

# IDEM Safety Switches Overview Brochure

*Designed and Manufactured in the UK*



**Machine Safety for YOU at Work**



# Product Portfolio Overview Brochure

## IDEM Safety Switches

Non - Contact RFID

E-Stop

Guardian Line Rope Pull

Mechanical Tongue Interlock

**Featured Application:** Gate Access

Skorpion Trapped Key

Z-Range

Guard Locking Safety interlock  
Hinge Interlock

ATEX Zone

Safety Relays  
Python Belt Alignment  
Safety Limit Switches



- Die Cast Version Available
- ATEX Version Available
- IP69K Tested
- Hygenic Range

### IDEM Featured Product

UGB - NET



UGB Solenoid Locking RFID with Integrated Profisafe (UGB-NET-PS) or CIP Safety (UGB-NET-CIP)

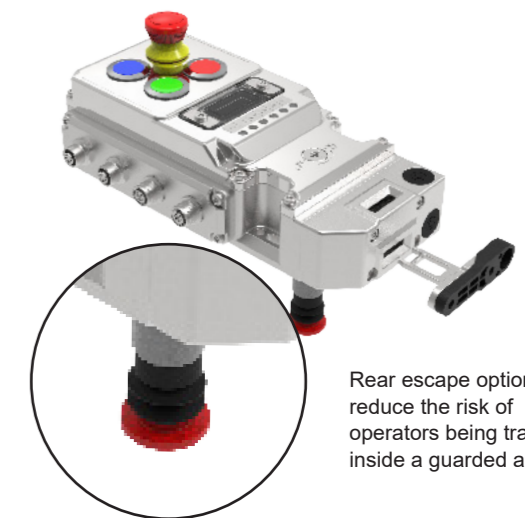
#### Switch Information

- Completely flexible - choice of machine control devices - buttons, lamps, selector switches or E-Stop, each individually illuminated.
- Choice of integrated protocol - PROFInet with PROFIsafe or Ethernet/IP with CIP Safety.
- In/Out pluggable connections for quick installation and ability to daisy-chain devices
- RFID sensing provides high coding acc. to ISO 14119.
- Cat.4 /PLe and SIL 3 acc to ISO 13849-1, IEC 62061 and IEC 61508
- Simple and easy set up.
- Die cast metal, painted red, or Stainless Steel 316 models available.

#### Switch Features

IDEM's Universal Gate Boxes (UGB-NET) provide high level RFID coded interlocking and machine control functions in one heavy duty housing. They can be easily fitted to access doors to provide guard locking, rear escape options and sliding or rotary handles can reduce the risk of operators being trapped inside a guarded area.

They incorporate standard machine request or control buttons and indicator lamps in an all-in-one machine safety device.



Rear escape option can reduce the risk of operators being trapped inside a guarded area.

Integrated PROFIsafe and Ethernet/IP safety protocols for use with industry recognised industrial Ethernet networking capabilities.

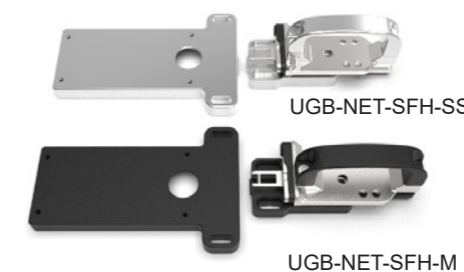
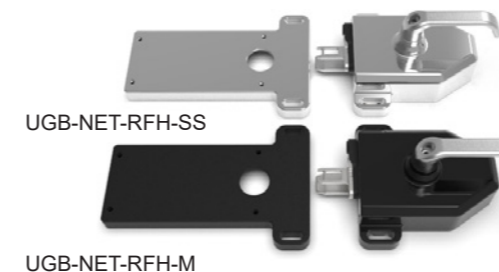
The benefits of using Profisafe include a reduced number of components, less wire, fewer cabinets, faster installation, and faster commissioning. In addition, manual maintenance is minimized since the system continually verifies functionality.

CIP Safety can be run over common network cabling and since it's not necessary to wire devices point-to-point, CIP Safety dramatically reduces wiring time and effort.

Because CIP Safety supports integrated architecture, it's possible to view the health of each module and other status information through messaging as well as the configuration bytes of the modules themselves.



#### UGB- NET Accessories



- Rotary or sliding handle both available with the UGB-NET.
- Available in die cast or stainless steel.

See website for more information...



Switch Information

- Survives Shock and Vibration
- Operates in temperatures up to 105C
- Suitable for CIP/SIP high-pressure cleaning
- IP69K and IP67
- Stainless Steel 316

Hygiene Factors

- Hygienic range
- Ra4 Mirror Polished finish allows for ease of cleaning, especially in strict wash-down environments
- Designed to prevent food traps

HYGIEMAG

- High power **magnetic** sensing
- Up to 2A ac/dc current switching
- Sensing up to 12mm

Connectivity

- Compatible with most common safety relays to achieve up to Cat. 4/ PLe and SIL 3 to ISO 13849-1 and IEC 62061
- Dual channel 2NC outputs with optional 1NO auxiliary.

The complete connection accessories package for easy installation of IDEM's magnetic and coded magnetic non-contact safety products. Simple plug and play connectivity drastically reduces installation time and replacing parts.

