Keylock / rotary switches for PCB

Keylock switches for PCB mounting. Matching with the RS 76 full-travel key switches and the RF 15 and RF 19 tactile switches.

• All products are RoHS compliant.
## Content

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</tbody>
</table>
# MICROMEC Keylock switches, IP54

## Technical Data

### General information
- Color: see order block
- Form of collar: square

### Dimensions
- Length of collar: 19 mm
- Width of collar: 19 mm
- Overall height: 19.5 mm

### Mechanical design
- Mounting: soldering
- Terminals: tin-plated
- Contact system: cross contact self cleaning
- Contact function: see order block
- Contact materials: Au alloy
- Illuminability: no
- Lock: Micromec
- Wafers: 5
- Lock type: 001
- Number of locking positions: 500
- Main key: on request
- Key removal position: see order block

### Mechanical characteristics
- Switching torque: 0.04 ... 0.10 Nm
- Robustness max.: 2 Nm
- Dielectric strength AC min.: 500 V
- Rated power max.: 1 W

### Electrical characteristics
- Rated voltage: 2 ... 35 V
- Rated current max.: 100 mA
- Contact resistance when new max.: 100 mΩ
- Contact resistance acc. to life max.: 200 mΩ
- Insulation resistance: $10^5$ Ω
- ESD strength max.: 8 kV

### Other specifications
- Rotating angle: see order block
- Operating life: 10,000
- Degree of protection from front side: IP54
- Ambient temp. operating min.: -25 °C
- Ambient temp. operating max.: +70 °C
- Storage temperature min.: -40 °C
- Storage temperature max.: +80 °C
- Environmental resistance: acc. to IEC 60068-2-14, -30, -33 and -78
- Flammability of materials: UL 94 HB
- ROHS compliant: yes
- REACH compliant: yes

## Accessories MICROMEC - Keylock switch IP54

<table>
<thead>
<tr>
<th>Description</th>
<th>Photo</th>
<th>Order no.</th>
<th>Additional accessories see page</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-ring for keylock switch</td>
<td><img src="image" alt="O-ring" /></td>
<td>5.30.120.015/0100</td>
<td>5 - 31</td>
</tr>
</tbody>
</table>
## Table (continued) – Accessories MICROMEC - Keylock switch IP54

<table>
<thead>
<tr>
<th>Description</th>
<th>Photo</th>
<th>Order no.</th>
<th>Additional accessories see page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare key, (delivery content 1 key)</td>
<td><img src="image1.jpg" alt="Photo" /></td>
<td>5.58.007.001/0000</td>
<td>-</td>
</tr>
<tr>
<td>Spare key, for double action, e.g. 2 x 90° (delivery content 1 key)</td>
<td><img src="image2.jpg" alt="Photo" /></td>
<td>5.58.008.001/0000</td>
<td>-</td>
</tr>
<tr>
<td>Spare key for 3 angles, f.ex. 3 x 90° degree (content 1 key)</td>
<td><img src="image3.jpg" alt="Photo" /></td>
<td>5.58.009.001/0100</td>
<td>-</td>
</tr>
<tr>
<td>Spare key for 4 angles, f.ex. 4 x 90 degrees, (content 1 key)</td>
<td><img src="image4.jpg" alt="Photo" /></td>
<td>5.58.010.001/0100</td>
<td>-</td>
</tr>
</tbody>
</table>
**Dimensional drawing**

**Circuit diagram**

Hole patterns PCB
View on component side

<table>
<thead>
<tr>
<th>Switching position</th>
<th>Contact function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td><img src="image" alt="Contact function diagram for switching position 0" /></td>
</tr>
<tr>
<td>1</td>
<td><img src="image" alt="Contact function diagram for switching position 1" /></td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Contact function diagram for switching position 2" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Contact function diagram for switching position 3" /></td>
</tr>
</tbody>
</table>
## PCB KEY SWITCHES

