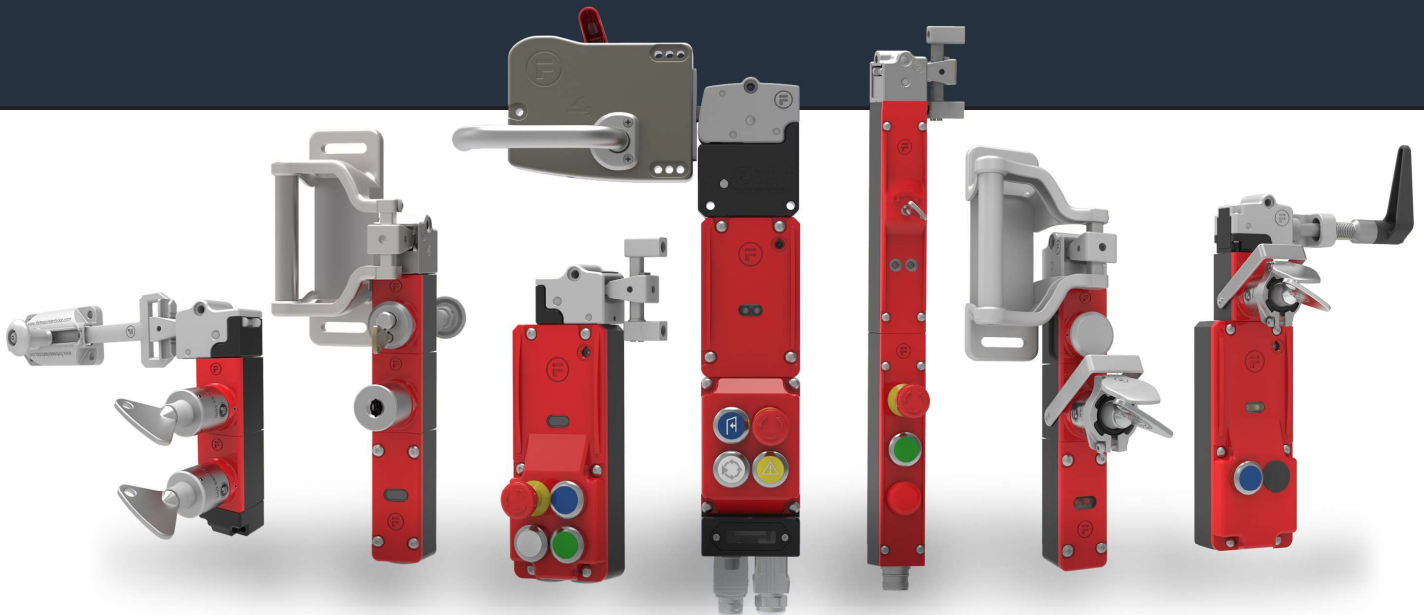


# Protecting People, Protecting Productivity

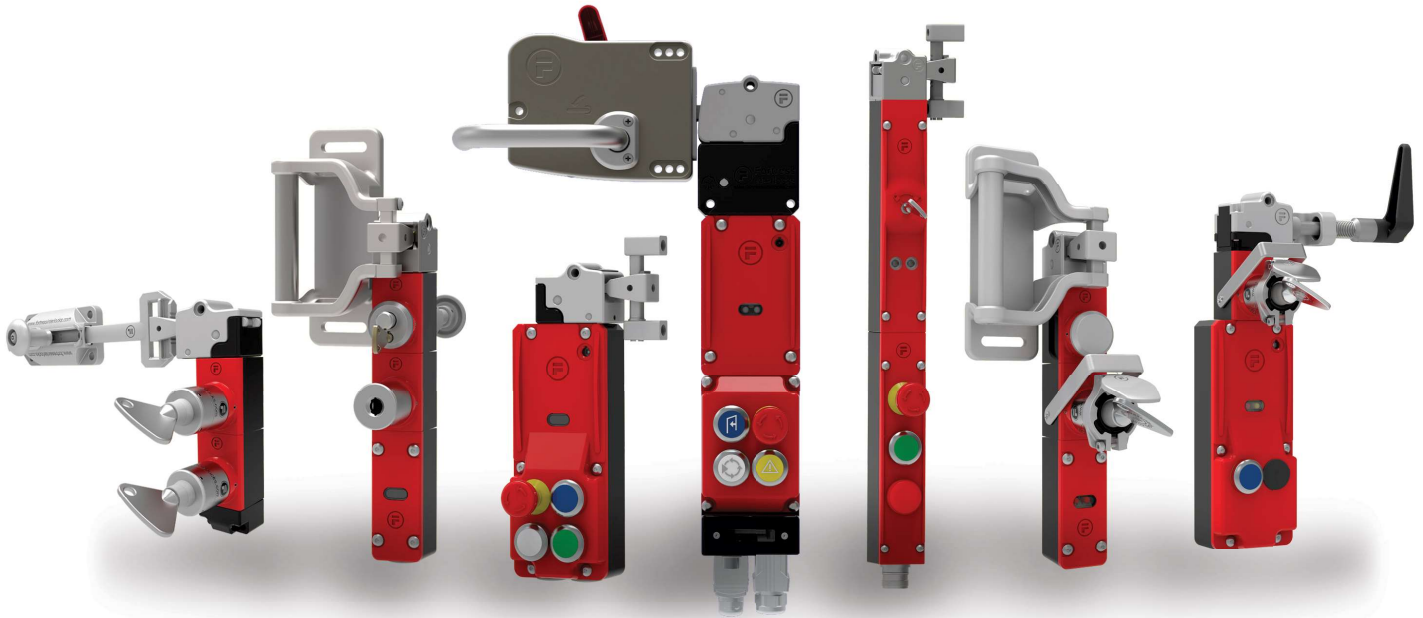


Modular Gate Switches for  
Safeguarding Hazardous Machinery



# Index

**amGard<sub>pro</sub>** “The Interlock of Choice”



The Company	4
The Concept	5 - 6
Compliance	7
Our Competency	8
amGard <sub>pro</sub> Application Examples	9 - 16
Configurations Part 1 - amGard <sub>pro</sub>	17
Configurations Part 2 - proNet	18
Configurations Part 3 - Eazi-fit Mounting System	19
Configurations Part 4 - Slimline <i>pro</i>	20
amGard <sub>pro</sub> Range Card	21
amGard <sub>pro</sub> Configurator	22 - 38

## The Company

### “Who we are and What we do”

Fortress Interlocks helps customers protect their personnel and capital assets. The company has over 40 years of experience in the safety market, designing and manufacturing safety access and control systems based at its headquarters in Wolverhampton, UK. These systems create safe workplaces where employees in industrial environments are safeguarded from injury and equipment is protected from damage. A world leader in access control systems, Fortress products guarantee that actions and events are undertaken in a pre-determined sequence ensuring a safe working environment.

