CHERRY MX1A-LxxA/B

High-precision MX keyswitch specially engineered for RGB Multicolor Illumination

Red switch: Without pressure point, linear light actuation - switching function with a defined force of approx. 45 cN without contact feedback.

A shining example: The new CHERRY MX RGB switch. Globally pioneering technology for precision mechanical keyswitches. Optimised for use with SMD LEDs, which make the keyboard shine in all RGB colours with high luminosity. Every key can be illuminated individually in a different color. Engineered and Made in Germany.

Key benefits

- Red switch: Without pressure point, linear light actuation - switching function with a defined force of approx. 45 cN without contact feedback
- MX switch variant optimised for use with SMD LEDs (RGB or single colour)
- More consistent lighting throughout the keycap due to optimised, transparent casing and scattering surface including lens.
- Option to use all 16.7 million RGB colours in high luminosity (scope of supply does not include LED)
- SMD LEDs directly mounted on the circuit board for cost-efficient, fully automated production
- High-precision mechanical keyswitch based on the MX standard
- World exclusive CHERRY Gold Crosspoint technology
- Short bounce time for high switching frequency (such as for fast typing)

- Self-cleaning contacts, resistant to dust and dirt
- Over 100 million keystrokes / contact switches per module with no loss of quality
- Engineered and Made in Germany.

Technical Data:

**Housing colour:**
Transparent cover, plain base

**Keymodule:**
- Switch type: MX
- Protection class: IP40
- Operation characteristics: RED SWITCH Linear (45 cN)

Technical Data:

- Fastening: Product dependant, see table "Models"
- Switching voltage: 12 V AC/DC max.
- Switching current: 10 mA AC/DC max.
- Dielectric strength: 500 V / 50Hz
- Durability: > 100 million actuations
- Contact configuration: Single-pole contact
- Actuator travel: 4.0 mm
- Pretravel: 2 mm
- Initial force: 30 cN min.
- Actuation force: 45 cN
- Bounce time: typically < 1 ms
- Standard lead spacing: 19.05 mm (16 mm min.)
- Lighting: SMD LED can be mounted directly on the circuit board (not included in the module), opening for SMD LED in the base.
- Decoupling diode: no
- Wire jumper: no
- Insulation materials: Thermoplastics (min.UL 94 HB)
- Spring: Stainless steel
- Contacts: High-quality gold alloy

For detailed information and the layout of the details described above, please do not hesitate to ask for our technical specifications and drawing.
Warranty:
2 years

Errors, technical changes and delivery possibilities excepted. Technical information refers only to the specifications of the products. Features may differ from the information provided.
<table>
<thead>
<tr>
<th>Models:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>CHERRY MX RGB Keyswitch</td>
<td>MX1A-L1NA</td>
<td>Snap fastening in frame</td>
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<tr>
<td>2</td>
<td>CHERRY MX RGB Keyswitch</td>
<td>MX1A-L1NB</td>
<td>Fixing pins in the printed circuit board</td>
</tr>
</tbody>
</table>
CHERRY MX1A-Lxxx

The Original: Key module with CHERRY Gold Crosspoint technology

Red switch: Linear easy actuation without pressure point with minimal resistance.
Original CHERRY MX is the world’s leading precision technology for mechanical key modules. The CHERRY Gold Crosspoint contact concept and the unprecedented production quality “made in Germany” are unique. MX inside ensures unrivalled quality, precision and reliability.

Key benefits

- Red switch: Linear easy actuation without pressure point with minimal resistance
- Mechanical high-precision key module
- In use worldwide for Original CHERRY keyboards and in keyboards of demanding input device manufacturers
- Safe and long-lasting reliability of switching performance and characteristics
- Short bounce time for high switching frequency (such as for fast typing)
- Self-cleaning contacts, resistant to dust and dirt
- Over 50 million keystrokes / contact switches per module with no loss of quality
- Proven a billion times over and continuously developed
- World exclusive CHERRY Gold Crosspoint technology

Technical Data:

Keymodule:

- Switch type: MX
- Protection class: IP40
- Operation characteristics: RED SWITCH Linear (45 cN)
- Fastening: Product dependent, see table "Models"
- Switching voltage: 12 V AC/DC max.
- Switching current: 10 mA AC/DC max.
- Dielectric strength: 500 V / 50Hz
- Durability: > 50 million actuations
- Contact configuration: Single-pole contact
- Actuator travel: 4.0 - 0.4 mm
- Pretravel: 2 ± 0.6 mm
- Initial force: 30 cN min.
- Actuation force: 45 ± 15 cN
- Bounce time: < 5 ms (during actuation with 0.4 m/s)
- Standard lead spacing: 19.05 mm (16 mm min.)
- Decoupling diode: Product dependent, see table "Models"
- Wire jumper: Product dependent, see table "Models"
- Insulation materials: Thermoplastics (min.UL 94 HB)
- Spring: Stainless steel
- Contacts: High-quality gold alloy
- Storage Temperature: 5°C to 40°C
- Operating Temperature: -40°C to 70°C
- Humidity: Storage: average <50% max. 3 months / 75% max. 15 days, operation: 5% to 95% without condensation

For detailed information and the layout of the details described above, please do not hesitate to ask for our technical specifications and drawing.

Warranty:

2 years

Errors, technical changes and delivery possibilities excepted. Technical information refers only to the specifications of the products. Features may differ from the information provided.
## Models:

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<th>Product name</th>
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<th>Fastening</th>
<th>Decoupling diode</th>
<th>Wire jumper</th>
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<tbody>
<tr>
<td>1</td>
<td>CHERRY MX1A-Lxxx</td>
<td>MX1A-L1DN</td>
<td>Snap fastening in frame</td>
<td>yes</td>
<td>no</td>
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<td>2</td>
<td>CHERRY MX1A-Lxxx</td>
<td>MX1A-L1DW</td>
<td>Fixing pins in the printed circuit board</td>
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<td>no</td>
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<td>3</td>
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<td>MX1A-L1NN</td>
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<td>5</td>
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<td>MX1A-L1NW</td>
<td>Fixing pins in the printed circuit board</td>
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