### MICROMEC - KEYLOCK SWITCHES IP 54

**MICROMEC**

**Keylock switch IP54**

Technical data see page 4 - 173

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**Key Swit-ches**

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### Contact function | Color | Rotating angle | Key removal position | Order no.
--- | --- | --- | --- | ---
momentary | charcoal grey | 1 x 40° | 0 | 3.13.026.041/0000
momentary | light grey | 1 x 40° | 0 | 3.13.026.541/0000
latching | charcoal grey | 1 x 90° | 0 | 3.13.026.001/0000
latching | light grey | 1 x 90° | 0 | 3.13.026.501/0000
latching | charcoal grey | 1 x 90° | 0+1 | 3.13.026.006/0000
latching | light grey | 1 x 90° | 0+1 | 3.13.026.506/0000
latching | charcoal grey | 3 x 90° | 0 | 3.13.026.021/0000
latching | light grey | 3 x 90° | 0+1+2+3 | 3.13.026.026/0000
latching | charcoal grey | 3 x 90° without stop | 0 | 3.13.026.031/0000
latching | light grey | 3 x 90° without stop | 0 | 3.13.026.531/0000
latching | charcoal grey | 4 x 90° without stop | 0+1+2+3 | 3.13.026.036/0000
latching | light grey | 4 x 90° without stop | 0+1+2+3 | 3.13.026.536/0000
latching | charcoal grey | 2 x 90° | 0 | 3.13.026.011/0000
latching | light grey | 2 x 90° | 0 | 3.13.026.511/0000
latching | charcoal grey | 2 x 90° | 0+1+2 | 3.13.026.016/0000
latching | light grey | 2 x 90° | 0+1+2 | 3.13.026.516/0000
latching | charcoal grey | 2 x 90° | 0 | 3.13.026.601/0000
latching | light grey | 2 x 90° | 0+1+3 | 3.13.026.606/0000
latching | charcoal grey | 2 x 90° | 0+1+3 | 3.13.026.856/0000

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2 keys included.

Other lock variants available on request.
EUROLOCKS

Keylock switches, IP54

Technical Data

→ General information
  Color                     see order block
  Form of collar            square

→ Dimensions
  Length of collar          19 mm
  Width of collar           19 mm
  Overall height            19.5 mm

→ Mechanical design
  Mounting                  soldering
  Terminal                  tin-plated
  Contact system            cross contact self cleaning
  Contact function          latching
  Contact materials         Au alloy
  Illuminability            no
  Lock                      Eurolocks
  Wafer                     5
  Lock type                 801
  Number of locking positions 50
  Main key                  no
  Symmetric key             yes
  Key removal position      see order block

→ Mechanical characteristics
  Switching torque          0.04 ... 0.10 Nm
  Robustness max.           2 Nm
  Dielectric strength AC min. 500 V
  Rated power max.          1 W

→ Electrical characteristics
  Rated voltage             2 ... 35 V
  Rated current max.        100 mA
  Contact resistance when new max. 100 mΩ
  Contact resistance acc. to life max. 200 mΩ
  Insulation resistance     $10^9$ Ω
  ESD strength max.         8 kV

→ Other specifications
  Rotating angle            see order block
  Operating life            10,000
  Degree of protection from front side IP54
  Ambient temp. operating min. -25 °C
  Ambient temp. operating max. +70 °C
  Storage temperature min.  -40 °C
  Storage temperature max.  +80 °C
  Environmental resistance  acc. to IEC 60068-2-14, -30, -33 and -78
  Flammability of materials  UL 94 HB
  ROHS compliant            yes
  REACH compliant           yes

Accessories EUROLOCKS - Keylock switch IP54

→ Description                            Photo       Order no.     Additional accessories see page
  O-ring for keylock switch               📸          5.30.120.015/0100 5 - 31
### Table (continued) –
**Accessories EUROLOCKS - Keylock switch IP54**

<table>
<thead>
<tr>
<th>Description</th>
<th>Photo</th>
<th>Order no.</th>
<th>Additional accessories see page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare key (delivery content 1 key)</td>
<td></td>
<td>5.58.006.801/0000</td>
<td></td>
</tr>
</tbody>
</table>

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**EUROLOCKS**

**Keylock switch IP54**

Technical data see page 4 - 177

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<table>
<thead>
<tr>
<th>Contact function</th>
<th>Color</th>
<th>Rotating angle</th>
<th>Key removal position</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>1 x 90°</td>
<td>0</td>
<td>3.13.009.001/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>1 x 90°</td>
<td>0</td>
<td>3.13.009.006/0000</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>1 x 90°</td>
<td>0+1</td>
<td>3.13.009.031/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>1 x 90°</td>
<td>0+1</td>
<td>3.13.009.036/0000</td>
</tr>
</tbody>
</table>

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2 keys included.
Other lock variants available on request.
For the switching arrangement, refer to Micromec keylock switch IP54.
Either 2 or 3 different keys are required, depending on the angle between positions. Key 1 can switch to position 1, key 2 can switch to position 1 and 2, etc.

### Technical Data

#### General information
- **Color**: see order block
- **Form of collar**: square

#### Dimensions
- **Length of collar**: 19 mm
- **Width of collar**: 19 mm
- **Overall height**: 19.5 mm

#### Mechanical design
- **Mounting**: soldering
- **Terminals**: tin-plated
- **Contact system**: cross contact self cleaning
- **Contact function**: see order block
- **Contact materials**: Au alloy
- **Illuminability**: no
- **Lock**: Micromec
- **Wafers**: 5
- **Lock type**: 001
- **Number of locking positions**: 500
- **Main key**: on request
- **Key removal position**: see order block