The company's products are suitable for applications across a wide industrial base including power generation and distribution, steel, automotive, recycling, building materials, food and beverage, robotics and palletisers. Its extensive product offering and interlocking experience allows Fortress to provide unique solutions for all safeguarding applications. It regularly creates bespoke solutions, often by customising its standard products.



# The Concept

**amGard<sup>pro</sup>** is the ultimate range of modular safety gate switch interlocks, for heavy duty applications. Its unique modular construction allows easy configuration and provides total electro-mechanical solutions for practically any safeguarding application up to SIL3 (EN/IEC 62061), Category 4 and PLe (EN/ISO 13849-1).

With its unrivalled design concept, amGard<sup>pro</sup> offers a range of fully integrated safety interlocks, including solenoid and non-solenoid safety switches complete with a host of additional options including key control modules, emergency release, redundant sensors, lock out/tag out and push buttons, E-stops and indication lights for enhanced functionality. The robust construction of this range makes it ideal for use in a wide range of industrial applications when safety, strength and reliability are of paramount importance.

The amGard<sup>pro</sup> system replaces all adaptations normally fitted within a guarding system, such that additional hardware like door catches, actuators, closing mechanisms, internal mechanisms, key functions including authorised access and deadlocks may be no longer needed. All of these separate functions can be incorporated into amGard<sup>pro</sup> configurations, resulting in the most flexible safety interlock solution available for today's industrial environment.

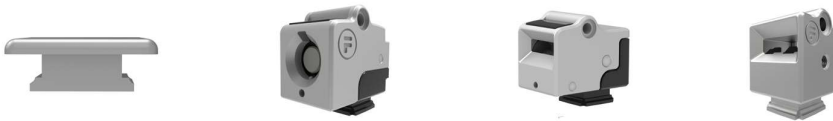


**Actuators**



- Actuators**  
Handle Actuators  
Hinged Handle Actuators  
Tongue Actuator  
Slimline Tongue Actuator  
All in One Head and Handle Actuator  
Slidebars

**Head Modules**



- Head Modules**  
Handle Actuator Head Module  
Tongue Actuator Head Module  
All in One Head and Handle Unit  
Padlock Adaptor

**Adaptors**



- Adaptors**  
Safety Key Adaptors  
Access Key Adaptors  
Extracted Key Adaptors  
Internal Release Adaptors

**Electrical Switching / Locking**



- Electrical Switching / Locking**  
Safety Switch Bodies  
Solenoid Controlled Lok Bodies  
Extended body Solenoid Controlled Lok Bodies  
Slimline Solenoid Controlled Lok Bodies  
Explosion Proof Switch Bodies  
Foot (to terminate mechanical lock)  
PROFINET and PROFIsafe versions available  
Ethernet/IP CIP Safety versions available  
AS-interface versions available  
European, Canadian and North American approvals

**Option Pods**



- Option Pods**  
Key Switch Option Pod  
Indicator Lamp Option Pod  
Pushbutton Option Pod  
Slimline Pushbutton Option Pod  
PROFINET and PROFIsafe versions available  
Ethernet/IP CIP Safety versions available  
AS-interface versions available  
European, Canadian and North American approvals

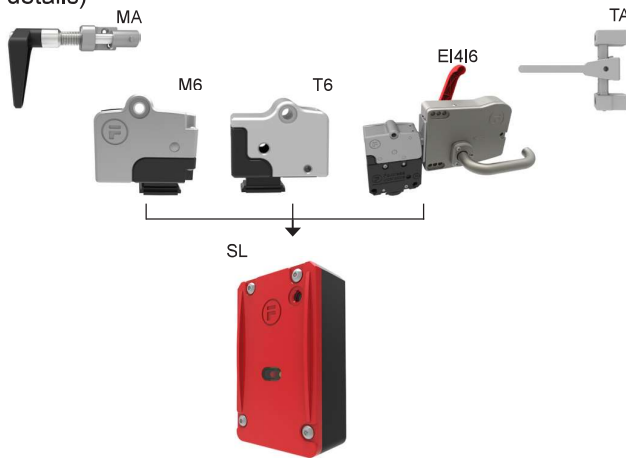


# The Concept

**amGard pro Technical Specifications**

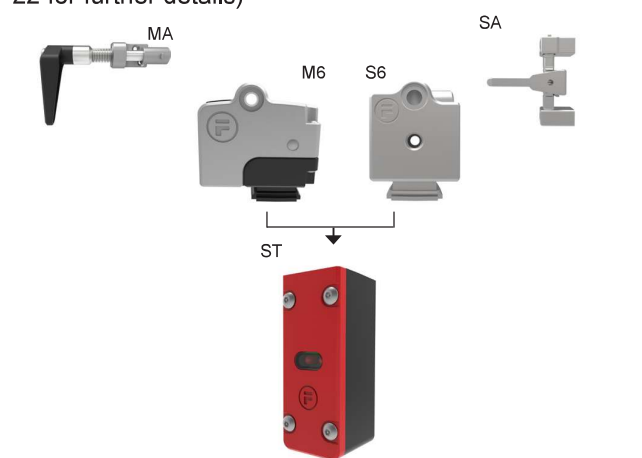
**MA2M6SL411 & TA4T6SL411 & EI4I6SR411**

The solenoid controlled safety switch body (*proLOK*) can be equipped with four different head types, creating door/hatch lock configurations that restrict access to the safeguarded area until it is safe to enter. (Please see amGard*pro* Range Card on page 22 for further details)



**MA2M6ST401 & SA4S6ST401**

The safety switch body (*proSTOP*) can be equipped with four different head types. These configurations select machine stop and detect the position of doors/hatches that give access to the safeguarded area or machine. (Please see amGard*pro* Range Card on page 22 for further details)



