Data sheet

i200-M0413 Lock

i200 Lock

SAFETY LOCKING DEVICES

SICK
Sensor Intelligence.

actuator not supplied with delivery

Ordering information

Type	part no.
i200-M0413 Lock	6025115

Other models and accessories → www.sick.com/i200_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	2
N/O door monitoring contacts	1
N/C contact for door monitoring	0
Locking force F_{max}	2,600 N (EN ISO 14119) [1]
Locking force F_{Zh}	2,000 N (EN ISO 14119)
Retaining force	≤ 30 N
Actuation frequency	≤ 3,600 /h
Actuation directions	3
Approach speed	≤ 10 m/min

[1] Only in combination with the delivered fixing screws, otherwise 1950 N.

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, 3 x M20
Display elements	LEDs
Status display	✓

Electronics

Switching principle	Slow action switching element
Usage category	AC-15/DC-13 (IEC 60947-5-1)
Rated operating current (voltage)	3 A (240 V AC) 3 A (24 V DC)
Rated insulation voltage U_i	500 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	0.55 kg
Housing material	Glass-fiber reinforced polyester
Mechanical life	1 x 10^6 switching cycles

Ambient data

Enclosure rating	IP65
Ambient operating temperature	–20 °C ... +60 °C
Storage temperature	–20 °C ... +60 °C

Certificates

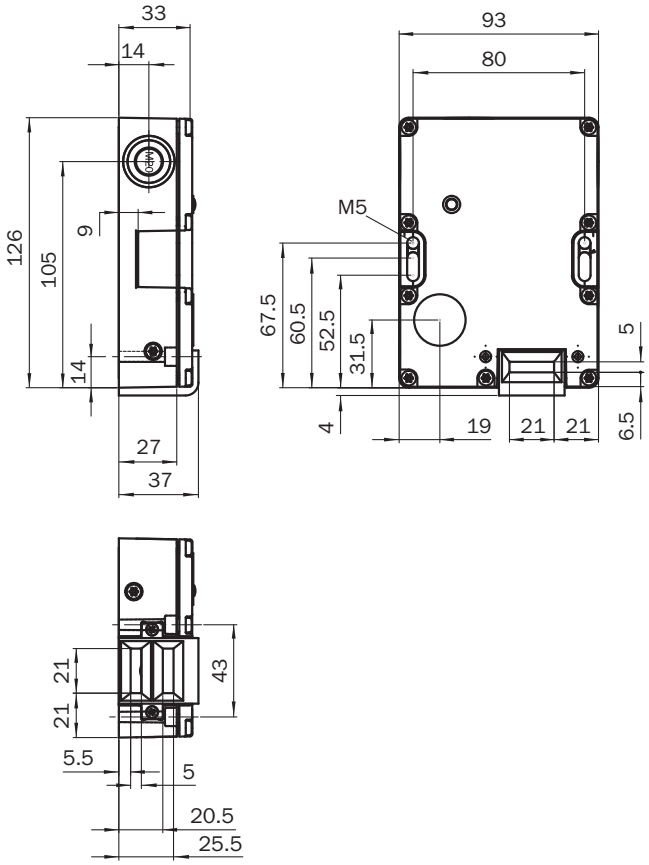
EU declaration of conformity	✓
UK declaration of conformity	✓
cULus certificate	✓
TÜV approval	✓
TÜV approval annex	✓

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

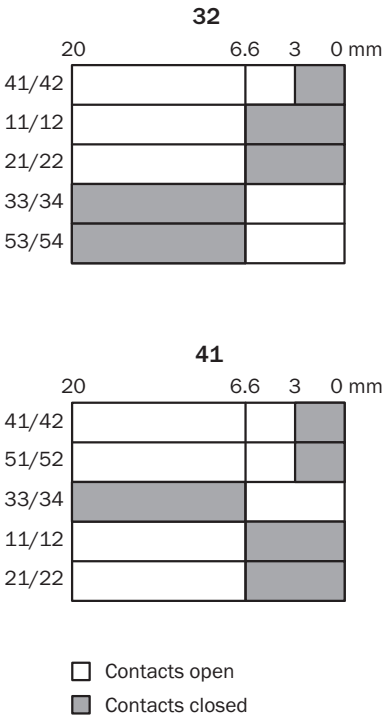
ECLASS 8.1	27272603
ECLASS 9.0	27272603
ECLASS 10.0	27272603
ECLASS 11.0	27272603
ECLASS 12.0	27272603
ETIM 5.0	EC002593
ETIM 6.0	EC002593
ETIM 7.0	EC002593
ETIM 8.0	EC002593
UNSPSC 16.0901	39122205

