



FORTRESS



Interlocking in Hygienic and Wash-Down Environments



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INTERNATIONAL TRADE
2018



Louis



Hygienic Interlocking Solutions - Louis

Fortress' Hygienic Interlocking Solutions or Louis includes the Hygienic Guard Lock and Non-Contact Switch product offering. Our inspiration for the name is based on Louis Pasteur who was a French biologist, microbiologist and chemist remembered for his remarkable breakthroughs into the causes and prevention of diseases. He is also known by name for the invention of the pasteurisation process.

Louis' discoveries and inventions have saved lives across the world, we want our products to do the very same by providing the best safety solutions possible.

We have often seen safety interlock products not holding up to high intensity wash-downs procedures. Fortress is able to not only provide solid state non contact sensors that resist high pressure cleaning, but we have also used RFID actuator coding for guard locking applications to create an extremely robust interlock with hygienic design features which is then ideal for use in a clean-in-place environment.



The Louis Range

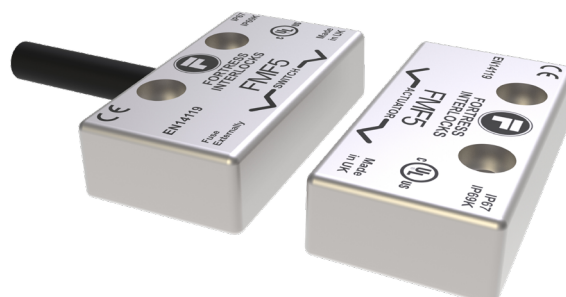
Stainless Steel safety on guard switching devices have been routine within sterile manufacturing environments, to create instant stop commands upon a guard opening. In certain applications, processes do not instantly stop upon opening the guard, such as a mixing blade which will continue to rotate and present a danger upon the guard opening. Fortress now offer a stainless-steel safety on guard locking product which has been third party approved by 3-A Sanitary Standards.

The Hygienic Guard Lock (HGL) is designed for controlled access in environments where caustic wash down processes are commonplace, and bacteria growth must be circumvented to guarantee contamination free interlocking. The HGL has an open design to maximise access for cleaning and minimise bacterial growth locations. The IP67 & IP69 sealing in addition to FDA & USDA approved PBT (Polybutylene Terephthalate) interfaces between stainless steel components, have been carefully selected with open plant cleaning and CIP (Clean in Place) in mind.



The Non-Contact Safety Switch is a magnetically coded, robust stainless steel IP67 and IP69 proximity switch ideal for any environment which requires wash down procedures or caustic cleaning.

The simple design of these switches minimises surfaces for contaminants to grow and maximises accessibility for cleaning.



