

PCB SWITCH SELECTION GUIDE

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

A WORLD OF SWITCHING CAPABILITIES

PUSHBUTTONS

TOGGLES

ROCKERS

SNAP ACTION

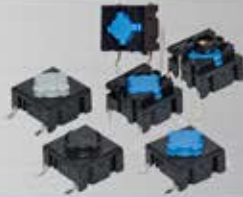
SLIDE

DIP & DIP CODED ROTARY

MEC SWITCHES AND CAPS

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



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 choices



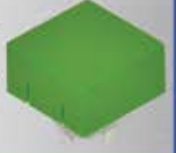
- 1IS**
- Fully-illuminated
 - Ø6.5mm
 - 7 standard height options
 - Transparent or frosted white



- 1LS**
- Illuminated, with lens
 - Ø6.5mm
 - 5 standard height options
 - Multiple colors available
 - 5 lens colors options



- 1KS**
- Solid or illuminated
 - Square, flat cap
 - 14.3mm x 14.3mm, h=19.1mm
 - Multiple colors and legends 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
 - 7 standard color options for non-illuminated
 - *add 1TW for IP67 sealing



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



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



- 1DS**
- Solid or illuminated, round cap
 - Ø9.6mm, h=14.9mm
 - 18 color options
 - Standard and custom 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 and custom legends available
 - 7 standard color options



- 1GAS**
- Solid or illuminated
 - Flat, round caps perfect for foil overlay
 - Ø11mm, h=12.5mm
 - 7 standard color options for solid



- 1GCS**
- Solid or illuminated
 - Flat, round caps perfect for foil overlay
 - Ø15mm, h=12.5mm
 - 7 standard color options for solid



- 1YS for 5E switch only**
- Illuminated by board chip LEDs
 - Square cap designed for foil overlay
 - 15mm x 15mm, h=12.5mm



- 1JS**
- Solid or illuminated
 - Low, flat caps perfect for foil overlay
 - Ø9.6mm, h=10.4mm
 - 7 standard color options for solid



- 1XS**
- Solid or illuminated
 - Rectangular cap
 - 7.4mm x 9.4mm, h=18.5mm
 - 18 standard solid color options



- 1PS**
- Solid or illuminated
 - Rectangular, concave cap
 - 12.5mm x 6.5mm, h=15.7mm
 - Multiple color options



- 1QS**
- Illuminated, with oblong lens
 - Rectangular, concave cap
 - 12.5mm x 6.5mm, h=15.7mm
 - Multiple color options



- 1RS**
- Illuminated, with round lens
 - Rectangular, concave cap
 - 12.5mm x 6.5mm, h=15.7mm
 - Multiple 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 & legend options



- 1ZW CONTROLMEC**
- Single cap panel sealed for display navigation
 - Solid or illuminated
 - Ø29.5mm, h=12.3mm
 - 8 solid cap color options
 - Standard & custom legend codes available



- 1Z CONTROLMEC**
- Single cap for display navigation
 - Solid or illuminated
 - Ø29.5mm, h=12.0mm
 - 8 solid cap color options
 - Standard & custom 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 & custom legends available



- 1NS**
- Solid or illuminated
 - Teardrop-shaped cap
 - 13.3mm x 11.0mm, h=14.9mm
 - Multiple solid & illuminated colors available



- 1WAS/1WPS**
- Solid or illuminated
 - Ellipse-shaped, convex or concave
 - 6.5mm x 12.5mm, h=15.0mm-15.7mm
 - Multiple solid colors available



- 1WDS**
- Solid or illuminated
 - Ellipse-shaped, convex top cap
 - 8.0mm x 15.3mm, h=15.0mm
 - Multiple solid 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
 - Several color options
 - Standard keycap legends available



- 16700 UNIMEC**
- Square cap
 - 14.9mm x 14.9mm, h=14.6mm
 - Several color options
 - Standard keycap legends available



- 10R/10RF/10RM**
- Large round cap
 - Optional metal legend
 - Solid or illuminated
 - Ø30mm, h=11mm
 - 7 standard solid color options



- 10Q/10QRM**
- Large square cap
 - Optional metal legend
 - Solid or illuminated
 - 22mm x 22mm, h=11mm
 - 7 standard solid color options



Panel switches

PCB switches

Joysticks

Switch panels

LED indicators