



# ES11-SA2B8

ES11

SAFETY COMMAND DEVICES

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
ES11-SA2B8	6051328

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>Emergency stop pushbutton (illuminable)</b>	✓
<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, 8-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>Switching current</b>	1 mA ... 100 mA
<b>Switching capacity</b>	≤ 250 mW
<b>Switching voltage</b>	1 V DC ... 30 V DC
<b>Contact material</b>	AgNi, 5 µm gold plated
<b>Electrical life</b>	
Emergency stop pushbuttons	5 x 10 <sup>4</sup> switching cycles

## Electronics - Illumination

<b>Supply voltage V<sub>s</sub></b>	30 V AC/DC
<b>Power consumption</b>	4 mA (24 V DC)

## Mechanics

<b>Dimensions</b>	40 mm x 123 mm x 52 mm
<b>Weight</b>	115 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

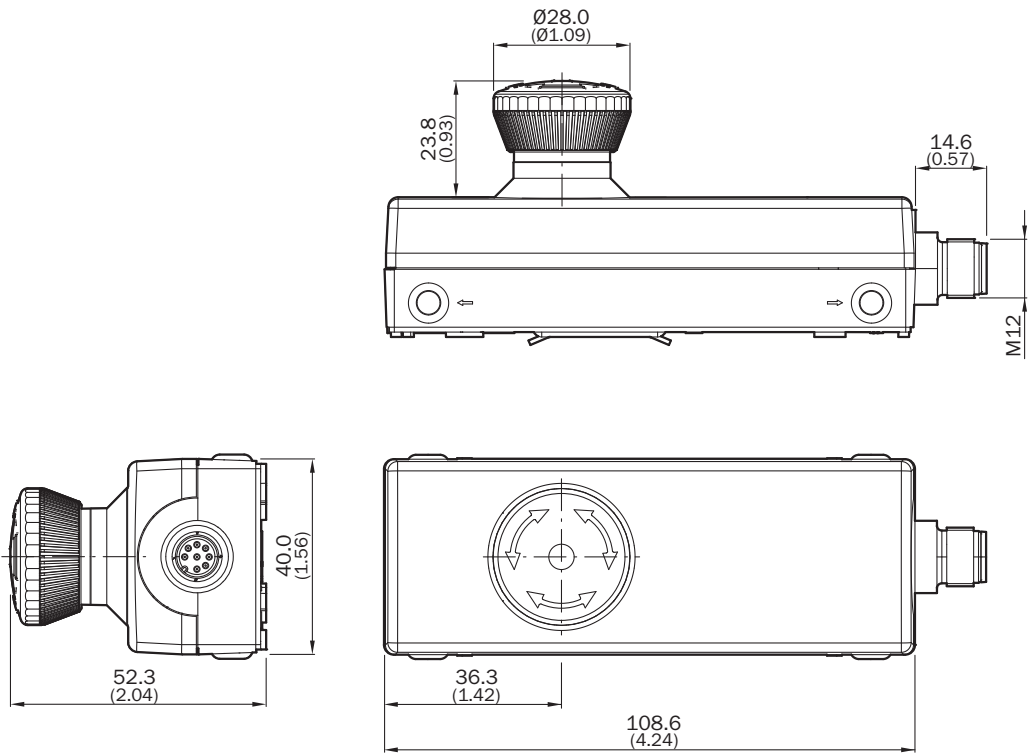
## Certificates

<b>EU declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>ULus approval</b>	✓

## Classifications

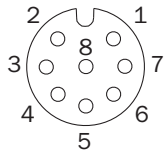
<b>ECLASS 5.0</b>	27371228
<b>ECLASS 5.1.4</b>	27371228
<b>ECLASS 6.0</b>	27371244
<b>ECLASS 6.2</b>	27371244
<b>ECLASS 7.0</b>	27371244
<b>ECLASS 8.0</b>	27371244
<b>ECLASS 8.1</b>	27371244
<b>ECLASS 9.0</b>	27371244
<b>ECLASS 10.0</b>	27371244
<b>ECLASS 11.0</b>	27371244
<b>ECLASS 12.0</b>	27371244
<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



