

HYGIEMAG - Magnetic Non Contact - Type: SMR

Magnetic Actuation - Power series 230V.ac 1.0A. / 24V.dc 1.0A. IP69K



Switching Tolerance up to 12mm

Specified to 105C but designed to work up to 125C.
Will operate with most Safety Relays

Specifically designed for Food Processing applications - Stainless Steel 316 Mirror polished finish (Ra4).

Suitable for CIP SIP cleaning - Food Splash Zones EHEDG guidelines

Universal Housing - 22mm fixing hole centre - 50mm wide body

Can be high pressure hosed at high temperature - IP69K

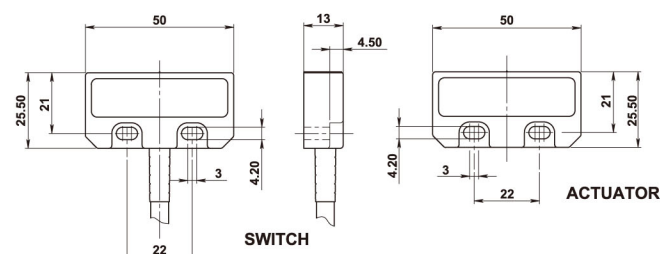
Wide 12mm sensing high tolerance to misalignment

High switching capability - up to 1A.

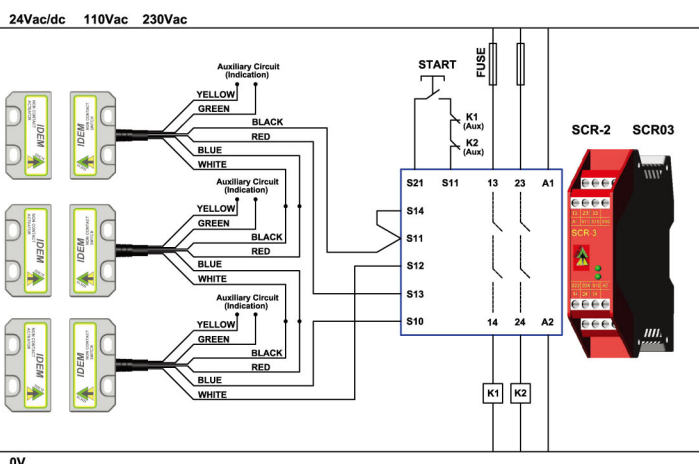
Up to : PLe ISO 13849-1 SIL 3 EN 62061 Cat. 4 EN 954-1

Quick connect versions

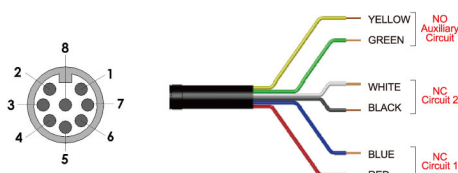
Stainless Steel Housing



Connection example - magnetic switches



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 ⁶ 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 PFHd	8 cycles per hour / 24 hours per day / 365 days
Proof Test Interval (Life) MTTFd	2.52 x 10 ⁻⁸
Safety Channel 1 NC	47 years
Safety Channel 2 NC	470 years
Safety Channel 3 NO	Voltage free : 250V.ac 1.0 A Max. Rating
Fuse	Voltage free : 250V.ac 1.0 A Max. Rating
Contact release time	Voltage free : 24V.dc 0.2 A Max. Rating
Initial contact resistance	Internal 1.0 A (F) External 0.8 A (F) (User)
Minimum switched current	<2ms
Dielectric withstand	<500 milliohm
Insulation Resistance	10V. dc 1mA
Recommended setting gap	250V.ac
Switching Distance: (Target to target)	100 Mohms
Tolerance to misalignment	5mm
Switching frequency	Sao 10mm Close
Approach speed	Sar 22mm Open
Body Material	5mm in any direction from 5mm setting gap
Temperature Range	1.0 Hz maximum
Enclosure Protection	200mm/m. to 1000mm/s.
Shock Resistance	Stainless Steel 316 Mirror polished finish (Ra4)
Vibration Resistance	-25 +105C.
Cable Type	IP69K (NEMA PW12) IP67 (NEMA 6)
Mounting Bolts	IEC 68-2-27 11ms 30g
Mounting Position	IEC 68-2-6 10-55 Hz. 1mm
	PVC 6 core 6mm O.D.
	2 x M4 Tightening torque 1.0 Nm
	Any

Three switches connected to an SCR-2 or SCR-3 to give Dual Channel Guard monitoring but with monitored manual start and contactor feedback check. Auxiliary circuits provide remote signalling from each switch.

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

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

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