Hygienic Guard Lock

High-Coded Versatility
High level misalignment tolerance with RF coding

Localised Indication
via LED for instant state detection

Robust
Stainless steel build to protect against harsh cleaning

Third Party 3-A Approval
Open design

Maximise Moisture Protection
IP67 & IP69 for wash-down applications



Over **4x10⁹** codes

Device status outputs via shatter-proof LED

316 stainless steel enclosure

Minimises risk of bacteria growth and contamination

IP67 / IP69 protection for use in wash-down

Part Number

Select a Hygienic Guard Lock beginning HGL-

Safety on Guard Locking

Disconnect Option

Safety on Guard Only

Safety on Guard Only

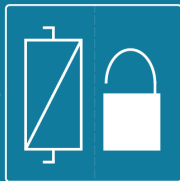
HGL-100A2-A

HGL-100A3-A

HGL-100A1-A

HGL-100A4-A

24V Power-To-Unlock



Daisy chain with 2 x 5-Pin M12

8-Pin M12

5-Pin M12

2 x 5-Pin M12

Power-To-Unlock

HGL-110A2-A

HGL-110A3-A

HGL-110A1-A

HGL-110A4-A

Power-To-Lock

HGL-610A2-A

HGL-610A3-A

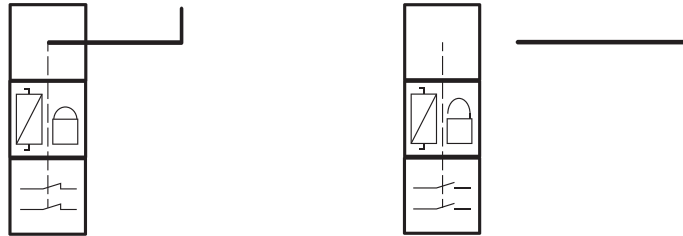
HGL-610A1-A

HGL-610A4-A

Food Mixer Application

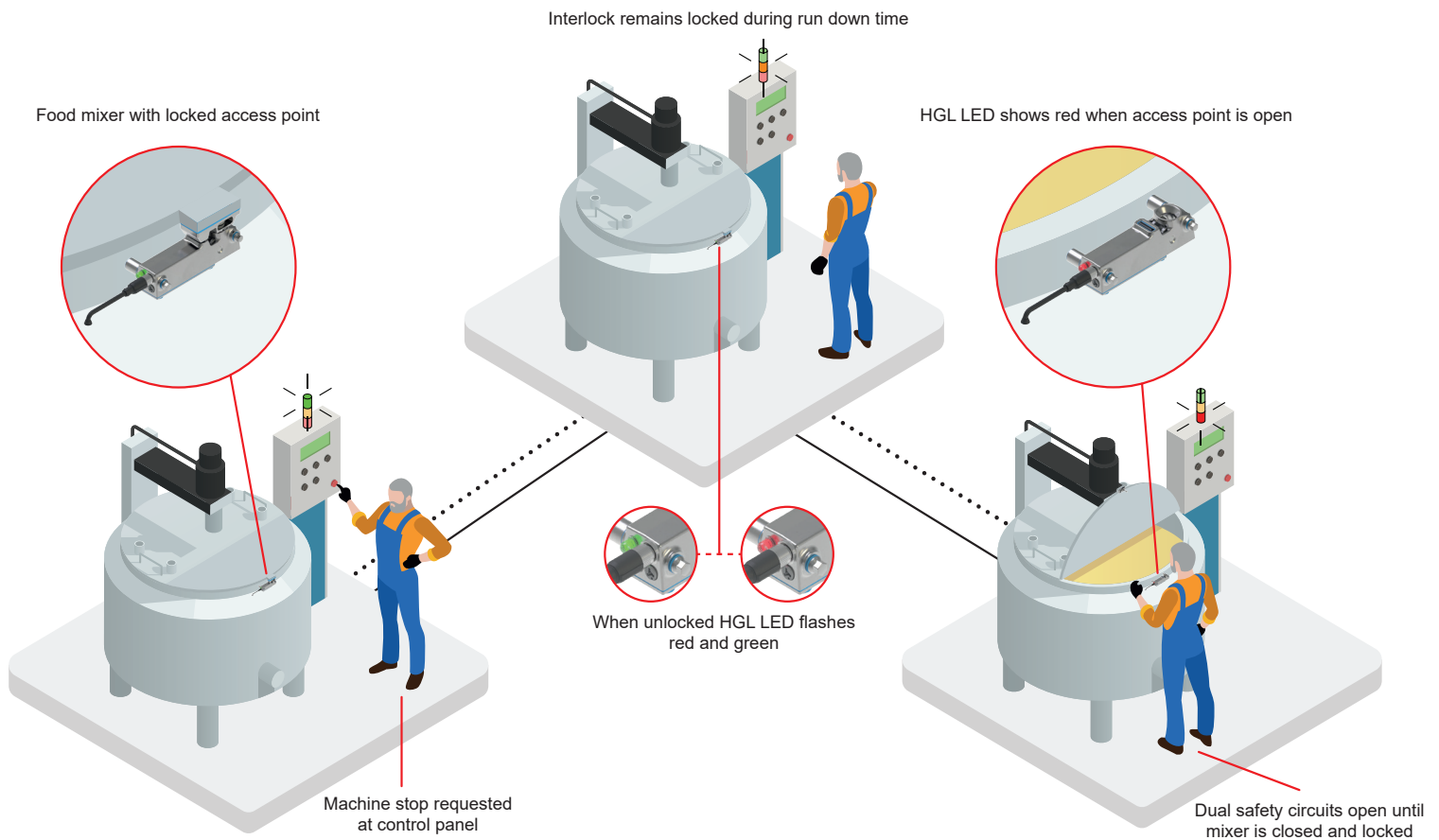
Food mixers with rotating internal blades continue to pose a hazard when power to the motor is initially isolated. Access to cleaning and inspection hatches needs to be prevented until the run down time has elapsed and the blade has stopped.

Mixing operation should only begin again once all guards are confirmed as closed and locked. During operation the locking method of the guard is required to be sufficiently strong and monitored to prevent opening while a hazard exists.



