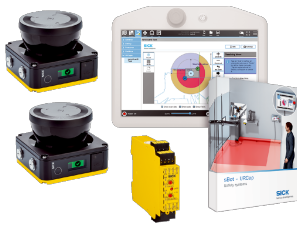# SYS/BOT-URST4ESUA02NS3

## Safe Robotics Area Protection

**SAFETY SYSTEMS FOR ROBOTS**

**SICK**
Sensor Intelligence.

## Ordering information

sBot Stop2 – URCap

| Items supplied | Robot restart | Opto-electronic protective devices | Type | Part no. |
|---|---|---|---|---|
| 2 x nanoScan3 Core I/O safety laser scanner 2 x system plug 2 x mounting kit (with protection for optics cover) 2 x Ethernet cable, 5 m 2 x M12 connecting cable, 10 m, flying leads 1 x main module for Flexi Classic safety controller nanoScan3 Tool – URCap (configuration software) Operating instructions Quickstart guide Circuit diagram(macro for ePlan and PDF) SISTEMA file | Automatic | nanoScan3 Core I/O Protective field range: 3 m | SYS/BOT-URST4ESUA02NS3 | 1137604 |

The safety system, comprising hardware, software and documentation, makes it easy to configure a safety application with a UR robot (the robot is not supplied with the system).

With purchase, you accept the product description available under Downloads > Documentation in connection with the General Terms and Conditions for the Supply of Software Products (AVB Software SICK).

Other models and accessories ➜ www.sick.com/Safe_Robotics_Area_Protection

## Detailed technical data

### Features

| Variant | sBot Stop2 – URCap |
|---|---|
| Description | sBot Stop2 - URCap is a safety system for UR robots that makes it easy to protect your freely accessible robot application. The system ensures a safe stop with automatic restart of the robot. Thanks to the two nanoScan3 safety laser scanners, approaching persons are detected over a 360-degree range. Using the nanoScan3 Tool - URCap, the safety laser scanner can be configured quickly and easily directly via the teach pendant of the robot. |
| Product type | System (hardware and software) |
| Robot controller | Universal Robots: UR3e, UR5e, UR10e, UR16e, UR20 und UR30 |
| Compatible robot software | Polyscope 5 |
| Stopping process of the robot | Stop only |
| Robot restart | Automatic |
| Interfaces | |
| Communication interface | Discrete I/Os, Ethernet |
| Safe state in the event of a fault | The safety-related semiconductor outputs are in the OFF state. |

| | |
|---|---|
| **Safety laser scanners** | nanoScan3 Core I/O |
| Protective field range | 3 m |
| **Safety task** | Hazardous area protection |
| **Ambient operating temperature** | –10 °C ... +50 °C |
| **Storage temperature** | –25 °C ... +70 °C |
| **Air humidity** | 0% ... 95%, non-condensing |
| **Voltage supply** | |
| Supply voltage $V_S$ | 24 V (19.2 V ... 30 V) |
| **Performance level** | PL d (ISO 13849-1) |
| **Items supplied** | 2 x nanoScan3 Core I/O safety laser scanner<br>2 x system plug<br>2 x mounting kit (with protection for optics cover)<br>2 x Ethernet cable, 5 m<br>2 x M12 connecting cable, 10 m, flying leads<br>1 x main module for Flexi Classic safety controller<br>nanoScan3 Tool – URCap (configuration software)<br>Operating instructions<br>Quickstart guide<br>Circuit diagram(macro for ePlan and PDF)<br>SISTEMA file |

## Functions

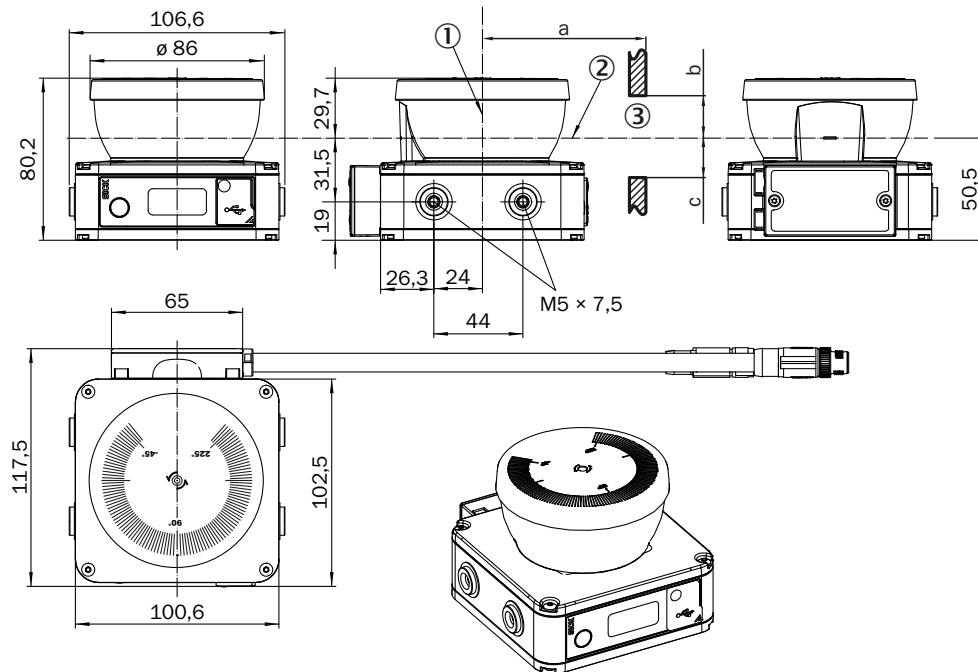| | |
|---|---|
| **Initiate a safety stop** | |
| Automated reset | ✓ |
| **Safety-rated monitored speed** | |
| Trigger safety-rated monitored speed | ✓ |
| **Operating mode** | |
| Operating mode selection (implemented in robot control) | ✓ |
| Enabling device - manual operating mode (implemented in robot control) | ✓ |

