



RE31-DA03

RE11/RE21/RE31

NON-CONTACT SAFETY SWITCHES

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|-----------|----------|
| RE31-DA03 | 6034325 |

Other models and accessories → www.sick.com/RE11_RE21_RE31

Detailed technical data

Features

| | |
|---|----------------------|
| System part | Sensor with actuator |
| Sensor principle | Magnetic |
| Number of N/O contacts | 1 |
| Number of N/C contacts | 1 |
| Safe switch on distance S_{ao} | 6 mm |
| Safe switch off distance S_{ar} | 17 mm |
| Active sensor surfaces | 1 |
| Actuation directions | 5 |

Safety-related parameters

| | |
|---|---|
| B_{10d} parameter | 2×10^7 switching cycles (with small load) |
| Type | Type 4 (EN ISO 14119) |
| Actuator coding level | Low coding level (EN ISO 14119) |
| Safe state in the event of a fault | The switch has no internal fault detection and is unable to assume a safe state in the event of a fault. Fault detection is performed by the connected safety-related logic unit. |

Functions

| | |
|-------------------------------|---|
| Safe series connection | None, only individual wiring (with diagnostics) |
|-------------------------------|---|

Interfaces

| | |
|------------------------|-------|
| Connection type | Cable |
| Length of cable | 3 m |
| Cable material | PVC |

Electrical data

| | |
|--------------------------|----------------|
| Type of output | Reed contacts |
| Switching voltage | ≤ 30 V DC |
| Switching current | ≤ 400 mA |

Mechanical data

| | |
|-------------------------|----------------------------|
| Design | Cylindrical |
| Housing diameter | M30 |
| Weight | + 0.283 kg |
| Housing material | Glass-fiber reinforced PPS |

Ambient data

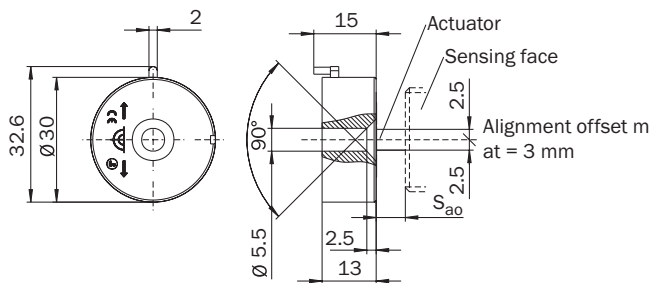
| | |
|--------------------------------------|--------------------------------------|
| Enclosure rating | IP67 |
| Ambient operating temperature | -20 °C ... +60 °C |
| Storage temperature | -20 °C ... +60 °C |
| Vibration resistance | 10 Hz ... 55 Hz, 1 mm (EN 60947-5-3) |
| Shock resistance | 30 g, 11 ms (EN 60947-5-3) |

Classifications

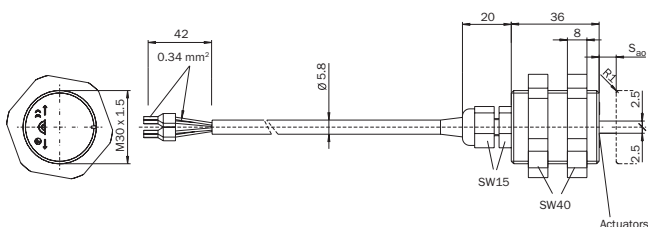
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27272402 |
| ECLASS 5.1.4 | 27272402 |
| ECLASS 6.0 | 27272402 |
| ECLASS 6.2 | 27272402 |
| ECLASS 7.0 | 27272402 |
| ECLASS 8.0 | 27272402 |
| ECLASS 8.1 | 27272402 |
| ECLASS 9.0 | 27272402 |
| ECLASS 10.0 | 27272402 |
| ECLASS 11.0 | 27272402 |
| ECLASS 12.0 | 27274401 |
| ETIM 5.0 | EC002544 |
| ETIM 6.0 | EC002544 |
| ETIM 7.0 | EC002544 |
| ETIM 8.0 | EC002544 |
| UNSPSC 16.0901 | 39122205 |

Dimensional drawing (Dimensions in mm (inch))

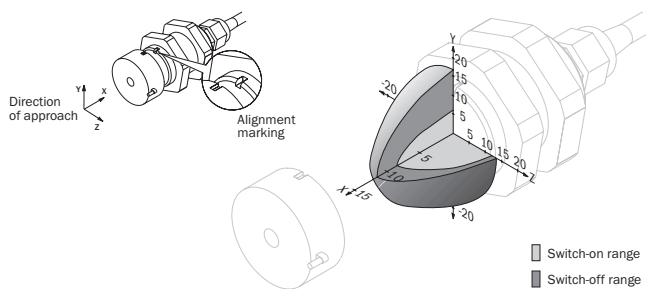
Actuator



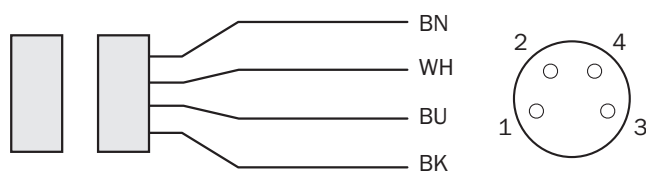
Sensor



Response range

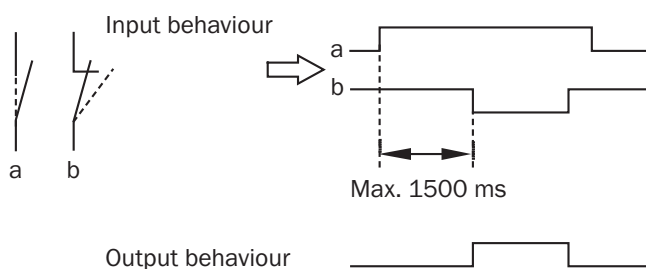


Pin assignment



| | |
|------|-------------|
| 1 BN | N/O contact |
| 2 WH | |
| 3 BU | N/C contact |
| 4 BK | |

Sensor timing



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