HYGIECODE

- **Coded** Actuation
- Solid State Design
- Tolerant to shock and vibration
- LED Guard Status Indication
- Sensing up to 14mm

WMR



WMR Magnetic Switch

- Wide stainless steel 316
- Suitable for all industry applications
- Suitable for high pressure hosing



WMC



WMC Coded Switch  
Status LED Indicators

MMR-H



MMR-H Magnetic Switch

- Compact fitting with industry standard 22mm fixing
- M4 Clearance Holes
- Suitable for mounting with hexagonal head bolts
- Suitable for direct contact zones



MMC-H



MMC-H Coded Switch  
Status LED Indicators

SMR-F



SMR-F Magnetic Switch

- Small Stainless Steel 316 Hygenic Housing
- Rear Fixing Holes, No visible food traps
- Coded Switch Sensing 14mm
- Compact 50mm long with 22mm fixing hole centres



SMC-F



SMC-F Coded Switch  
Status LED Indicators

LMR



LMR Magnetic Switch  
Status LED Indicator Available

- Slim fitting with a narrow profile for flush mounting
- Can be mounted unobtrusively
- Mirror polished finish
- Suitable for direct contact zones



LMC



LMC Coded Switch  
Status LED Indicators

CMR-F



CMR-F Magnetic Switch

- Compact and Narrow mounting holes at the rear
- No visible food traps
- Slim fitting 20mm wide
- Suitable for direct contact zones



CMC-F



CMC-F Coded Switch  
Status LED Indicators

RMR



RMR Magnetic Switch

- Barrel type cylindrical fitting with M30 thread
- 45mm Adjustment length
- Easy to install
- Suitable for direct contact zones



RMC



RMC Coded Switch  
Status LED Indicators

SMR



SMR Magnetic Switch

- Small stainless steel 316 housing- with a mirror Polish Finish
- Compact 50mm long with 22mm fixing hole centres
- Suitable for direct contact zones



SMC



SMC Coded Switch  
Status LED Indicator

SMR-H



SMR-H Magnetic Switch

- Small stainless steel 316 housing
- Mounted with hexagonal head bolts to prevent food traps
- Universal 22mm fixing
- Suitable for direct contact zones



SMC-H



SMC-H Coded Switch  
Status LED Indicator

CMR



CMR Magnetic Switch

- 316 Stainless Steel with a Mirror Polish Finish
- Slim fitting 20mm wide
- Suitable for direct contact zones



CMC



CMC Coded Switch  
Status LED Indicator

IDEMAG

- High power magnetic sensing
- Up to 2A ac/dc current switching
- Tolerant to guard misalignment
- Sensing up to 12mm

MPR



IDEMAG MPR Magnetic Switch 12mm

SPR



IDEMAG SPR Magnetic Switch

LPR



IDEMAG LPR Magnetic Switch  
Available with LED if required

CPR



IDEMAG CPR Magnetic Switch  
WPR



IDEMAG WPR Magnetic Switch

RPR



IDEMAG RPR Magnetic Switch

IDECODE

- Coded actuation
- Solid state design
- Tolerant to guard misalignment, shock and vibration
- Sensing up to 14mm
- Guard status LED

MPC



IDECODE MPC Coded Switch

SPC



IDECODE SPC Coded Switch

LPC



IDECODE LPC Coded Switch

CPC



IDECODE CPC Coded Switch

WPC



IDECODE WPC Coded Switch

RPC



IDECODE RPC Coded Switch

- Compact housing with 22mm fixing
- Cable exit left or right options available
- Supplied with Hygenic screw cap covers

- Industry standard 22mm fixing
- Withstands environments of high humidity and wash down conditions

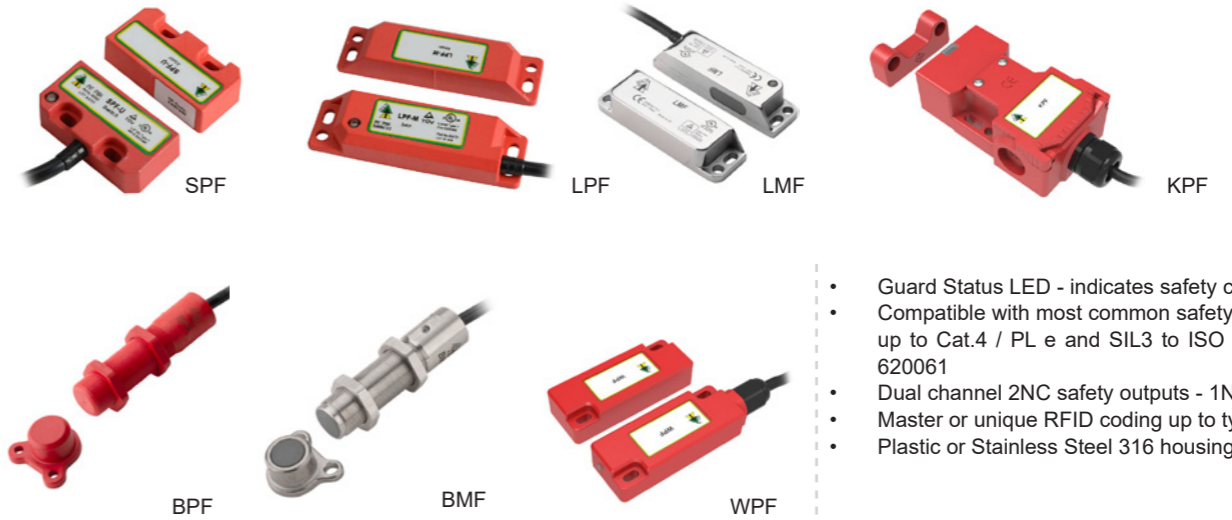
- Industry standard european housing
- Narrow fitting for flush mounting

- Industry standard slimline housing
- Easy to install within narrow frame
- Heavy duty switching available

- Industry standard fitting
- Suitable for all industry applications
- Wide body - tolerant to guard misalignment

- M30 Cylindrical fitting
- Suitable for all industry applications
- Easy to install and set
- 45mm adjustment length

Non-Contact RFID Safety Switches With Unique or Master Series Coding



Standalone Non Contact Safety Switches



Accessories for Non-Contact Safety Switches



- Guard Status LED - indicates safety circuits closed
- Compatible with most common safety relays to achieve up to Cat.4 / PL e and SIL3 to ISO 13849-1 and IEC 620061
- Dual channel 2NC safety outputs - 1NO auxiliary
- Master or unique RFID coding up to type 4
- Plastic or Stainless Steel 316 housings.

