

## Machine Guarding and Safety

Many thanks for clicking on this document. Please let us introduce selected highlights from our **Machine Guarding and Safety** offer.

### Related Industries:

- Food and Beverage Industry
- Pharmaceutical Industry
- Rail and Transport Industry
- Automotive Industry
- Mining and Quarrying Industry
- Factory Automation Industry





# Machine Guarding and Safety

*High reliance on product availability*

## Emergency Stop



RS knows that a full range of E-Stops is essential to industry. Discover a range that includes foot switches pushbuttons and grab wires, all designed to protect machinery and guard against injury.

## Interlock Switches



Interlock switches are used to ensure guard doors are closed and the machine is safely isolated from personnel. With many variants available we have products to cover all safety applications.

## Safety I/O Modules



Increase the number of contacts that can be used on safety related control units. Expansion also allows for increased application possibilities whilst maintaining safety integrity.

## Safety Curtains, Scanners and Light Beams



Light curtains and light beams are opto-electronic devices used to safeguard personnel from moving machinery. When light beams are broken the control circuit receives a signal to safely stop machinery.



## Non Contact Safety Switches

Non contact safety switches offer robust operation and are not adversely effected by heavy vibration. They are particularly suited to applications where door misalignment is common and where hygienic conditions must be maintained.

## Safety Relays



Safety relays are used to maintain safe working conditions, they react to changes outside of normal operating parameters, thus informing control devices to remove potential hazardous to machinery and personnel.

## Safety Controllers



Safety controllers protect machine and personnel, they are used with light curtains, non contact switches, two hand controls and other safety related devices.

## Safety Switches



Safety limit switches remain safe by preventing contact weld, they have an internal mechanism to forcibly separate normally closed contacts, thus allowing the safety circuit to remain open.

The machine guarding and safety range from RS Components offers protection and safety equipment for all industry sectors, including factory automation (food and beverage and pharmaceutical) and process automation (utilities and mining). You will also find safety devices such as mechanical and non-contact interlock switches, light curtains, safety relays, E-stop push buttons and rope pulls.

This is a small selection of our Machine Guarding and Safety offer, within our website you have access to many thousands more products.



# Machine Guarding and Safety

*Three great ranges of Machine Guarding*



PROVIDING MACHINE SAFETY  
FOR YOU AT WORK.



## SCHMERSAL

## OMRON

IDEM is our newest supplier within our Machine Guarding range. IDEM Safety Switches provide you, our customer with modern cost effective Machine Safety solutions.

IDEM's range of "Next Generation" products harness higher reliability, the latest features and are manufactured in materials to provide high durability to cope with the continually increasing demands placed on Machine Safety Devices

- Emergency Stops
- Grab wires
- Non Contact Safety Switches
- Safety-Rated Interlock Switches
- Solenoid Interlock Switches



Schmersal offer an extensive range of safety and safety related products. With new and innovative products in constant development, together with key established ranges end users have a great pool of products to choose from.

So whether it's new build or maintaining existing applications and processes, Schmersal have products to fit.

- Safety Switches
- Solenoid Interlocks
- Hinge Safety Switches
- Safety Sensors
- Safety Relays
- Two-Hand Controllers
- Rope Pull Switches
- Emergency Stop Buttons



Omron are market leading manufacturers of Machine Guarding and Safety products. Their range has extensive coverage across our Machine Safety offer.

Constant updates are added to the range, recent introductions see the new G9SE Safety Relays and NX Standalone Safety Controller joining the range.

G9SE  
890-3382



NX  
862-5749



With a further 400+ Omron products in the range to choose from





# Safety switches

## Non Contact Safety Switches

## Solenoid Safety Interlocks

## Safety Limit Switches



## Hinge Switches

## Solenoid Interlock Switches

## Emergency Stop Pushbuttons & Foot





# Products with unique benefit

## IDEM Emergency Stop 826-4397

The ES-P is a standard duty emergency stop switch (E-Stop). A special lid safety trip mechanism means that the safety contacts will open if the lid is removed.

Connects to most safety relays to give up to PLe Cat.4.

Designed to provide robust emergency stop protection for machines or exposed conveyors, it has IP67 polyester housing and 3 pole contact blocks providing positively operated switch contacts.

Conformance to ISO13850, EN60947-5-1 and EN60947-5-5



## Omron Laser Scanner 757-7879

The OS32C is a compact and versatile safety laser scanner designed for easy handling and installation. The low profile and lightweight body allows installation in small spaces and the 270° detection angle provides coverage of two sides with just one laser scanner. For complex AGV applications up to 70 combinations can be set, each with one safety zone and two warning zones. The two warning zones can be set to support various purposes such as warning sound and speed control.



## IDEM non-contact switches 826-4384

These non-contact switches can be mounted to guard doors to provide and maintain a high level of functional safety without the need to connect to a safety relay or safety controller. They have their own internal monitoring system and use force guided mechanical contacts which maintain PLe/Category 4 (ISO13849-1) even when the switches are connected in series.



