



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



Detailed technical data

Features

System part	Sensor with actuator
Sensor principle	Magnetic
N/O contacts	1
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 connections	None, only individual wiring (with diagnostics)
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Interfaces

Connection type	Plug connector, M8, 4-pin
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Electronics

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

Mechanics

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

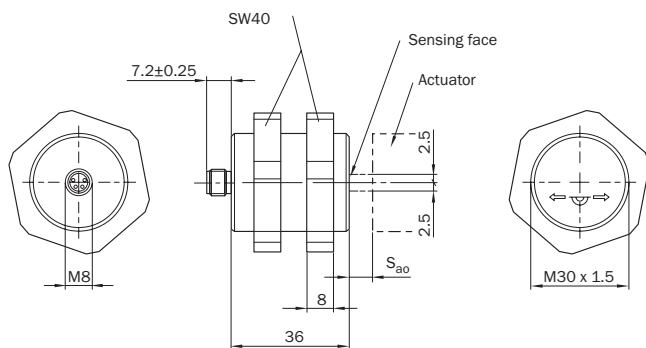
Ambient data

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))



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

The diagram illustrates the input and output behaviours of the model. On the left, under 'Input behaviour', two scenarios are shown: (a) a step function and (b) a ramp function. An arrow points to the right, where a timing diagram is shown. This diagram has two input channels, 'a' and 'b'. Channel 'a' is a step function that transitions from low to high at a certain point. Channel 'b' is a step function that transitions from high to low at the same point. A double-headed arrow indicates a time interval of 'Max. 1500 ms' between the transitions. Below this, under 'Output behaviour', a single channel is shown as a step function that transitions from low to high at the same point as the input transitions.

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:

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