Data sheet

i14-M0303 Lock

i14 Lock

SAFETY LOCKING DEVICES

SICK
Sensor Intelligence.

actuator not supplied with delivery

Ordering information

Type	part no.
i14-M0303 Lock	6025062

Other models and accessories → www.sick.com/i14_Lock

Detailed technical data

Features

Sensor principle	Electro-mechanical
Locking principle	Power to release
Positive action N/C solenoid monitoring contacts	3
N/O solenoid monitoring contacts	0
Positive action N/C door monitoring contacts	0
N/O door monitoring contacts	0
N/C contact for door monitoring	0
Locking force F_{max}	1,000 N (EN ISO 14119)
Locking force F_{Zh}	770 N (EN ISO 14119)
Actuation force	≥ 12 N
Retaining force	≤ 50 N [1]
Actuation frequency	≤ 3,600 /h
Actuation directions	3
Approach speed	≤ 10 m/min

[1] With actuator iE14-S1; max. 12 N with actuator iE14-S2.

Safety-related parameters

B_{10d} parameter	2 x 10^6 switching cycles (with small load)
Type	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.

Functions

Safe series connection	None, only individual wiring (with diagnostics)

Interfaces

Connection type	Cable gland, 1 x M20
Conductor cross section	≤ 1.5 mm²
Display elements	LEDs
Status display	✓

Electronics

Switching principle	Slow action switching element
Usage category	AC-15/DC-13 (EN 60947-5-1)
Rated operating current (voltage)	3 A (240 V AC) 2 A (24 V DC)
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	2,500 V
Type of output	Electro-mechanical contacts
Power consumption	≤ 7 W
Short-circuit protection	3 A gG
Switching voltage	≥ 5 V DC
Switching current (switching voltage)	5 mA (5 V DC)
Solenoid operating voltage	(20.4 V DC ... 26.4 V DC)
Switch-on time of magnet	100 %
Locking principle	Power to release

Mechanics

Weight	0.37 kg
Housing material	Glass-fiber reinforced thermoplastic
Mechanical life	1 x 10^6 switching cycles

Ambient data

Enclosure rating	IP65 (IEC 60529)
Ambient operating temperature	–20 °C ... +60 °C
Storage temperature	–10 °C ... +60 °C

Certificates

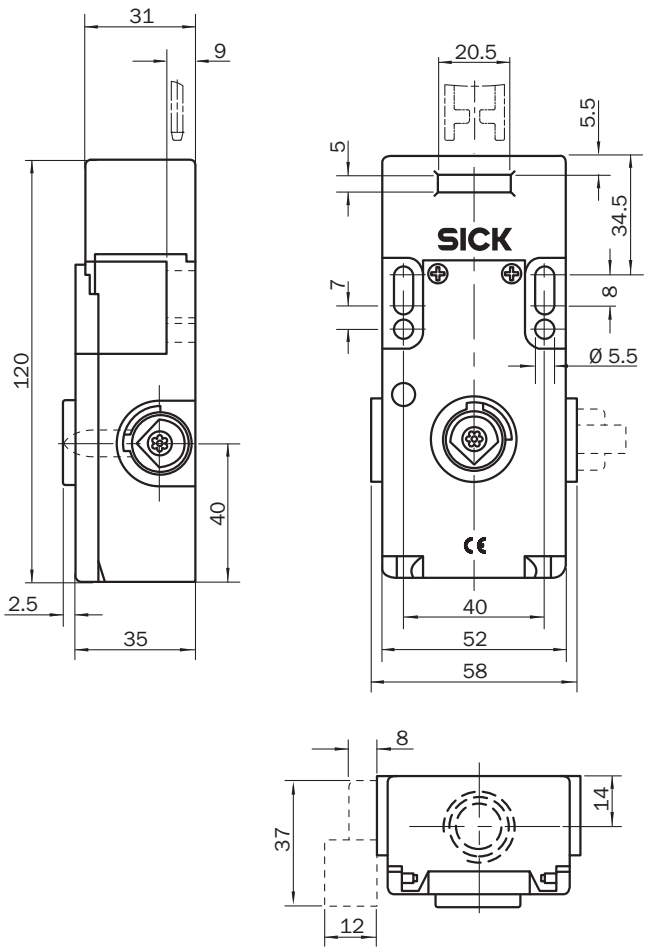
EU declaration of conformity	✓
UK declaration of conformity	✓
cULus certificate	✓
TÜV approval	✓
TÜV approval annex	✓

Classifications

ECLASS 5.0	27272603
ECLASS 5.1.4	27272603
ECLASS 6.0	27272603
ECLASS 6.2	27272603
ECLASS 7.0	27272603

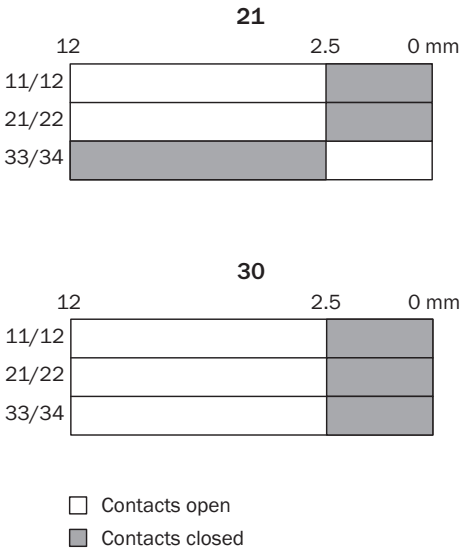
ECLASS 8.0	27272603
ECLASS 8.1	27272603
ECLASS 9.0	27272603
ECLASS 10.0	27272603
ECLASS 11.0	27272603
ECLASS 12.0	27272603
ETIM 5.0	EC002593
ETIM 6.0	EC002593
ETIM 7.0	EC002593
ETIM 8.0	EC002593
UNSPSC 16.0901	39122205

Dimensional drawing

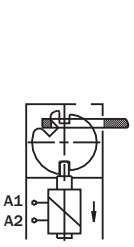
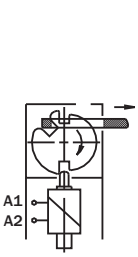
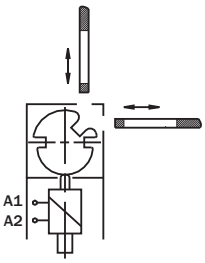


Dimensions in mm (inch)

Actuator travel diagram Contact action over the entire actuator withdrawl distance (full insertion = 0 mm)



Switching elements

	Actuator inserted		Actuator removed
	locked	unlocked	
			
Switching element 21	11 12 21 22 33 34	11 12 21 22 33 34	11 12 21 22 33 34
Switching element 30	11 12 21 22 31 32	11 12 21 22 31 32	11 12 21 22 31 32

Positive action N/C locking monitoring contact

Switching element 21:
2 positive action N/C contacts + 1 N/O contact

Switching element 30:
3 positive action N/C contacts

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Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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