## Wieland samos Pro Safety Controller 871-4596

The samos PRO Compact has 4 A switching power for each output and over 300 functions built in. Suitable for monitoring non-contact safety sensors, emergency off buttons, protective door switches, two-hand controls, light curtains and laser scanners. Features USB and Ethernet interfaces for remote maintenance together with a 512 kb program memory offering space for each project







# Light Curtains

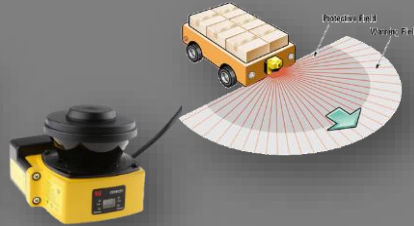
## Type 2

Type 2 safety light curtains are a cost-effective light curtain safety solution for guarding lower-risk applications, where the result of an accident is only a slight injury. Type 2 light curtains feature a large field of view and use fault exclusion to ensure the integrity of safeguarding.



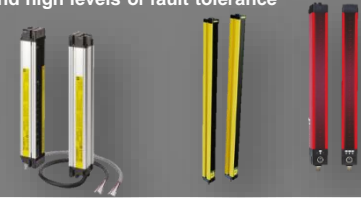
## Type 3

Type 3 include safety laser scanners and are best used in applications where light curtains would be unsuitable.



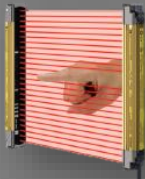
## Type 4

Type 4 safety light curtains protect personnel from injury and machines from damage by guarding points of operation, access, areas and perimeters. With self-checking circuitry, Type 4 light curtains provide control reliability and high levels of fault tolerance



## Typical beam resolution for finger hand arm and body protection

Beam resolution 14mm



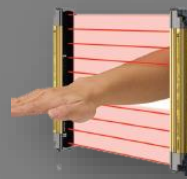
Finger & hand protection

Beam resolution 24mm to 40mm



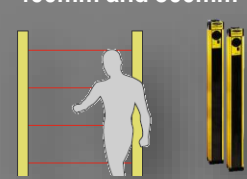
Hand protection

Beam resolution 40mm



Arm

Beam resolution between 400mm and 500mm



Body



# Control

## Safety Relays



## Safety Controllers



## Safety I/O & Exp. Modules



## Operator interactive

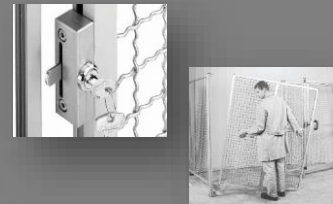
### Grab Wire Switches



### Two Hand Control Stations



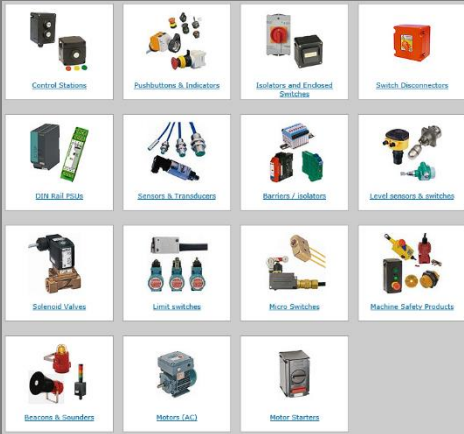
### Safety Fencing & Structural Systems



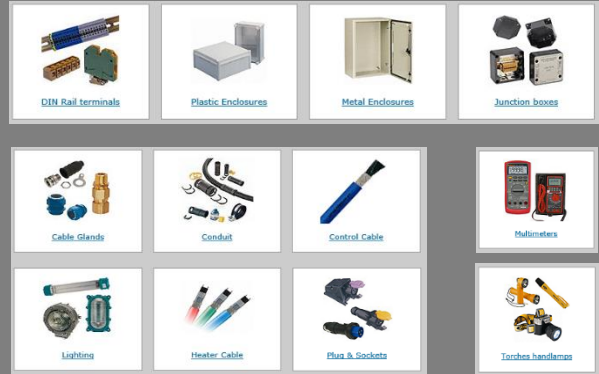


# Hazardous Area - over 1400 products to choose from just search ATEX

## Automation



## Enclosures and Panels, Electrical, Site Safety and Test & Measurement



## IECEx for universal use, ensuring compliance worldwide

### IECEx – Taking hazardous area approval worldwide

IECEx is a certification scheme championed by the IEC, and it is fast becoming the preferred route for international safe certification of products for use within all hazardous areas.

The IEC test report provides detail not included within an ATEX certificate and can be locally ratified to overcome any destination market legislative difficulties that may arise.



For single standards, a single set of tests and assessments can support both IECEx and ATEX

<p>IECEx BAS08.0001X</p> <p>Ex de IIC T4 Gb</p> <p>Ex tb IIC T135°C T250 180°C Db IP66</p> <p>Tamb:-30°C Ta: +50°C</p> <p>RS Engineering</p> <p>Corby, NN17 9UB, UK</p> <p>Model ABC1 Solenoid</p> <p>2008 s/n 1234</p> <p>Baseefa08ATEX0001X</p>		<p>IECEx Certificate No.</p> <p>Maximum External Surface Temperature under 250mm of dust</p> <p>Maximum External Surface Temperature</p> <p>Ambient Range -20°C to 40°C unless stated on label</p> <p>Manufacturer's Name and Address</p> <p>Electrical Parameters</p> <p>Product Identification</p> <p>Serial No. and Year of Manufacture</p> <p>ATEX Notified Body Identification No.</p> <p>ATEX Certificate No.</p>
<p>Temperature Class</p> <p>Gas Group</p> <p>Protection Concept</p> <p>Dust Group</p> <p>Equipment Protection Levels</p> <p>Ingress Protection</p> <p>ATEX Coding</p>	<p>240V ac</p> <p>5A</p> <p>CE 0519</p>	