

Magnetically Operated: CMR (HYGIEMAG)

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.

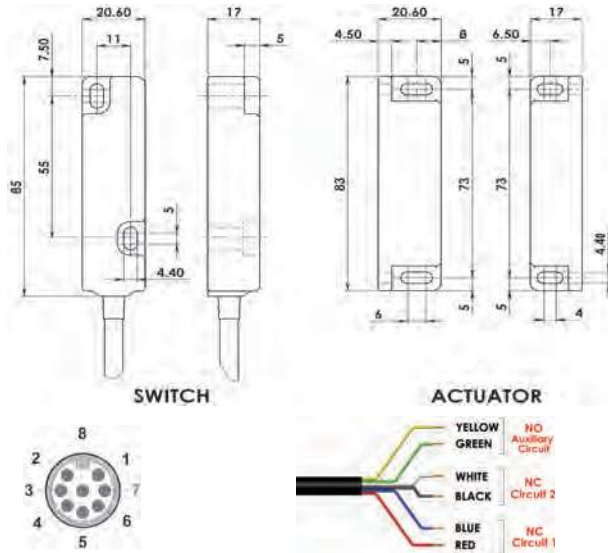
Can be high pressure hosed at high temperature.

High switching capability - up to 2.0A.

Up to: PLe ISO13849-1.

Quick Connect versions available.

DIMENSIONS:



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 EN60947-5-3
EN60204-1 ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d
ISO13849-1
Safety Data - Annual Usage
3.3 x 10⁶ operations at 100mA load
Up to PLe depending upon system architecture
8 cycles per hour/24 hours per day/365 days
MTTFd 470 years

Technical Specification:

Heavy Duty	Safety Channel 1 NC	Voltage Free: 250Vac 2.0A Max. Rating
	Safety Channel 2 NC	Voltage Free: 250Vac 2.0A Max. Rating
	Safety Channel 3 NO	Voltage Free: 24Vdc 0.2A Max. Rating
	Fuse	Internal 2.0A (F) External 1.6A (F) (User)
Medium Duty	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 (Target to Target)	Sao 8mm Close Sar 22mm Open
	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 (QC versions IP67 for connector)
	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 ²
	Mounting Bolts	2xM4 Tightening torque 1.0Nm

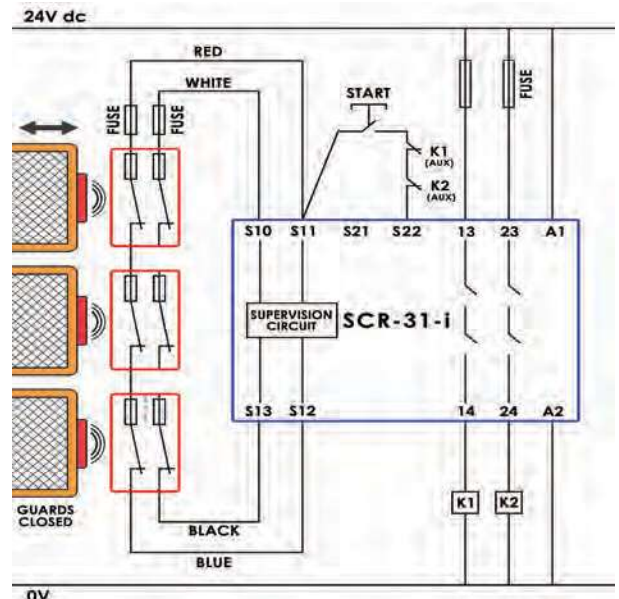
For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.

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.



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.



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