## Classifications

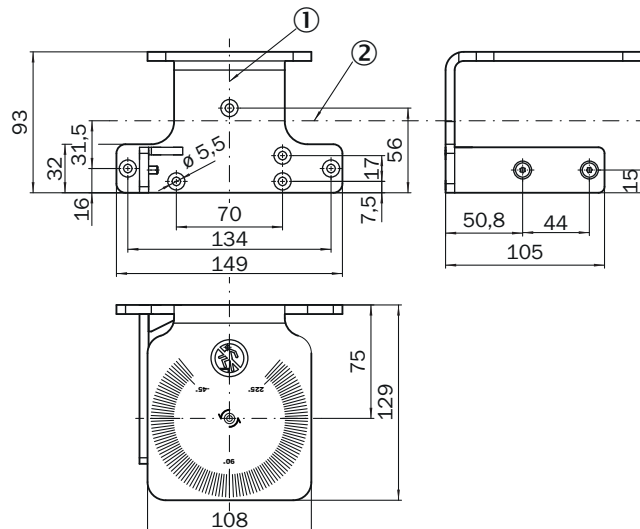| | |
|---|---|
| **ECLASS 5.0** | 27279090 |
| **ECLASS 5.1.4** | 27279090 |
| **ECLASS 6.0** | 27279090 |
| **ECLASS 6.2** | 27279090 |
| **ECLASS 7.0** | 27279090 |
| **ECLASS 8.0** | 27279090 |
| **ECLASS 8.1** | 27279090 |
| **ECLASS 9.0** | 27279090 |
| **ECLASS 10.0** | 27279090 |
| **ECLASS 11.0** | 27279090 |
| **ECLASS 12.0** | 27279090 |
| **ETIM 5.0** | EC001449 |
| **ETIM 6.0** | EC001449 |
| **ETIM 7.0** | EC001449 |
| **ETIM 8.0** | EC001449 |

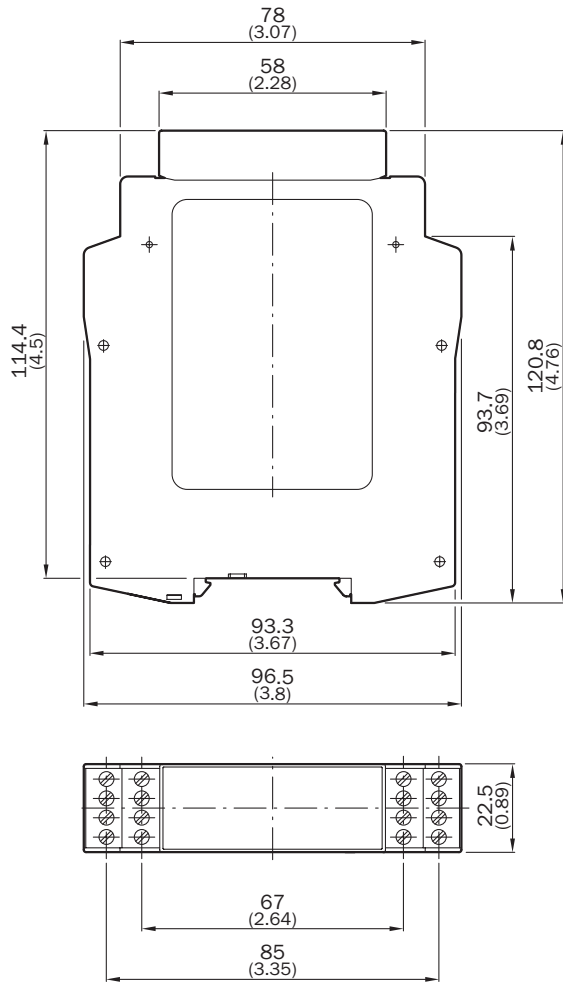| UNSPSC 16.0901 | 32151705 |
|---|---|

## 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.)



① Mirror axis of rotation
② Scan plane

Flexi Classic main module

# 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**

SICK AG  |  Waldkirch  |  Germany  |  www.sick.com