

# HYGIEMAG - Magnetic Non Contact Type: CMR-F

## FEATURES:

Specifically designed for Food Processing applications -

Stainless Steel 316 Mirror Polished finish (Ra4)

Suitable for CIP SIP cleaning, mounting holes are at the rear - no food traps

Suitable for Food Contact Zones - EHEDG Guidelines

Industry standard fixings - can be high pressure hosed at high temperature

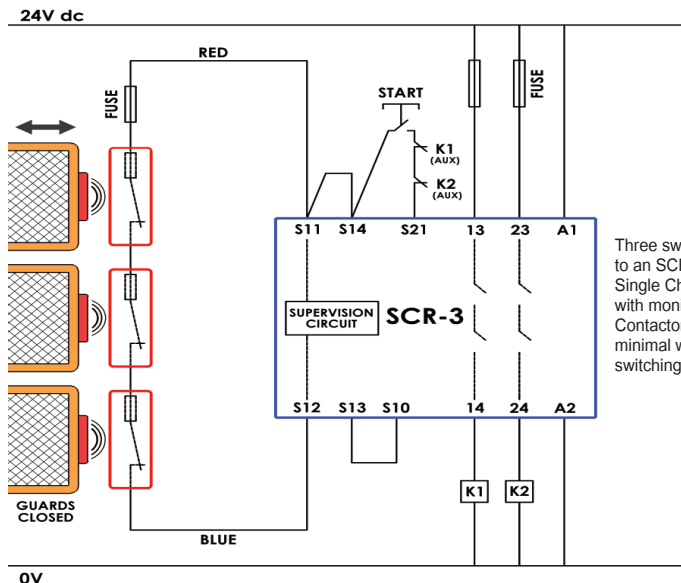
Wide sensing at 12mm with high tolerance to misalignment

Can be high pressure hosed at high temperature

High switching capability - up to 2.0A

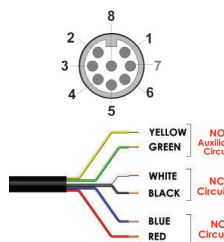
Up to: PLe ISO13849-1

## CONNECTION EXAMPLE: Magnetic Switches



Three switches connected in series to an SCR-2 or SCR-3 to give Single Channel guard monitoring with monitored Manual Start and Contactor Feedback check. Allows minimal wiring but higher current switching to K1 and K2 contactors.

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

ISO13849-1

Safety Data – Annual Usage

Heavy Duty	Safety Channel 1 NC	3.3 x 10 <sup>6</sup> operations at 100mA load
	Safety Channel 2 NC	Up to PLe depending upon system architecture
	Safety Channel 3 NO	8 cycles per hour/24 hours per day/365 days
	Fuse	MTTFd 470 years
Medium 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)
	Initial Contact Resistance	Voltage Free: 250Vac 1.0A Max. Rating
	Minimum Switched Current	Voltage Free: 250Vac 1.0A Max. Rating
	Dielectric Withstand	Voltage Free: 24Vdc 0.2A Max. Rating
	Insulation Resistance	Internal 1.0A (F) External 0.8A (F) (User)
	Recommended Setting Gap	<2ms
	Switching Distance	<500 milliohm
	(Target to Target)	10Vdc 1mA
	Tolerance to Misalignment	250Vac
	Switching Frequency	100 Mohms
	Approach Speed	5mm
	Body Material	Sao 8mm Close
	Operating Temperature	Sar 22mm Open
	Enclosure Protection	5mm in any direction from 5mm setting gap
	Shock Resistance	1.0Hz maximum
	Vibration Resistance	200mm/min to 1000mm/sec
	Cable Type	Stainless Steel 316 mirror polished finish to Ra4
	Mounting Bolts	-25C +105C (CIP SIP cleaning)
	Mounting Position	Any

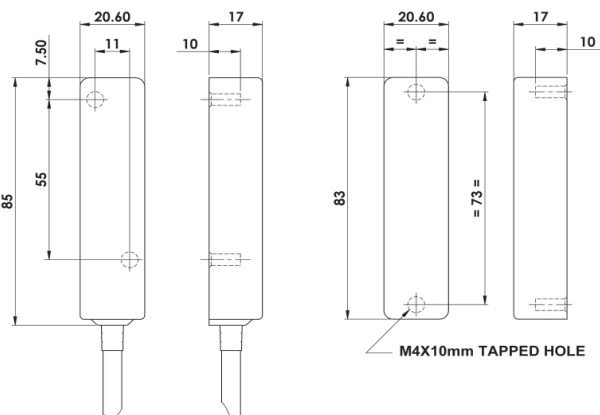
For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.

**Stainless Steel 316 Housing mirror polished (Ra4)**  
**Magnetic Actuation - Power Series 230Vac/24Vdc 2.0A**  
**Switching Tolerance up to 12mm**  
**No Food Traps - Rear Mounting Holes**  
**Will operate with most Safety Relays**



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

## DIMENSIONS:



SWITCH

ACTUATOR

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS	NC DUTY
135017	Hygiemag CMR-F	2M	2NC	Medium 1A
135018	Hygiemag CMR-F	5M	2NC	Medium 1A
135019	Hygiemag CMR-F	10M	2NC	Medium 1A
135020	Hygiemag CMR-F	QC-M12	2NC	Medium 1A
135021	Hygiemag CMR-F	2M	2NC 1NO	Medium 1A
135022	Hygiemag CMR-F	5M	2NC 1NO	Medium 1A
135023	Hygiemag CMR-F	10M	2NC 1NO	Medium 1A
135024	Hygiemag CMR-F	QC-M12	2NC 1NO	Medium 1A
135025	Hygiemag CMR-F	2M	1NC	Heavy 2A
135026	Hygiemag CMR-F	5M	1NC	Heavy 2A
135027	Hygiemag CMR-F	10M	1NC	Heavy 2A
135028	Hygiemag CMR-F	QC-M12	1NC	Heavy 2A
135029	Hygiemag CMR-F	2M	1NC 1NO	Heavy 2A
135030	Hygiemag CMR-F	5M	1NC 1NO	Heavy 2A
135031	Hygiemag CMR-F	10M	1NC 1NO	Heavy 2A
135032	Hygiemag CMR-F	QC-M12	1NC 1NO	Heavy 2A

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