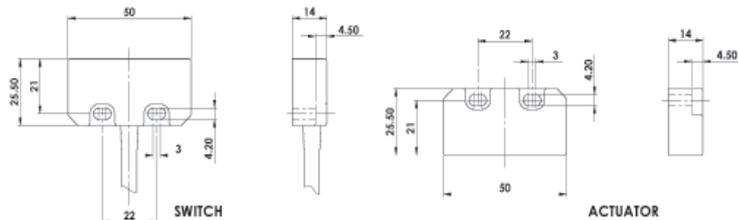


# HYGIEMAG - Magnetic Non Contact Type: SMR

## FEATURES:

- Specifically designed for Food Processing applications -
- Stainless Steel 316 Mirror Polished finish (Ra4)
- Suitable for CIP and SIP cleaning -
- Food Splash Zones EHEDG guidelines
- Universal housing - 22mm fixing hole centre with a 50mm wide body
- Wide sensing at 12mm with high tolerance to misalignment
- Can be high pressure hosed at high temperature
- High switching capability - up to 1.0A
- Up to: PLe ISO13849-1
- 2NC 1NO circuits
- Quick Connect versions available

## DIMENSIONS:

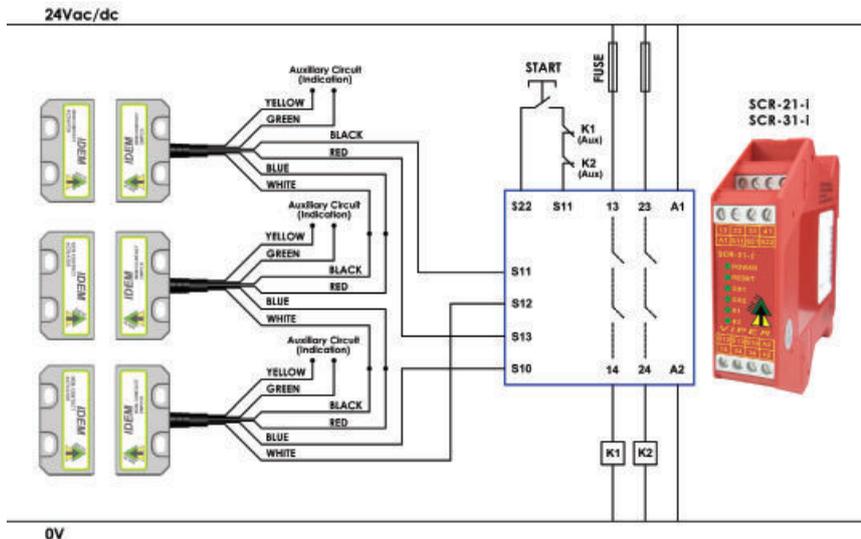


**Stainless Steel 316 Housing mirror polished (Ra4)**  
**Magnetic Actuation - Power Series 230Vac/24Vdc 1.0A**  
**Switching Tolerance up to 12mm**  
**Will operate with most Safety Relays**

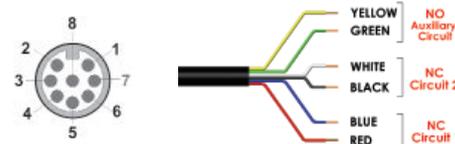


Quick Connect M12 versions fitted with 250mm (10") cable

## CONNECTION EXAMPLE: Magnetic Switches



Three SMR switches connected to an SCR-21-i or SCR-31-i to give dual channel guard monitoring with monitored manual start and contactor feedback check. Auxiliary circuits provide remote signalling from each switch.



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

**Standards:** ISO14119 EN60947-5-1  
 EN60204-1 ISO13849-1 EN62061 UL508

**Safety Classification and Reliability Data:**  
 Mechanical Reliability B10d 3.3 x 10<sup>6</sup> operations at 100mA load  
 ISO13849-1 Up to PLe depending upon system architecture  
 EN62061 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: 250Vac 1.0A Max. Rating  
 Safety Channel 2 NC Voltage Free: 250Vac 1.0A Max. Rating  
 Safety Channel 3 NO Voltage Free: 24Vdc 0.2A Max. Rating  
 Fuse Internal 1.0A (F) External 0.8A (F) (User)  
 Contact Release Time <2ms  
 Initial Contact Resistance <500 milliohm  
 Minimum Switched Current 10Vdc 1mA  
 Dielectric Withstand 250Vac  
 Insulation Resistance 100 Mohms  
 Recommended Setting Gap 5mm  
 Switching Distance Sao 10mm Close Sar 22mm Open  
 (Target to Target)  
 Tolerance to Misalignment 5mm in any direction from 5mm setting gap  
 Switching Frequency 1.0Hz maximum  
 Approach Speed 200mm/min to 1000mm/sec  
 Body Material Stainless Steel 316 mirror polished finish to Ra4  
 Operating Temperature -25C +105C (CIP SIP cleaning)  
 Enclosure Protection IP69K (NEMA PW12) IP67 (NEMA 6)  
 Shock Resistance IEC68-2-27 11ms 30g  
 Vibration Resistance IEC68-2-6 10-55Hz 1mm  
 Cable Type PVC 6 core 6mm OD Conductors 0.25mm<sup>2</sup>  
 Mounting Bolts 2xM4 Tightening torque 1.0Nm  
 Mounting Position Any

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
139009	Hygiemag SMR	2M	2NC
139010	Hygiemag SMR	5M	2NC
139011	Hygiemag SMR	10M	2NC
139012	Hygiemag SMR	QC-M12	2NC
139013	Hygiemag SMR	2M	2NC 1NO
139014	Hygiemag SMR	5M	2NC 1NO
139015	Hygiemag SMR	10M	2NC 1NO
139016	Hygiemag SMR	QC-M12	2NC 1NO
139017	Hygiemag SMR	2M	1NC
139018	Hygiemag SMR	5M	1NC
139019	Hygiemag SMR	10M	1NC
139020	Hygiemag SMR	QC-M12	1NC
139021	Hygiemag SMR	2M	1NC 1NO
139022	Hygiemag SMR	5M	1NC 1NO
139023	Hygiemag SMR	10M	1NC 1NO
139024	Hygiemag SMR	QC-M12	1NC 1NO

For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.

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