

# IDEMAG - Magnetic Non Contact - Type: SPR

## Magnetic Actuation - Power series

Medium Duty versions 230V.ac / 24V.dc 1A.

Switching Tolerance up to 12mm

Universal fitting - established 22mm fixing footprint suitable for most general applications.

Can be high pressure hosed at high temperature - IP69K.

Withstands environments where high humidity or hose down is required.

Durable polyester housing.

Wide 12mm sensing – high tolerance to misalignment.

Long life high switching capability to 1A.

Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat.4 EN 954-1

2NC 1NO circuits

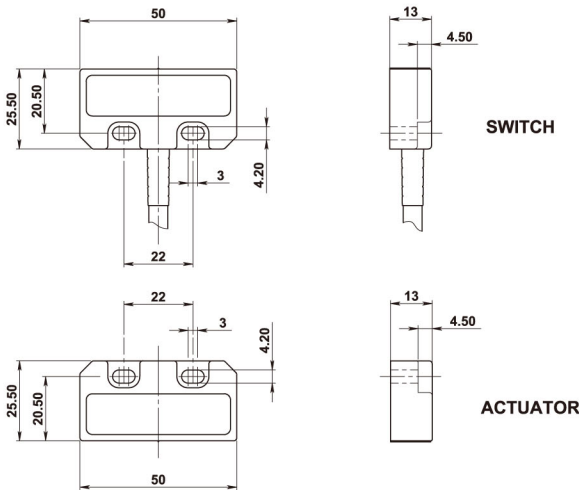
Quick connect versions



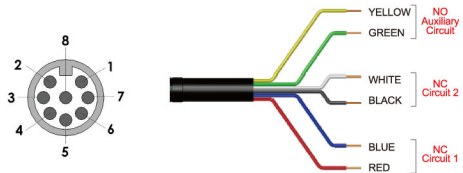
**Specified to 80C but designed to work up to 100C.**  
**Will operate with most Safety Relays**



Quick Connect M12 versions fitted with 250mm (10") cable

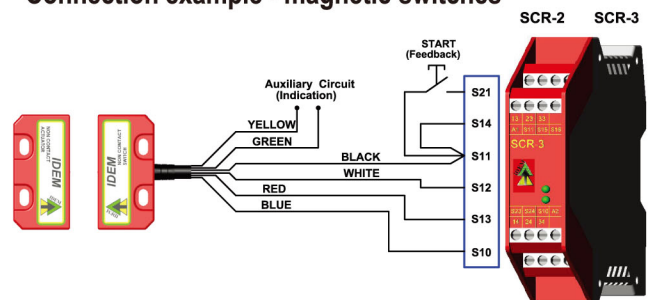


Quick Connect (QC)	Standard Lead Colour	Circuit (Actuator Present)
M12 8 Way Male Plug Pin view from switch		
4	Yellow	NO
6	Green	NO
7	Black	NC2
1	White	NC2
2	Red	NC1
3	Blue	NC1



Standards	EN1088 IEC 60947-5-3 EN 60204-1 ISO 13849-1 EN62061 EN 954-1 UL508
Safety Classification and Reliability Data:	
Mechanical Reliability B10d	3.3 x 10 <sup>6</sup> operations at 100mA load
EN 954-1	up to Category 4 with Safety Relay
ISO 13849-1	up to PLe depending upon system architecture
EN 62061	up to SIL3 depending upon system architecture
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days
PFHd	2.52 x 10 <sup>-8</sup>
Proof Test Interval (Life)	47 years
MTTFd	470 years
Safety Channel 1 NC	Voltage free : 250V.ac 1.0 A Max. Rating
Safety Channel 2 NC	Voltage free : 250V.ac 1.0 A Max. Rating
Safety Channel 3 NO	Voltage free : 24V.dc 0.2 A Max. Rating
Fuse	Internal 1.0 A. (F) External 0.8A (F) (User)
Contact release time	<2ms
Initial contact resistance	<500 milliohm
Minimum switched current	10V. dc 1mA
Dielectric withstand	250V.ac
Insulation Resistance	100 Mohms
Recommended setting gap	5mm
Switching Distance:	Sao 10mm Close
(Target to target)	Sar 22mm Open
Tolerance to misalignment	5mm in any direction from 5mm setting gap
Switching frequency	1.0 Hz maximum
Approach speed	200mm/m. to 1000mm/s.
Body Material	UL approved polyester
Temperature Range	- 25 +80C.
Enclosure Protection	IP69K (NEMA PW12) IP67 (NEMA 6)
Shock Resistance	IEC 68-2-27 11ms 30g
Vibration Resistance	IEC 68-2-6 10-55 Hz. 1mm
Cable Type	PVC 6 core 6mm O.D.
Mounting Bolts	2 x M4 Tightening torque 1.0 Nm
Mounting Position	Any

## Connection example - magnetic switches



Single switch connected to an SCR-2 or SCR-3 to give Dual Channel monitoring with Manual Start. Optional auxiliary circuit provides for remote signalling from switch.

Sales Number	Type	Cable Length	Circuits
111009	Idemag SPR	2M	2NC
111010	Idemag SPR	5M	2NC
111011	Idemag SPR	10M	2NC
111012	Idemag SPR	QC-M12	2NC
111013	Idemag SPR	2M	2NC 1NO
111014	Idemag SPR	5M	2NC 1NO
111015	Idemag SPR	10M	2NC 1NO
111016	Idemag SPR	QC-M12	2NC 1NO

140101	Female QC Lead	M12 Female 5m. 8 way
140102	Female QC Lead	M12 Female 10m. 8 way

111300	Plastic 8mm Spacers for use when mounted on Ferrous Materials.	(1 X Switch 1 X Actuator)
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For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present