## FORTRESS



## Compact Robust Interlock with RFID Coding





#### What is ATOM?

**ATOM** is a compact, solenoid controlled interlock with high coded RFID, which hosts over 4,000,000,000 unique codes to prevent defeat. Externally approved and suitable for applications up to PLe (Cat. 4) **ATOM** can be used in heavier industry applications.







Construction Applications

The self-centring actuator, with retention forces of 8,000N, allows for misalignment in moveable guards, both hinged & sliding. Manufactured in stainless steel the head has an open design to prevent dust, dirt & corrosion from impacting performance. A LED at the base provides clear machine state indication from all angles.

Multiple units can be connected together with OSSD (Output Signal Switching Device) functionality preventing fault masking & minimises cabling requirements.

An Escape Release (ER) option is available for Safety-On-Guard-Locking (SOGL) variants, to allow egress from safeguarded spaces.

#### What are the features of ATOM?

- · Ultra compact mounting footprint, easy to mount with 4 x M5 screws
- Suitable for applications up to SIL3 Cat.4 PLe
- · Provides OSSD outputs with daisy-chain connection, connects up to 8 ATOMs in series
- · Available in multiple hardware variants
- Sealed to IP65 and IP67 & IP69
- · 24V control voltage
- · Safety-On-Guard only with Power-to-Lock
- · Safety-On-Guard-Locking with Power-to-Lock & Power-to-Unlock
- · Padlockable head during guard opening to prevent unexpected restart
- Third party TUV approved

## Product Range





## **High Coded RFID**

**ATOM** has a high-coded RFID technology that provides millions of different coding combinations and is classed as "high" coding by ISO 14119.

The uniquely coded actuator helps to create a tamper-proof system that prevents unauthorised access.

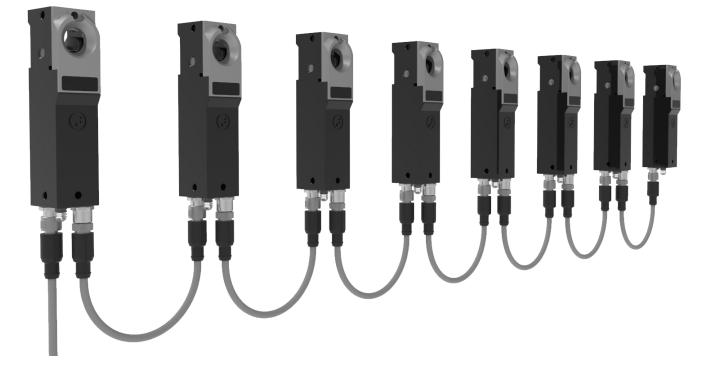




#### **OSSD** Outputs

**ATOM** supports OSSD output (**O**utput **S**ignal **S**witching **D**evice) with daisy-chain connection that enables ease of wiring installation and prevents fault masking powered from the same supply.

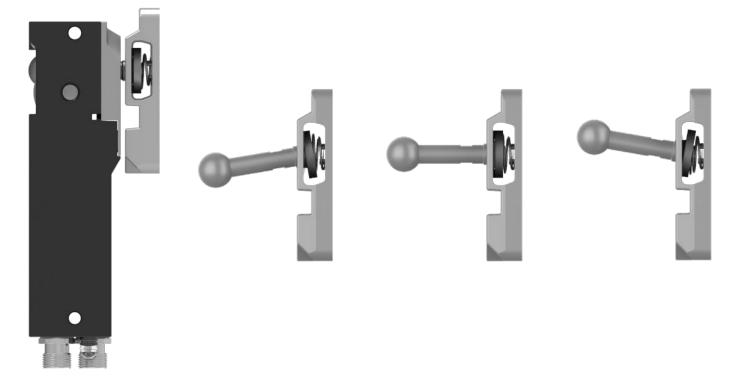
Each **ATOM** unit in series draws current and causes a voltage drop on the power line. For a detailed calculation please see the voltage drop tool on the Fortress website.



The ATOM actuator can pivot and self-centre to operate under a high degree of misalignment.

High maximum retention force of up to 8kN.

