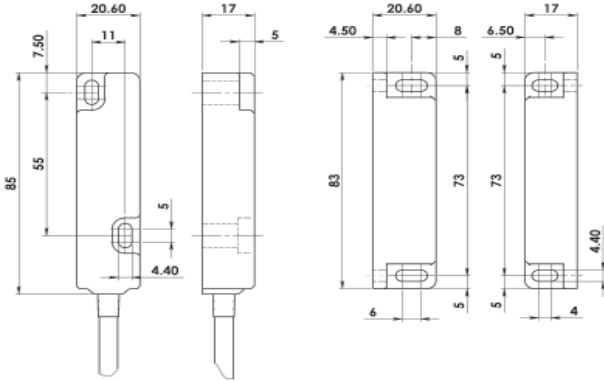


# HYGIEMAG - Magnetic Non Contact Type: CMR

## FEATURES:

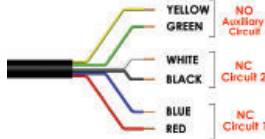
- Specifically designed for Food Processing applications - Stainless Steel 316 Mirror Polished finish (Ra4)
- Suitable for CIP and SIP cleaning - Food Splash Zones EHEDG guidelines
- Slim 20mm wide housing - can be fitted into narrow channels easily
- Wide sensing at 12mm with high tolerance to misalignment
- Can be high pressure hosed at high temperature
- High switching capability - up to 2.0A
- Up to: PLe ISO13849-1
- Quick Connect versions available

## DIMENSIONS:



SWITCH

ACTUATOR



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:

Category	Parameter	Value
Mechanical Reliability B10d	ISO13849-1	3.3 x 10 <sup>6</sup> operations at 100mA load
	EN62061	Up to PLe depending upon system architecture
	Safety Data - Annual Usage PFHd	Up to SIL3 depending upon system architecture
	Proof Test Interval (Life) MTTFd	8 cycles per hour/24 hours per day/365 days
Heavy Duty	Safety Channel 1 NC	2.52 x 10 <sup>-6</sup>
	Safety Channel 2 NC	47 years
Medium Duty	Safety Channel 3 NO	470 years
	Fuse	Internal 1.0A (F) External 0.8A (F) (User)
Electrical	Initial Contact Resistance	<2ms
	Minimum Switched Current	<500 milliohm
	Dielectric Withstand	10Vdc 1mA
	Insulation Resistance	250Vdc
	Recommended Setting Gap	100 Mohms
	Switching Distance (Target to Target)	5mm
	Tolerance to Misalignment	Sao 10mm Close Sar 22mm Open
	Switching Frequency	5mm in any direction from 5mm setting gap
	Approach Speed	1.0Hz maximum
	Body Material	200mm/min to 1000mm/sec
	Operating Temperature	Stainless Steel 316 mirror polished finish to Ra4
	Enclosure Protection	-25C +105C (CIP SIP cleaning)
	Shock Resistance	IP69K (NEMA PW12) IP67 (NEMA 6)
	Vibration Resistance	IEC68-2-27 11ms 30g
Cable Type	IEC68-2-6 10-55Hz 1mm	
Mounting Bolts	PVC 6 core 6mm OD Conductors 0.25mm <sup>2</sup>	
Mounting Position	2xM4 Tightening torque 1.0Nm	
		Any

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



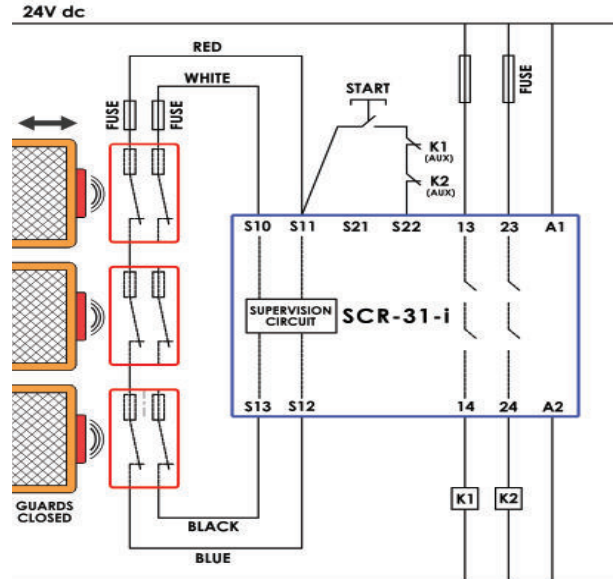
**Stainless Steel 316 Housing mirror polished (Ra4)**  
**Magnetic Actuation - Power Series 230Vac/24Vdc 2.0A**  
**Switching Tolerance up to 12mm**  
**Will operate with most Safety Relays**



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

## CONNECTION EXAMPLE: Magnetic Switches

Three switches connected in series to an SCR-21-i or SCR-31-i to give Dual Channel guard monitoring with Monitored Manual Start and Contactor Feedback check.



OV

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS	NC DUTY
138017	Hygiemag CMR	2M	2NC	Medium 1A
138018	Hygiemag CMR	5M	2NC	Medium 1A
138019	Hygiemag CMR	10M	2NC	Medium 1A
138020	Hygiemag CMR	QC-M12	2NC	Medium 1A
138021	Hygiemag CMR	2M	2NC 1NO	Medium 1A
138022	Hygiemag CMR	5M	2NC 1NO	Medium 1A
138023	Hygiemag CMR	10M	2NC 1NO	Medium 1A
138024	Hygiemag CMR	QC-M12	2NC 1NO	Medium 1A
138025	Hygiemag CMR	2M	1NC	Heavy 2A
138026	Hygiemag CMR	5M	1NC	Heavy 2A
138027	Hygiemag CMR	10M	1NC	Heavy 2A
138028	Hygiemag CMR	QC-M12	1NC	Heavy 2A
138029	Hygiemag CMR	2M	1NC 1NO	Heavy 2A
138030	Hygiemag CMR	5M	1NC 1NO	Heavy 2A
138031	Hygiemag CMR	10M	1NC 1NO	Heavy 2A
138032	Hygiemag CMR	QC-M12	1NC 1NO	Heavy 2A

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