

i110-M0454 i110 Lock

SAFETY LOCKING DEVICES





Ordering information

Туре	part no.
i110-M0454	6051602

Other models and accessories → www.sick.com/i110_Lock

actuator not supplied with delivery







Detailed technical data

Features

Sensor principle	Electro-mechanical
Locking principle	Power to release
Positive action N/C solenoid monitoring contacts	2
N/O solenoid monitoring contacts	0
Positive action N/C door monitoring contacts	1
N/O door monitoring contacts	0
N/C contact for door monitoring	0
Locking force F _{max}	2,500 N (EN ISO 14119) ¹⁾
Locking force F _{Zh}	2,000 N (EN ISO 14119) ²⁾
Actuation force	≥ 35 N
Retaining force	≤ 30 N
Actuation frequency	≤ 1,200 /h
Actuation directions	5
Approach speed	≤ 20 m/min

 $^{^{1)}}$ 1500 N with angled actuator.

Safety-related parameters

B _{10d} parameter	5 x 10 ⁶ switching cycles (with small load)
Туре	Type 2 (EN ISO 14119)
Actuator coding level	Low coding level (EN ISO 14119)
Safe state in the event of a fault	The switch has no internal fault detection and is unable to assume a safe state in the event of a fault. Fault detection is performed by the connected safety-related logic unit.

²⁾ 1150 N with angled actuator.

Functions

Safe series connection	With Flexi Loop (with diagnostics)

Interfaces

Connection type	Plug connector, M12, 8-pin
Coupling nut material	Brass

Electronics

Contamination rating	3
Switching principle	Slow action switching element
Usage category	AC-15/DC-13 (IEC 60947-5-1)
Rated operating current (voltage)	1 A (24 V AC) 1 A (24 V DC)
Rated insulation voltage U _i	30 V
Rated impulse with stand voltage $\mathbf{U}_{\mathrm{imp}}$	1,500 V AC
Type of output	Electro-mechanical contacts
Power consumption	≤8 W
Short-circuit protection	1 A gG
Switching voltage	≥ 12 V DC
Switching current (switching voltage)	1 mA (24 V DC)
Switch-on time of magnet	100 %
Locking principle	Power to release

Mechanics

Weight	0.5 kg
Housing material	Glass-fiber reinforced thermoplastic
Actuator head material	Metal
Mechanical life	1 x 10 ⁶ switching cycles

Ambient data

Enclosure rating	IP67 (IEC 60529)
Ambient operating temperature	-20 °C +55 °C
Storage temperature	-20 °C +55 °C

Certificates

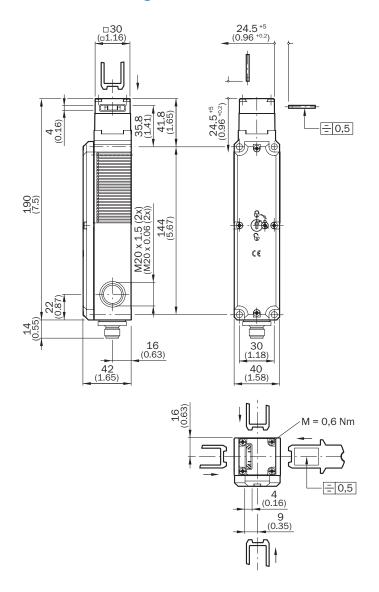
EU declaration of conformity	✓
UK declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Classifications

ECLASS 5.0	27272603
ECLASS 5.1.4	27272603
ECLASS 6.0	27272603
ECLASS 6.2	27272603

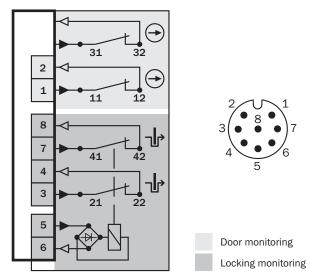
ECLASS 7.0	27272603
ECLASS 8.0	27272603
ECLASS 8.1	27272603
ECLASS 9.0	27272603
ECLASS 10.0	27272603
ECLASS 11.0	27272603
ECLASS 12.0	27272603
ETIM 5.0	EC002593
ETIM 6.0	EC002593
ETIM 7.0	EC002593
ETIM 8.0	EC002593
UNSPSC 16.0901	39122205

Dimensional drawing



Dimensions in mm (inch)

Pinouts



- → Positive action N/C locking monitoring contact
- $\ensuremath{\boxdot}$ Positive action N/C door monitoring contact

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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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For us, that is "Sensor Intelligence."

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