



MMECHAN CONTROLS



Product Brochure

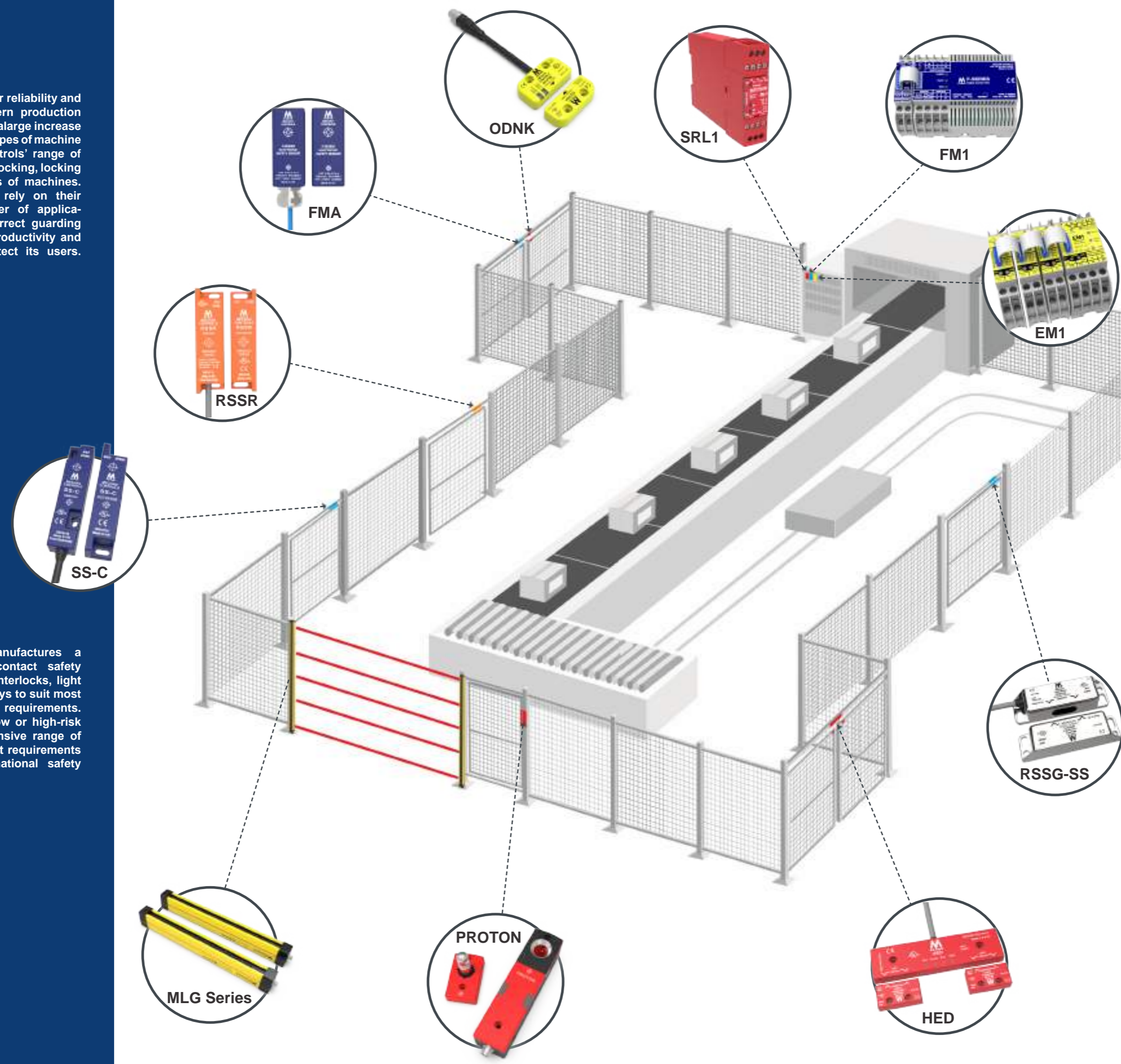
MECHAN CONTROLS LTD

Machine Safety for People and Productivity

Products

The growing demand for reliability and efficiency in the modern production environment has led to a large increase in the need for various types of machine guarding. Mechan Controls' range of products cater for non-locking, locking and non-guarded areas of machines. This means you can rely on their products for a number of applications, ensuring the correct guarding is used to maximise productivity and more importantly, protect its users.

Mechan Controls manufactures a large range of non-contact safety switches, mechanical interlocks, light curtains and safety relays to suit most machine guarding requirements. Whether you have a low or high-risk application, their extensive range of products fulfil the latest requirements set out in the international safety standards.



