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DATA SHEET

i10-M0253 Lock

i10 Lock
Safety locking devices

SICK Sensor Intelligence



actuator not supplied with delivery

SAFETY LOCKING DEVICES

i10-M0253 Lock

ORDERING INFORMATION

Type	part no.
i10-M0253 Lock	6027397

Further device versions and accessories at www.sick.com/i10_Lock

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	0
N/O door monitoring contacts	1
N/C contact for door monitoring	1
Locking force F_{max}	1,300 N (EN ISO 14119)
Locking force F_{Zh}	1,000 N (EN ISO 14119)
Actuation force	≥ 10 N
Retaining force	≤ 20 N
Actuation frequency	≤ 1,200 /h
Actuation directions	4
Approach speed	≤ 20 m/min

SAFETY-RELATED PARAMETERS

B_{10d} parameter	3×10^6 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, 3 x M20
Conductor cross section	0.34 mm² ... 1.5 mm²

ELECTRONICS

Contamination rating	3
Switching principle	Slow action switching element
Usage category	AC-15/DC-13 (IEC 60947-5-1)
Rated operating current (voltage)	4 A (230 V AC) 4 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	≤ 8 W
Short-circuit protection	4 A gG
Switching voltage	≥ 12 V DC
Switching current (switching voltage)	1 mA (24 V DC)
Solenoid supply voltage	20.4 V DC ... 26.4 V DC
Switch-on time of magnet	100 %
Locking principle	Power to release

MECHANICS

Weight	0.46 kg
Material	
Housing	Glass-fiber reinforced thermoplastic
Mechanical life	1×10^6 switching cycles

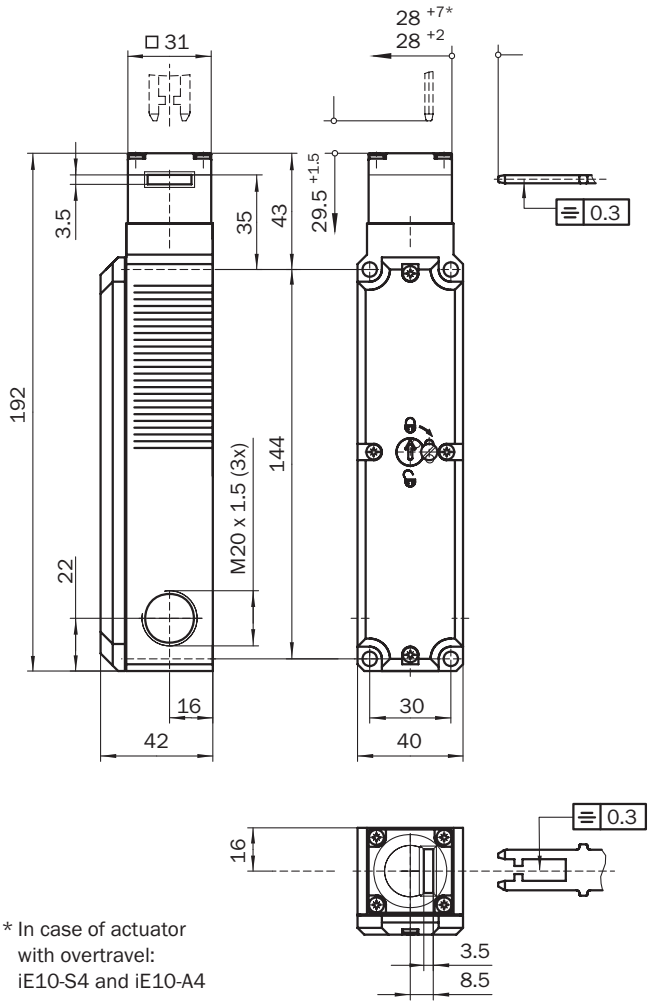
AMBIENT DATA

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	✓

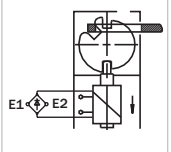
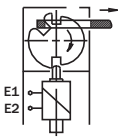
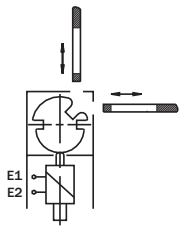
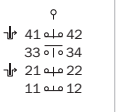
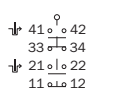
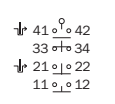
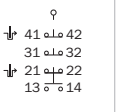
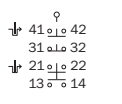
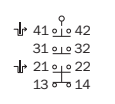
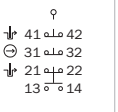
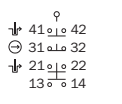
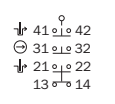
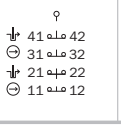
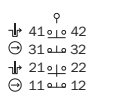
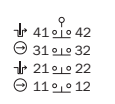
DIMENSIONAL DRAWING



* In case of actuator with overtravel: iE10-S4 and iE10-A4

Dimensions in mm (inch)

SWITCHING ELEMENTS

	Actuator inserted		Actuator removed
	locked	unlocked	
			
Switching element 23			
Switching element 25			
Switching element 31			
Switching element 45			

Positive action N/C locking monitoring contact
Positive action N/C door monitoring contact

Switching element 23:
2 positive action N/C contacts + 1 N/O contact (Locking monitoring)
1 N/C contact (Door monitoring)

Switching element 25:
2 positive action N/C contacts (Locking monitoring)
1 N/C contact + 1 N/O contact (Door monitoring)

Switching element 31:
2 positive action N/C contacts (Locking monitoring)
1 positive action N/C + 1 N/O contact (Door monitoring)

Switching element 45:
2 positive action N/C contacts (Locking monitoring)
2 positive action N/C contacts (Door monitoring)

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/6027397

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SICK AT A GLANCE

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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

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