



## ES11-SA1A4

ES11

SAFETY COMMAND DEVICES

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
ES11-SA1A4	6051327

Other models and accessories → [www.sick.com/ES11](http://www.sick.com/ES11)



### Detailed technical data

#### Features

<b>Positive action N/C contacts</b>	2
<b>N/O contacts</b>	0
<b>Actuation directions</b>	1
<b>Dimensions (W x H x D)</b>	40 mm x 123 mm x 52 mm
<b>Items supplied</b>	Including retaining clip

#### Safety-related parameters

<b>B<sub>10d</sub> parameter</b>	2.5 x 10 <sup>5</sup> switching cycles
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#### Functions

<b>Safe series connection</b>	With Flexi Loop (with diagnostics)
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#### Interfaces

<b>Connection type</b>	Plug connector, M12, 4-pin
Coupling nut material	PBT

#### Electronics - Operating data

<b>Protection class</b>	III (EN 50178)
<b>Switching principle</b>	Slow action switching element
<b>Positive action N/C contacts</b>	2
<b>N/O contacts</b>	0
<b>Usage category</b>	DC-13 (EN 60947-5-1)
<b>Rated operating current (voltage)</b>	2 A (24 V DC)
<b>Contact material</b>	AgNi
<b>Electrical life</b>	
Emergency stop pushbuttons	5 x 10 <sup>4</sup> switching cycles

#### Mechanics

<b>Dimensions</b>	40 mm x 123 mm x 52 mm
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<b>Weight</b>	112 g
<b>Housing material</b>	PBT
<b>Mechanical life</b>	
Emergency stop pushbuttons	5 x 10 <sup>4</sup> switching cycles

Ambient data

<b>Enclosure rating</b>	IP65 (EN 60529)
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>Storage temperature</b>	-25 °C ... +80 °C

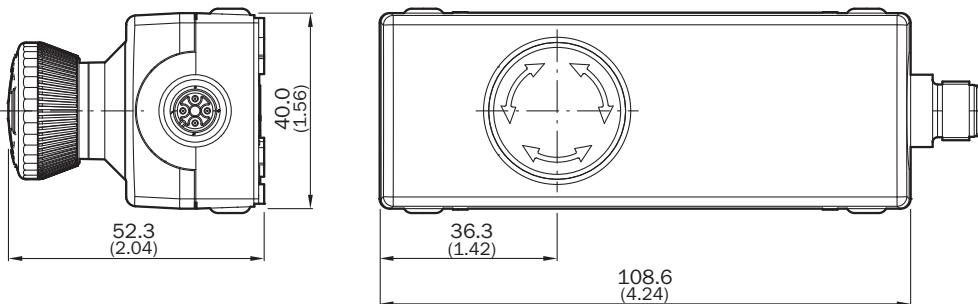
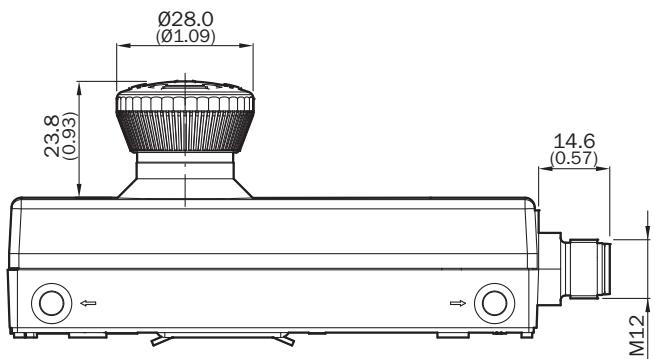
Certificates

<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>ULus approval</b>	✓
<b>Third party certificate</b>	✓

Classifications

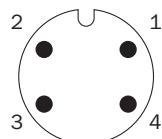
<b>ECLASS 5.0</b>	27371228
<b>ECLASS 5.1.4</b>	27371228
<b>ECLASS 6.0</b>	27371244
<b>ECLASS 6.2</b>	27371244
<b>ECLASS 7.0</b>	27371244
<b>ECLASS 8.0</b>	27371244
<b>ECLASS 8.1</b>	27371244
<b>ECLASS 9.0</b>	27371244
<b>ECLASS 10.0</b>	27371244
<b>ECLASS 11.0</b>	27371244
<b>ECLASS 12.0</b>	27371244
<b>ETIM 5.0</b>	EC002034
<b>ETIM 6.0</b>	EC002034
<b>ETIM 7.0</b>	EC002034
<b>ETIM 8.0</b>	EC002034
<b>UNSPSC 16.0901</b>	39121545