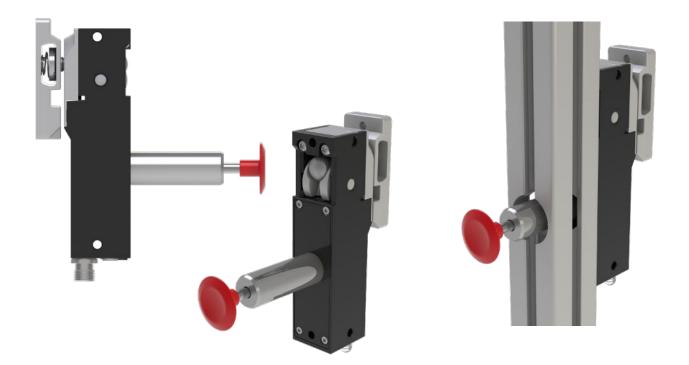
Pivoting mechanism is particularly well suited to small radius hinged doors and hatches.



#### Escape Release

ATOM with Escape Release allows a person to escape if they become trapped inside a safeguarded space.

Escape Release functionality for whole body access application perfect for small guards and tight spaces.



## **ATOM in Action**

If a person requires entry to the machine they must press the 'request to stop' button.

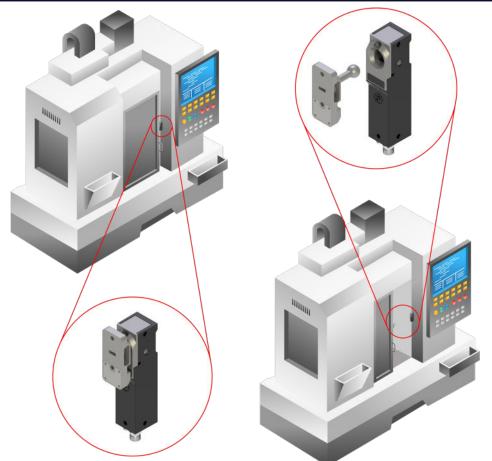
The **ATOM** will prevent guard doors from opening whilst the machine is still operating during rundown time.

Once the machine has stopped, the **ATOM**'s solenoid is energised which breaks the dual safety circuit to prevent unexpected restart.

Opening the guard door disconnects the RFID connection which prevents inadvertent restart.

## High-coded RFID technology prevents any attempts to manually defeat the unit.

When intervention is complete, closing the machine door will re-establish the safety circuits and providing the solenoid is de-energised, the **ATOM** unit will then relock and allow for machine restart.



#### **ATOM Escape Release in Action**

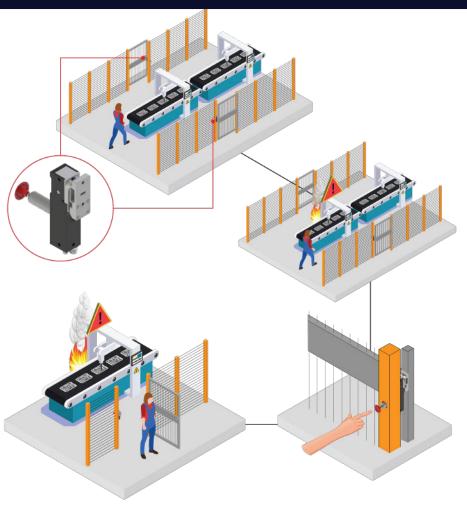
With added benefit of escape release our **ATOM ER** units allow for egress of a safeguarded space.

In this application the **ATOM ER** units are located on each guard opening.

While personnel are working within the safeguarded area an expected hazard occurs, blocking the entrance/exit route.

Personnel can press the escape release, which will override the locking mechanism by disconnecting the RFID connection.

The personnel can now egress the hazardous space.



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## FORTRESS

We have the peace of mind that our workers are safe and protected by Fortress equipment.

## -FORTRESS

Fortress' best quality is providing each customer the most robust and safe solution - all while being completely customizable and retaining a high level of quality.

## FORTRESS

Fortress is best at providing customised solutions at a rapid turnaround - reacting immensely to a challenge to put the customer's needs first.



## -FORTRESS

We value suppliers that can help navigate the standards and provide guidance that is directly linked to our applications.



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## Notes



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