**amGardpro Technical Specification**

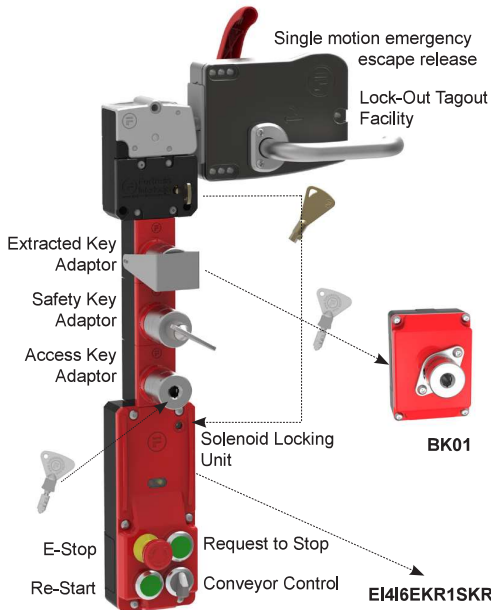
Housing Materials	Zinc Alloy to BSEN12844 & Stainless Steel to BS3146-2 ANC4B
Paint Finishes	Glass powder coat on passivated base material
Ingress Protection	IP65 + IP67
Mechanical Life	1,000,000 Switching Cycles
Performance Level	PLe
B10d	5,000,000
Ambient Temperature	-5°C to +40°C / 60°C
Switches Conformance	DIN VDE 0060 Part 206 & IEC 947-5-1
Maximum Frequency of Ops	7,200 per hour
Connector Type	Spring Activated Vibration Proof Block

**amGardpro Switching Specifications**

Switching Principal	Positive Break (safety circuits)
Switch Circuit Current	3A
Minimum Switch Current	1mA at 5 VDC
Maximum Switch Current	230V AC Max
Utilisation Category	AC15 or DC13
Switching Contact Element	4NC/2NO ( <i>proLOK</i> ), 2NC/1NO ( <i>proSTOP</i> )
Control Voltage	24V AC/DC, 110V AC or 230V AC
Insulating Resistance	20M Ohm
Insulating Voltage	2500V AC
Solenoid Power Rating	12W (current at Nominal 24V DC = 500mA)
Solenoid Rating (Duty Cycle)	100%
Solenoid Voltage	24V AC/DC, 110V AC and 230V AC
Solenoid Voltage Tolerance	90% to 110% of nominal
Cable Size	26 - 14 AWG

# Compliance

**am Gard pro** “The Interlock of Choice”



**Improved Standards Compliance**

- Complies with all new and forthcoming machine safety standards.
- Integrated redundancy sensor solution (with coding options).
- Single motion emergency escape release regardless of solenoid or trapped key locking mechanisms.

**Enhanced Machine Control Functionality**

- Integrated pushbutton control in single unit.
- Up to 8 illuminated pushbuttons/lamps/selector switches, including 1 e-stop.
- Up to 10 safety/access keys in one configuration.

**Enhanced Strength**

- Stainless steel heads with mounting point, increasing retention force to market leading 10KN.
- Standardisation and enhancement of all anti-vibration features.
- Improved weather resistance.

EU machinery safety standards are regarded as the most stringent in the world and are adopted via IEC on a global basis. Fortress strive to adhere to such standards from design phase through to final product delivery, so that our customers can have peace of mind that their product or system selection from Fortress complies with the very latest machinery safety standards, regardless of where in the world the equipment is deployed.

Our amGardpro range complies with the EU Machinery Directive 2006/42/EC and the following standards:

- EN ISO 13849-1 Safety of Machinery - Safety related parts of control systems
- EN ISO 14119 Safety of Machinery - Interlocking devices associated with guards - Principles for design and selection

These products also carry TÜV SÜD NTRL Approval for U.S.A / Canada. They comply with the following standards:

- UL508:1999R
- CAN/CSA 22.2 No 14

Extensive testing of all of our products is inherent in our design for industrial applications. In addition, all of the equipment within the amGardpro range has been independently assessed by TÜV SÜD to achieve Cat. 4, PLe.



We have several functional safety experts within our global applications team who are always on hand to offer advice on product selection, application and standards compliance.

# Our Competency

## **Gard** Application Examples

Fortress Interlocks core competency is the design of safety interlock systems and products which are suitable for use in a wide cross section of industries and applications. Our application expertise covers the following industrial sectors: Manufacturing, Power, Process and Transport. The following section contains a selection of typical applications for Fortress amGardpro products.

### amGardpro Application Example 1

This example shows the safeguarding of robot areas in which amGardpro products offer a combined mechanical and electrical solution.

**1 NO2C6SKL12LL411L0WB00N**

By pressing the access request button, the machine or installation is shut down by the machine control system.

The solenoid, controlled by the machine control system restricts the release of keys A until the guarded area or machine is safe to enter (indicated by the yellow status LEDs).

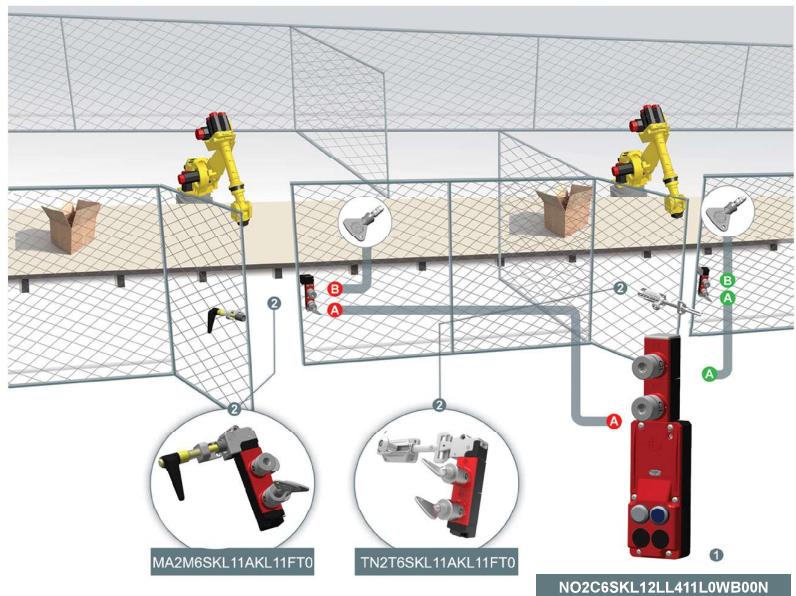
Energising the solenoid breaks the dual safety circuits to prevent unexpected re-start.

Both safety keys A can now be released indicated by the red status LED.

**2 TN2T6SKL11AKL11FT0**

Keys A can be used to unlock the door locks and release the safety keys B. These can be taken inside the guarded area to prevent personnel being trapped and/or an accidental machine restart.

By reversing this compulsory procedure the machine can safely be restarted.



### amGardpro Application Example 2

This example shows the safeguarding of a potentially dangerous area with a teach mode function inside.

**1 TN2T6SL411BK21**

Removal of the key from one of the pods at the doors selects machine stop at the end of a run down cycle. The solenoid is then energised by the machine control system and access can be gained.

