



# PCB & MEC SWITCH SELECTION GUIDE

**ZP**

- Threaded 4.83mm metal bushing
- Single pole, double throw
- Solder lug or PC terminals
- Gold or silver plated contacts
- Epoxy sealed terminals



**SP**

- Plain or threaded bushing
- Washable snap-action momentary pushbutton
- Single or double pole
- Silver or gold plated contacts
- Internally sealed bushing with epoxy sealed terminals



**9100/9200/9500**

- Plain or threaded bushing
- Horizontal or vertical mounting
- Single pole, momentary with several plunger options
- Gold plated brass contacts
- Epoxy and O-ring sealed



**18000**

- Single or double pole
- Snap action momentary
- Tactile feedback
- Gold plated contacts
- Many terminal, mounting and special options available



**SMT TP**

- Surface mount, single pole
- Available with or without positioning pins
- Reflow solderable
- Protected against electrostatic discharge (ESD) up to 10KV
- Washable: Epoxy and O-ring sealed



**TP**

- Single or double pole
- Washable momentary pushbutton with single piece case
- Several contacts and terminal materials available
- Epoxy and O-ring sealed



**TL**

- Single or double pole
- Several lever and case style options
- Washable with single piece case
- Epoxy and O-ring sealed
- Several contact material options



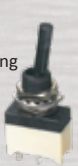
**SMT TL**

- Surface mount, single pole with standard gold plated brass contacts
- With or without positioning pins
- Reflow solderable
- Protected against electrostatic discharge (ESD) up to 10KV
- Washable



**S and SF**

- Single or double pole
- Plain or insulated threaded bushing
- Gold or silver plated contact
- Optional ESD protection
- Internally sealed bushing
- Washable: epoxy sealed



**21000N**

- Single or double pole
- Threaded or smooth bushings, both with mounting plate
- Low profile – same height for single or double pole
- Silver or gold plated brass contacts
- Epoxy and O-ring sealed



**ZL**

- Single pole, 4.83mm threaded bushing
- Solder lug and straight PC terminals
- Gold plated or silver plated contacts
- Epoxy sealed terminals



**7000**

- 1, 2, 3 or 4 pole
- Several mounting configurations
- Wide variety of actuators
- Brass, silver or gold plated contacts with ratings to 6 amps
- VDE, UL and CSA approved



**S and SR**

- Single or double pole
- Straight or right angle PC terminals
- Washable: epoxy sealed
- Brass, silver or gold plated contacts
- Actuators available in a variety of colors



**TR**

- Single or double pole
- Variety of contact materials
- Straight, right angle or wire-wrap PC terminals
- Washable: epoxy and O-ring sealed



**SMT TR**

- Surface mount, single pole
- With or without positioning pins
- Reflow solderable
- Protected against electrostatic discharge (ESD) up to 10KV
- Washable



**MBZ**

- Movement differential  $\leq 0.13\text{mm}$
- Available in NO, NC and change-over functions
- Solder lug or PC terminals
- Wide variety of actuators



**MAB**

- Movement differential  $\leq 0.4\text{mm}$
- Available in NO, NC and change-over functions
- Solder lug, quick connect, PCB and screw terminals available
- Wide variety of actuator styles



**MBB and MDB**

- Movement differential  $\leq 0.2\text{mm}$
- Available in NO, NC and change-over functions
- Solder lug, PC or quick connect terminals
- Plunger, hinge lever or roller lever actuators available



**G**

- Single or double pole, 2 or 3 positions
- Solder lug, straight PC or right angle terminals
- 6 different actuator length available
- Wide variety of contact materials



**25000N**

- Single or double pole
- Wave solderable
- Wide selection of actuator shapes and lengths
- UL 1054 approved



**NK**

- Single pole
- Straight or right angle PC terminals
- Stackable in X and Y directions
- Flushed and raised actuators positioning pins



**TG**

- Single pole
- Straight, right angle or wire-wrap terminal options
- Sealed: Single piece case, epoxy sealed terminals



**SLB**

- Single or double pole
- Positive spring loaded ball detent mechanism
- Vertical or right angle actuators
- Silver plated contacts and terminals



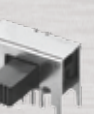
**SMT TG**

- Surface mount, single pole
- With or without positioning pins
- Reflow solderable
- Washable



**M**

- 1,2,4 and 6 pole
- Bifurcated wiping contact design
- Vertical and right angle actuators
- Many actuator styles and lengths available



**MSS**

- 1, 2 & 4 pole
- Bifurcated wiping contact design
- Gold or silver plated terminals with reinforced mounting legs
- Epoxy sealed



**IKE**

- Even and odd pole numbers
- Overall height from PCB: THR = 3.2mm, SMT = 3.8mm
- End-stackable
- Self-cleaning wiping contacts
- Raised or recessed actuators available



