



# FX0-STI068012

Flexi Soft

SAFETY CONTROLLERS

**SICK**  
Sensor Intelligence.

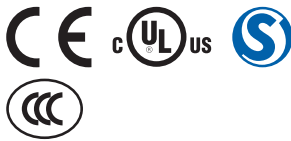


### Ordering information

Number of non-safe inputs	Number of non-safe outputs	Protective coating	Type	Part no.
6-8	6-8	✓	FX0-STIO68012	1112297

Protective coating for more challenging ambient conditions (e.g., resistance to sulfur).

Other models and accessories → [www.sick.com/Flexi\\_Soft](http://www.sick.com/Flexi_Soft)



### Detailed technical data

#### Features

<b>Module</b>	I/O module
<b>Configuration method</b>	Via software (Flexi Soft Designer, Safe EFI-pro System: Safety Designer)
<b>Specialty</b>	Protective coating for more challenging ambient conditions (e.g., resistance to sulfur).

#### Interfaces

<b>Number of non-safe inputs</b>	6-8 <sup>1)</sup>
<b>Number of non-safe outputs</b>	6-8 <sup>1)</sup>
<b>Connection type</b>	Plug-in spring terminals

<sup>1)</sup> The FX0-STIO features 6 non-safe inputs and 6 non-safe outputs. In addition, 2 connections can be used both as non-safe inputs and non-safe outputs.

#### Electrical data

<b>Protection class</b>	III (EN 61140)
<b>Voltage supply</b>	Via FLEXBUS+
<b>Internal power consumption</b>	≤ 1.5 W <sup>1)</sup>
<b>Inputs</b>	
Input voltage HIGH	13 V DC ... 30 V DC
Input voltage LOW	-5 V DC ... 5 V DC
Input current HIGH	2.4 mA ... 3.8 mA
Input current LOW	-2.5 mA ... 2.1 mA
<b>Outputs</b>	
Voltage supply	Via A1, A2
Supply voltage	24 V DC (16.8 V DC ... 30 V DC)
Type of supply voltage	PELV or SELV <sup>2)</sup>

<sup>1)</sup> Via FLEXBUS+.

<sup>2)</sup> The current of the power supply that powers the module must be limited to a maximum of 4 A, either through the power supply itself or a fuse.

Type of output	PNP semiconductors, short-circuit protected
Output voltage HIGH	16 V DC ... 30 V DC
Output current	≤ 500 mA

1) Via FLEXBUS+.

2) The current of the power supply that powers the module must be limited to a maximum of 4 A, either through the power supply itself or a fuse.

## Mechanical data

<b>Dimensions (W x H x D)</b>	22.5 mm x 96.5 mm x 120.6 mm
<b>Weight</b>	139 g (± 5 %)

## Ambient data




<b>Enclosure rating</b>	IP20 (EN 60529)
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Storage temperature</b>	-25 °C ... +70 °C
<b>Air humidity</b>	≤ 95 %, Non-condensing
<b>Single gas resistance (sulfur dioxide)</b>	25 ppm, 21 days, 25 °C (IEC 60068-2-42 - Kc)
<b>Mixed gas resistance</b>	100 ppb - H <sub>2</sub> S 2000 ppb - NO <sub>2</sub> 100 ppb - Cl <sub>2</sub> 2,000 ppb - SO <sub>2</sub> , 21 days, 30 °C (IEC 60068-2-60 Ke)

## Classifications

<b>ECLASS 5.0</b>	27243001
<b>ECLASS 5.1.4</b>	27243101
<b>ECLASS 6.0</b>	27243101
<b>ECLASS 6.2</b>	27243101
<b>ECLASS 7.0</b>	27243101
<b>ECLASS 8.0</b>	27243101
<b>ECLASS 8.1</b>	27243101
<b>ECLASS 9.0</b>	27243101
<b>ECLASS 10.0</b>	27243101
<b>ECLASS 11.0</b>	27243101
<b>ECLASS 12.0</b>	27243101
<b>ETIM 5.0</b>	EC001449
<b>ETIM 6.0</b>	EC001449
<b>ETIM 7.0</b>	EC001449
<b>ETIM 8.0</b>	EC001449
<b>UNSPSC 16.0901</b>	32151705

### Recommended accessories

Other models and accessories → [www.sick.com/Flexi\\_Soft](http://www.sick.com/Flexi_Soft)

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none"> <li>• <b>Sub product family:</b> SIM1000 FX</li> <li>• <b>Product category:</b> Programmable devices</li> <li>• <b>Supported products:</b> 2D and 3D LiDAR sensors, incremental and absolute encoders, Image-based code readers, Fixed mount barcode scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors, Flexi Soft main module</li> <li>• <b>Processor:</b> Dual-core ARM Cortex-A9 CPU with NEON accelerator</li> <li>• <b>Toolkit:</b> SICK algorithm API</li> <li>• <b>Further functions:</b> FPGA for I/O handling</li> <li>• <b>Connections:</b> Terminal block 1-4, Ethernet, FLEXBUS+</li> <li>• <b>Enclosure rating:</b> IP20</li> </ul>	SIM1000-0P0B110	1097817
Safety switching amplifier			
	<ul style="list-style-type: none"> <li>• <b>Applications:</b> Output expansion module for OSSDs</li> <li>• <b>Compatible sensor types:</b> Safety sensors with OSSDs</li> <li>• <b>Connection type:</b> Front connector with spring terminals</li> <li>• <b>Restart interlock:</b> no</li> <li>• <b>External device monitoring (EDM):</b> Via path</li> <li>• <b>Outputs:</b> 2 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe)</li> <li>• <b>Housing width:</b> 18 mm</li> </ul>	RLY3-OSSD100	1085343
	<ul style="list-style-type: none"> <li>• <b>Applications:</b> Output expansion module for OSSDs</li> <li>• <b>Compatible sensor types:</b> Safety sensors with OSSDs</li> <li>• <b>Connection type:</b> Front connector with spring terminals</li> <li>• <b>Restart interlock:</b> no</li> <li>• <b>External device monitoring (EDM):</b> Via path</li> <li>• <b>Outputs:</b> 4 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe), 1 signaling current path (not safe)</li> <li>• <b>Housing width:</b> 28 mm</li> </ul>	RLY3-OSSD400	1099971

## 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)