

IS-MAG-DC - PLe

Non-Contact Safety Switch



The IS-MAG-DC-PLe is a non-contact, magnetically operated switch.

The switch opens the normally closed (NC) contacts when the magnetic actuator is moved away from the switch

Features include

- Non-contact operation
- High tolerance to misalignment
- High switching current
- up to 1A DC and 2A AC
- Housing sealed to IP67

When used with a Dual Channel Safety Relay or Control Device, these Magnetic Non-Contact Switches can provide protection up to Category 4 and PLe to ISO13849-1.

They conform to EN60947-5-3 and can be used as directed by ISO14119 and EN ISO12100. The safety functions and mechanics must be tested regularly - at least once per month for PLe Cat3/4 (ISO13849-1).

The recommended setting gap is 5mm. Typical misalignment tolerance after setting is 5mm. The NC switch contacts are potential free and are internally fused. To protect the internal fuse, all switches must be externally fused at a lower rating (see Technical data).

Safety Classification and Reliability Data:

ISO 13849-1	Up to PLe Category 4 (if both channels are used with a PLe control device)
B10d	3,300,000 cycles at 100mA load
Usage	8 cycles/hour 24 hours/365 days per year MTTFd is 470 years

Technical Data

Standards	ISO14119 EN60947-5-3 EN60204-1 ISO13849-1 UL508
Voltage(1NC)	240V.ac / 24V.dc 2.0 A. max.
Safety Circuits	(Fuse externally 1.6A. (F).
Auxiliary Circuits	24V.ac/dc 0.2A. max.
Contact release time	<2ms
Initial contact resistance	<500 milliohm
Minimum switched current	10V. dc 1mA
Delectric withstand	250V.ac
Insulation Resistance	100 Mohms
Recommended setting gap	5mm
NC Switching Distance:	Sao 8mm
(Target to target)	Sar 20mm
NO Switching Distance	Opens before NC circuits close
Tolerance to misalignment	5mm in any direction from 5mm setting gap
Switching frequency	1.0 Hz maximum
Approach speed	200mm/m. to 1000mm/s.
Temperature Range	-25/80C. 105C. S/Steel for CIP/SIP cleaning
Enclosure Protection	IP67 and IP69K (QC versions IP67 for connector)
Cable	PVC 6.0mm OD Conductors 0.25 sq.mm
Bolts	2 x M4 Tightening torque 1.0 Nm

Dimensions