**IKD**

- Self-cleaning wiping contacts
- Gold plated terminals
- IR and vapor phase reflow soldering compatible
- Gull wing and J bend terminals
- Up to 12 number of ways
- Recessed actuators with top tape seal



**NDS/DP/DA**

- 1 to 12 positions
- Vertical, right angle or piano styles
- Raised or recessed, long or short actuators available
- Epoxy and top tape sealing options



**IKH**

- Low profile for very small PCB space requirements
- 1.27mm terminal to terminal pitch
- Process compatible
- Washable with standard tape seal



**IKN**

- Low profile with 2, 4, 6 and 8 positions
- Available in THR or SMT
- Overall height from PCB: THR = 4.0mm, SMT = 2.85mm
- Recessed actuator with positive detents
- Self-cleaning wiping/sliding contacts



**P36**

- Available in THR or SMT
- Ultra compact with 10 or 16 positions
- 3 different actuator types
- Straight or right angle terminations
- Washable: solder and flux sealed



**PT65**

- Available in THR
- 4, 6, 8, 10 & 16 positions
- 4 different actuator types
- Up to 4 code options
- Straight or right angle terminals
- Washable, solder and flux sealed



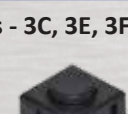
**UNIMEC - 154XX**

- Available in THR
- IP54 Sealed
- Max 250 mA/120V/9W
- Double pole
- Momentary or latching
- 8 contact functions



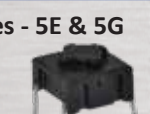
**MULTIMEC 3 series - 3C, 3E, 3F**

- Available in THR or SMT
- IP67 Sealed
- 50mA/24VDC
- 10,000,000 operations
- LED option
- Single pole / momentary (NO)



**MULTIMEC 5 series - 5E & 5G**

- Available in THR or SMT
- IP67 Sealed
- 50mA/24VDC
- 10,000,000 operations
- LED option
- Single pole / momentary, NO or NC/NO



**ILLUMEC - 4F**

- Illuminated switch
- Available in THR or SMT
- 50mA/24VDC
- 10,000,000 operations
- Single pole / momentary
- Normally open functions



**ULTRAMEC - 6C**

- Low profile
- J-bend
- IP67 Sealed
- 0.5 - 50mA/24VDC
- Single pole / momentary
- 3,000,000 operations