## Dimensional drawing



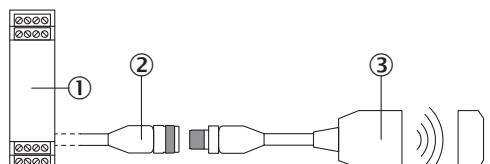
Dimensions in mm (inch)

## Pinouts



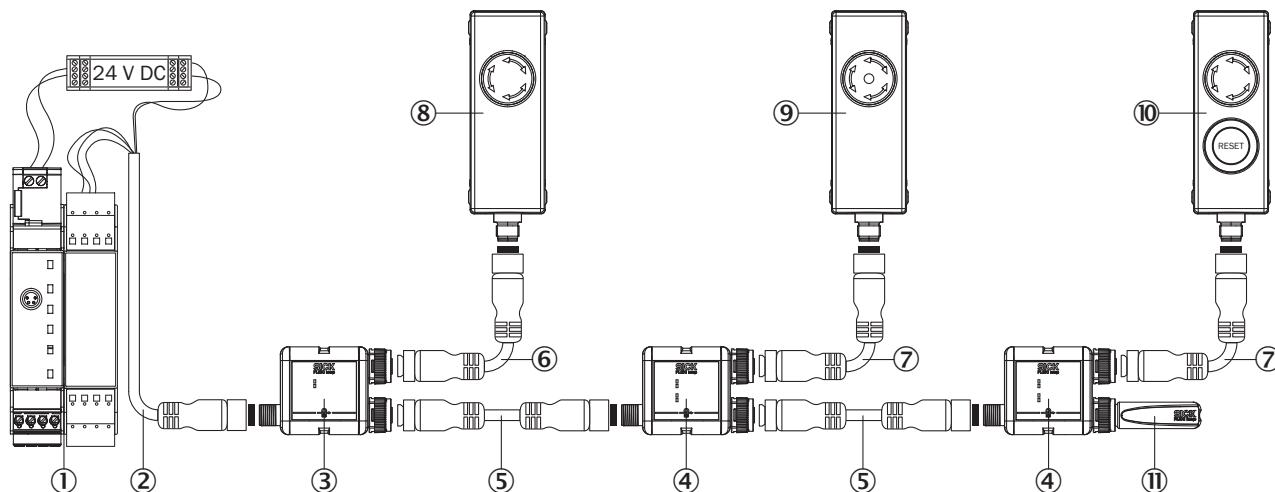
1	N/C contact
2	
3	N/C contact
4	

## Connection single sensor



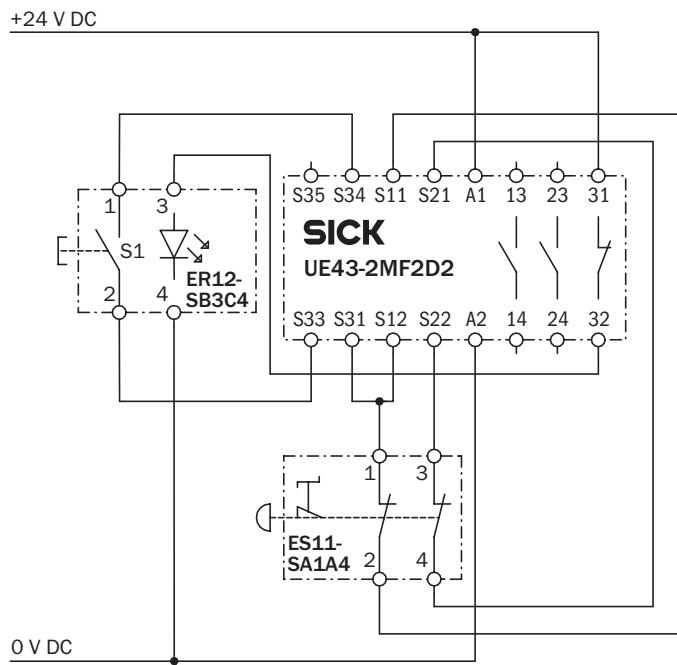
- ① Safe evaluation unit
- ② connecting cable with M12 female connector, 4-pin and flying leads (e.g. YF2A14-xxxVB3XLEAX)
- ③ ES11-SA1A4 emergency stop pushbutton