Concrete block/building material manufacturers



Food Production



Automation



Dairy Plants



Bottling Plants



Pharmaceutical



RFID Safety System

F-Series



- CAT 4 SIL3 PL-e Safety System
- Modular Control Unit
- RFID Safety Switches
- Monitor up to 30 Switches / E-Stops
- Unique Code Safety Switches (EN14119 High Coded)

The F-SERIES, is the latest version of Mechan's unique RFID safety system which now has a record of over 30 YEARS reliability in all types of industrial applications.

The DIN rail mounting safety control unit can monitor up to 30 Mechan Safety Switches and/or Emergency Stop Buttons in one system. The RFID non-contact safety switches are fully encapsulated, easy to install and tolerant to misalignment.

Together the switches and control module provide a safety system capable of meeting the international safety standard requirements CAT 4 SIL 3 PL-e that can be used in the harshest environments, providing long term reliability.



Features

- Multi-Gate Monitoring
- Tamper-Proof Safety Switches
- Long Term Proven Reliability
- Modular System
- Monitor up to 30 Guards and / or E-Stops
- Guard Status Indication
- Simple to Install and Expand
- No Programming Required

Coded Magnetic Safety System



ISIS

- SIL3 PL-e Safety System
- Control Unit Monitors Safety Switches & E-Stops
- Guard Status Indication
- Tamper Resistant Safety Switches
- Suitable for use with Safety Mats and Sensing Edges
- Simple 2 Wire Connections

The ISIS safety system is a tamper resistant non-contact safety switch system, suitable for use in most types of machine guarding applications where guard locking is not required.

The ISIS Safety control units can monitor 2 (ISIS-2) or 4 (ISIS-4) safety switches with the ISIS-E being used to add more safety switch inputs to a system. The ISIS-4 can also be used to monitor the Emergency Stop button.

All ISIS control units are suitable for use with safety mats and sensing edges terminated with 6K8 or 8K2 resistor. The non-contact safety switches are available in stainless steel or ABS and have a simple 2 wire connection to the control unit which can detect open and short circuit faults as they happen.

The ISIS system comprises of a control unit and 1 or more safety switches. (The ISIS-4 can also monitor and EStopinputs).

Each ISIS safety switch has a 2-wire connection to the control unit. The safety switch is continuously monitored by the control unit, detecting both open and short circuit faults immediately and returning the control unit to the off state even if the gate is not operated.

Using one of the ISIS control unit and one or more ISIS Extender modules, systems can be assembled to monitor up to 30 inputs.



Magnasafe



- Non-Contact Operation
- IP67 / IP69K Fully Sealed, Washdown
- ABS or 316 Stainless Steel
- Max 2A Switching Capability (Heavy Duty)
- Large Range of Housings / Fixtures
- Quick Disconnect Options

SRL1 Safety Relay

Combine the Magnasafe Range with our SRL1 Safety Relay

- LED Dianostics
- Dual Channel Output
- Automatic / Manual Monitored Reset



The Mechan MAGNASAFE switches are magnetically operated safety switches. Easy to install and maintain, the MAGNASAFE switches are fully encapsulated non-contact switches ideal for long term for use in harsh / wet environments.

Simple to install non-contact safety switches

HE-Series



- Solid State Coded Magnetic Switches
- Dual Colour Indication on the Switch
- Unique Double Door Safety Switches
- Shock and Vibration Proof
- IP67 & IP69K Fully Sealed, Wash down



The Mechan HE-Series are coded magnetic safety switches.

They can be used as a standalone safety switch or combined with our SCU1 safety relay for a CAT4 SIL3 PL-e approved safety system.

The HE-Series is designed to combine the ease of use and maintenance of a simple magnetic safety switch along with the improved security, performance levels and indication of Mechan's electronic switching.

Applications

- Food Processing
- Dairies
- Bottling Plants
- Pharmaceutical
- Concrete Block / Building Material Manufacture

Expandable Safety Relay

EM-Series Modular Safety Relay



The EM-Series is an expandable safety relay designed to eliminate fault masking without the need for programming. Using the expander module (ESM) the system can monitor up to 20 Dual channel safety devices ranging from Emergency Stops, Mechanical Interlocks, Non-Contact Safety Switches, Grab-Wires plus more.

- CAT4 SIL3 PL-e Safety System
- Monitor up to 20 Dual Channel Devices
- Expandable using the ESM Module
- Guard Status Indication
- Advanced Fault Diagnostics
- No Programming Required



Single Generic Code RFID Safety Switches

S-Type

- Tamper-Proof RFID Safety Switches
- Single Generic Code
- 10mm Switching Distance
- Guard Status Indication
- Quick Disconnect Option (M12)



The S-Type are RFID operated safety switches. Based on Mechan's unique frequency operated switching system the S-Type safety switches provide a more secure non contact safety switch, with precise switching and indication on the switch for reliable operation is assured along with easy operator identification of guard status.



