL 1054 approved</li> </ul> 
<p><b>NK</b></p> <ul style="list-style-type: none"> <li>• Single pole</li> <li>• Straight or right angle PC terminals</li> <li>• Stackable in X and Y directions</li> <li>• Flushed and raised actuators positioning pins</li> </ul> 	<p><b>TG</b></p> <ul style="list-style-type: none"> <li>• Single pole</li> <li>• Available in NO, NC and change-over functions</li> <li>• Straight, right angle or wire-wrap terminal options</li> <li>• Sealed: Single piece case, epoxy sealed terminals</li> </ul> 	<p><b>SLB</b></p> <ul style="list-style-type: none"> <li>• Single or double pole</li> <li>• Positive spring loaded ball detent mechanism</li> <li>• Vertical or right angle actuators</li> <li>• Silver plated contacts and terminals</li> </ul> 	<p><b>SMT TG</b></p> <ul style="list-style-type: none"> <li>• Surface mount, single pole</li> <li>• With or without positioning pins</li> <li>• Reflow solderable</li> <li>• Washable</li> </ul> 
<p><b>M</b></p> <ul style="list-style-type: none"> <li>• 1, 2, 4 and 6 pole</li> <li>• Bifurcated wiping contact design</li> <li>• Vertical and right angle actuators</li> <li>• Many actuator styles and lengths available</li> </ul> 	<p><b>MSS</b></p> <ul style="list-style-type: none"> <li>• 1, 2 &amp; 4 pole</li> <li>• Bifurcated wiping contact design</li> <li>• Gold or silver plated terminals with reinforced mounting legs</li> <li>• Epoxy sealed</li> </ul> 	<p><b>IKE</b></p> <ul style="list-style-type: none"> <li>• Even and odd pole numbers</li> <li>• Overall height from PCB: Through-hole = 3.2mm, SMT = 3.8mm</li> <li>• End-stackable</li> <li>• Self-cleaning wiping contacts</li> <li>• Raised or recessed actuators available</li> </ul> 	<p><b>IKD</b></p> <ul style="list-style-type: none"> <li>• Self-cleaning contacts</li> <li>• Gold plated terminals</li> <li>• IR and vapor phase reflow soldering compatible</li> <li>• Gull wing and J bend terminals</li> <li>• Recessed actuators with top tape seal</li> </ul> 
<p><b>NDS/DP/DA</b></p> <ul style="list-style-type: none"> <li>• 2 to 12 positions</li> <li>• Vertical, right angle or piano styles</li> <li>• Raised or recessed, long or short actuators available</li> <li>• Epoxy and top tape sealing options</li> </ul> 	<p><b>IKH</b></p> <ul style="list-style-type: none"> <li>• Low profile for very small PCB space requirements</li> <li>• 1.27mm terminal to terminal pitch</li> <li>• Process compatible</li> <li>• Washable with standard tape seal</li> </ul> 	<p><b>PT65</b></p> <ul style="list-style-type: none"> <li>• Available in THR (through-hole reflow)</li> <li>• 4, 6, 8, 10 &amp; 16 positions</li> <li>• 4 different actuator types</li> <li>• Straight or right angle terminals</li> <li>• Washable, solder and flux sealed</li> </ul> 	<p><b>P36</b></p> <ul style="list-style-type: none"> <li>• Available in THR (through-hole reflow)</li> <li>• Ultra compact with 10 or 16 positions</li> <li>• 3 different actuator types</li> <li>• Straight or right angle terminations</li> <li>• Washable, solder and flux sealed</li> </ul> 
<p><b>IKN</b></p> <ul style="list-style-type: none"> <li>• Low profile with 2, 4, 6 and 8 positions</li> <li>• Through-hole or SMT mounting</li> <li>• Overall height from PCB: Through-hole = 4.0m, SMT = 2.85mm</li> <li>• Recessed actuator with positive detents</li> <li>• Self-cleaning bifurcated sliding contacts</li> </ul> 			



## MEC SWITCH AND CAP SELECTION GUIDE

### MULTIMEC 5 series - 5E & 5G

- Through-hole or SMT mounting
- IP67 Sealed
- 50mA/24VDC
- 10,000,000 operations
- Single pole / momentary
- NO or NC/NO function



### UNIMEC

- Through-hole mounting
- IP54 Sealed
- Max 250 mA/120V/9W
- Double pole
- Momentary or latching
- 8 contact functions



#### 1SS

- Solid, round cap
- Ø6.5mm
- 9 standard height options
- 7 standard color options



#### 1IS

- Fully-illuminated
- Ø6.5mm
- 7 standard height options
- Transparent or frosted white



#### 1LS

- Illuminated, with lens
- Ø6.5mm
- 5 standard height options
- 9 standard colors available
- 5 lens colors options



#### 1KS

- Solid or illuminated
- Square, flat cap
- 14.3mm x 14.3mm, h=19.1mm
- 8 standard colors available