- Built in safety monitoring
- Standalone switches for direct machine control.
- Guard Status LEDs - indicates safety circuits closed.
- Compact housing - fits on 40mm frame sections.
- Compatible with most common safety relays to achieve up to Cat.4 / PL e and SIL3 to ISO 13849-1 and IEC 620061
- 2NC Relay safety outputs - high current switching 3A
- Contact feedback circuit (manual or auto).
- **Maintain a high level of functional safety without the need to connect to a safety monitoring device such as a safety relay or PLC.**

- Gate Bolt for Non Contact Switches
- GBN-1 (Sliding)
- GBN-3 (Latched)

MGL Non-Contact Locking RFID Switches



The MGL range of 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 switches sizes; MGL-1 and MGL-2

Compatible with most common safety relays to achieve up to Cat.4 / PL e and SIL3 to ISO 13849-1 and IEC 620061.

- ✓ Heavy Duty or Medium Duty Holding Force. Holding forces up to 1500N
- ✓ Stainless Steel 316, Robust Plastic or Die-Cast Metal
- ✓ RFID Master or Unique Coding, up to type4.





Switch Information

All IDEM's Emergency Stop Switches conform to European Standard EN ISO13850 and IEC60947-5-5. They have a positive mechanical linkage between the switch contacts and the E Stop Button. The switches are mechanically latched and can then only be returned to the operational condition by pressing the reset button as required by EN ISO13850.

Designed with a special lid safety trip mechanism means that the safety contacts will open if the lid is removed from the Emergency Stop Switch adding an extra level of protection.

Protection and padlock shroud versions available.



3 Pole ES-P(P)



3 Pole ES-SS



4 Pole ESL-SS



4 Pole ESL-SS(P)



3 Pole ES-P(P)



3 Pole ES-SS (P)



4 Pole ESL-SS(L)



4 Pole ESL-SS(LP)

IDEM Featured Product

ESL-SS-WR



IDEM's water resistant Emergency Stop Switch is designed to provide robust Emergency Stop protection for applications in the food and beverage industries.

Single piece enclosure with a curved edge for ease of cleaning. ✓

The ESL-SS-WR features IDEM's unique X-Ray detectable material, for the button. ✓

The mirror polished surface to Ra10 is designed to cope with direct food splash and tough cleaning. ✓

- Contacts: 4 Pole Positively operated contact blocks
- Conduit Entry: M20 or 1/2"NPT fitting



GLHL



GLHD



GLHR



GLHL-SS



GLHD-SS



GLHR-SS



GLM



GLM-SS

- Light Duty Safety Rope Pull, Compact Solution
- Protects short conveyer lengths in most industrial applications
- **Up to 50m protection using two switches**
- **Up to 30m protection using one switch**
- Optional E-Stop and 2 Colour LED

- Stainless steel 316
- Medium Duty Safety Rope Pull
- **Protects conveyer lengths up to 30m using one switch**
- Optional E-Stop and 2-colour LED available



GLS

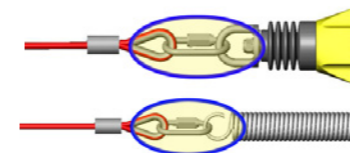


GLS-SS

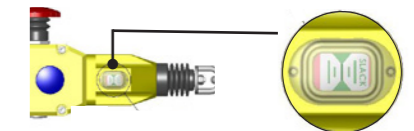
- Standard Duty Safety Rope Pull
- **Up to 80m protection using two switches,**
- **Up to 60m protection using one switch**
- Optional E-Stop and 2-colour LED available

- Stainless steel 316
- Standard Duty Safety Rope Pull
- **Protects conveyer lengths up to 80m using one switch**
- Optional E-Stop and 2-colour LED available

IDEM's Tensioner Gripper System



For systems up to 50m a QuickLink clamp is provided at one end of the rope for easy.



The Tensioner Gripper thimble allows immediate, accurate and final tensioning of the rope, whilst viewing the tension marker through the viewing window of the rope switch.



IDEM's patented Tensioner Gripper system allows for quick and reliable initial septup of the rope. As well as simple maintenance where re-tensioning of the rope is required.

**Rope Kits up to 125m** Contains; Tensioner Gripper, Rope, Eyebolts and Allen Key.



Universal Pulley



Safety Spring - Stainless Steel 220mm Length

Eyebolts



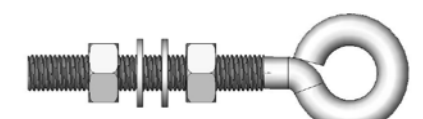
Flexible Roller Eyebolt with Adjustment



Flexible Roller Eyebolt with Nuts



Pigtail Eyebolt



Standard Eyebolt



## Tongue Operated Safety Interlock Switches

### Switch Information

IDEM Tongue Operated Safety Interlock Switches are designed to fit to the leading edge of sliding, hinged or lift off machine guards to provide position interlock detection for moving guards.



For the harsh environments like Food Processing, Pharmaceutical and Petro-Chemical Industries the Stainless Steel 316 range offers protection up to IP69K for use in high pressure chemical cleaning or CIP/SIP applications.