# MEC SWITCH CAP SELECTION GUIDE

<p><b>1SS</b></p> <ul style="list-style-type: none"> <li>• Solid, round cap</li> <li>• Ø6.5mm</li> <li>• Variable height options</li> <li>• 7 standard color options</li> <li>• For 5 series switch</li> </ul> 	<p><b>1IS</b></p> <ul style="list-style-type: none"> <li>• Fully-illuminated</li> <li>• Ø6.5mm</li> <li>• Variable height options</li> <li>• Transparent or frosted white</li> <li>• For 5 series switch</li> </ul> 	<p><b>1LS</b></p> <ul style="list-style-type: none"> <li>• Illuminated with lens</li> <li>• Ø6.5mm</li> <li>• Variable height options</li> <li>• 9 standard colors available</li> <li>• 5 lens colors options</li> <li>• For 5 series switch</li> </ul> 	<p><b>1NS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Teardrop-shaped cap</li> <li>• 13.3mm x 11.0mm, h=14.9mm</li> <li>• For 5G series switch</li> <li>• 3 standard colors available</li> </ul> 
<p><b>1JS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Low cap perfect for under overlay</li> <li>• Ø9.6mm, h=10.4mm</li> <li>• 9 standard color options</li> <li>• For 5G series switch</li> </ul> 	<p><b>1WAS/1WPS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Ellipse-shaped, convex / concave</li> <li>• 6.5mm x 12.5mm, h=14.9mm/15.7mm</li> <li>• For 5G series switch</li> <li>• 10 standard colors options</li> </ul> 	<p><b>1WDS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Ellipse-shaped, convex top cap</li> <li>• 8.0mm x 15.2mm, h=14.9mm</li> <li>• For 5G series switch</li> <li>• 10 standard colors options</li> </ul> 	<p><b>1VS</b></p> <ul style="list-style-type: none"> <li>• Panel sealed*</li> <li>• 10.4mm x 13.25mm</li> <li>• Half-ellipse, rounded cap</li> <li>• Solid or illuminated</li> <li>• For 5G series switch</li> <li>• 5 standard color options</li> <li>*add 1VW for IP65 sealing</li> </ul> 
<p><b>1US</b></p> <ul style="list-style-type: none"> <li>• Panel sealed*</li> <li>• Ø10.6mm, h=14.9mm</li> <li>• Rounded top surface</li> <li>• Solid or illuminated</li> <li>• For 5G series switch</li> <li>• 5 standard color options</li> <li>*add 1UW for IP67 sealing</li> </ul> 	<p><b>1DS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated, round cap, chamfer edge</li> <li>• Ø9.6mm, h=14.9mm</li> <li>• 18 color options</li> <li>• For 5G series switch</li> <li>• Standard legends available</li> </ul> 	<p><b>1ES</b></p> <ul style="list-style-type: none"> <li>• Illuminated with lens</li> <li>• Ø9.6mm, h=14.9mm</li> <li>• 7 standard color options</li> <li>• For 5G series switch</li> <li>• 5 lens color options</li> </ul> 	<p><b>1FS</b></p> <ul style="list-style-type: none"> <li>• Illuminated with lens</li> <li>• Ø9.6mm, h=14.9mm</li> <li>• 7 standard color options</li> <li>• For 5G series switch</li> <li>• 5 lens color options</li> <li>• Standard legends available</li> </ul> 
<p><b>10G</b></p> <ul style="list-style-type: none"> <li>• Concave top</li> <li>• Anti-rotation cutout</li> <li>• Ø11.5mm, h=4.9mm</li> <li>• for 6C / 3C switches</li> <li>• 5 standard color options</li> </ul> 	<p><b>1ZCS</b></p> <ul style="list-style-type: none"> <li>• Rounded top</li> <li>• Ø14.3mm, h=11.7mm</li> <li>• 11 standard color options</li> <li>• For 5G series switch</li> <li>• Standard legends available</li> </ul> 	<p><b>1GAS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Flat, round caps perfect for using under overlay</li> <li>• Ø11mm, h=12.5mm</li> <li>• For 5G series switch</li> <li>• 9 standard color options</li> </ul> 	<p><b>1GCS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Flat, round caps perfect for using under overlay</li> <li>• Ø15mm, h=12.5mm</li> <li>• For 5G series switch</li> <li>• 9 standard color options</li> </ul> 
<p><b>CONTROLMEC 1Z</b></p> <ul style="list-style-type: none"> <li>• Single cap for display navigation</li> <li>• Solid or illuminated</li> <li>• Ø29.5mm, h=12.0mm</li> <li>• 8 standard color options</li> <li>• For 5 series switch</li> </ul> 	<p><b>1ZW CONTROLMEC</b></p> <ul style="list-style-type: none"> <li>• Panel sealed up to IP67</li> <li>• Single cap for navigation</li> <li>• Solid or illuminated</li> <li>• Ø29.5mm, h=12.3mm</li> <li>• 8 cap color options</li> <li>• For 5 series switch</li> </ul> 	<p><b>NAVIMEC</b></p> <ul style="list-style-type: none"> <li>• Designed for display navigation</li> <li>• 11 standard cap colors</li> <li>• For 5G series switch</li> <li>• Standard legends available</li> <li>• Ø34.25mm h=11.7/12.2mm</li> </ul> 	<p><b>10R/10RF</b></p> <ul style="list-style-type: none"> <li>• Large round or flat cap</li> <li>• Solid or illuminated</li> <li>• Ø30mm, h=12.6/11mm</li> <li>• 8 standard color options</li> <li>• For 5G series switch</li> <li>• Standard legends available</li> </ul> 
