# IDEM NON-CONTACT RFID LOCKING SWITCH MGL STAINLESS STEEL

460003
MGL-2SS-U QC-M12

- Heavy or medium duty holding force
- Available in 316 grade stainless steel
- Operates with most safety relays to achieve up to PLe/Cat.4
- RFID master coded or unique coding

## Product description

The MGL range of Non Contact RFID Coded switches has been developed in order to provide and maintain a high level of functional safety whilst providing a reliable magnetic door interlock.

Flexibility for holding force is provided by the provision of 2 different switch sizes - Heavy Duty (1100N (F1Max) Stainless Steel and Medium Duty (600N (F1Max) Stainless Steel to cover all applications.

Coding is achieved by using magnetic and RFID techniques and both principles need to be satisfied for the switch to operate safely.

The MGL range will connect to the majority of popular standard safety relays to achieve up to PLe/Category 4 to ISO13849-1.

The Stainless Steel 316 version has been designed with a Stainless Steel magnet and IP69K rating making it suitable for CIP and SIP processes.

RFID coding options
The RFID coding is offered in two types and can be either coded by series or uniquely coded.
Type 1: Master Code - by series (any actuator will operate any switch) this is used when unique door activation is not required, but the benefit of RFID makes it virtually impossible to be overridden or by-passed by simple means.
Type 2: 32,000,000 Unique Codes - the switch is factory set and used when unique activation is required in areas where there are many interlocked doors and security of individual areas is required.

The MGL combines magnetic sensing and RFID technology to provide non contact operation and high anti-tamper coding. In addition an electromagnet is used to lock machine guards.

Only when the actuator is in the correct position can the lock be achieved and the safety outputs closed.

The switch provides two safe switching outputs for use with popular safety relays as well as a semi conductor auxiliary signal to indicate the door position.

There are 2 LEDs that offer 5 diagnostic functions to the user.

The switch is "Power to Lock" and therefore consideration must be given in the event of a power failure to machines where a run down time is present before the hazard is removed.

Specifications

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| **Approvals** | ISO 14119, EN60204-1, ISO 13849-1, EN62061, UL 508, EN60947-5-3 |
| **Cable length** | 0.25 m |
| **Cable type** | PVC 6 or 8 core 6mm OD |
| **Central Material** | Stainless steel 316 |
| **Coding** | Uniquely coded |
| **Contact Type** | 2NC safety outputs overload protected, 1NO auxiliary output for indication of door open |
| **Contacts** | 2NC 1NO |
| **Holding force (F1Max)** | 600 |
| **Integrated LED indication** | Yes |
| **IP Class** | IP67, IP69K |
| **Mechanical reliability B10d** | No mechanical parts implemented |
| **Mounting** | 2 x M5 |
| **MTTFd** | 1100a |
| **Operating temperature** | -25°C...+40°C |
| **PL** | up to PLe |
| **Safety category** | 4 |
| **SIL** | up to SIL3 |
| **Solenoid Voltage** | 24V dc |
| **Switching current min** | 10V dc 1mA |
| **Switching distance** | Sao 1mm close Sar 10mm open |
| **Switching frequency max** | 1.0 Hz maximum |
| **Weight** | 1500 |