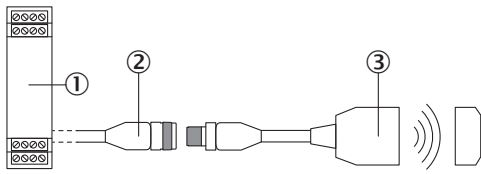
Dimensions in mm (inch)

Pinouts



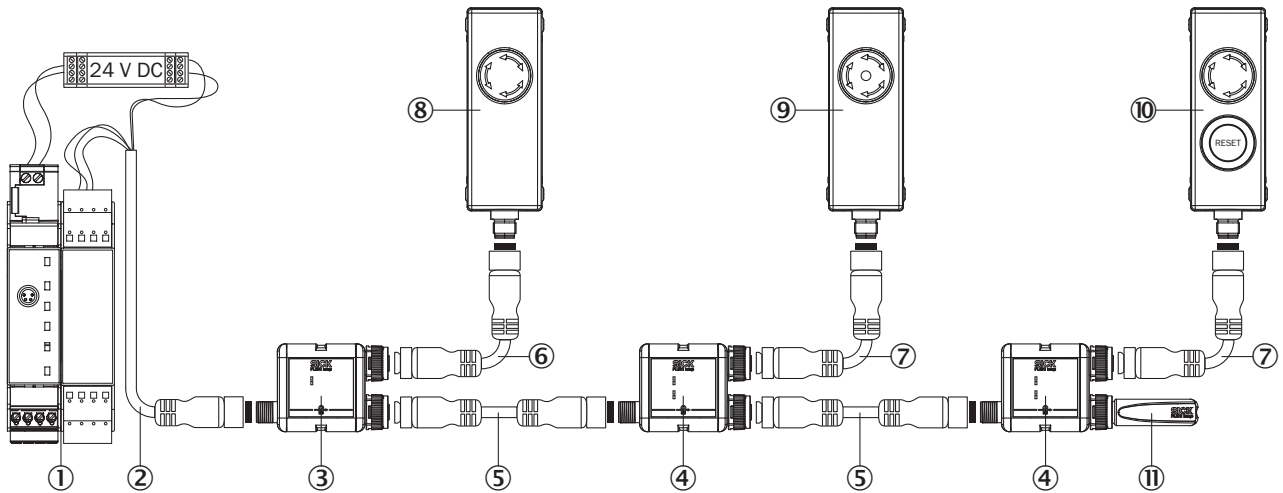
3	N/C contact
4	N/C contact
7	N/C contact
8	N/C contact
5	LED + (E-Stop)
6	LED - (E-Stop)
1	not connected
2	not connected

## Connection single sensor



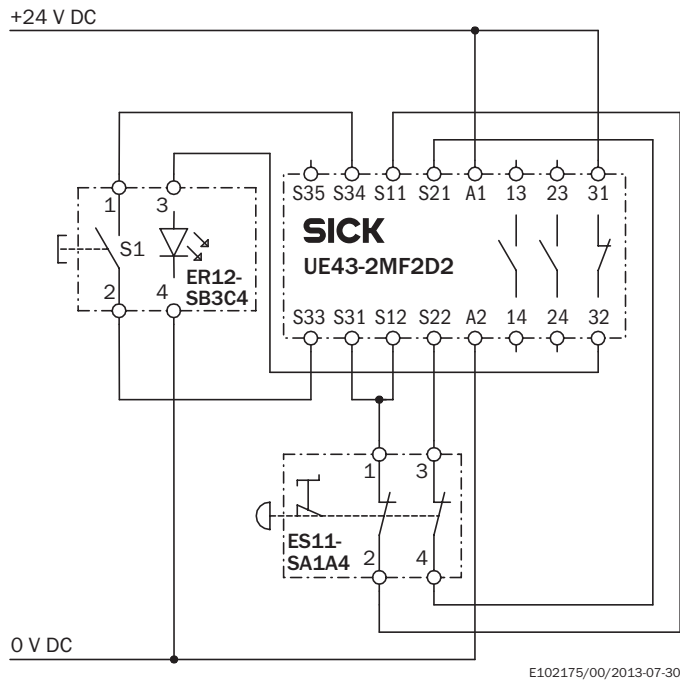
- ① Safe evaluation unit
- ② connecting cable with M12 female connector, 8-pin and flying leads (e.g. YF2A18-xxxUA5LEAX)
- ③ ES11-Sxxx8 emergency stop pushbutton