- ✓ They can be used independently to provide positively operated contacts to IEC60947-5-1.
- ✓ They can be used in combination with any dual channel safety monitoring relays to provide up to Category 4 PLe and SIL 3 to ISO13849-1 or SIL3 EN60261.



KM-SS

- Available with die cast or stainless steel head.
- 8 Actuator entry positions
- 3 pole or 4 pole contact blocks.
- 40mm x 118mm l x 30mm fixing.
- IP67 ingress protection.
- ATEX Version available.



K-15

- 4 Actuator entry positions - designed with a rotatable head.
- Compact body with 3 conduit entries.
- 3 pole contact blocks.
- 54mm wide 86mm long 40mm fixing.
- Plastic or Stainless Steel 316 head options.
- IP67 ingress protection rating.

K-15-SS



KSS

- Universal Fitting
- Suitable for most general applications.
- 52mm wide x 99mm long.
- Replaceable contact blocks.
- Head rotates to give 4 actuator entry points.
- ATEX Version available.



KM-SS

- Slim fitting suitable for most industrial applications - 42mm x 118mm
- Mirror polished surface finish (Ra4).
- Head rotates to protect head assembly and prevent tampering with switch
- Provides 8 actuator entry positions.
- ATEX Version available.



KP

KP-SS

- 4 Actuator entry positions - designed with a rotatable head.
- 3 pole or 4 pole contact blocks.
- 3 conduit entries.
- 52mm x 98mm
- Plastic or Stainless Steel 316 head options.
- ATEX Version available.



### Miniature Tongue Interlock Safety Switches



INCH-1

- Miniature plastic housing:
- 25mm x 55mm with 17mm fixing centres.
- 8 Actuator entry positions - designed for robustness
- with a rotatable Stainless Steel 316 head.
- 2 pole contact blocks.
- IP67 or IP69K ingress protection.



INCH-3

- 8 Actuator entry positions - designed with a rotatable Stainless Steel 316 head.
- 3 pole contact blocks.
- Choice of 3 conduit entries.
- Plastic housing with IP67 ingress protection.
- 25mm wide 79mm long 22mm fixing.



MK1-SS

- Compact with 22mm fixing centres.
- Mirror polished finish.
- Suitable for most applications.
- Small 30mm wide x 99mm long.
- Replaceable contact blocks.
- Provides 8 actuator entry points.
- Standard or flexible actuator.



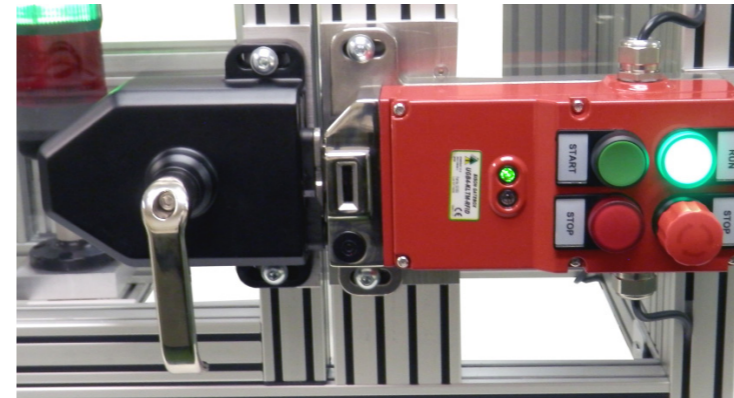
IDIS-1

- Compact yet robust fitting suitable for all small guard applications. Suitable for food processing and petro-chemical industries.
- 8 Actuator entry positions - rotatable head.
- 3 pole contact blocks or 2 pole snap action.
- 32mm wide 97mm long 17mm fixing.

## IDEM Featured Application

## Gate Access

### Universal Gate Box - Solenoid Locking and RFID Sensing



### Switch Information

- High level RFID coded interlocking and machine control functions in one heavy duty housing.
- They are easily fitted to access doors to provide guard locking, rear escape options and sliding or rotary handles.
- Holds guards closed up to 3000N and can be padlocked off for safe working in maintenance situations.



UGB-KLTM RFID

UGB-KLT-SS RFID

- Die Cast Metal, painted red, or Stainless Steel 316
- 4 Station model or 2 Station model
- Completely flexible - end user can select buttons, lamps, and switches for each station from a wide range of options.

### KLM-Z-4ST Solenoid Locking and RFID Sensing



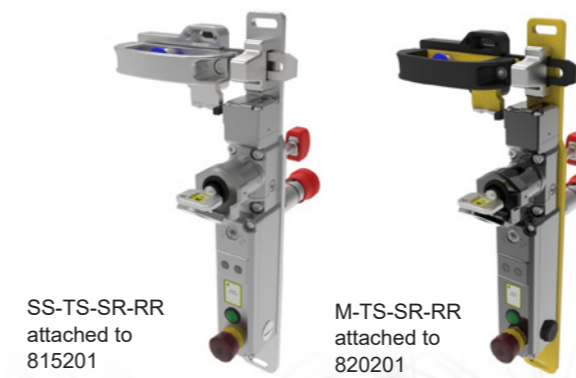
Solenoid Locking Switch featuring RFID interlocking and incorporating machine control functions. The KLM-Z-4ST incorporates all the switch features of the KLM-Z but offers extra machine control functions all in one housing incorporating standard 22mm push buttons, lamps or switches for machine request or control function. The KLM-Z-4ST has a slim profile and has been designed specifically to fit on 50mm (2in.) frame sections. Robust Stainless Steel 316 head and Die-Cast metal body. Choice of standard or flexible actuators.