Series connection with Flexi Loop (with diagnostics)



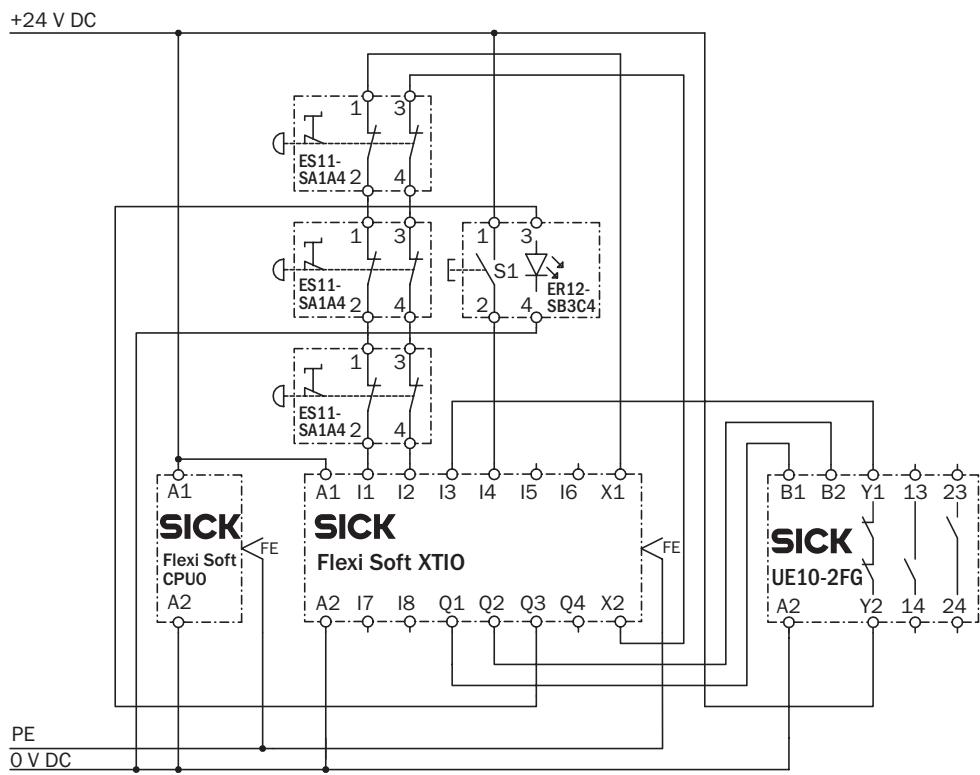
- ① Flexi Soft safety controller
- ② connecting cable with M12 female connector, 5-pin and flying leads (e.g., YF2A15-xxxVB5XLEAX)
- ③ FLN-EMSS0000105 Flexi Loop node
- ④ FLN-EMSS1100108 Flexi Loop node
- ⑤ Connection cable with 5-pin, M12 male connector and 5-pin, M12 female connector (e.g., YF2A15-xxxUB5M2A15)
- ⑥ Connection cable with 4-pin, M12 male connector and 4-pin, M12 female connector (e.g., YF2A14-xxxVB3M2A14)
- ⑦ Connection cable with 8-pin, M12 male connector and 8-pin, M12 female connector (e.g., YF2A18-xxxUA5M2A18)
- ⑧ ES11-SA1A4 emergency stop pushbutton
- ⑨ ES11-SA2B8 emergency stop pushbutton
- ⑩ ES11-SC4D8 emergency stop pushbutton
- ⑪ FLT-TERM00001 Flexi Loop terminating element

Connection diagram ER12 reset pushbutton and ES11 emergency stop pushbutton to UE43 safety relay



E102175/00/2013-07-30

Connection diagram ER12 reset pushbutton and series connection of three ES11 emergency stop pushbutton to a Flexi Soft safety controller



E102174/00/2013-07-30

## Recommended accessories

Other models and accessories → [www.sick.com/ES11](http://www.sick.com/ES11)

	<b>Brief description</b>	<b>Type</b>	<b>part no.</b>
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 4-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 10 m, 4-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-100VB3XLEAX	2096236
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 15 m, 4-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-150VB3XLEAX	2096237
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 20 m, 4-wire, PVC</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-200VB3XLEAX	2096238

## 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](http://www.sick.com)