## Series connection with Flexi Loop (with diagnostics)

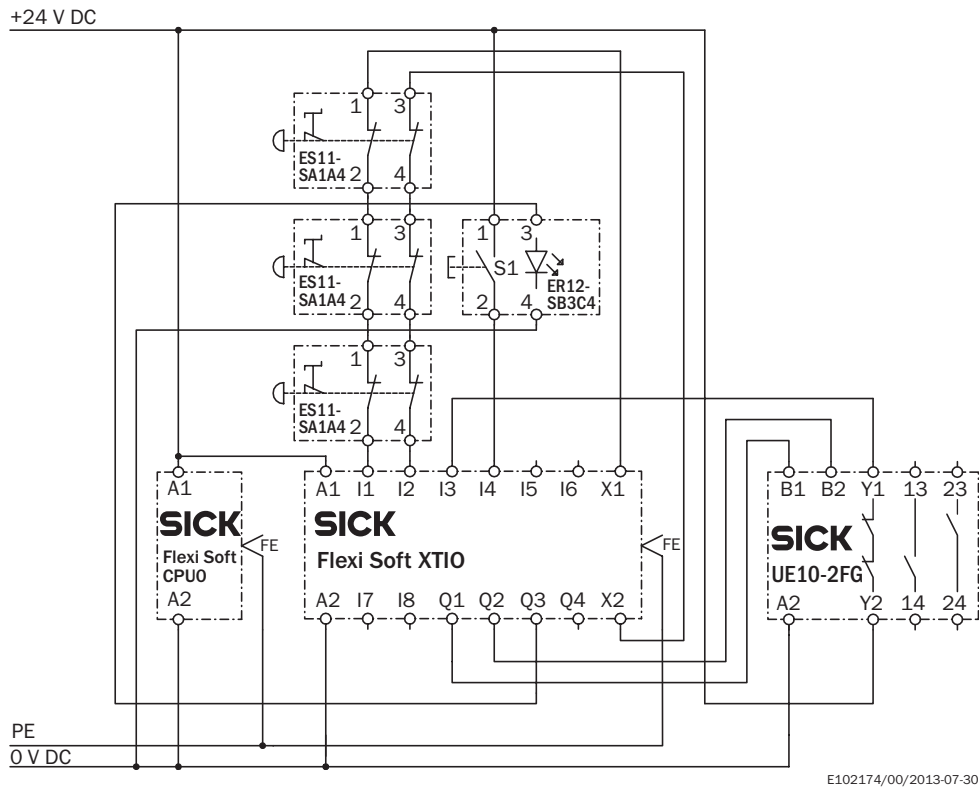


- ① Flexi Soft safety controller
- ② connecting cable with M12 female connector, 5-pin and flying leads (e.g., YF2A15-xxxVB5XLEAX)
- ③ FLN-EMSS0000105 Flexi Loop node
- ④ FLN-EMSS1100108 Flexi Loop node
- ⑤ Connection cable with 5-pin, M12 male connector and 5-pin, M12 female connector (e.g., YF2A15-xxxUB5M2A15)
- 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






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



## Recommended accessories

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M12, 8-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, 8-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A18-050UA5XLEAX	2095653
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M12, 8-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, 8-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A18-100UA5XLEAX	2095654
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M12, 8-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, 8-wire, PUR, halogen-free</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A18-150UA5XLEAX	2095679

## 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)