



DATA SHEET

i14-M0213 Lock

i14 Lock
Safety locking devices

SAFETY LOCKING DEVICES

i14-M0213 Lock

ORDERING INFORMATION

Type	part no.
i14-M0213 Lock	6025060

Further device versions and accessories at www.sick.com/i14_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	1
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	$\leq 3,600$ /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	2×10^6 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	$\leq 1.5 \text{ mm}^2$
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	$\leq 7 \text{ W}$
Short-circuit protection	3 A gG
Switching voltage	$\geq 5 \text{ V DC}$
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	1×10^6 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	✓

SWITCHING ELEMENTS

	Actuator inserted		Actuator removed
	locked	unlocked	
Switching element 21	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ 33 \text{ o} \text{---} 34 \end{matrix}$	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ 33 \text{ o} \text{---} 34 \end{matrix}$	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ 33 \text{ o} \text{---} 34 \end{matrix}$
Switching element 30	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ \downarrow 31 \text{ o} \text{---} 32 \end{matrix}$	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ \downarrow 31 \text{ o} \text{---} 32 \end{matrix}$	$\begin{matrix} \circ \\ \downarrow 11 \text{ o} \text{---} 12 \\ \downarrow 21 \text{ o} \text{---} 22 \\ \downarrow 31 \text{ o} \text{---} 32 \end{matrix}$

⌞ 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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6025060



SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence