

# IDEMAG - Magnetic Non Contact Type: BPR (M18 Plastic)

## FEATURES:

M18 cylindrical fitting suitable for all industry applications.  
 Easy to install - M18 threaded body - easy to set  
 Wide 10mm sensing  
 Suitable for harsh environments of Food Processing and Packaging  
 High specification red polyester housing  
 Up to: PLe ISO13849-1  
 2NC 1NO circuits  
 Quick Connect versions available

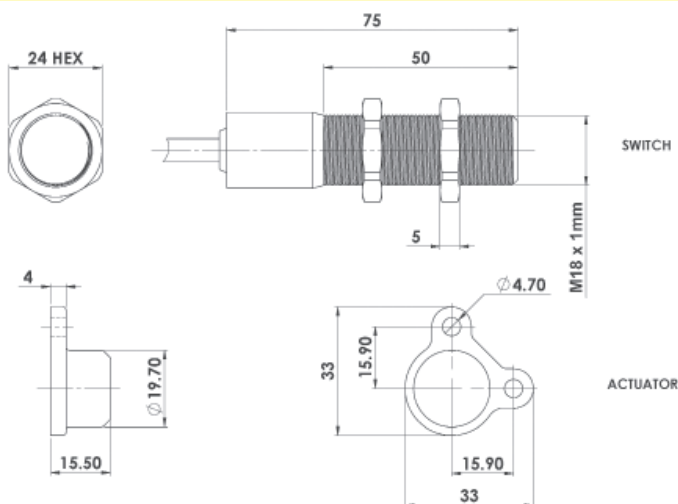
## Magnetic Actuation

Switching Tolerance up to 10mm

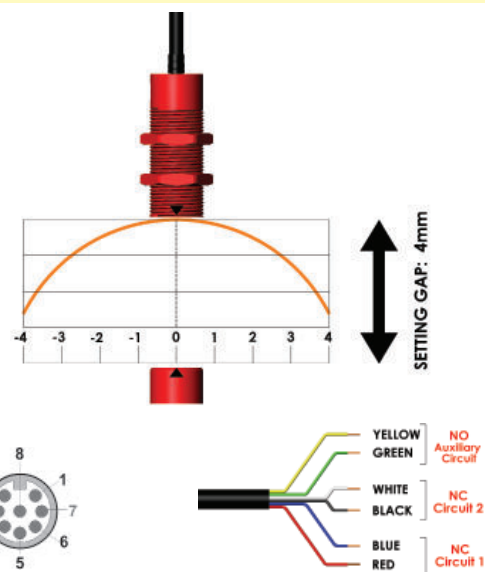
Will operate with most Safety Relays  
 Quick Connect versions available



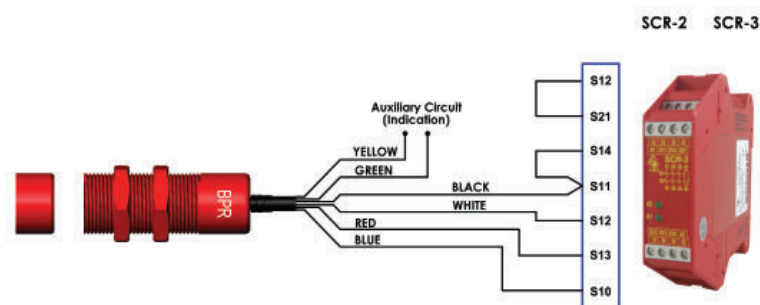
## DIMENSIONS:



## SETTING GAP:



## CONNECTION EXAMPLE: Magnetic Switches



One switch connected to an SCR-2 or SCR-3 to give Dual Channel guard monitoring with Automatic Start.

Standards: ISO14119 EN60947-5-3  
 EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

Mechanical Reliability B10D	3.3 x 10 <sup>6</sup> operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 470 years
Safety Channel 1 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 2 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 3 NO	Voltage Free: 24Vdc 0.2A Max. Rating
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 20mm Open
Tolerance to Misalignment	4mm in any direction from 4mm setting gap
Switching Frequency	1.0Hz maximum
Approach Speed	200mm/min to 1000mm/sec
Body Material	UL approved polyester
Operating Temperature	-25C +80C
Enclosure Protection	IP69K IP67
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 <sup>2</sup>
Mounting Position	Any

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

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

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
415009	Idemag BPR Plastic	2M	2NC
415010	Idemag BPR Plastic	5M	2NC
415011	Idemag BPR Plastic	10M	2NC
415012	Idemag BPR Plastic	QC-M12	2NC
415013	Idemag BPR Plastic	2M	2NC 1NO
415014	Idemag BPR Plastic	5M	2NC 1NO
415015	Idemag BPR Plastic	10M	2NC 1NO
415016	Idemag BPR Plastic	QC-M12	2NC 1NO

