



# SYS/BOT-URE04020102N33

Safe Robotics Area Protection

SAFETY SYSTEMS FOR ROBOTS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
SYS/BOT-URE04020102N33	1121078

**Included in delivery:** SOW/BOT-URE0402010 (1), FX3-XTIO84002 (2), FX3-CPU320002 (1), FX3-MPL100001 (1), NANSX-AAACAEZZ1 (1), NANS3-CAAZ30AN1 (1)

Other models and accessories → [www.sick.com/Safe\\_Robotics\\_Area\\_Protection](http://www.sick.com/Safe_Robotics_Area_Protection)

### Detailed technical data

#### Features

<b>Variant</b>	sBot Speed – URe
<b>Product type</b>	System (hardware and software)
<b>Robot controller</b>	Universal Robots: e-Series + UR Series robots
<b>Stopping process of the robot</b>	With speed reduction
<b>Robot restart</b>	Automatic or manual
<b>Interfaces</b>	
Communication interface	Discrete I/Os
Configuration interface	Ethernet
<b>Safe state in the event of a fault</b>	The safety-related semiconductor outputs are in the OFF state.
<b>Safety laser scanners</b>	nanoScan3 Pro I/O
Protective field range	3 m
<b>Safety task</b>	Hazardous area protection
<b>Ambient operating temperature</b>	-10 °C ... +50 °C
<b>Storage temperature</b>	-20 °C ... +50 °C
<b>Air humidity</b>	90% at 50 °C (EN 61131-2)
<b>Safety controller included</b>	Flexi Soft (CPU3)
Safety controller type	Programmable
<b>Voltage supply</b>	
Supply voltage $V_S$	24 V DC (16.8 V DC ... 28.8 V DC)
<b>Performance level</b>	PL d (ISO 13849-1)
<b>Items supplied</b>	2 x nanoScan3 Pro I/O safety laser scanners Flexi Soft main module FX3-CPU0 1 Flexi Soft system plug FX3-MPL1 2 x FX3-XTIO Flexi Soft I/O module 2 x nanoScan3 Pro I/O Ethernet system plugs Software (Flexi Soft Designer project file with functional logic, pre-configuration in Safety Designer file for nanoScan3 Pro I/O safety laser scanner, I/O Safety communication setting and UR-specific settings) as well as operating instructions, connection diagram, SISTEMA file and quick reference guide

#### Functions

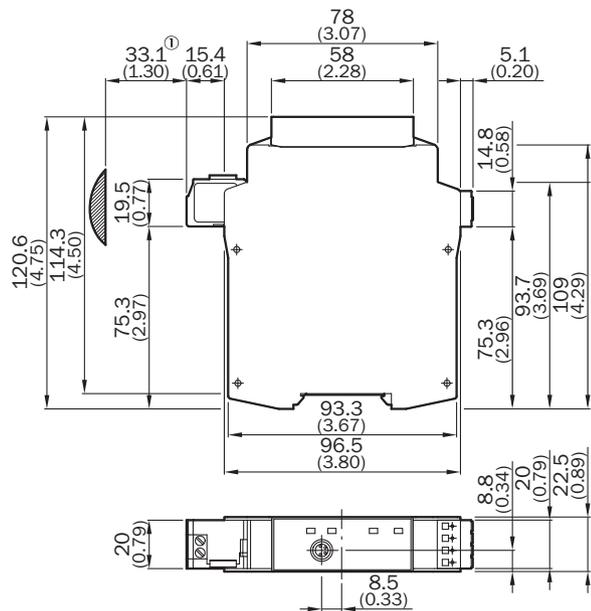
<b>Emergency stop</b>	
Shut down in the event of an emergency situation	✓

Prevent unexpected restarting after an emergency stop	✓
<b>Initiate a safety stop</b>	
Automated reset and restart with safe sequence monitoring	✓
Optional manual reset	✓
<b>Safety-rated monitored speed</b>	
Trigger safety-rated monitored speed	✓
<b>Operating mode</b>	
Operating mode selection (implemented in robot control)	✓
Enabling device - manual operating mode (implemented in robot control)	✓