GBZ-4ST Rotary

GBZ-4ST Sliding

### SKORPION Gate Bolt



SS-TS-SR-RR attached to 815201

M-TS-SR-RR attached to 820201

The trapped key rear escape and handle, provides a manual means of escape from inside the guarded area. The red button and red knob are fitted to protrude through the guard frame to enable access to the switch from inside the hazardous area. When the actuator tongue is inserted into the switch (guard closed) the key can be rotated and trapped and the main safety contacts are closed (machine able to run). Available with right or left handed handles. Available in Stainless Steel or Die Cast.



Switch Information

Skorpion works on the principle of releasing heavy duty coded mechanical keys in a pre-determined sequence to ensure machine power has been isolated before any access can be made into areas where hazards or dangerous machinery is present.

1

Once the machine control has been isolated (achieved by turning the first key in the system) the removed key from the isolator is then used to release other trapped keys to enable access to the guarded areas.

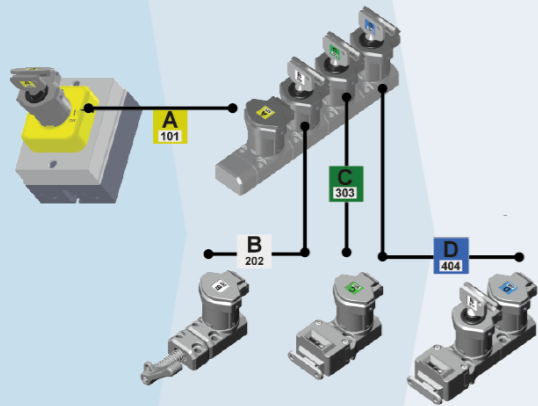
2

Following release of the first key (isolator) safeguarding is achieved without the need for expensive and time consuming electrical wiring – thus making the system perfect for use in harsh and challenging environments and applications.

Machine Power 'ON' Guards Locked

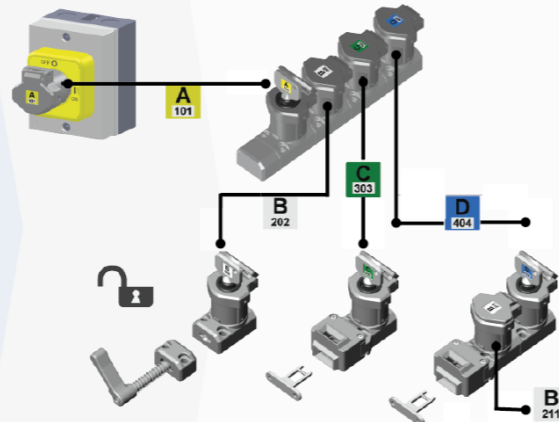
Machine Power 'OFF' Guards Locked

POSITION 1



(Access is denied to the operator)

POSITION 2



(Access is granted to the operator)



ISB1  
25A 660V 4-Pole  
40A 660V 4-Pole



ISB2  
63A 660V 4-Pole  
100A 660V 4-Pole



ISP  
63A 660V 4-Pole  
100A 660V 4-Pole



ISB-CB  
2NC 2NO 240V 3A max.  
3NC 1NO 240V 3A max.  
4NC 240V 3A max.



SS-ISP-SKR-WR  
25A 24V 4-Pole  
40A 24V 4-Pole  
63A 24V 4-Pole



SS-ISP-SKR  
25A 660V 4-Pole  
63A 660V 4-Pole  
100A 660V 4-Pole



SS-ISB4-SR  
2NC 2NO 240V 3A max.  
3NC 1NO 240V 3A max.  
4NC 240V 3A max.

Bolt Interlocks Single or Dual Key



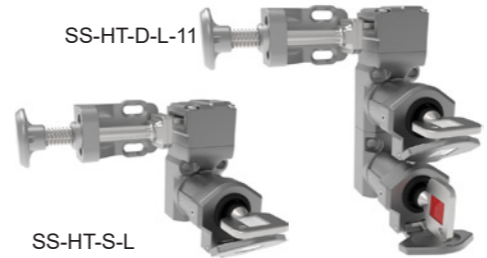
SS-BS SS-BD-11

Handle Interlocks Single Key



SS-HS SS-HS-C

Handle Interlocks Single and Dual Key



SS-HT-D-L-11 SS-HT-S-L

Key Exchange System



SS-KE-NS4

Mini Valve Interlocks



Available in stainless steel or die-cast.

Sizes available;  
0.375", 1/2", 1/4", 1", 2"

IDEM's mini valve locks can be used as a standalone valve or as part of a SKORPION Trapped Key solution.

Multi Key Exchange Box Mount



SS-MX-P-8 MX

SS-MX-P-12 MX

SS-MX-P-20 MX

The "initial keys", usually in the power isolation parts of the system, are placed in the first row in the MX Multi Key Exchange panel to allow access to the guarded areas when required.

Once the "initial keys" have been placed in the first row of the MX Multi Key Exchange panel and turned then all the other keys in the panel can now be retracted (non-sequentially) and moved to the other parts of the system.

The end user has the option to configure and retrofit extra barrels to systems

Tongue Interlocks Single or Dual Key



SS-TS SS-TD-11 Various actuator options.

Handle Interlocks Dual Key



SS-HD-11 SS-HD-C-11

Isolation with Interlocking



SS-TS-CB Ex

Single key available as;  
Key trapped, actuator unlocked  
or  
Key removed, actuator locked

Dual key available as;  
2 keys trapped (actuator open)  
or  
1 key trapped, 1 key free (actuator unlocked)

Single key available as;  
Key trapped, actuator unlocked  
or  
Key removed, actuator locked

Dual key available as;  
1 Key trapped, 1 key free (actuator unlocked)

Single key available as;  
Key trapped, actuator unlocked  
or  
Key removed, actuator locked

Dual key available as;  
1 Key trapped, 1 key free (actuator unlocked)

Available in stainless steel or die-cast.  
Currently available with:  
1 key trapped and up to 5 keys released (non-sequential), or  
1 key trapped and up to 9 keys released (sequentially).





### Series Connection

- The Z-Range of safety devices feature self monitoring and OSSD outputs to achieve CAT4/PLe (ISO 13849-1) and SIL 3 (IEC 62061) even when connected in a series.
- Up to 30 Z-Range devices can be connected to one

### RFID

- IDEM's RFID Technology is available with high and low condng acc. ISO 14119. Switch and actuator are supplied pre-taught from the factory for the customers convinience.
- The uniquely coded versions have up to 32 million code variations, reducing the likelihood of manipulation or defeat.

### Extended Diagnostics

The Z-Range features extended diagnostics presented by the device LEDs and auxillary output signals that can help reduce downtime by allowing quick identification of individual device states and wiring faults.



### Switch Information

- IDEM specialises in 316 stainless steel hygiene versions. The high precision stainless steel castings combined with a double seal ensures a IP69K protection level.
- The mirror polished surface to Ra10 is designed to cope with direct food splash and cleaning found in the Food Processing Industries.



### Connectivity

The Z-Range accessories features plug and play connectivity which drastically reduces installation time and replacing damaged parts.



### Safety Rope Pull Switches Stainless Steel



### Safety Rope Pull Switches Die Cast



### Emergency Stop Switches



### Safety Tongue Interlock Switches



### Hinge Switch



- Fully Stainless Steel 316 or Die Cast body and head.
- Ideal for high pressure, high temperature wash downs.
- Left and Right sided handles available
- Blank switches used on applications where two switches are needed.

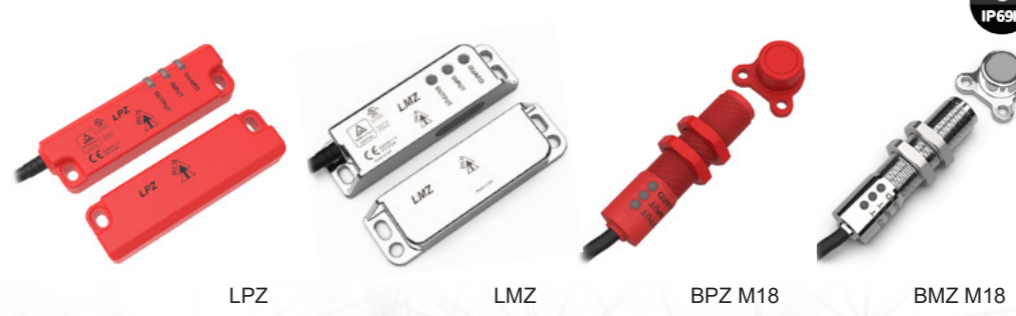
### Solenoid Locking RFID Switches



IDEMs range of RFID Solenoid Guard Locking Interlock switches have for moving guards and provide a lock mechanism to keep the guard closed until the hazard has been removed. With RFID integration this creates a level of anti-tamper that is hard to defeat and by-pass as two safety features need to be satisfied.

Available in Plastic, Die Cast and Stainless Steel 316

### Non-Contact RFID Switches



- LPZ RAMZsense RFID with Unique or Master Series Coding.
- Stainless Steel 316 available.
- Tamper resistant operation.
- Safety outputs short-circuit protected.
- Wide sensing range.
- Tolerant to guard misalignment.
- Cable or quick connect options.



## Guard Locking Interlock Safety Switches Solenoid Controlled

KL1P  
1400N



- Plastic body universal 40mm mounting.
- 4 Actuator entry positions - rotatable head.
- Guard locking for small to medium doors.
- Stainless steel head for robustness
- 63mm wide 143mm long 40mm fixing.

KLP  
2000N



- Compact plastic body/stainless steel head for medium to heavy duty guards.
- Provides 2NC safety contacts and 2NO aux. contacts or LED indication diagnostics.
- 8 Actuator entry positions - rotatable head.
- 46mm wide 160mm long 30mm fixing.

KLM  
3000L



- Die cast metal switch suitable for heavy duty guard locking
- Provides 4NC safety contacts and 2NO auxiliary contacts or LED indication diagnostics.
- 3 conduit entry points and 30mm fixing
- 46mm wide 176mm long 30mm fixing.

KLTM  
3000N



- Suitable for heavy duty guard locking with solenoid locking. 3000N holding force.
- Provides 4NC safety contacts and 2NO aux. contacts or LED indication diagnostics.
- 3 conduit entry points. 73mm fixing centres.
- 105mm wide 150mm long 73mm fixing.

KL1-SS  
2000N



- Provides 4 actuator entry points. Rotatable head.
- Compact 63mm wide x 143mm long.
- 2 lock monitoring safety contacts.
- LED 1: Status of solenoid applied power.
- LED 2: Status of guard lock.

KL3-SS  
3000N



- Choice of 24V 110V or 230V operation.
- Slim body 48mm wide x 177mm long.
- 2 LEDs for solenoid and lock status.
- Standard or flexible actuator options available.

KL4-SS  
3000N



- Optional request button.
- Choice of 24V 110V or 230V operation.
- Slim body 48mm wide x 177mm long.
- 2 LEDs for solenoid and lock status.
- Standard or flexible actuator options available.

KLT-SS  
3000N



- Suitable for heavy duty guard locking with solenoid locking. 3000N holding force.
- Provides 4NC safety contacts and 2NO aux. contacts or LED indication diagnostics.
- 3 conduit entry points. 73mm fixing centres.
- 105mm wide 150mm long 73mm fixing.

