TR110 Lock
Safety locking device with transponder monitoring
TR110 Lock
SAFETY LOCKING DEVICES

Technical data overview

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Type</td>
<td>Type 4, Transponder (EN ISO 14119)</td>
</tr>
<tr>
<td>Actuator coding level</td>
<td>High coding level (EN ISO 14119)</td>
</tr>
<tr>
<td>Type of output</td>
<td>Self-monitoring semiconductor outputs (OSSDs)</td>
</tr>
<tr>
<td>Locking principle</td>
<td>Power to lock / power to release (depending on type)</td>
</tr>
<tr>
<td>Locking monitoring</td>
<td>✔</td>
</tr>
<tr>
<td>Door monitoring</td>
<td>✔</td>
</tr>
<tr>
<td>Locking force $F_{\text{max}}$</td>
<td></td>
</tr>
<tr>
<td>With straight actuator</td>
<td>3,900 N (EN ISO 14119)</td>
</tr>
<tr>
<td>With angled actuator</td>
<td>1,500 N (EN ISO 14119)</td>
</tr>
<tr>
<td>With hinged actuator</td>
<td>2,600 N (EN ISO 14119)</td>
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<tr>
<td>Connection type</td>
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<td></td>
<td>Plug connector, M12, 5-pin (depending on type)</td>
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<tr>
<td>LED</td>
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Product description

The TR110 Lock safety locking device unites the best of proven technologies: high manipulation protection of the transponder technology for monitoring the actuator and the ruggedness and reliability of the mechanical locking device. The self-monitoring semiconductor outputs (OSSDs) with PL e (EN ISO 13849) result in a high level of safety, both for the door and for the locking monitoring. The optional escape release enables unlocking of the locking device from the hazardous area. The variants with two illuminable pushbuttons make it possible to trigger control signals such as door requests or resets directly on the safety switch.

At a glance

- PL e for door and locking monitoring (EN ISO 13849)
- Locking force: up to 3,900 N
- Actuator with high coding level (EN ISO 14119)
- Connection type: IP67, IP69K
- Power to lock or power to release variants
- Three actuation directions
- Optional emergency release
- Variants with two illuminable pushbuttons

Your benefits

- Highest level of safety for door and locking monitoring with just one device
- High level of machine availability due to a rugged metal locking head and high locking force
- High coding level of the actuator fulfills the requirements of EN ISO 14119 on manipulation protection without additional measures
- Easy mounting thanks to three actuation directions
- The escape release enables use of the locking device in applications in which the hazardous area is not completely visible
- Illuminable pushbuttons make triggering of control signals directly on the device possible
- Additional application diagnostic outputs simplify diagnostics

Fields of application

- Hazardous areas with fully body access
- Hazardous areas with partial body access
- Protection of persons in the event of the machine making dangerous overrun movements
- Applications requiring a high level of manipulation protection
- Applications requiring a high locking force
Ordering information
Other models and accessories → www.sick.com/TR110_Lock

- **Locking principle:** power to lock
- **Connection type Detail:** plug connector, M12, 8-pin
- **Safe series connection:** no
- **Challenges:** manipulation protection
- **Functional principle:** Transponder
- **Switch type:** Safety locking device
- **Safety level:** PL e, SIL3, SILCL3
- **Actuator coding level:** High coding level
- **Housing material:** Plastic/metal

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TR110 Lock
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- **Locking principle:** power to lock
- **Connection type Detail:** plug connector, M12, 8-pin
- **Safe series connection:** with Flexi Loop (with diagnostics)
- **Challenges:** manipulation protection
- **Functional principle:** Transponder
- **IP69K, IP67**
- **Switch type:** Safety locking device
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- **Escape release:** ✔
- **Challenges:** manipulation protection
- **Functional principle:** Transponder
- **IP69K, IP67**
- **Switch type:** Safety locking device
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- **Locking principle**: power to lock
- **Connection type Detail**: plug connector, M12, 8-pin, plug connector, M12, 5-pin
- **Safe series connection**: with T-connector (without diagnostics)
- **Challenges**: manipulation protection
- **Functional principle**: Transponder
- **IP69K, IP67**
- **Switch type**: Safety locking device
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- **Safe series connection**: with T-connector (without diagnostics)
- **Challenges**: manipulation protection
- **Functional principle**: Transponder
- **IP69K, IP67**
- **Switch type**: Safety locking device
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- **Safe series connection**: with T-connector (without diagnostics)
- **Escape release**: ✔
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- **Locking principle**: power to lock
- **Connection type Detail**: plug connector, M12, 8-pin, plug connector, M12, 5-pin
- **Safe series connection**: no
- **Pushbuttons**: ✓
- **Challenges**: manipulation protection
- **Functional principle**: Transponder
- **Switch type**: Safety locking device
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