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

Technical data overview

<table>
<thead>
<tr>
<th></th>
<th>Type</th>
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<tbody>
<tr>
<td></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_{max})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With straight actuator 3,900 N (EN ISO 14119)</td>
</tr>
<tr>
<td></td>
<td>With angled actuator 1,500 N (EN ISO 14119)</td>
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<tr>
<td></td>
<td>With hinged actuator 2,600 N (EN ISO 14119)</td>
</tr>
<tr>
<td>Connection type</td>
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<tr>
<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)
- Enclosure rating: 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

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- **Connection type Detail:** plug connector, M12, 8-pin
- **Safe series connection:** no
- **Safety task:** Safety locking function of doors
- **Challenges:** manipulation protection, Simple diagnostics
- **Functional principle:** Transponder
- **Special ambient conditions:** IP69K, IP67
- **Switch type:** Safety locking device
- **Safety level:** PL e, SIL3, SILCL3
- **Actuator coding level:** High coding level
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- **Escape release:** ✔

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SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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