## Solenoid Controlled Safety Interlock Switches with RFID Coding



KLTM-RFID  
3000N



KLT-SS-RFID  
3000N

The KLTM-RFID and KLT-SS-RFID Guard Locking Switch is a Tongue Type Safety Interlock Switches which incorporates traditional mechanical anti-tamper tongue technology (cam system) but in addition incorporates Uniquely Coded RFID Non Contact Coded Sensor Technology all in one device

## P2L Mechanical Interlock Switches with Solenoid Guard Locking

Power to Lock Versions - for machines without rundown time.



KLP-P2L  
2000N



KLTM-P2L  
3000N



KLM-P2L  
2000N



KL3-SS-P2L  
3000N

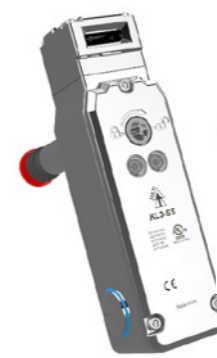
## Solenoid Controlled Safety Interlock Switches with Rear Release



GBL-1



KLM-RR  
3000N



GBL-1-SS



KL3-SS-RR  
3000N

- Shown fitted with KLM-RR switch. For solenoid locking tongue switches with optional extra rear handle.
- Suitable for: KLP, KLM, KLM-RR and KL4-SS.
- Available in Stainless Steel, Plastic and Die Cast
- A manual escape release is used to enable a quick release of the switch lock in case of emergency.

## Hinge Interlock Safety Switches



HC-1

- Polyester body and Stainless Steel Head
- 2 N/C or 1 N/C + 1 N/O
- Hollow Shafts Available
- Solid shafts are available as: 10mm dia. and 50 or 80mm long or as 8mm dia. and 60mm long



IDIS-2

- Compact fitting
- 18mm fixing profile
- The head can be rotated through 90 degree increments to provide ease of mounting in 4 positions.
- Suitable for food splash/contact zones



HC-3



HC-SS

- 18mm fixing profile make them easy to install in restricted space
- The head can be rotated to provide ease of mounting in 4 positions.
- Polyester body and Stainless Steel Head
- 2 N/C Safety and 1 N/C Auxiliary



HS-SS

Blank Hinge  
Stainless Steel



HSM

Blank Hinge  
Die Cast



- Available in either die cast or stainless steel housing
- designed to be mounted for interlock position sensing of hinged moving guards.
- They feature positive opening contacts in accordance with IEC 60947-5-1 and after fitting the switch offers a very high degree of anti-tamper.
- Positive actuation of the contacts is achieved at only 6 degrees of opening of the guard and can be adjusted up to 12 degrees if required upon installation
- Blank switches available for use on large doors



Hinge Switch Mounting Bracket available. Manufactured using 316 stainless steel. This is also available for HS -Z



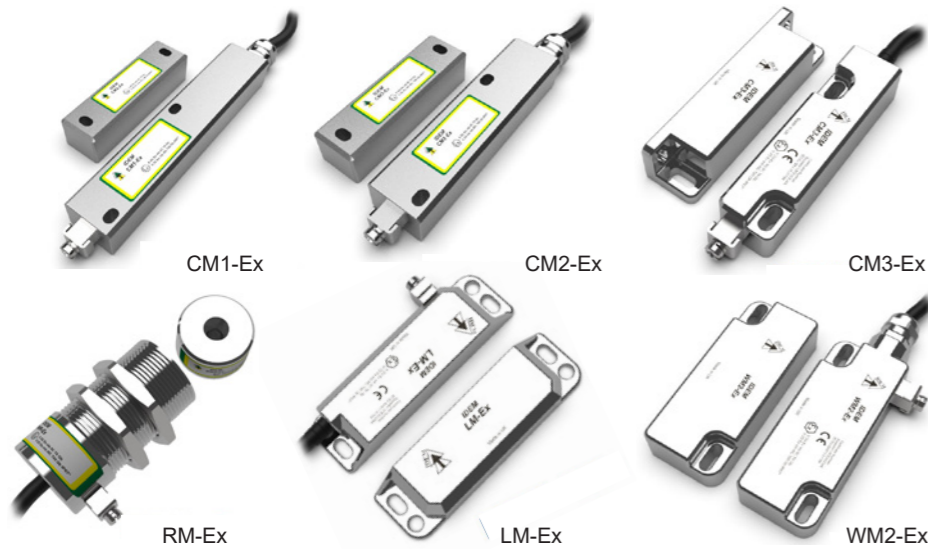




IDEM's product portfolio includes safety switches that are safe to use in potentially explosive atmospheres. A mixture of air gases, vapours, mists or dusts can combine in a way that can ignite under certain operating conditions.

A place in which an explosive atmosphere is...	Gases	Dusts
Continually Present	0	20
Likely to occur in normal operation occasionally	1	21
Not likely to occur in normal operation and only for very short durations	2	22

**Non Contact Safety Switches in Stainless Steel**



II 2G Ex mb IIC T6 Gb  
 II 2D Ex mb IIIC T80 Db IP67

Zones 1, 2, 21, 22



II 1G Ex ma IIC T6 Ga  
 II ID Ex ma IIIC T80 Da IP67

Zones 0, 1, 2, 20, 21, 22

**ATEX E-Stop Safety Switches**



Exd IIC T6 (-20 ≤ Ta ≤ +60C) Gb  
 Ex tb IIIC T85C (-20 ≤ Ta ≤ +60C) Db

Zones 1, 2, 21, 22



**Tongue Interlock Switches**



**Rope Pull Safety Switches**



**Conveyor and Mini Belt Alignment Switches**



**Trapped Key Interlocks**



**Limit Switches**



Exd IIC T6 (-20 ≤ Ta ≤ +60C) Gb  
 Ex tb IIIC T85C (-20 ≤ Ta ≤ +60C) Db  
 Zones 1, 2, 21, 22



## Safety Relays

### Switch Information

- Dual force guided relay output contacts with high current up to 6A each.
- Up to Cat. 4PLe and SIL 3 acc. to ISO13849-1, IEC 62061 and IEC 61508
- Single or dual channel input.
- Feedback loop for monitoring contactors.
- Short circuit and earth fault monitoring.
- Automatic or monitored manual start.
- Instant or delayed contacts.



