

# HYGIEMAG - Magnetic Non Contact: LMR (with Integral LED)

## FEATURES:

2NC circuits for connection to safety relays to achieve up to:

PLe ISO13849-1

Integral LED indication of sensing position

Choice of LED versions:

Green - ON when guard is closed

Red - ON when guard is open

Stainless Steel 316 housing - IP69K suitable for high pressure hosing

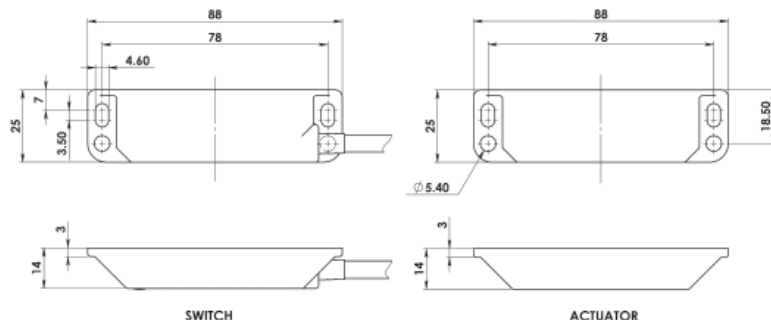
Popular European style narrow fitting for flush mounting

Wide 10mm sensing with high tolerance to misalignment

Long life high power switching capability up to 1A

M12 Quick Connect versions available

## DIMENSIONS:



Recommended operating  
direction for optimum  
performance

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

### Safety Classification and Reliability Data:

Safety Channels NC1 and NC2  
Fuse (NC Circuits) Fuse externally 0.8A (F)  
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  
LED Supply Voltage 24Vdc +/-10%  
NC Switching Distance Sao 8mm Close  
(Target to Target) Sar 22mm Open  
LED (Green) Typical 8mm ON 15mm OFF  
LED (Red) Typical 8mm OFF 15mm ON  
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 Ra4  
Operating Temperature -25C +105C (CIP SIP cleaning)  
Enclosure Protection IP67 IP69K  
Shock Resistance IEC68-2-27 11ms 30g  
Vibration Resistance IEC68-2-6 10-55Hz 1mm  
Mechanical Life Expectancy 10,000,000 switching operations  
Electrical Life Expectancy 1,000,000 switching operations  
De-rating Safety Factor 2  
Tested to 2,000,000 cycles at 24V 0.2A  
Cable Type PVC 6 core 6mm OD Conductors 0.25mm<sup>2</sup>  
Mounting Bolts 2xM4 Tightening torque 1.0Nm  
Mounting Position Any

Integral LED (options available)

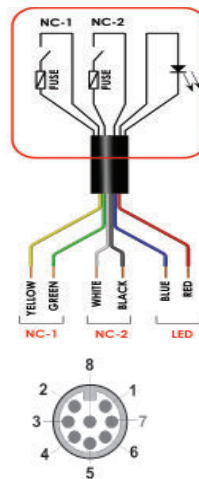
Magnetic Actuation - Power Series

Switching Tolerance up to 10mm

**Will operate with most Safety Relays**



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



**Note:** The LED does  
not indicate the status  
of the NC Safety  
Contacts, but indicates  
that the actuator is  
aligned to give optimum  
performance.

Quick Connect QC M12 8 Way Male Plug Pin view from Switch	Standard Lead Colour	Circuit (Actuator Present)
4	Yellow	NC2
6	Green	NC2
7	Black	NC1
1	White	NC1
2	Red	Supply + 24Vdc
3	Blue	Supply 0Vdc

LED COLOUR AND STATUS	SALES NUMBER	TYPE	CABLE LENGTH	OUTPUT CIRCUITS
<b>LED GREEN</b> (Illuminated when the guard is closed)	133120	Hygiemag LMR (with Integral LED)	2M	2NC
	133121	Hygiemag LMR (with Integral LED)	5M	2NC
	133122	Hygiemag LMR (with Integral LED)	10M	2NC
	133123	Hygiemag LMR (with Integral LED)	QC-M12	2NC
<b>LED RED</b> (Illuminated when the guard is open)	133124	Hygiemag LMR (with Integral LED)	2M	2NC
	133125	Hygiemag LMR (with Integral LED)	5M	2NC
	133126	Hygiemag LMR (with Integral LED)	10M	2NC
	133127	Hygiemag LMR (with Integral LED)	QC-M12	2NC

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