NEW SWITCH

HIGHLY RELIABLE TACTILE SWITCH

- IP67 sealing
- 3,000,000 cycles
- Dimensions 8x8mm
- Low profile h=2.5mm
- Crisp sound and feel
- Pins for accurate positioning
- Excellent for under overlay and custom caps
- Good when space is limited

- New cap 10G Ø11.5mm in 5 solid colours
- 6C+10G lowest solution in MEC range h=4.9mm
- Floating cap- easy alignment of PCB and front panel
- Soft actuator: no rattling from the cap when application gets shaken
ultramec™ ultramec™ 6C + 10G

- Low profile h=2.5 mm
- Dimensions: 8 x 8 mm
- IP67 sealing
- Temp. Range: -40/+85°C
- Lifetime: 3,000,000 cycles
- Actuation force: 3.7N +/- 0.7N

Cap series:
- Round
- Ø11.5 mm
- Concave
- Total height: 4.9 mm

All dimensions in mm. Tolerances +/- 0.2 mm.

DIMENSIONS

Switch 6C

6C+10G

PCB LAYOUT & CIRCUIT DIAGRAM

PACKAGING

Tape & Reel
- Tape width: 16
- Pitch: 12
- Reel: Ø330mm
- Quantity per reel: 1000 pcs
- MOQ: 1/2 reel 500 pcs

HOW TO ORDER

Switch  Mounting  Poles  Function  Positioning pins  Packaging  Cap  Colour code
6 C  J  1  NO  P  R  10G  00 blue
J-bend  single pole  normally open  optional  tape & reel  03 grey
08 red
09 black
36 signal white

Ordering example: 6CJ1NOPR + 10G09 or 6CJ1NOR

Specifications subject to changes. Please see updates of products and changes of specifications on www.mec.dk
# ultramec™ 6C

## ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact resistance</td>
<td>&lt;50mΩ</td>
</tr>
<tr>
<td>Insulation resistance</td>
<td>&gt;10MΩ</td>
</tr>
<tr>
<td>Recommended resistive load</td>
<td>0.5-50mA 24VDC</td>
</tr>
<tr>
<td>Contact bounce</td>
<td>&lt;2ms</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td>250V</td>
</tr>
</tbody>
</table>

## MECHANICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard actuation force:</td>
<td></td>
</tr>
<tr>
<td>Before soldering:</td>
<td>4.2N +/- 1.0N</td>
</tr>
<tr>
<td>After soldering:</td>
<td>3.7N +/- 0.7N</td>
</tr>
<tr>
<td>Max. actuation force</td>
<td>100N for 10 sec</td>
</tr>
<tr>
<td>Key travel</td>
<td>0.3mm +/- 0.15mm</td>
</tr>
<tr>
<td>Lifetime</td>
<td>3,000,000 cycles</td>
</tr>
</tbody>
</table>

## TEMPERATURE RANGE

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-40/+85°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40/+85°C</td>
</tr>
<tr>
<td>SOLDERING (SMD)</td>
<td>JEDEC J-STD-020C</td>
</tr>
<tr>
<td>Sealing IEC 529</td>
<td>IP67</td>
</tr>
</tbody>
</table>

## MATERIAL SPECIFICATIONS - SWITCHES

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>PPS</td>
</tr>
<tr>
<td>Actuator</td>
<td>Silicon</td>
</tr>
<tr>
<td>Contact dome</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Fixed contacts</td>
<td>CuZn +1µNi + 4µAg</td>
</tr>
<tr>
<td>Terminals</td>
<td>CuZn +1µNi</td>
</tr>
</tbody>
</table>
Ultramec™ is a whole new switch family designed and produced by MEC Switches in Denmark. The low profile 6C is just the first one out of the pipeline.

**ONE FOOTPRINT, MANY FUNCTIONS**

The keyword for the new switch family is modularity. Different versions of ultramec use the same number of terminals and the same bottom part of the housing, it is the top parts that define the height, function and options available.

**FUTURE OPTIONS**

The ten terminals are designed to adapt to evolving requirements, such as illumination including RGB option as well as NC/NO and double pole function.

The future versions of Ultramec™ will be 5G series snap-action caps.

Only J-bend terminals are offered as a standard option.
WORLDWIDE SALES & CUSTOMER SUPPORT

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