SCR-21-i    SCR-31-i    SCR-31P-i    SCR-73-i    SCR-31-42TD-i    SEU-31-i    SEU-31TD-i

### Python Conveyor Belt Alignment Switches



Belt Switch 35mm Diam. Short Roller Die Cast    Belt Switch 50mm Diam Roller Die Cast    Belt Switch 35mm Diam, Long Roller Die Cast    Belt Switch 35mm Diam, Long Roller Stainless Steel    Belt Switch 50mm Diam, Long Roller Stainless Steel    Belt Switch 35mm Diam. Long Roller Stainless Steel

### Product Quality

Available with M20 or 1/2" NPT Fixing  
24V, 110V and 230V Fixing  
ATEX Models available



- Miniature Belt Alignment Switch has the option of stainless steel or plastic roller and is housed in a rugged die cast aluminium or stainless steel body
- Miniature Belt Alignment switches are mounted on sections of narrow conveyors to protect against belt drift due to an unintentional movement.
- Positive opening NC safety contact to EN60947-5-1
- Slow break or snap action contacts
- High mechanical life over 500,000 cycles
- Industry standard mounting to EN50041

### LED Diagnostic Features

- All relays include a combination of the below diagnostics.
- |       |                                              |
|-------|----------------------------------------------|
| Power | Power applied to device                      |
| Reset | Reset Circuit is closed                      |
| CH1   | External switch input 1 closed               |
| CH2   | External switch input 2 closed               |
| K1    | Internal relay safety output contacts closed |
| K2    | Internal relay safety output contacts closed |
| K3    | Internal relay safety output contacts closed |
| K4    | Internal relay safety output contacts closed |

## Safety Limit Switches



HLM Die Cast Metal  
EN50041 IP67

HLM-SS Stainless Steel  
EN50041



- Positive opening contacts to IEC60947-5-1.
- Industry standard mounting to EN5004.
- 240V 3A contacts 230V 3A.
- Rotary or Linear Actions
- M20 or 1/2" NPT conduit entry.
- High mechanical life expectancy - 2,500,000,00 cycles.



LSPS Plastic

- Positive opening safety contacts to IEC60947-5-1
- Choice of 11 actuator heads: Linear, Rotary and Flexible actions
- High mechanical life expectancy - 2,500,000,00 cycles.
- Head position adjustment any of 4 positions
- Enclosure protection to IP67 making them suitable for washdown
- Conduit entries: M20 1/2" NPT or Quick Connect

### Miniature Safety Limit Switches



- Standard duty plastic body or robust, die cast body
- Positive opening NC safety contacts to IEC60947-5-1
- Unique 3 pole positively operated contacts.
- Choice of 7 actuator heads Linear and Rotary
- High mechanical life expectancy - 2,500,000,00 cycles.
- Side or end cable exit
- Enclosure protected to IP67
- Operating temperature -25C to 80C

### Micro Switches



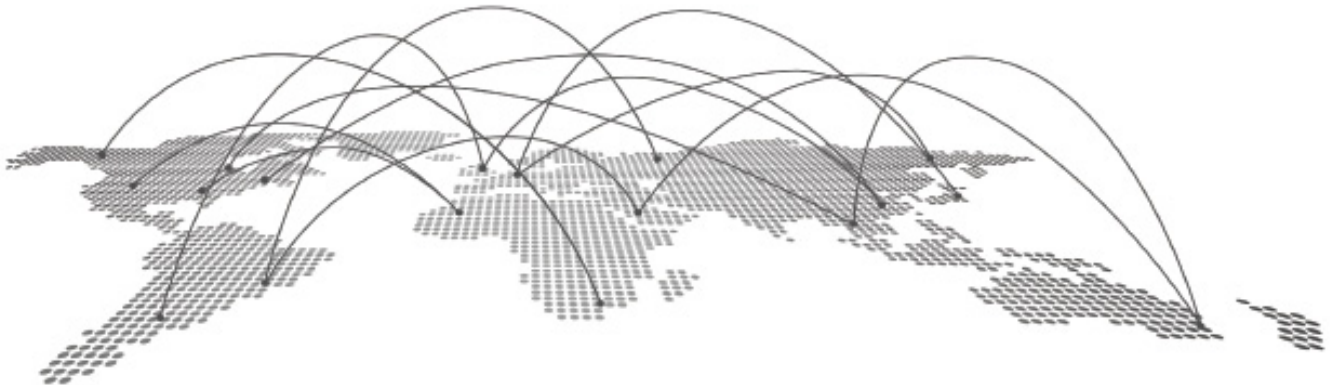
- To complement our range we now stock a wide range of the most popular micro switches including Pin Plunger, Roller Lever Panel Mount types, Short and Long Hinge Lever, etc.
- For the full range please see the website or the catalogue.





[www.idemsafety.com](http://www.idemsafety.com)

See catalogue or website for full product information



*Designed and Manufactured in the United Kingdom*

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