<p><b>AQUAMEC</b></p> <ul style="list-style-type: none"> <li>• Round cap</li> <li>• Panel sealed up to IP67</li> <li>• Solid or illuminated</li> <li>• Ø10.6mm h=24.2 - 27.2mm</li> <li>• For 5G series switch</li> </ul> 	<p><b>VARIMEC Round</b></p> <ul style="list-style-type: none"> <li>• Round cap</li> <li>• 5 standard colors available</li> <li>• Variable heights</li> <li>• Ø5.2; 7.8; 11.6mm</li> <li>• h=10.4 - 22.5mm</li> <li>• For 3E series switch</li> </ul> 	<p><b>VARIMEC Square</b></p> <ul style="list-style-type: none"> <li>• Square cap</li> <li>• 5 standard colors available</li> <li>• Variable heights</li> <li>• Ø5.2; 7.8; 11.6mm</li> <li>• h=10.4 - 22.5mm</li> <li>• For 3E series switch</li> </ul> 	<p><b>10RM</b></p> <ul style="list-style-type: none"> <li>• Large round or flat cap</li> <li>• Metal plate front</li> <li>• Solid or illuminated</li> <li>• Ø30mm, h=11mm</li> <li>• For 5G series switch</li> <li>• Standard legends available</li> </ul> 
<p><b>1KBS / 1KCS</b></p> <ul style="list-style-type: none"> <li>• Illuminated</li> <li>• Convex or concave cap</li> <li>• 14.3mm x 14.3mm, h=20.2mm / 20.1mm</li> <li>• Bezel 2k option</li> <li>• Transparent lid, frosted white lens</li> </ul> 	<p><b>1TS</b></p> <ul style="list-style-type: none"> <li>• Panel sealed*</li> <li>• 10.6mm x 10.6mm</li> <li>• Rounded top surface</li> <li>• Solid or illuminated</li> <li>• For 5G series switch</li> <li>• 5 standard color options</li> <li>*add 1TW for IP67 sealing</li> </ul> 	<p><b>1KS</b></p> <ul style="list-style-type: none"> <li>• Square, flat cap</li> <li>• Solid or illuminated</li> <li>• 14.3mm x 14.3mm, h=19.1mm</li> <li>• For 5G series switch</li> <li>• 8 standard colors available</li> <li>• Bezel 2k option</li> </ul> 	<p><b>10Q/10QM</b></p> <ul style="list-style-type: none"> <li>• Large square, flat cap</li> <li>• Solid or illuminated</li> <li>• 22mm x 22mm, h=11mm</li> <li>• For 5G series switch</li> <li>• 8 standard color options (QM metal plate / frosted white)</li> <li>• Standard legends available</li> </ul> 
<p><b>1XS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Rectangular cap, rounded edges</li> <li>• 7.4mm x 9.4mm, h=18.5mm</li> <li>• For 5G series switch</li> <li>• 9 standard color options</li> </ul> 	<p><b>1PS</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Rectangular, concave cap</li> <li>• 12.5mm x 6.5mm, h=15.7mm</li> <li>• For 5 series switch</li> <li>• 9 standard color options</li> </ul> 	<p><b>1QS / 1RS</b></p> <ul style="list-style-type: none"> <li>• Illuminated</li> <li>• Rectangular, concave cap</li> <li>• 12.5mm x 6.5mm, h=15.7mm</li> <li>• For 5G series switch</li> <li>• Square (QS) or round (RS) lens</li> <li>• 3 standard color options</li> </ul> 	<p><b>1YS</b></p> <ul style="list-style-type: none"> <li>• For under overlay</li> <li>• Illuminated by chip LEDs on PCB</li> <li>• 15mm x 15mm, h=12.5mm</li> <li>• For 5E series switch</li> </ul> 
<p><b>1A/1H/1M/1ZA</b></p> <ul style="list-style-type: none"> <li>• Solid or illuminated</li> <li>• Multiple color &amp; legend options</li> <li>• Rectangular, rocker-style cap for 5G series</li> <li>• 1A/1H=12.5mm x 10.1mm, h=12.2mm</li> <li>• 1M=25.0mm x 10.1mm, h=12.2mm</li> <li>• 1ZA=18.65mm x 10.1mm, h=12.2mm</li> </ul> 	<p><b>1B + 2C/2D</b></p> <ul style="list-style-type: none"> <li>• Rocker-action cap</li> <li>• Illumination option</li> <li>• 15.1mm x 15.1mm, h=12.2mm</li> <li>• For 5G series switch</li> <li>• 8 standard color options</li> </ul> 	<p><b>2SS</b></p> <ul style="list-style-type: none"> <li>• Extender</li> <li>• Black</li> <li>• h=5.0 - 10.0mm</li> <li>• For 5G series switches and caps</li> </ul> 	<p><b>FOILMEC 1YAS</b></p> <ul style="list-style-type: none"> <li>• Square cap with round corners</li> <li>• Ø2.8mm indicator in corner</li> <li>• 15mm x 15mm, h=12.5mm</li> <li>• Illumination with LEDs on PCB</li> <li>• For 5E series switch</li> </ul> 
<p><b>16300 UNIMEC</b></p> <ul style="list-style-type: none"> <li>• Rectangular cap, convex top</li> <li>• Various bezel options</li> <li>• 6.0mm x 12.3mm</li> <li>• h=16.0mm or 20.5mm</li> <li>• 7 standard color options</li> <li>• Standard legends available</li> </ul> 	<p><b>16700 UNIMEC</b></p> <ul style="list-style-type: none"> <li>• Square cap, concave top</li> <li>• 14.9mm x 14.9mm, h=14.6mm</li> <li>• 7 standard color options</li> <li>• Standard legends available</li> </ul> 	<p><b>ROCKERMEC</b></p> <ul style="list-style-type: none"> <li>• Rocker style 10A cap</li> <li>• Panel sealed to IP67</li> <li>• 28.0mm x 10.6mm h=12.15mm</li> <li>• Standard legends available</li> <li>• For 5E/3C series switch</li> </ul> 	<p><b>10C</b></p> <ul style="list-style-type: none"> <li>• Round, 2 piece cap</li> <li>• Illuminated with diffuser</li> <li>• Slight concave surface</li> <li>• Ø19.2mm, h=13.7mm</li> <li>• For 5G series switch</li> </ul> 