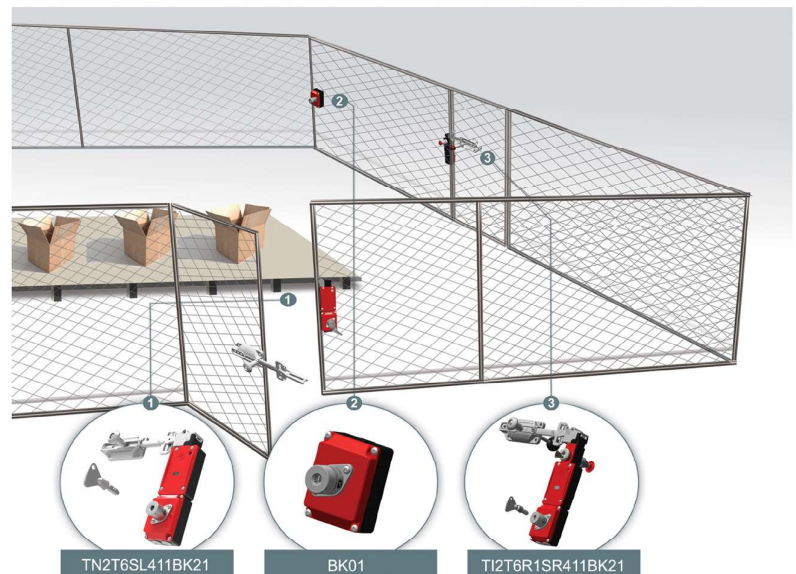
The operator can take the safety key into the potentially hazardous area preventing restart.

**2 BK01**

By inserting one of the keys in the stand alone pod inside the guarded area safe programming can be initiated.

**3 TI2T6R1SR411BK21**

The LOK internal release option can be used to unlock the door from inside a guarded area should personnel become trapped. By pushing the button on the rear of the unit, the tongue is released from the actuator head and the door can be opened from the inside. This also breaks both safety circuits, which then have to be manually reset before the machine can re-start.





# Our Competency

**am Gard pro Applications**

## Automotive Die Stamping Presses



### Application Requirement

The metal die stamping presses in an automotive manufacturing plant are used to form various automotive body parts that will later be welded together to assemble the finished vehicle. These presses are used to create body parts of a series of different models therefore personnel may require entry in order to alter the current stamping operation. However, due to the series of hazards that arise from such a dangerous process, operators must only be able to gain entry once all moving parts of the presses have come to a complete stop.

### System Schematic



### Fortress Solution

- E14A6SR411**  
Solenoid Gate Switch with Escape Handle
- B0YB0KN**  
Machine Control Push Button Station

### Sequence of Operation

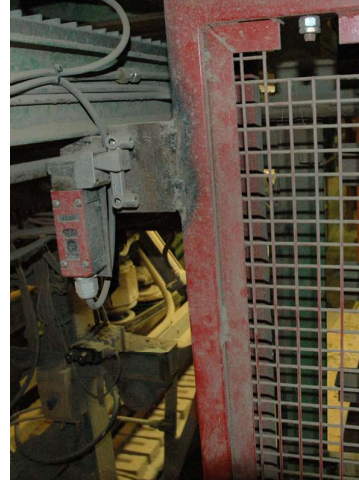
To gain entry into any of the press and die cells, an operator must request entry by pressing the yellow pushbutton on the machine control station sending a signal to the machine's control system, bringing that specific cell to a controlled rest. When it is safe, a signal is sent from the machine control system to energise the solenoid gate switch enabling the handle to be operated in order to unlock the door. The machine will not restart until the door is closed and an operator has pressed the illuminated blue pushbutton to reset the machine. In an emergency the red escape handle can be used as an internal release to open the locked cell from the inside.



# Our Competency

**am Gard pro Applications**

**Brick Press**



**Application Requirement**

A brick press is used in the forming process within a brick manufacturing plant. The clay material is placed in a die and then compacted with a steel plunger set at a desired pressure. Operators may need to gain access to the brick press for scheduled cleaning, or to remove pieces of lodged clay that are holding up the production process. However, access into the machine should not be possible until power to the machine has been isolated. Therefore, each door is fitted with a safety gate switch. Sliding doors are fitted with tongue operated gate switches and hinged doors are fitted with handle operated gate switches.

**System Schematic**

**MA2M6ST401**



**TA4T6ST401**



**Fortress Solution**

**MA2M6ST401**

Handle Operated Safety Switch

**TA4T6ST401**

Tongue Operated Safety Switch

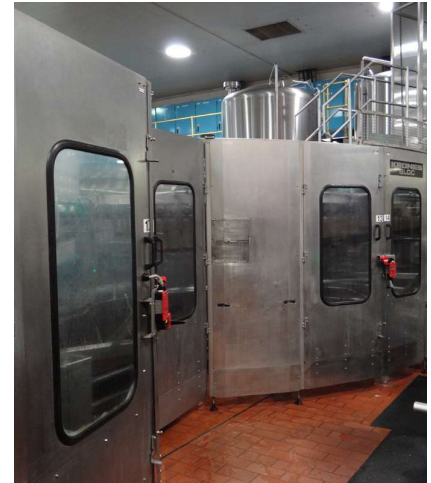
**Sequence of Operation**

To gain entry into a sliding door, an operator simply opens the door which disengages the tongue from the interlocks head, isolating power to the machine. Whereas, to gain entry into a hinged door requires an operator to pull and rotate the latching handle 90 degrees clockwise before the door can be unlocked. The handle's latching feature is compensate against guard doors that are located to the actual press itself that is subject to high vibration.

# Our Competency

**am Gard pro Applications**

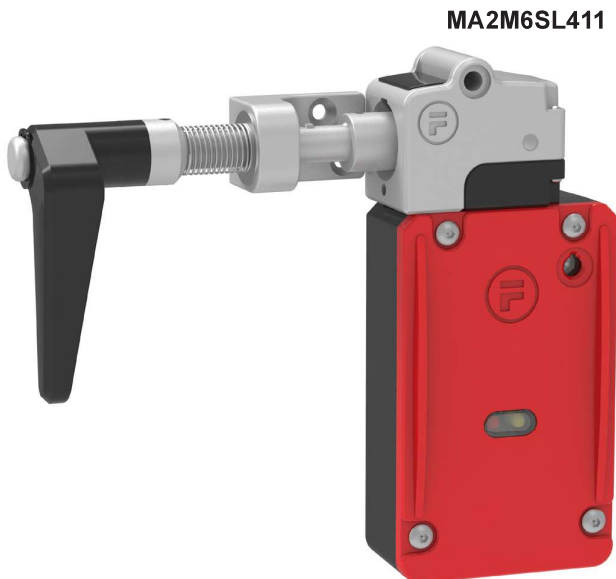
**Automated Beverage Rinser and Filler**



**Application Requirement**

Beverage bottling plants use automated rinser and filler machines to inject water into each plastic bottle as it moves down the production line to rinse out any unwanted material or bacteria before the filler machine fills the empty bottle with the freshly produced beverage. To comply with global safety and hygiene regulations, such machinery is protected with an interlocked guard to limit the possibility of external contamination. However, maintenance personnel may require access to the machine in the event of a blockage, but access can only be achieved once the machine has come to the end of its current operating cycle.

