



SICK Sensor Intelligence.

**ELECTRO-MECHANICAL SAFETY SWITCHES** 



### Ordering information

Туре	Part no.
i12-SA203	6025100

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

Details.

Other models and accessories -> www.sick.com/i12S

actuator not supplied with delivery



#### Detailed technical data

#### Features

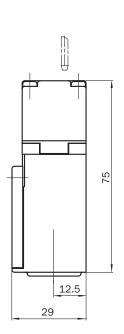
reatures	
Number of positive action N/C contacts	2
Number of N/O contacts	0
Retaining force	≤ 6 N
Actuation frequency	≤ 7,200 /h
Actuation directions	5
Approach speed	≤ 10 m/min
Safety-related parameters	
B <sub>10d</sub> parameter	$2 \times 10^6$ switching cycles (with small load)
Туре	Type 2 (EN ISO 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	No
Interfaces	
Connection type	Cable gland, 1 x M16
Conductor cross-section	≤ 1.5 mm²
Electrical data	
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) 2 A (24 V DC)
Rated insulation voltage U <sub>i</sub>	240 V
Rated impulse withstand voltage $\mathbf{U}_{\text{imp}}$	2,500 V AC

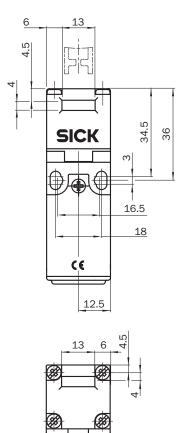
## i12-SA203 | i12S

ELECTRO-MECHANICAL SAFETY SWITCHES

Switching voltage> 5 V DCSwitching current (switching voltage)> 5 m A (5 V DC)Mechanical data0.08 kgHousing material0.08 kgMechanical life0.38 stiching cyclesAmbient data1 x 10 <sup>6</sup> switching cyclesEnclosure ratingP67 (IEC 60529)Ambient operating temperature-20 °C +80 °CStorage temperature-20 °C +80 °C		740/404
Switching ourged (switching voltage)> 5 mA (5 V DC)Mechanical dataWeight0.08 kgHousing materialGias-fiber reinforced thermoplasticMechanical life1 x 10 <sup>6</sup> switching cyclesAmbient dataEnclosure ratingIP67 (IEC 60529)Ambient operating temperature-20 °C +80 °CStorage temperature-20 °C +80 °CClassificationsECless 5.027272602ECless 5.427272602ECless 6.027272602ECless 6.127272602ECless 6.22727202ECless 6.32727202ECless 7.02727202ECless 7.02727202ECless 6.12727202ECless 6.22727202ECless 7.02727202ECless 7.0	Short-circuit protection	T10/10A
Mechanical data      Weight 0.08 kg     Gass-fiber reinforced thermoplastic Mechanical life 0.18 kg     Is an 0 <sup>6</sup> switching cycles      Ambient data      Enclosure rating PP67 (EC 60529) Amblent operating temperature 0.20 °C +80 °C     Cocc +80 °C     Cocc +80 °C     Cocc +80 °C      Ecless 5.0 27272602      Ecless 5.14 27272602      Ecless 5.14 27272602      Ecless 6.0 27272602      Ecless 8.1 2772602      Ecless 8.1 2772602      Ecless 8.1 2772602      Ecless 1.0 2772602      Ecl		
Weight0.08 kgHousing materialGlass-fiber reinforced thermoplasticMochanical life1x 10 <sup>6</sup> switching cyclesAmbient dataPF67 (IEC 60529)Ambient operating temperature-20 °C +80 °CStorage temperature-20 °C +80 °CStorage temperature-20 °C +80 °CCless 5.020 °C +80 °CECless 5.12727602ECless 6.02727602ECless 6.22727602ECless 6.22727602ECless 7.02727602ECless 8.12727602ECless 8.12727602ECless 9.02727602ECless 9.02727602ECless 1.02727602ECless 1.02727602ETIM 5.0EClos592ETIM 5.0EClos592<	Switching current (switching voltage)	≥ 5 mA (5 V DC)
Housing materialGlass-fiber reinforced thermoplasticMechanical life1 x 10 <sup>6</sup> switching cyclesAmbient dataEnclosure ratingP67 (IEC 60529)Ambient operating temperature-20 °C +80 °CStorage temperature-20 °C +80 °CClassifications20 °C +80 °CEcless 5.02727602Ecless 6.027272602Ecless 6.227272602Ecless 7.027272602Ecless 8.127272602Ecless 8.127272602Ecless 9.027272602Ecless 1.027272602Ecless 1.027272602Ecless 1.027272602Erless 1.027272602 <th>Mechanical data</th> <th></th>	Mechanical data	
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	UNSPSC 16.0901	39122205

## Dimensional drawing (Dimensions in mm (inch))

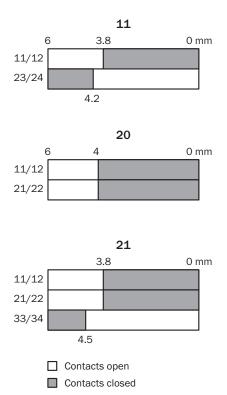




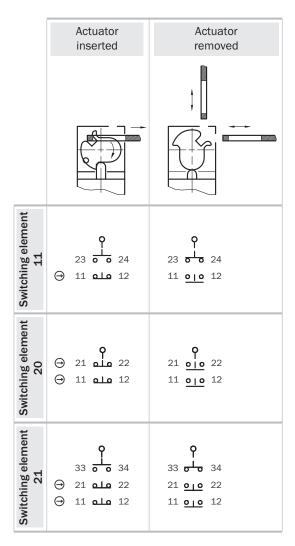
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## Actuator travel diagram

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



### Switching elements



#### Switching element 11:

1 positive action N/C contact + 1 N/O contact

Switching element 20: 2 positive action N/C contacts

#### Switching element 21:

2 positive action N/C contacts + 1 N/O contact

# SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.

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

For us, that is "Sensor Intelligence."

## WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com



Online data sheet

