



# RE31-DAC

RE11/RE21/RE31

NON-CONTACT SAFETY SWITCHES

**SICK**  
Sensor Intelligence.



Ordering information

Type	Part no.
RE31-DAC	6036768

Other models and accessories → [www.sick.com/RE11\\_RE21\\_RE31](http://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	$2 \times 10^7$ 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)
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Interfaces

Connection type	Plug connector, M8, 4-pin
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Electrical data

Type of output	Reed contacts
Switching voltage	$\leq 30$ V DC
Switching current	$\leq 400$ mA

Mechanical data

Design	Cylindrical
Housing diameter	M30
Weight	+ 0.051 kg
Housing material	Glass-fiber reinforced PPS

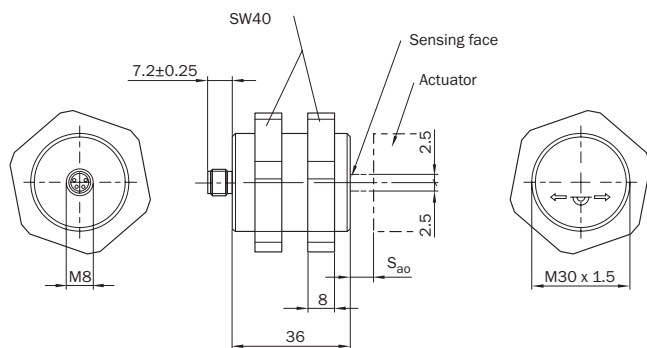
## Ambient data

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

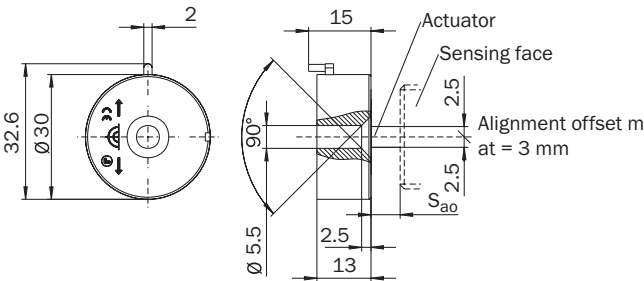
## Classifications

<b>ECLASS 5.0</b>	27272402
<b>ECLASS 5.1.4</b>	27272402
<b>ECLASS 6.0</b>	27272402
<b>ECLASS 6.2</b>	27272402
<b>ECLASS 7.0</b>	27272402
<b>ECLASS 8.0</b>	27272402
<b>ECLASS 8.1</b>	27272402
<b>ECLASS 9.0</b>	27272402
<b>ECLASS 10.0</b>	27272402
<b>ECLASS 11.0</b>	27272402
<b>ECLASS 12.0</b>	27274401
<b>ETIM 5.0</b>	EC002544
<b>ETIM 6.0</b>	EC002544
<b>ETIM 7.0</b>	EC002544
<b>ETIM 8.0</b>	EC002544
<b>UNSPSC 16.0901</b>	39122205

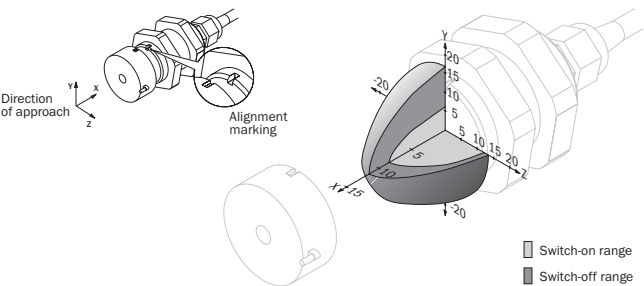
## Dimensional drawing (Dimensions in mm (inch))



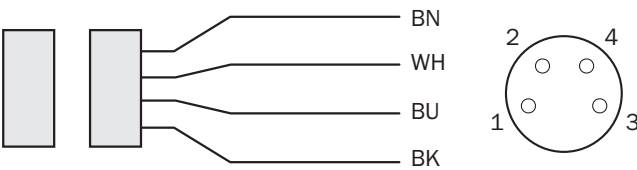
Actuator



Response range

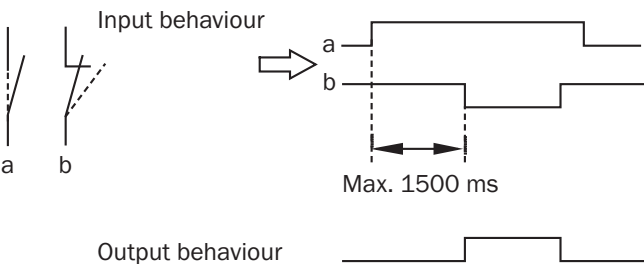


Pinouts



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](http://www.sick.com)