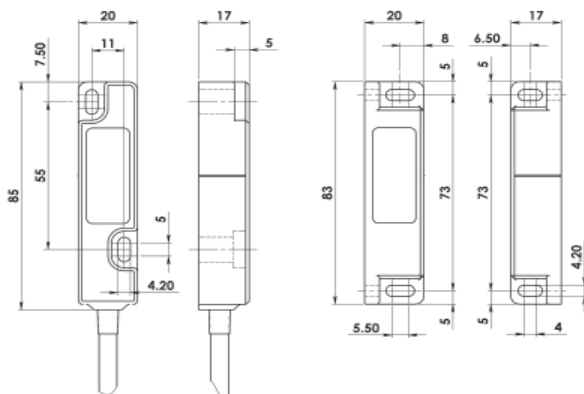
140101	Female QC Lead	M12 Female 5m. 8 way
140102	Female QC Lead	M12 Female 10m. 8 way

# IDEMAG - Magnetic Non Contact Type: CPR

## FEATURES:

- Can be high pressure hosed at high temperature IP69K
- Slim fitting suitable for all industry applications.
- Easy to install within narrow frame structures
- Operates from two sides for ease of applications
- Wide 12mm sensing and high tolerance to misalignment
- High switching capability 1A (medium duty) or 2A (heavy duty)
- Up to: PLe ISO13849-1
- 2NC 1NO circuits
- 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	3.3 x 10 <sup>6</sup> operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days MTTFd 470 years
Heavy Duty	Safety Channel 1 NC Safety Channel 2 NC Safety Channel 3 NO
Medium Duty	Safety Channel 1 NC Safety Channel 2 NC Safety Channel 3 NO
Voltage Free	250Vac 2.0A Max. Rating
Internal 2.0A (F)	External 1.6A (F) (User)
Voltage Free	250Vac 1.0A Max. Rating
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	UL approved polyester
Operating Temperature	-25C +80C
Enclosure Protection	IP69K (NEMA PW12) IP67 (NEMA 6)
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 <sup>2</sup>
Mounting Bolts	2xM4 Tightening torque 1.0Nm
Mounting Position	Any

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



## Magnetic Actuation - Power Series

Switching Tolerance up to 12mm

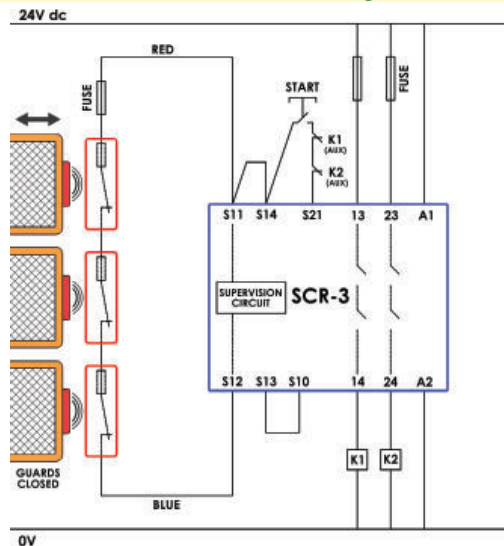
Heavy Duty 230Vac/24Vdc 2A or Medium Duty 1.0A

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

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS	NC DUTY
113001	Idemag CPR	2M	2NC	Medium 1A
113002	Idemag CPR	5M	2NC	Medium 1A
113003	Idemag CPR	10M	2NC	Medium 1A
113004	Idemag CPR	QC-M12	2NC	Medium 1A
113005	Idemag CPR	2M	2NC 1NO	Medium 1A
113006	Idemag CPR	5M	2NC 1NO	Medium 1A
113007	Idemag CPR	10M	2NC 1NO	Medium 1A
113008	Idemag CPR	QC-M12	2NC 1NO	Medium 1A
113009	Idemag CPR	2M	1NC	Heavy 2A
113010	Idemag CPR	5M	1NC	Heavy 2A
113011	Idemag CPR	10M	1NC	Heavy 2A
113012	Idemag CPR	QC-M12	1NC	Heavy 2A
113013	Idemag CPR	2M	1NC 1NO	Heavy 2A
113014	Idemag CPR	5M	1NC 1NO	Heavy 2A
113015	Idemag CPR	10M	1NC 1NO	Heavy 2A
113016	Idemag CPR	QC-M12	1NC 1NO	Heavy 2A

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

113300	Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials	1 x Switch 1 x Actuator
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# EUROMAG - Magnetic Non Contact: LPR (with Integral LED)

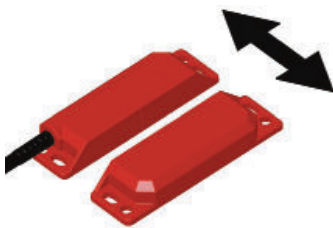
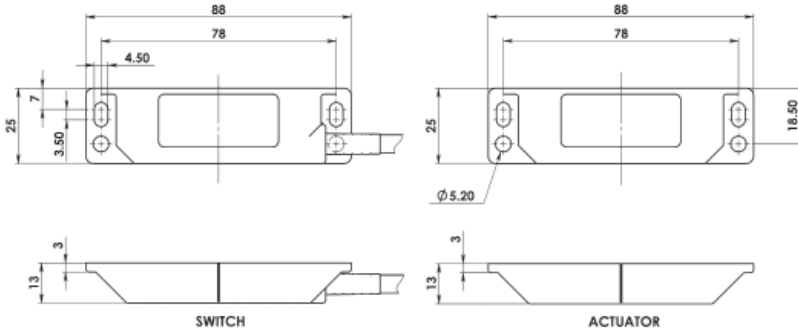
## FEATURES:

- 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
- Popular European fitting suitable for all industry applications
- Narrow fitting to allow 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



**Integral LED (options available)**  
**Magnetic Actuation - Power Series**  
**Switching Tolerance up to 10mm**  
**Will operate with most Safety Relays**

## DIMENSIONS:



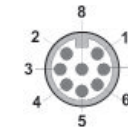
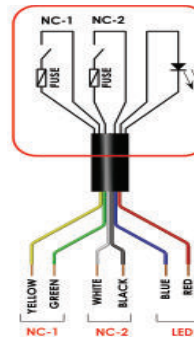
Recommended operating direction for optimum performance

**Standards:** ISO14119 EN60947-5-3  
 EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

- |                                          |                                           |
|------------------------------------------|-------------------------------------------|
| Safety Channels NC1 and NC2              | Voltage free: 250Vac 1.0A Max.            |
| 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 (Target to Target) | Sao 8mm Close                             |
| 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                            | UL approved polyester                     |
| Operating Temperature                    | -25C +80C                                 |
| Enclosure Protection                     | IP67                                      |
| 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            |

Cable Type: PVC 6 core 6mm OD Conductors 0.25mm<sup>2</sup>  
 Mounting Bolts: 2xM4 Tightening torque 1.0Nm  
 Mounting Position: Any



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

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



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.

LED COLOUR AND STATUS	SALES NUMBER	TYPE	CABLE LENGTH	OUTPUT CIRCUITS
<b>LED GREEN</b> (Illuminated when the guard is closed)	110101	Euromag LPR (with Integral LED)	2M	2NC
	110102	Euromag LPR (with Integral LED)	5M	2NC
	110103	Euromag LPR (with Integral LED)	10M	2NC
	110104	Euromag LPR (with Integral LED)	QC-M12	2NC
<b>LED RED</b> (Illuminated when the guard is open)	110105	Euromag LPR (with Integral LED)	2M	2NC
	110106	Euromag LPR (with Integral LED)	5M	2NC
	110107	Euromag LPR (with Integral LED)	10M	2NC
	110108	Euromag LPR (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.

110300	Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials	1 x Switch 1 x Actuator
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# EUROMAG - Magnetic Non Contact Type: LPR

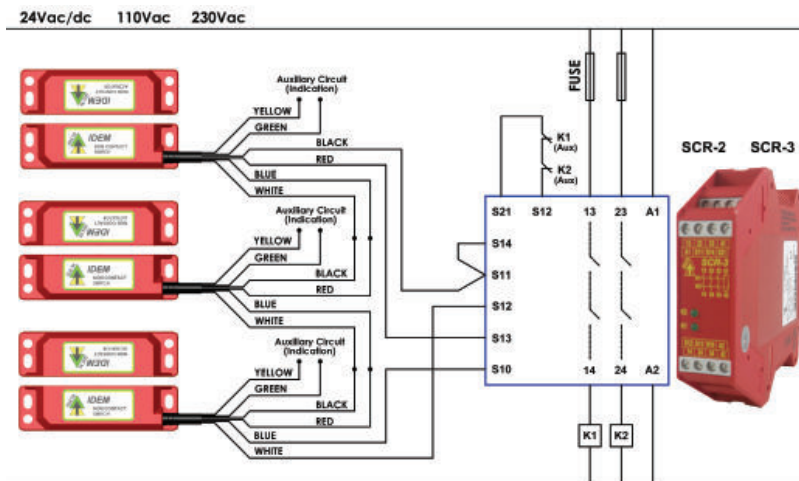
## FEATURES:

Popular European fitting suitable for all industry applications  
Wide 12mm sensing and high tolerance to misalignment  
Narrow fitting to enable flush mounting  
Long life high power switching capability up to 1A  
Up to: PLe ISO13849-1  
2NC 1NO circuits  
Quick Connect versions available

**Magnetic Actuation - Power Series**  
**Switching Tolerance up to 12mm**  
**Medium Duty versions 230Vac/24Vdc 1A**  
**Will operate with most Safety Relays**

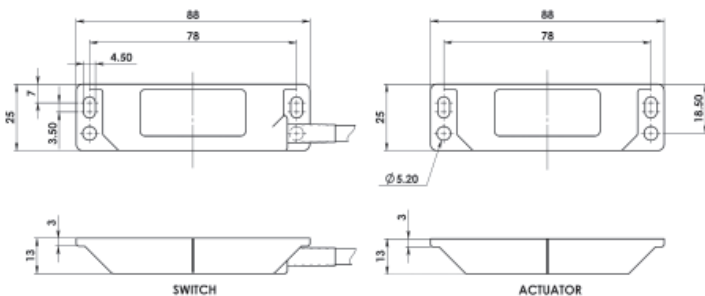


## CONNECTION EXAMPLE: Magnetic Switches



0V  
Three switches connected in series to an SCR-2 or SCR-3 to give Dual Channel guard monitoring with Automatic Start and Contactor Feedback check.  
Optional auxiliary circuits provides for remote signalling from each switch.

## DIMENSIONS:



Standards: ISO14119 EN60947-5-3  
EN60204-1 ISO13849-1 EN62061 UL508

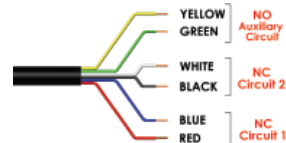
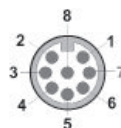
### Safety Classification and Reliability Data:

Mechanical Reliability B10d  
ISO13849-1  
Safety Data – Annual Usage  
8 cycles per hour/24 hours per day/365 days  
MTTFd 470 years  
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 Sao 8mm Close  
(Target to Target) 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 UL approved polyester  
Operating Temperature -25C +80C  
Enclosure Protection IP69K (NEMA PW12) IP67 (NEMA 6)  
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<sup>2</sup>  
Mounting Bolts 2xM4 Tightening torque 1.0Nm  
Mounting Position Any

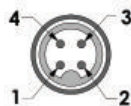
For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.



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



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



NC1 Pins 1 and 2  
NC2 Pins 3 and 4  
M12 4 Way Versions  
Asi compatible Pin out  
Pin view from switch

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
110009	Euromag LPR	2M	2NC
110010	Euromag LPR	5M	2NC
110011	Euromag LPR	10M	2NC
110012	Euromag LPR	QC-M12	2NC
110013	Euromag LPR	2M	2NC 1NO
110014	Euromag LPR	5M	2NC 1NO
110015	Euromag LPR	10M	2NC 1NO
110016	Euromag LPR	QC-M12	2NC 1NO
110021	Euromag LPR	2M	1NC 1NO
110022	Euromag LPR	5M	1NC 1NO
110023	Euromag LPR	10M	1NC 1NO
110024	Euromag LPR	QC-M12 4 Way	2NC



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

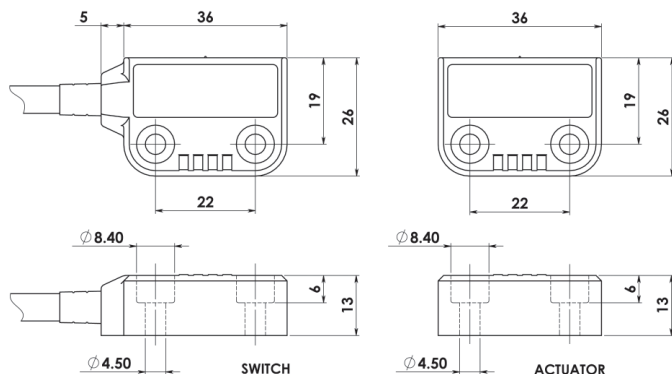
110300	Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials	1 x Switch 1 x Actuator
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# IDEMAG - Magnetic Non Contact Type: MPR

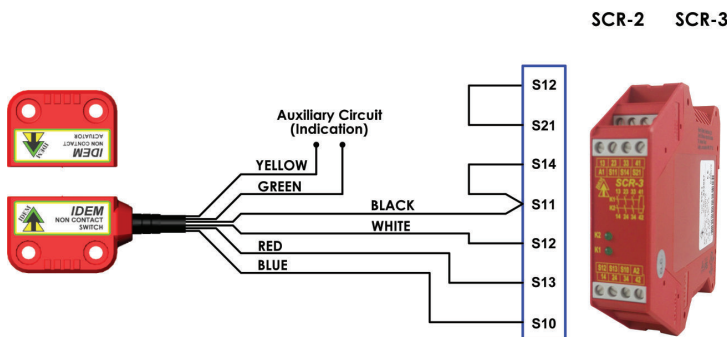
## FEATURES:

Compact and robust fitting suitable for all small guard applications.  
Hygienic screw covers ensure suitability for Food Processing washdown  
Cost-effective interlock solution  
Wide sensing at 12mm and high tolerance to misalignment  
High specification polyester housing with integral back plate  
Can be mounted unobtrusively in channels or behind doors  
Left or Right Cable exit options available  
High current switching capability up to 0.5A  
Up to: PLe ISO13849-1  
2NC 1NO circuits  
Quick Connect versions available - M12 8 Way or M8 4 Way

## DIMENSIONS:



## CONNECTION EXAMPLE: Magnetic Switches



Standards: ISO14119 EN60947-5-3  
EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

Mechanical Reliability B10d	3.3 x 10 <sup>6</sup> operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 470 years
Medium Duty Safety Channel 1 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 2 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 3 NO	Voltage Free: 24Vdc 0.2A Max. Rating
Fuse	Internal 1.0A (F) External 0.4A (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	Sao 8mm Close
(Target to Target)	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	UL approved polyester
Operating Temperature	-25C +80C
Enclosure Protection	IP69K (NEMA PW12) IP67 (NEMA 6)
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 <sup>2</sup>
Mounting Bolts	2xM4 Tightening torque 1.0Nm
Mounting Position	Any

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



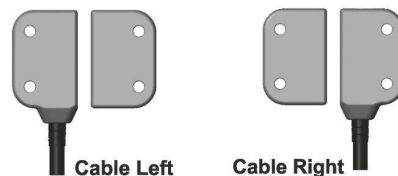
## Magnetic Actuation

Switching Tolerance up to 12mm

Will operate with most Safety Relays



Left or Right Cable Exit Options available



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

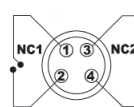


SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
114001	MPR Cable Right	2M	2NC
114002	MPR Cable Right	5M	2NC
114003	MPR Cable Right	10M	2NC
114004	MPR Cable Right	QC-M12	2NC
114005	MPR Cable Right	2M	2NC 1NO
114006	MPR Cable Right	5M	2NC 1NO
114007	MPR Cable Right	10M	2NC 1NO
114008	MPR Cable Right	QC-M12	2NC 1NO
114009	MPR Cable Left	2M	2NC
114010	MPR Cable Left	5M	2NC
114011	MPR Cable Left	10M	2NC
114012	MPR Cable Left	QC-M12	2NC
114013	MPR Cable Left	2M	2NC 1NO
114014	MPR Cable Left	5M	2NC 1NO
114015	MPR Cable Left	10M	2NC 1NO
114016	MPR Cable Left	QC-M12	2NC 1NO

Alternative QC Version

M8 Universal

4 Way Integral Connector



M8 Connector Right

2NC Versions

1NC 1NO Versions

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
114020	MPR Connector Right	QC M8 2NC	Close 10mm Open 20mm
114021	MPR Connector Left	QC M8 2NC	Close 10mm Open 20mm
114022	MPR Connector Right	QC M8 1NC 1NO	Close 10mm Open 20mm
114023	MPR Connector Left	QC M8 1NC 1NO	Close 10mm Open 20mm
114024	MPR Connector Right	QC M8 2NC	Close 4mm Open 10mm
114025	MPR Connector Left	QC M8 2NC	Close 4mm Open 10mm
114026	MPR Connector Right	QC M8 1NC 1NO	Close 4mm Open 10mm
114027	MPR Connector Left	QC M8 1NC 1NO	Close 4mm Open 10mm

114300

Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials

1 x Switch  
1 x Actuator

# IDEMAG - Magnetic Non Contact Type: RPR (M30 Plastic)

## FEATURES:

M30 cylindrical fitting suitable for all industry applications.  
 Easy to install - M30 threaded body - easy to set  
 Wide 10mm sensing  
 Suitable for harsh environments of Food Processing and Packaging  
 High specification red polyester housing  
 Up to: PLe ISO13849-1  
 2NC 1NO circuits  
 Quick Connect versions available



## Magnetic Actuation

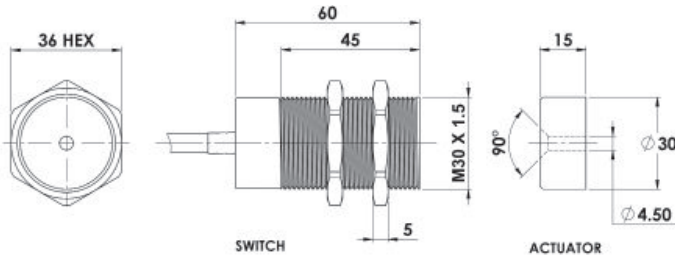
Switching Tolerance up to 10mm

Will operate with most Safety Relays

Quick Connect versions available

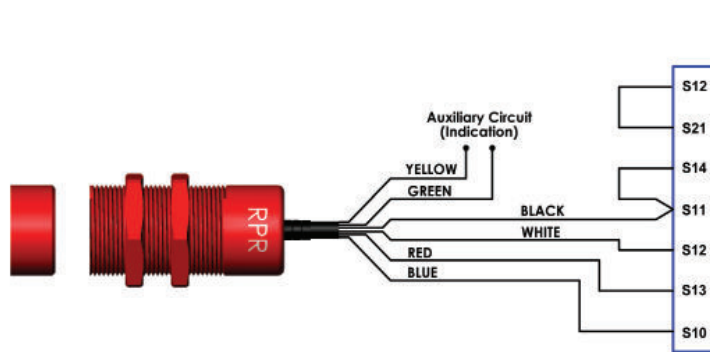


## DIMENSIONS:

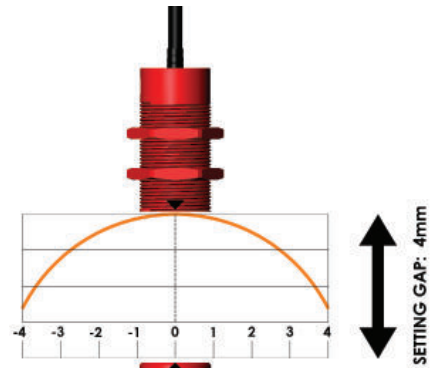


## CONNECTION EXAMPLE: Magnetic Switches

## SETTING GAP:



SCR-2 SCR-3



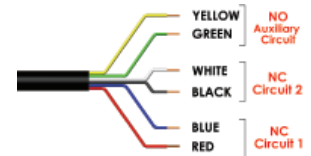
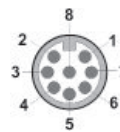
One switch connected to an SCR-2 or SCR-3 to give Dual Channel guard monitoring with Automatic Start.

**Standards:** ISO14119 EN60947-5-3  
 EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and

### Reliability Data:

Mechanical Reliability B10d	3.3 x 10 <sup>6</sup> operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 470 years
Safety Channel 1 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 2 NC	Voltage Free: 250Vac 0.5A Max. Rating
Safety Channel 3 NO	Voltage Free: 24Vdc 0.2A Max. Rating
Minimum Switched Current	10Vdc 1mA
Dielectric Withstand	250Vac
Insulation Resistance	100 Mohms
Recommended Setting Gap	5mm
Switching Distance	Sao 8mm Close
(Target to Target)	Sar 20mm Open
Tolerance to Misalignment	4mm in any direction from 4mm setting gap
Switching Frequency	1.0Hz maximum
Approach Speed	200mm/min to 1000mm/sec
Body Material	UL approved polyester
Operating Temperature	-25C +80C
Enclosure Protection	IP69K IP67
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 <sup>2</sup>
Mounting Position	Any



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

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
116009	Idemag RPR Plastic	2M	2NC
116010	Idemag RPR Plastic	5M	2NC
116011	Idemag RPR Plastic	10M	2NC
116012	Idemag RPR Plastic	QC-M12	2NC
116013	Idemag RPR Plastic	2M	2NC 1NO
116014	Idemag RPR Plastic	5M	2NC 1NO
116015	Idemag RPR Plastic	10M	2NC 1NO
116016	Idemag RPR Plastic	QC-M12	2NC 1NO

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



# IDEMAG - Magnetic Non Contact Type: SPR

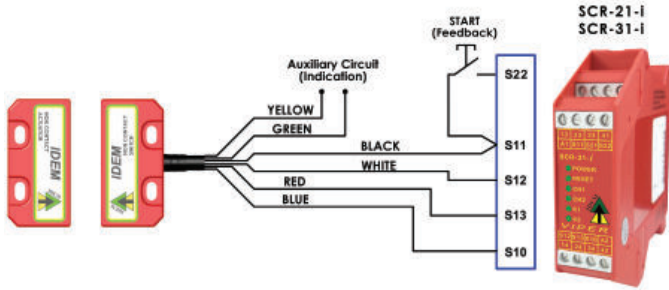
## FEATURES:

- Universal fitting - established 22mm fixing footprint
- Suitable for most general industry applications
- Can be high pressure hosed at high temperature - IP69K
- Withstands environments where high humidity or hose down is required
- Wide sensing at 12mm and high tolerance to misalignment
- High specification polyester housing with integral back plate
- Long life high current switching capability up to 1A
- Up to: PLe ISO13849-1
- 2NC 1NO circuits
- Quick Connect versions available

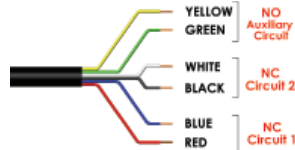
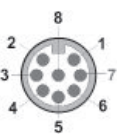


**Magnetic Actuation - Power Series**  
**Switching Tolerance up to 12mm**  
**Medium Duty versions 230Vac/24Vdc 1A**  
**Will operate with most Safety Relays**

## CONNECTION EXAMPLE: Magnetic Switches



Single switch connected to an SCR-21-i or SCR-31-i to give Dual Channel guard monitoring with Manual Start. Optional auxiliary circuit provides for remote signalling from switch.



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



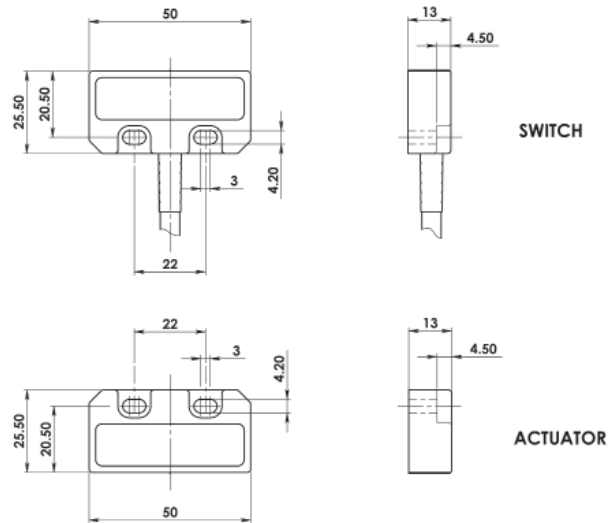
Quick Connect QC M12 8 Way Male Plug Pin view from Switch	Standard Lead Colour	Circuit (Actuator Present)
4	Yellow	NO
6	Green	NO
7	Black	NC2
1	White	NC2
2	Red	NC1
3	Blue	NC1

**Standards:** ISO14119 EN60947-5-3  
 EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

Mechanical Reliability B10d	3.3 x 10 <sup>6</sup> operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 470 years
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	UL approved polyester
Operating Temperature	-25C +80C
Enclosure Protection	IP69K (NEMA PW12) IP67 (NEMA 6)
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 <sup>2</sup>
Mounting Bolts	2xM4 Tightening torque 1.0Nm
Mounting Position	Any

## DIMENSIONS:



SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
111009	Idemag SPR	2M	2NC
111010	Idemag SPR	5M	2NC
111011	Idemag SPR	10M	2NC
111012	Idemag SPR	QC-M12	2NC
111013	Idemag SPR	2M	2NC 1NO
111014	Idemag SPR	5M	2NC 1NO
111015	Idemag SPR	10M	2NC 1NO
111016	Idemag SPR	QC-M12	2NC 1NO

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

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

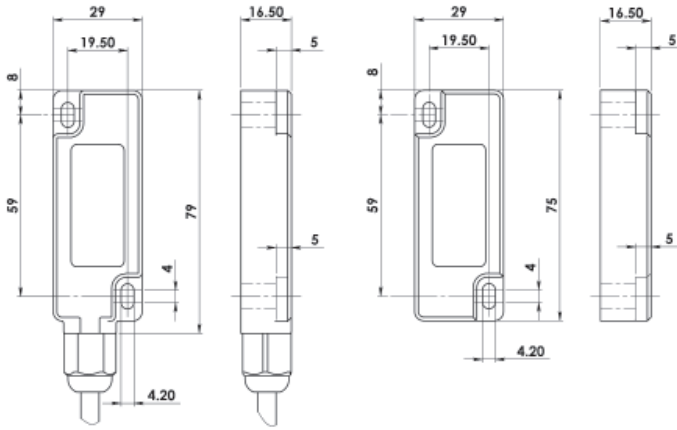
111300	Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials	1 x Switch 1 x Actuator
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# IDEMAG - Magnetic Non Contact Type: WPR

## FEATURES:

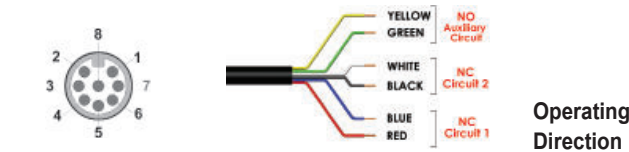
Robust wide fitting suitable for all industry applications.  
 Wide 12mm sensing and high tolerance to misalignment  
 Long life high power switching capability: Heavy Duty 2A  
 Up to: PLe ISO13849-1  
 2NC 1NO circuits  
 Quick Connect versions available

## 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

### Alternative QC option:



NC1 Pins 1 and 2  
 NC2 Pins 3 and 4  
 M12 4 Way Versions  
 Asi compatible Pin out  
 Pin view from switch

Standards: ISO14119 EN60947-5-3  
 EN60204-1 ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

Mechanical Reliability B10d 3.3 x 10<sup>6</sup> operations at 100mA load  
 ISO13849-1 Up to PLe depending upon system architecture  
 Safety Data – Annual Usage 8 cycles per hour/24 hours per day/365 days  
 MTTFd 470 years

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)
	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	Sao 8mm Close
	(Target to Target)	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	UL approved polyester
	Operating Temperature	-25C +80C
	Enclosure Protection	IP69K (NEMA PW12) IP67 (NEMA 6)
	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 <sup>2</sup>
	Mounting Bolts	2xM4 Tightening torque 1.0Nm
	Mounting Position	Any

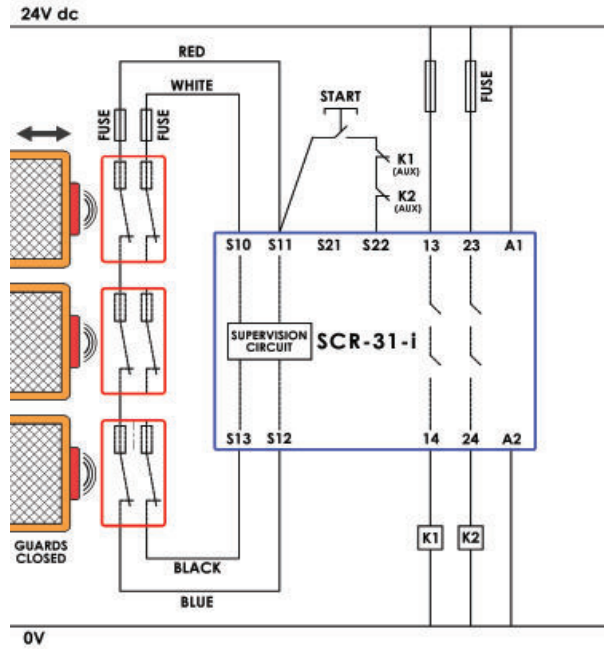
For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed and the actuator is present.



**Magnetic Actuation - Power Series**  
**Switching Tolerance up to 12mm**  
**Heavy Duty version 230Vac/24Vdc 2A**  
**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 but with Monitored Manual Start and Contactor Feedback check.

SALES NUMBER	TYPE	CABLE LENGTH	CIRCUITS
112001	Idemag WPR	2M	2NC
112002	Idemag WPR	5M	2NC
112003	Idemag WPR	10M	2NC
112004	Idemag WPR	QC-M12	2NC
112005	Idemag WPR	2M	2NC 1NO
112006	Idemag WPR	5M	2NC 1NO
112007	Idemag WPR	10M	2NC 1NO
112008	Idemag WPR	QC-M12	2NC 1NO
112009	Idemag WPR	2M	1NC 1NO
112010	Idemag WPR	5M	1NC 1NO
112011	Idemag WPR	10M	1NC 1NO
112012	Idemag WPR	QC-M12	1NC 1NO

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

112300	Plastic 8mm Spacers (2) for use when mounting on Ferrous Materials	1 x Switch 1 x Actuator
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