**System Schematic**



**Fortress Solution**

**MA2M6SL411**

Handle Operated Solenoid Gate Switch

**Sequence of Operation**

In the event of a machine breakdown or minor maintenance task, a maintenance engineer needs to request entry using a nearby machine control panel, sending a signal to the machine's control system, bringing the machine to a controlled rest. Once the automated rinser and filler has finished its current operating cycle, a signal is sent to energise the solenoid, enabling the handle actuator to be operated. Maintenance personnel can now gain entry into the required section on the filling line by rotating the handle actuator 90 degrees clockwise to unlock the guard door.

# Our Competency

**am Gard** Applications

Beverage Can Bodymaker



### Application Requirement

Beverage can manufacturers use a specialist press machine called a bodymaker in order to produce the finished beverage can bodies in rapid succession. Unfinished beverage cans are fed into the machine and pressed to create the final shape of the beverage can. Operators may need to gain access into the bodymaker if a misaligned beverage can were to cause the machine to breakdown. However as each can is pressed every 1/5<sup>th</sup> of a second, access into the machine should only be achieved once power to the machine has been isolated and all moving parts have come to a controlled stop.

### System Schematic



### Fortress Solution

**TA2T6SL411**

Left Handed Tongue Operated Solenoid Switch

### Sequence of Operation

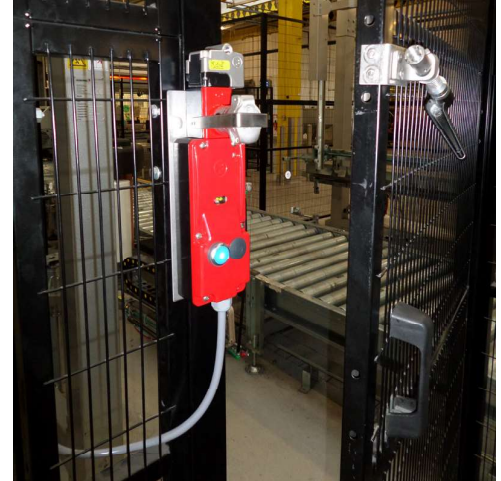
To gain entry into one of the maintenance hatches on the bodymaker, an operator must request entry using a nearby control panel. This sends a signal to the machine's control panel, isolating power to the machine and bringing all moving parts to a complete stop. Once it is safe to enter, the machine's control system will energise the solenoid enabling the tongue actuator to be removed from the interlocks head which enables the hatch door to be opened.



# Our Competency

**am Gard pro Applications**

## Combined Palletiser & Stretch Wrapper



### Application Requirement

The combined Palletiser & Stretch Wrapper in a food manufacturing plant is an automated 'end of line' process of stacking cases of finished goods onto pallets and wrapping them in a layer of protective film, ready for final shipment. Personnel may require entry into the guarded area in the event of a machine breakdown, but should only be able to gain access once the machine has finished its cycle. Therefore, such machinery is extensively guarded and interlocked to ensure that access inside the guarded area can only be achieved once power has been isolated and all moving parts have come to a complete stop.

### System Schematic

**MA4M6EKL2LL411L0B000N**



### Fortress Solution

**MA4M6EKL2LL411L0B000N**

Handle Operated Solenoid Gate Switch

### Sequence of Operation

To gain entry into the machine, an operator must request entry by pressing the blue pushbutton, sending a signal to the machine's control system to bring the machine to the end of its current cycle. When it is safe to enter, the blue pushbutton will illuminate and flash intermittently, enabling an operator to turn and remove the extracted key before the door can be opened. This key must remain on the operator's person while they remain inside the danger zone to avoid inadvertent machine restart.



# Our Competency

**am Gard** Applications

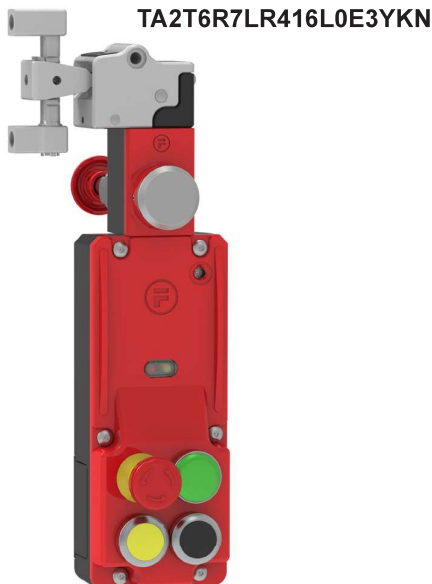
Hot Rolling Mill - Steel Industry



### Application Requirement

A hot rolling mill in a steel strip plant is the process in which semi-finished steel slabs, that are nearly at their melting point, are passed through a series of rolls to increase the length and reduce the thickness so that it forms a steel strip before coiling up the lengthened steel strip. There are six access doors into the hot rolling mill that might be accessed in the event of a machine breakdown therefore, each door has been fitted with a solenoid controlled safety gate switch to prevent access into the area until all moving parts of the mill have come to a complete stop.