Uniquely Coded RFID Safety Switches

RSS-Series



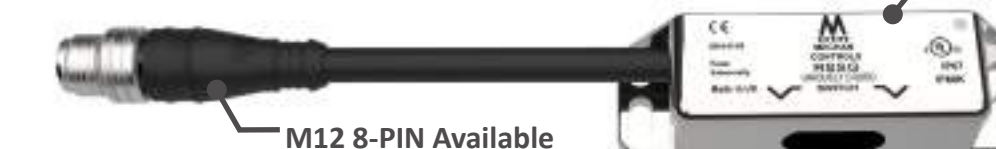
- Standalone Non-Contact Operation
- Volt Free Contact Outputs
- IP67 & IP69K Fully Sealed
- 4 Billion Unique Codes Available
- EN14119 Type 4 High Code
- LED Guard Status Indication
- Large Range of Housings / Fixtures

The RSS-SERIES are uniquely coded RFID (Radio Frequency Identification) safety switches with volt free contact outputs. They offer protection against manipulation, interference and defeat making them ideal for use in high risk applications where high level coding is required.



Unique 316 Stainless Steel Version

- Mirror Finished 316 Stainless Steel Housing
- Strict Washdown, Tested to IP67 / IP69K
- 10mm Switching Distance, 5mm Misalignment
- Shock and Vibration Proof



Uniquely Coded OSSD RFID Safety Switches

O-Type



- Uniquely Coded RFID with OSSD Outputs
- Maintain PL-e when Connected in Series
- Advanced LED Diagnostics
- External Device Monitoring Available
- External Device Monitoring (Optional)

The O-Type range combines 40+ years of experience designing and manufacturing machine guard safety switches with the latest in safety technology. There unique design means 30off O-Type switches can be connected in series maintaining PL-e status.

Using Tri-Colour LEDs, the O-Type switches can indicate multiple functions with just two LED's.

Don't want to use a safety controller to monitor them? The O-Type switches can be supplied with a feature called EDM (external device monitoring). This means you can monitor contactors/relays and manual reset push button using just the switches maintaining PL-e. The unique indication will monitor your reset circuit allowing the user to easily diagnose faults.



MLG-Series



Type 4 and Multi Beam Light Curtains

- Production Line Safety
- Perimeter Guarding
- Finger, Hand and Body Protection
- 200mm-1800mm Protection Height
- Compact, Rugged Design
- British Design & Manufacture
- Advanced Dianostic Display

Mechan Controls have combined 40+ years' experience in design and manufacture of machine guard safety products to bring you the MLG Light Curtain Range.

Designed to be robust, the MLG-Series can be used in most harsh environments providing the user with a reliable way to guard hazardous machinery.

Applications

- Presses
- Packing Machines
- Carton Gluers
- Robot Assembly
- Welding Cells

Uniquely Coded RFID Interlock with OSSD Outputs

Proton



- Advanced Solenoid Interlock (Power to Unlock)
- Ball Style Actuator for Improved Misalignment
- Uniquely Coded RFID (4 Billion Codes)
- Maintain PL-e when Connected in Series
- External Device Monitoring (Optional)
- Advanced LED Diagnostics
- 3000 Newstons Hold Force

The Proton solenoid interlock and been designed to safeguard areas that require guard locking during operation or during run down periods. The uniquely coded RFID actuator provides a high level of coding according to EN14119.

The ball style actuator has been designed to be tolerant to high misalignment, self-centring itself upon actuation. The robust design has been tested to hold 3000 Newtons and the large solenoid can energise under a lateral load. The Proton switch is highly reliable and therefor suitable for most guard locking applications.





Mechan Controls

Mechan Controls was established in the early 1970's to design and manufacture machine guard safety products for the harsh environments of the can making industry.

With the development of the first electronic non-contact safety switch in 1972, the company now has over 40 years of experience and tens of thousands of installations world-wide that prove the safety and reliability of Mechan safety systems.

With a dedicated technical team, Mechan Controls prides itself on its innovative approach to machine guard safety solutions, continuously developing new products and improving the existing range.

The range includes products that are suitable for use in all machine guarding environments and have been well tried and tested in various industries such as concrete block

manufacturing with high levels of dirt, dust and vibration and food processing where high temperatures and high pressure wash down procedures are the norm.

To support our world-wide customer base, Mechan now has agents and distributors throughout the world and is able to provide bespoke solutions as well as the standard product range shown in this catalogue.

Anywhere there is a need for non-contact machine guard safety switches, Mechan Controls aims to provide the most reliable and therefore cost effective solution to your requirements.

With an in-house design team, Mechan Controls will continue to invest in new technologies to ensure that our customers have the very best and latest in machine guarding products.



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