#### Mechanical characteristics
- **Switching torque**: 0.04 ... 0.10 Nm
- **Robustness max.**: 2 Nm
- **Dielectric strength AC min.**: 500 V
- **Rated power max.**: 1 W

#### Electrical characteristics
- **Rated voltage**: 2 ... 35 V
- **Rated current max.**: 100 mA
- **Contact resistance when new max.**: 100 mΩ
- **Contact resistance acc. to life max.**: 200 mΩ
- **Insulation resistance**: $10^7$ Ω
- **ESD strength max.**: 8 kV

#### Other specifications
- **Rotating angle**: see order block
- **Operating life**: 10,000
- **Degree of protection from front side**: IP54
- **Ambient temp. operating min.**: -25 °C
- **Ambient temp. operating max.**: +70 °C
- **Storage temperature min.**: -40 °C
- **Storage temperature max.**: +80 °C
- **Environmental restistance acc. to IEC 60068-2-14, -30, -33 and -78**:
- **Flammability of materials**: UL 94 HB
- **ROHS compliant**: yes
- **REACH compliant**: yes
Accessories Priority keylock switch IP54

<table>
<thead>
<tr>
<th>Description</th>
<th>Photo</th>
<th>Order no.</th>
<th>Additional accessories see page</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-ring for keylock switch</td>
<td></td>
<td>5.30.120.015/0100</td>
<td>5 - 31</td>
</tr>
<tr>
<td>Set of keys for 2 x 90° type (2 keys)</td>
<td></td>
<td>5.58.099.012/0000</td>
<td>-</td>
</tr>
<tr>
<td>Set of keys for 3 x 90° type (3 keys)</td>
<td></td>
<td>5.58.099.013/0000</td>
<td>-</td>
</tr>
</tbody>
</table>

Priority keylock switch IP54

Technical data see page 4 - 179

Contact function  Color  Rotating angle  Key removal position  Order no.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>3 x 90°</td>
<td>0</td>
<td>3.13.027011/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>3 x 90°</td>
<td>0</td>
<td>3.13.027511/0000</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>3 x 90°</td>
<td>0+1+2+3</td>
<td>3.13.027016/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>3 x 90°</td>
<td>0+1+2+3</td>
<td>3.13.027516/0000</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>2 x 90°</td>
<td>0</td>
<td>3.13.027001/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>2 x 90°</td>
<td>0</td>
<td>3.13.027501/0000</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>2 x 90°</td>
<td>0+1+2</td>
<td>3.13.027006/0000</td>
</tr>
<tr>
<td>latching</td>
<td>light grey</td>
<td>2 x 90°</td>
<td>0+1+2</td>
<td>3.13.027506/0000</td>
</tr>
</tbody>
</table>

2 sets of keys included.

Other lock variants available on request.

For the switching arrangement, see IP54 Micromec keylock switch.

Either 2 or 3 different keys are required, depending on the angle between positions. Key 1 can switch to position 1, key 2 can switch to position 1 and 2, etc.
ROTARY SWITCHES, IP40

Technical Data

→ General information
  Color: see order block
  Form of collar: square

→ Dimensions
  Length of collar: 19 mm
  Width of collar: 19 mm
  Overall height: 24 mm

→ Mechanical design
  Mounting: soldering
  Terminals: tin-plated
  Contact system: cross contact self cleaning
  Contact function: see order block
  Contact materials: Au alloy
  Illuminability: no

→ Mechanical characteristics
  Torque against stop min.: 0.45 Nm
  Dielectric strength AC min.: see order block
  Rated power max.: 1 W

→ Electrical characteristics
  Rated voltage max.: 35 V
  Rated current max.: 100 mA
  Contact resistance when new max.: 200 mΩ
  Contact resistance acc. to life max.: 200 mΩ
  Insulation resistance: 10² Ω
  ESD strength max.: 8 kV

→ Other specifications
  Rotating angle: see order block
  Operating life: 50,000
  Degree of protection from front side: IP40 (DIN EN 60529)
  Ambient temp. operating min.: -25 °C
  Ambient temp. operating max.: +70 °C
  Storage temperature min.: -40 °C
  Storage temperature max.: +80 °C
  Environmental restistance: acc. to IEC 60068-2-14, -30, -33 and -78
  Flammability of materials: UL 94 HB
  ROHS compliant: yes
  REACH compliant: yes
Rotary switch IP40

Technical data see page 4 - 181

<table>
<thead>
<tr>
<th>Contact function</th>
<th>Color</th>
<th>Rotating angle</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>1 x 90°</td>
<td>3.13.007.001/0152</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>3 x 90°</td>
<td>3.13.007.021/0152</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>4 x 90°</td>
<td>3.13.007.031/0152</td>
</tr>
<tr>
<td>latching</td>
<td>charcoal grey</td>
<td>2 x 90°</td>
<td>3.13.007.011/0152</td>
</tr>
</tbody>
</table>

Other color variants available on request