



i10-E0233 Lock

i10 Lock

SAFETY LOCKING DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
i10-E0233 Lock	6022585

The actuator has to be ordered separately. See "Accessories" for further

Details.

Other models and accessories → www.sick.com/i10_Lock

actuator not supplied with delivery



Detailed technical data

Features

Number of positive action N/C solenoid monitoring contacts	2
Number of N/O solenoid monitoring contacts	1
Number of positive action N/C door monitoring contacts	0
Number of N/O door monitoring contacts	0
Number of N/C door monitoring contacts	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
Actuation frequency	≤ 7,000 /h
Actuation directions	4
Approach speed	≤ 20 m/min

Safety-related parameters

B_{10d} parameter	3 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.

Interfaces

Connection type	Cable gland, 3 x M20
Conductor cross-section	0.34 mm ² ... 1.5 mm ²

Electrical data

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
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 operating voltage	(20.4 V DC ... 26.4 V DC)
Duty cycle	100 %

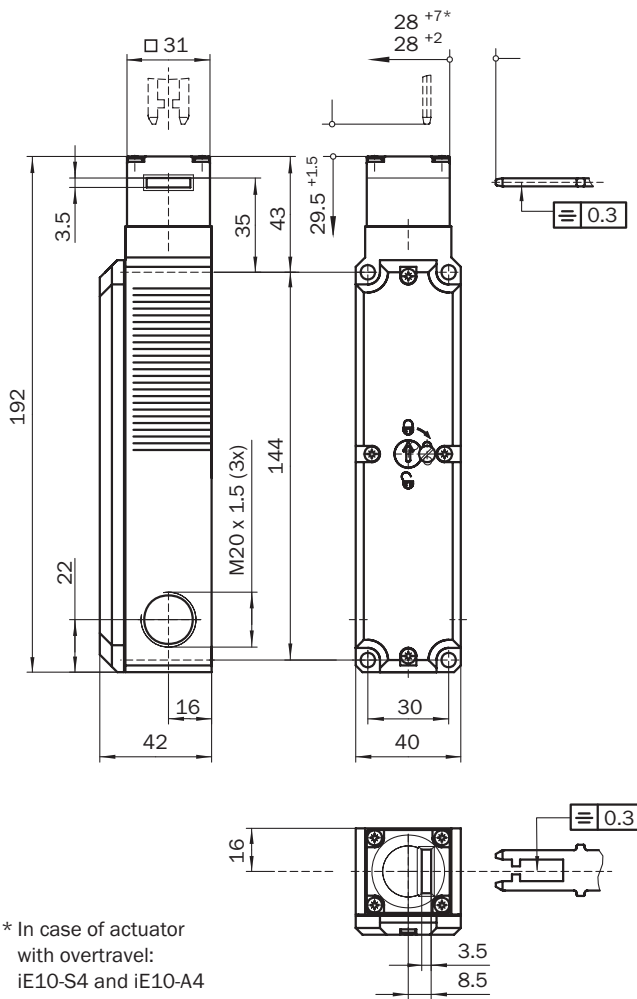
Mechanical data

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

Ambient data

Enclosure rating	IP 67 (IEC 60529)
Ambient operating temperature	-20 °C ... +55 °C
Storage temperature	-20 °C ... +55 °C
Contamination rating	3

Dimensional drawing (Dimensions in mm (inch))



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

Switching elements

	Actuator inserted		Actuator removed
	locked	unlocked	
Switching element 23	♀ ↓ 41 42 33 34 ↓ 21 22 11 12	♀ ↓ 41 42 33 34 ↓ 21 22 11 12	♀ ↓ 41 42 33 34 ↓ 21 22 11 12
Switching element 25	♀ ↓ 41 42 31 32 ↓ 21 22 13 14	♀ ↓ 41 42 31 32 ↓ 21 22 13 14	♀ ↓ 41 42 31 32 ↓ 21 22 13 14
Switching element 31	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 13 14	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 13 14	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 13 14
Switching element 45	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 ⊖ 11 12	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 ⊖ 11 12	♀ ↓ 41 42 ⊖ 31 32 ↓ 21 22 ⊖ 11 12

↓ 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)