#### 1KBS

- Illuminated
- Convex square cap
- 14.3mm x 14.3mm, h=20.2mm



#### 1KCS

- Illuminated
- Concave square cap
- 14.3mm x 14.3mm, h=20.1mm



#### 1TS

- Panel sealed\*
- 10.6mm x 10.6mm
- Rounded top surface
- Solid or illuminated
- 5 standard color options
- \*add 1TW for IP67 sealing



#### 1VS

- Panel sealed\*
- 10.4mm x 13.25mm
- Rounded top surface
- Solid or illuminated
- 5 standard color options
- \*add 1VW for IP65 sealing



#### 1US

- Panel sealed\*
- Ø10.6mm
- Rounded top surface
- Solid or illuminated
- 5 standard color options
- \*add 1UW for IP67 sealing



#### 1DS

- Solid or illuminated, round cap
- Ø9.6mm, h=14.9mm
- 18 color options
- Standard legends available



#### 1ES

- Illuminated with lens
- Ø9.6mm, h=14.9mm
- 7 standard color options
- 5 lens color options



#### 1FS

- Illuminated with lens
- Ø9.6mm, h=14.9mm
- 5 lens color options
- Standard legends available
- 7 standard color options



#### 1GAS

- Solid or illuminated
- Flat, round caps perfect for using under overlay
- Ø11mm, h=12.5mm
- 9 standard color options



#### 1GCS

- Solid or illuminated
- Flat, round caps perfect for using under overlay
- Ø15mm, h=12.5mm
- 9 standard color options



#### 1YS

- for 5E switch only
- Illuminated by board chip LEDs
- Square cap designed for using under overlay
- 15mm x 15mm, h=12.5mm



#### 1JS

- Solid or illuminated
- Low, flat caps perfect for using under overlay
- Ø9.6mm, h=10.4mm
- 9 standard color options



#### 1XS

- Solid or illuminated
- Rectangular cap
- 7.4mm x 9.4mm, h=18.5mm
- 9 standard color options



#### 1PS

- Solid or illuminated
- Rectangular, concave cap
- 12.5mm x 6.5mm, h=15.7mm
- 9 standard color options



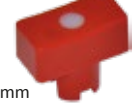
#### 1QS

- Illuminated, with rectangular lens
- Rectangular, concave cap
- 12.5mm x 6.5mm, h=15.7mm
- 3 standard color options



#### 1RS

- Illuminated, with round lens
- Rectangular, concave cap
- 12.5mm x 6.5mm, h=15.7mm
- 3 standard color options



#### 1A/1H/1M/1ZA

- Solid or illuminated
- Multiple color & legend options
- Rectangular, rocker-style cap
- 1A/1H-12.5mm x 10.1mm, h=12.2mm
- 1M-25.0mm x 10.1mm, h=12.2mm
- 1ZA-18.65mm x 10.1mm, h=12.2mm



#### 1B/1C + 2C/2D

- Solid or illuminated
- Rectangular, rocker-style cap
- 15.1mm x 15.1mm, h=12.2mm
- Multiple color options



#### 1ZW CONTROLMEC

- Single cap panel sealed for display navigation
- Solid or illuminated
- Ø29.5mm, h=12.3mm
- 6 cap color options
- Standard legends available



#### 1Z CONTROLMEC

- Single cap for display navigation
- Solid or illuminated
- Ø29.5mm, h=12.0mm
- 6 cap color options
- Standard legends available



#### 1ZB/1ZCS NAVIMEC

- Designed for display navigation
- Solid or illuminated
- 1ZB - 90°, R=17.5mm h=12.2mm
- 1ZCS - Ø14.3mm, h=11.7mm
- Standard legends available



#### 1NS

- Solid or illuminated
- Teardrop-shaped cap
- 13.3mm x 11.0mm, h=14.9mm
- 3 standard colors available



#### 1WAS/1WPS

- Solid or illuminated
- Ellipse-shaped, convex or concave
- 6.5mm x 12.5mm, h=15.0mm-15.7mm
- 10 standard colors available



#### 1WDS

- Solid or illuminated
- Ellipse-shaped, convex top cap
- 8.0mm x 15.3mm, h=15.0mm
- 10 standard colors available



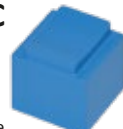
#### 16300 UNIMEC

- Rectangular solid cap & square solid or illuminated bezel
- Cap: 6.1mm x 12.4mm
- Bezel: 15.1mm x 15.1mm, h=16.0mm-20.5mm
- 7 standard color options
- Standard keycap legends available



#### 16700 UNIMEC

- Square cap
- 14.9mm x 14.9mm, h=14.6mm
- 7 standard color options
- Standard legends available



#### 10R/10RF/10RM

- Large round cap
- Optional metal legend
- Solid or illuminated
- Ø30mm, h=11mm
- 8 standard color options



#### 10Q/10QM

- Large square cap
- Optional metal legend
- Solid or illuminated
- 22mm x 22mm, h=11mm
- 8 standard color options



PCBSG1607A