### System Schematic



### Fortress Solution

**TA2T6R7LR416L0E3YKN**

Tongue Operated Solenoid Gate Switch with an Escape Release Pushbutton

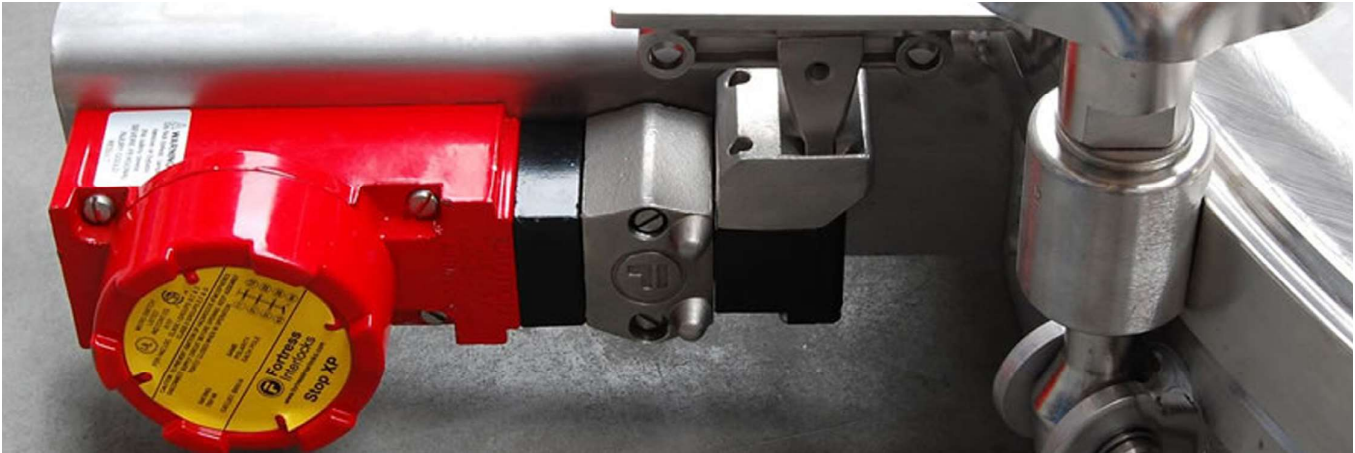
### Sequence of Operation

In order for an operator to gain entry into the hot rolling mill area, they must request entry using the black pushbutton which sends a signal to the machine's control system, bringing the line to a controlled stop. Once it is safe to enter, a signal is sent to energise the solenoid and the green lamp is illuminated, indicating to the operator that access inside the area can now be achieved. In the unlikely event that an operator finds themselves trapped on the inside of the area, they can gain immediate exit by pressing the red escape release pushbutton.

## Our Competency

am **Gard** Applications  
pro

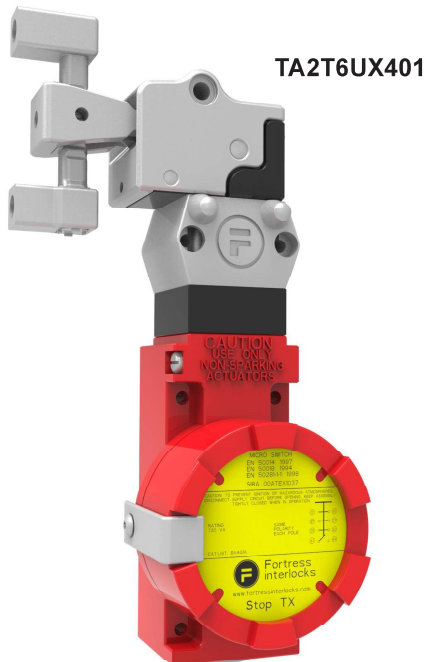
Mixing Vessel



### Application Requirement

Mixing vessels in chemical processing plants are used to house the chemical compounds that have been mixed together to form the finished product. All vessels are air-tight to ensure that no outside contaminants can affect the chemical reaction that is taking place within the mixing vessels. There are a series of blades on the inside of the mixer that operate at incredibly fast speeds to blend the chemicals together. Therefore, such chemical processing machinery is extensively interlocked to ensure that cleaning and/or maintenance personnel can only gain entry to the vessels once power to the machine has been isolated and the chemicals being processed have been removed from the mixing vessels.

### System Schematic



### Fortress Solution

**TA2T6UX401**

Explosion Proof Safety Switch

### Sequence of Operation

In order to gain entry to the mixing vessels, an operator must isolate the power using a nearby control panel. The operator must then unscrew all the air tight fixings holding the vessels hatch door closed. Once all of these fixings are removed, the operator can gain entry by using the handle to open the mixing vessels hatch door. Upon opening the hatch door, this disengages the tongue from the locking mechanism on the 'TA2T6UX401' explosion proof safety switch to ensure that power to the machine cannot be restarted.

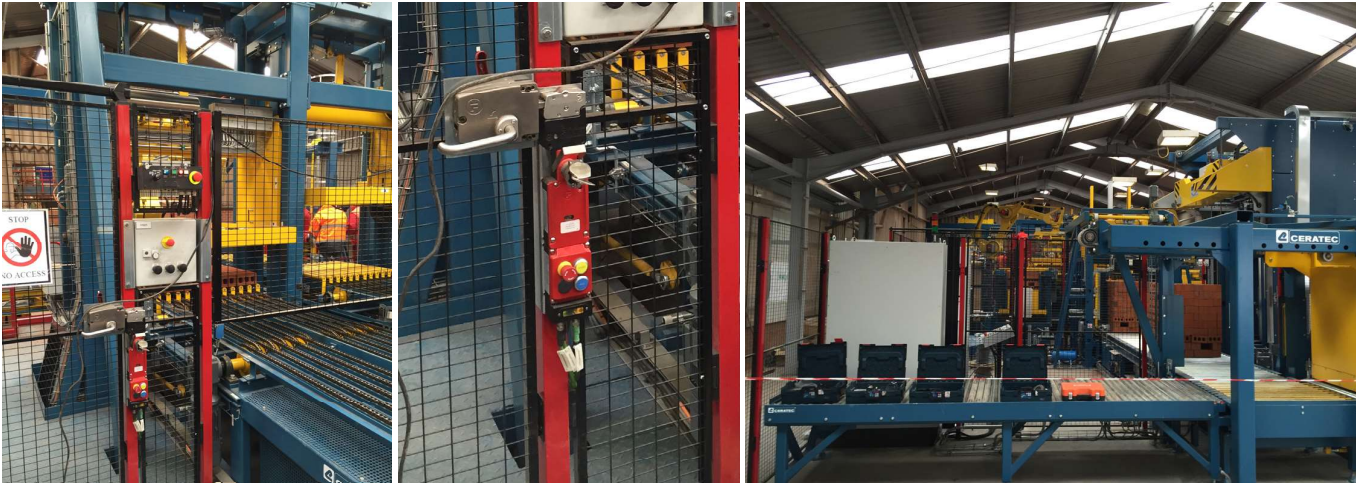




# Our Competency

**am Gard pro Applications**

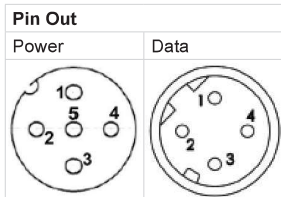
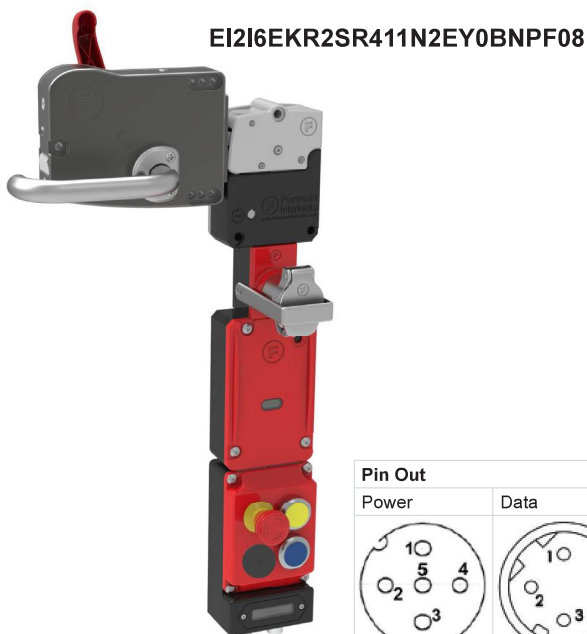
**Dehacking Line**



### Application Requirement

Setting machines pile dried bricks onto a kiln car in a selected setting pattern before conveying the pile onto the Dehacker which unloads the bricks before packing and palletising ready for final shipment. Due to the dangerous nature of this process, the following safety system prevents access to operators until power to the machine has been isolated and the machines cycle has ended. Using the Profi-enabled device makes installation much simpler as the four core Profi-cables significantly reduces wiring while increasing real-time diagnostic capability and maintaining the safety integrity.

