

# IDEMAG - Magnetic Non Contact - Type: CPR

Magnetic Actuation – Power series



Switching Tolerance up to 12mm

Heavy Duty 230V.ac / 24V.dc 2.0A. or Medium Duty version 1.0A.

Can be high pressure hosed at high temperature - IP69K

Slim fitting suitable for all industry applications.

Easy to install within narrow frame structures.

Operates from 2 sides for ease of application.

Wide 12mm sensing high tolerance to misalignment.

High switching capability - Medium Duty 1A. Heavy Duty 2A.

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

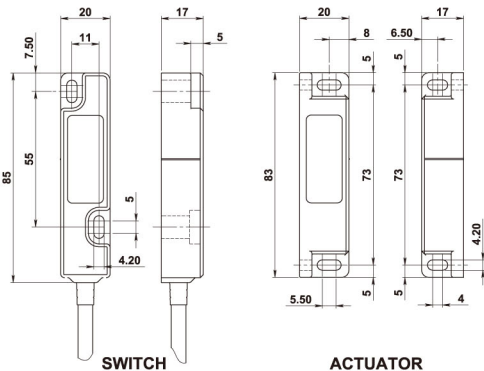
2NC + 1NO circuits

Quick connect versions

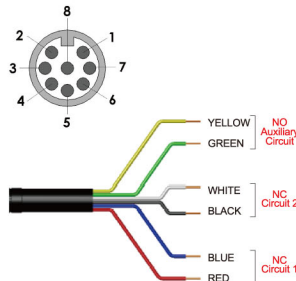
Specified to 80C but designed to work up to 100C.  
Will operate with most Safety Relays



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>

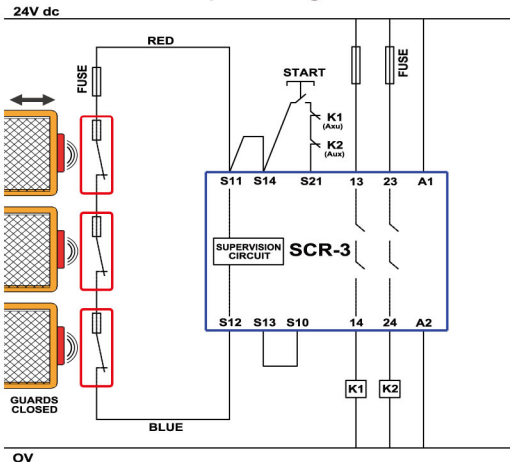
Proof Test Interval (Life) 47 years  
MTTFd 470 years

Heavy Duty Safety Channel 1 NC Voltage free : 250V.ac 2.0 A Max. Rating  
Safety Channel 2 NC Voltage free : 250V.ac 2.0 A Max. Rating  
Safety Channel 3 NO Voltage free : 24V.dc 0.2 A Max. Rating  
Fuse Internal 2.0 A. (F) External 1.6A (F) (User)

Medium Duty 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 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



Three switches connected in series to an SCR-2 or SCR-3 to give Single Channel Guard monitoring but with monitored manual start and contactor feedback check. Allows minimal wiring but higher current switching to K1 and K2 contactors.

For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present

Sales Number	Type	Cable Length	Circuits	NC Duty
113001	Idemag CPR	2M	2NC	Medium 1A
113002	Idemag CPR	5M	2NC	Medium 1A
113003	Idemag CPR	10M	2NC	Medium 1A
113004	Idemag CPR	QC-M12	2NC	Medium 1A
113005	Idemag CPR	2M	2NC 1NO	Medium 1A
113006	Idemag CPR	5M	2NC 1NO	Medium 1A
113007	Idemag CPR	10M	2NC 1NO	Medium 1A
113008	Idemag CPR	QC-M12	2NC 1NO	Medium 1A
113009	Idemag CPR	2M	1NC	Heavy 2A
113010	Idemag CPR	5M	1NC	Heavy 2A
113011	Idemag CPR	10M	1NC	Heavy 2A
113012	Idemag CPR	QC-M12	1NC	Heavy 2A
113013	Idemag CPR	2M	1NC 1NO	Heavy 2A
113014	Idemag CPR	5M	1NC 1NO	Heavy 2A
113015	Idemag CPR	10M	1NC 1NO	Heavy 2A
113016	Idemag CPR	QC-M12	1NC 1NO	Heavy 2A

113300	Plastic 8mm Spacers for use when mounted on Ferrous Materials.	(1 X Switch 1 X Actuator)
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140101	Female QC Lead	M12 Female 5m. 8 way
140102	Female QC Lead	M12 Female 10m. 8 way