Dimensional drawing

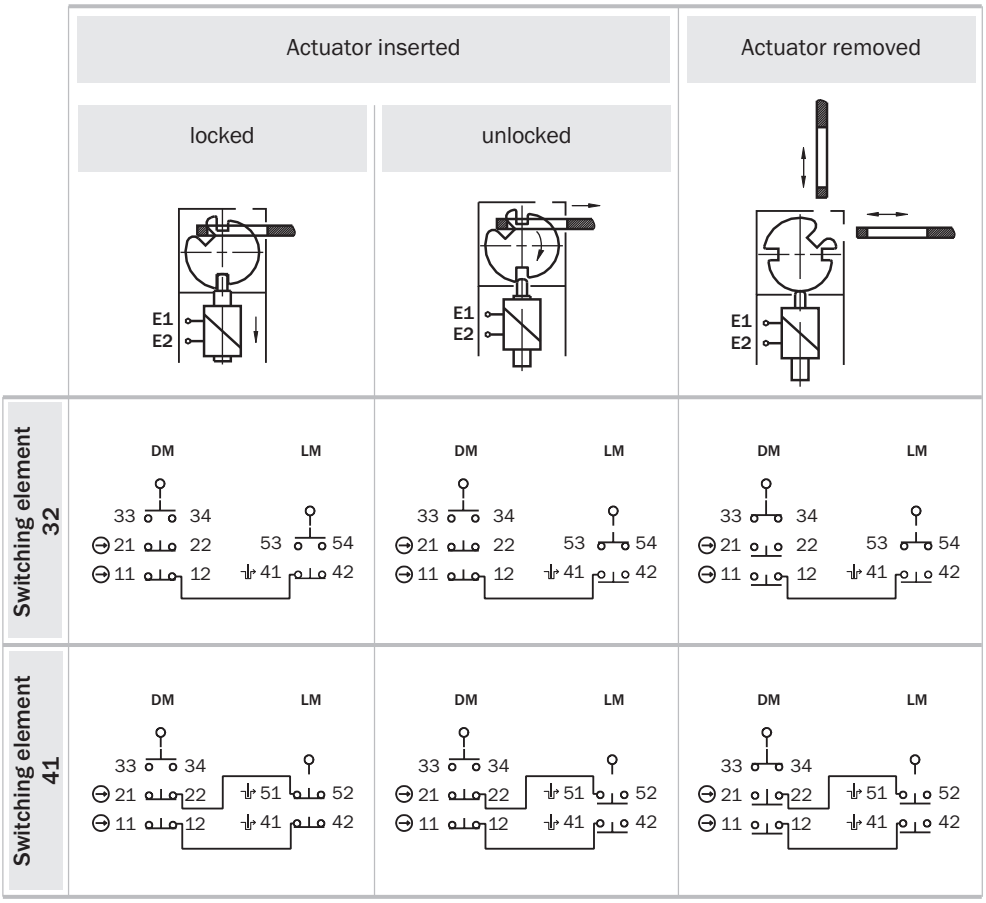


Dimensions in mm (inch)

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



Switching elements



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

LM: Locking monitoring contacts
DM: Door monitoring contacts

Switching element 32:
1 positive action N/C contact + 1 N/O contact (Locking monitoring)
2 positive action N/C contacts + 1 N/O contact (Door monitoring)

Switching element 41:
2 positive action N/C contacts (Locking monitoring)
2 postivie action N/C contacts + 1 N/O contact (Door monitoring)

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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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