### System Schematic



### Fortress Solution

#### E12I6EKR2SR411N2EY0BNPF08

Left Handed Handle Operated Profi-enabled Solenoid Switch with Escape Release


### Sequence of Operation

To gain access to the Dehacker, an operator must request entry by pressing the yellow illuminated pushbutton marked 'Access'. This sends a signal to the machine's control system bringing the machine to a controlled rest. Once the machine has finished its cycle, a signal is sent from the control system, energising the solenoid and enabling an operator to remove the extracted key before access into the machine can be achieved. This safety key must remain upon the operator's person while they remain inside the danger zone. Communication control is transmitted via the PROFINET network and the safety is managed via the PROFIsafe network. If an operator should find themselves locked on the inside of the machine for any unforeseen circumstance, the red internal escape release handle can be used to immediately isolate power to the machine and grants instant exit from the cell.

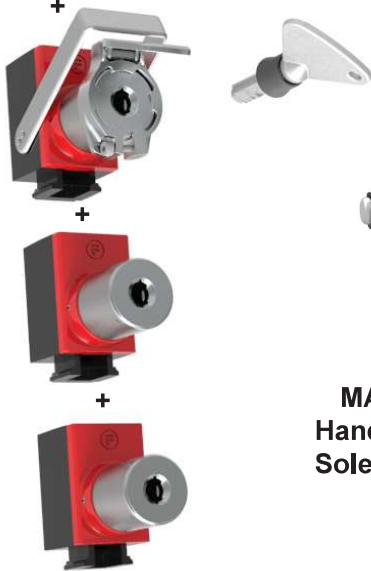
# Configurations Part 1

**am Gard** is a modular design that enables the user to configure a wide range of safety gate switches to exactly meet the specific application. The products can therefore be used to satisfy a range of machine guarding situations. You simply select the actuator and head mechanism and then add in key adaptors and/or control units, as needed.


Actuator and Head



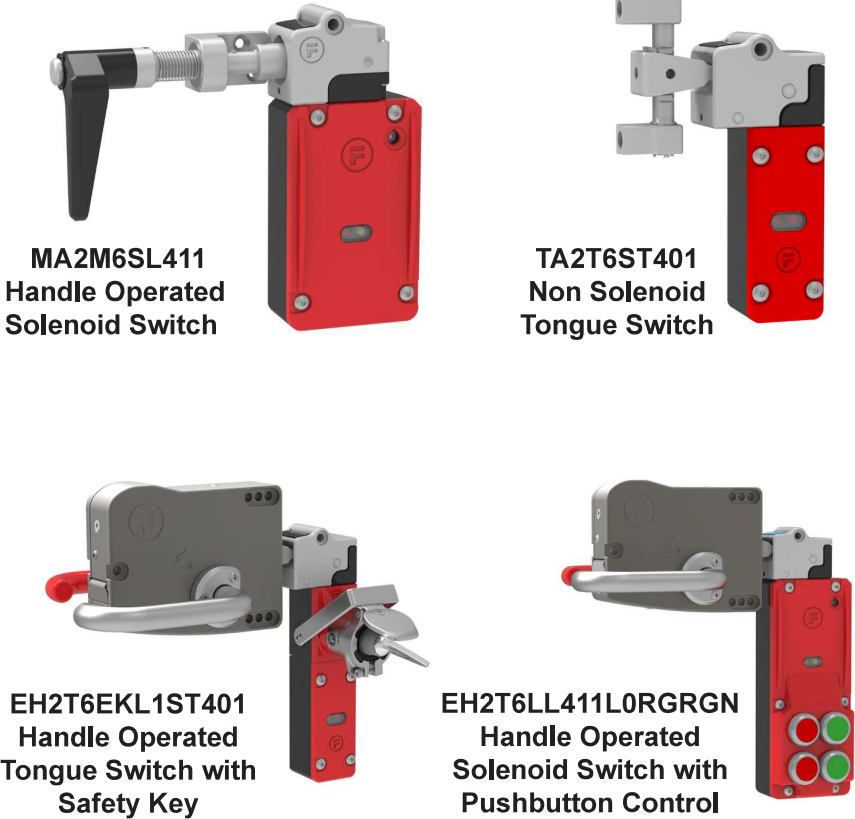
+




Key Adaptors




Control Unit




Common Configurations




**MA2M6SL411**  
Handle Operated Solenoid Switch



**TA2T6ST401**  
Non Solenoid Tongue Switch



**EH2T6EKL1ST401**  
Handle Operated Tongue Switch with Safety Key



**EH2T6LL411L0RGRGN**  
Handle Operated Solenoid Switch with Pushbutton Control

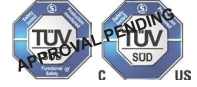


## Configurations Part 2



Approvals  
Ethernet/IP - CIP

EtherNet/IP™



### Communications / Networked Safety Switches

#### What is *proNet*?

amGard *proNet* is an addition to the amGard*pro* range that adds an Ethernet based networking capability to the range. It is designed as an add-on module that replaces, or can be used in addition to, an option pod so that any configurable unit can be converted to communicate over Ethernet. The two supported protocols are:

- 'PROFINET' with the 'PROFIsafe' functional safety extension.
- "Ethernet/IP" with the "CIP Safety" function safety extension

Approvals  
PROFINET &  
PROFIsafe



These protocols allow non-safety control functions (lamp outputs, switches, monitor signals) and safety functions (gate switch safety functions, E-stop functions) to be communicated over the same network, using the same connection. It is therefore now possible to create the following types of interlocks with industrial communication built in:

- Solenoid control guard switches with escape release
- Solenoid control guard switches with "safety key" protection
- Solenoid control guard switches with machine control functionality
- Control stations with E-stop included