Classifications

<b>ECLASS 5.0</b>	27279090
<b>ECLASS 5.1.4</b>	27279090
<b>ECLASS 6.0</b>	27279090
<b>ECLASS 6.2</b>	27279090
<b>ECLASS 7.0</b>	27279090
<b>ECLASS 8.0</b>	27279090
<b>ECLASS 8.1</b>	27279090
<b>ECLASS 9.0</b>	27279090
<b>ECLASS 10.0</b>	27279090
<b>ECLASS 11.0</b>	27279090
<b>ECLASS 12.0</b>	27279090
<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

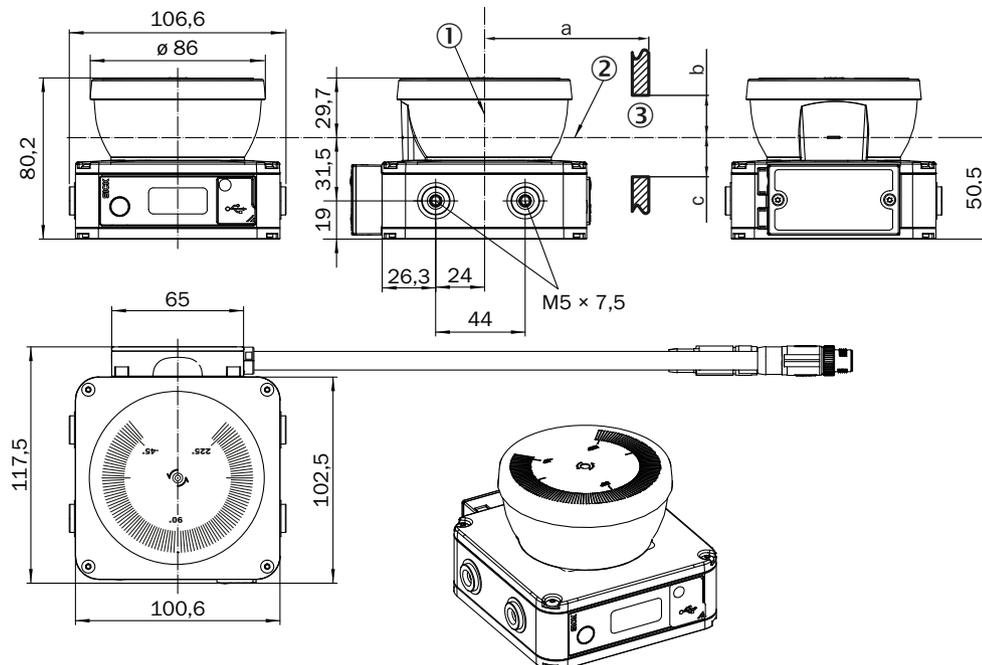
### Dimensional drawing FX3-CPU1, FX3-CPU2



Dimensions in mm (inch)

① Approximate connector range

### Dimensional drawing



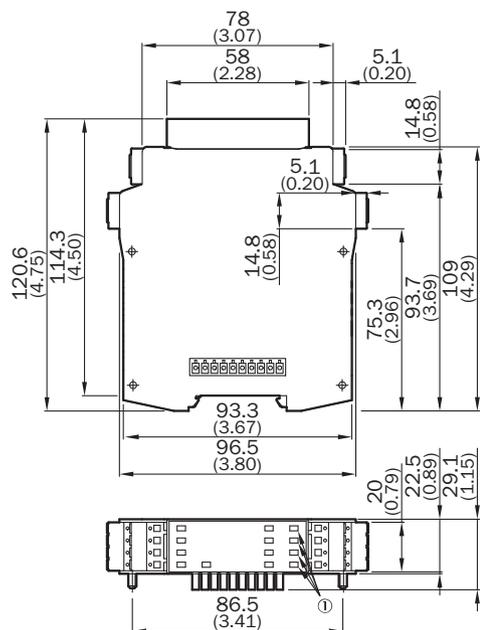
Dimensions in mm (inch)

① mirror axis of rotation

② scan plane

③ required viewing slit (a: length of the viewing slit, b: minimum height above the scan plane, c: minimum height below the scan plane. See the operating instructions for details.)

Dimensional drawing FX3-XTIO, FX3-XTDI



Dimensions in mm (inch)

① Only valid for FX3-XTIO

## 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)