The following features are built in to *proNet* units:

- One cable for control and safety communication
- One cable for power – reducing installation time and cost
- 100% diagnostic capability – increasing up time
- Quick connection connections via M12 or 7/8 plug and socket or AIDA standard connectors
- Addressing flexibility either by web interface or dip switches aiding installation and maintainability
- An integrated network switch – 'daisy chain' bus topologies with no additional hardware
- Up to two power connectors – 'daisy chain' power topologies with no additional hardware
- Optional external safety switch connection

### Common Configurations



EI2A6SR411N2B0WYNPF15



EI4A7SR411N5GAYUNPF10



MA4M6EKL2SL411N2EY0BNPF10

## Configurations Part 3

### **Gard**<sub>pro</sub> Eazi-fit Mounting System

#### Simple System

Fortress new Eazi-fit mounting system is a series of packing and mounting plates to ensure any configured amGard<sub>pro</sub> safety switch can easily and simply be fitted to machine guarding. The configurable plates are a robust design of die cast aluminium and are suitable for both hinged and sliding guards with a choice of colour finishes. The packing and mounting plates are pre-fitted to the interlock when ordered together and the mounting plates can also be ordered separately.

#### Easy to use Configurator

The online configurator tool provides you with 2D Drawings, 2D and 3D Images and Models together with a part number for ordering purposes. To add our new Eazi-fit mounting system to your configurations visit [www.fortressinterlocks.com](http://www.fortressinterlocks.com) and select the amGard<sub>pro</sub> configurator.

### **Gard**<sub>pro</sub> Eazi-fit Mounting System Benefits



- Robust Design - 10KN Retention Force (when plate mounted correctly to amGard<sub>pro</sub> Unit)
- Configurable
- Accommodates most amGard<sub>pro</sub> configurations
- Pre-assembled
- Handle/tongue packing plates included
- Easy to order: Online configurator selects safety interlock and mounting plate to suit
- Easy to install: Interlock comes pre-fitted to mounting plate with actuator packing plate
- Painted Die Cast Aluminium either black finish or grey finish (to suit guarding finish)
- Standard designs for speedy delivery

## Common Configurations



EI2I6EKR2LR411L0E70BNMPB1



TA2T6R1EKR2AKR12SR411MPB1



EH4T6EKL2SL411MPB1

# Configurations Part 4

## **am** **Gard** *pro* Slimline *pro*

### What is Slimline *pro*?

amGard*pro* now has two additions to the range which are in a slimline housing - a Solenoid Controlled LOK body and an Option Pod for up to three control or pushbutton elements. Both are compatible with the standard modules within the amGard*pro* range and enable numerous configurations of guard switches for machine guarding applications all within a width of just 40mm. The control elements of the Slimline *pro*Option Pod unit can be prewired with a common power supply to minimise external wiring or supplied with volt free contacts.

### Slimline *pro* Benefits

- Slim profile - ideal for narrow guarding at just 40mm wide.
- Sealed to IP65 & IP67
- Choice of actuators (handle or tongue)
- Internal release option
- Keyed override (in event of power failure)

For more information on the **Slimline *pro*Option Pod** and **Slimline *pro*Lok** units visit our website [www.fortressinterlocks.com](http://www.fortressinterlocks.com) or request our individual datasheets and installation instructions from your local Fortress rep

## Common Configurations



SA2S6SKL21AKL21ZL411Y1EG10ND900



HS1S6ZL411D200



HS1S6ZL411Y1BW00ND600



HS1S6R2AKR11ZR411D200



# Fortress Interlocks

## amGuardpro Component Range Card

Protecting People, Protecting Productivity



### Actuators



AM Handle

MA\*  
MI\*



AT Tongue

TA\*  
TK\*  
SA\*



Hinged Handle  
Short Reach



HL1



Slidebar

TI\* TF\* SI\* SF\*  
TS\* TM\* SS\*  
TN\* TG\* SN\*



Handle Actuator

SD2  
SD4



All in 1 Head & Handle Combination

EI2 EI4  
I6 I7  
A6 A7



EN Handle

EN2  
EN4



EF Handle

EF2  
EF4



EH Handle

EH2  
EH4

### Adaptors

#### Head Modules

Cap



C6

AM Head



M6  
M7  
M8

AT Head



T6  
T7  
T8

AT Slimline Head



S6

### Electrical Switching / Locking



Extracted Key Adaptor

EK\*\*



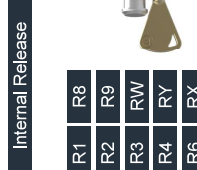
Safety Key Adaptor

SK\*\*



Access Key Adaptor

AK\*\*



Internal Release

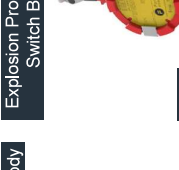
R1 R8  
R2 R9  
R3 RW  
R4 RY  
R6 RX  
R7 RZ

### Option Pods



RFID Pod

B\*\*\*\*  
B\*\*\*\*S



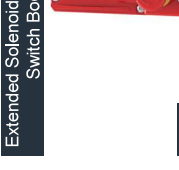
Key Switch Pod

BK\*\*



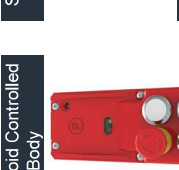
Pushbutton / Lamp Pod

B0\*\*\*\*  
B1\*\*\*\*  
B2\*\*\*\*  
B5\*\*\*\*  
B6\*\*\*\*  
B7\*\*\*\*



Slimline Pushbutton / Lamp Pod

Y0\*\*0N  
Y1\*\*0N  
W0\*\*0N  
W1\*\*0N



proNet Option Pod

N0\*\*\*\*NPF\*\*  
N2\*\*\*\*NPF\*\*  
N3\*\*\*\*NPF\*\*  
N5\*\*\*\*NPF\*\*



AM Lock-Out Clip

AML



AM Lock-Out Clip

ATL



Drop Down Lock-Out

DD7



Mounting Plates

...MPB1

### Accessories



Solenoid Controlled Switch Body

SE\*\*\*



Solenoid Controlled Switch Body with Internal Release

LE\*\*\*



Foot

FT0



Slimline Solenoid Controlled Switch Body

ZL\*\*\*  
ZR\*\*\*



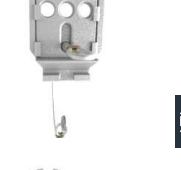
Extended Solenoid Controlled Switch Body

LL\*\*\*  
LR\*\*\*



Explosion Proof Safety Switch Body

EX\*\*\*  
UX\*\*\*



Non Solenoid Switch Body

ST\*\*\*



Solenooid Controlled Switch Body

SL\*\*\*  
SR\*\*\*