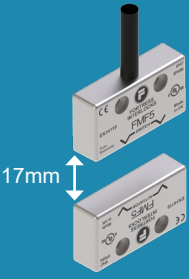
Guard Lock

Guard is locked until machine stops, guard unlocking opens safety switches



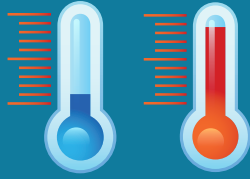
High Temperature Non-Contact Switch

Versatile
High Misalignment



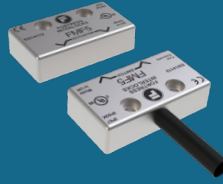
+/- 17mm operating distance X/Y/Z planes

Environment
Variable operating temperatures



Use in temperatures between -25°C and 125°C

Robust
Stainless steel build to protect against harsh



316 stainless steel housing

Compact
Perfect for small guards



Installation envelope of 29 x 53 x 13.5mm

Maximise Moisture Protection
IP69 for wash-down applications

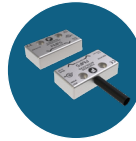


IP67 / IP69 protection for use in wash-down

Part Number

Select a Non-Contact Switch beginning FMF5-

Material



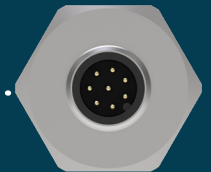
Stainless Steel

Pre-Wired Lead

5 m

10 m

Disconnect



M12 8-Pin

FMF5-SS-21-DC-05M-HT

FMF5-SS-21-DC-10M-HT

Do you need a cable with this product?

CABLE-5M-NCS

5m Cable to Suit 8-Pin Connector

5m
(16.4ft)

CABLE-10M-NCS

10m Cable to Suit 8-Pin Connector

10m
(32.8ft)

CABLE-20M-NCS

20m Cable to Suit 8-Pin Connector

20m
(65.6ft)

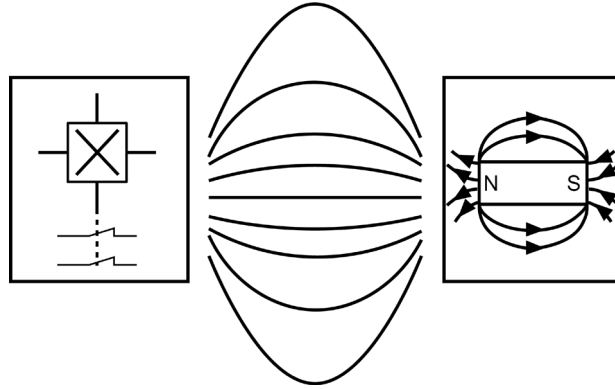


Food Hatch Application

Access hatches on processing equipment typically allow fast and frequent access to certain parts of the machinery for cleaning and minor maintenance.

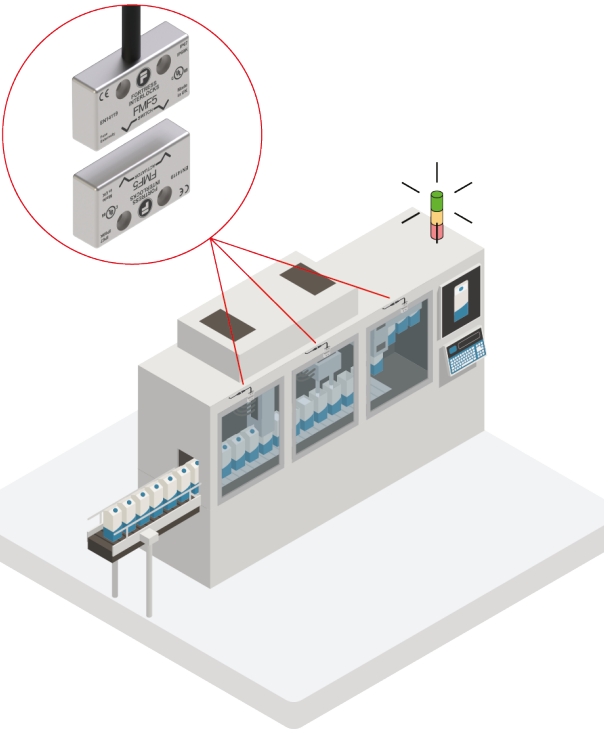
Where immediate stopping times are present, guard locking is not required. However, a stop command must be generated upon the guard opening.

The non-contact sensor uses no moving parts to facilitate a long life in operation alongside high temperature, misalignment, and cleaning procedures.

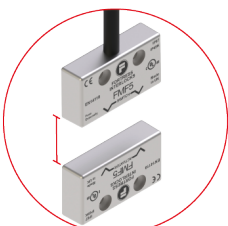
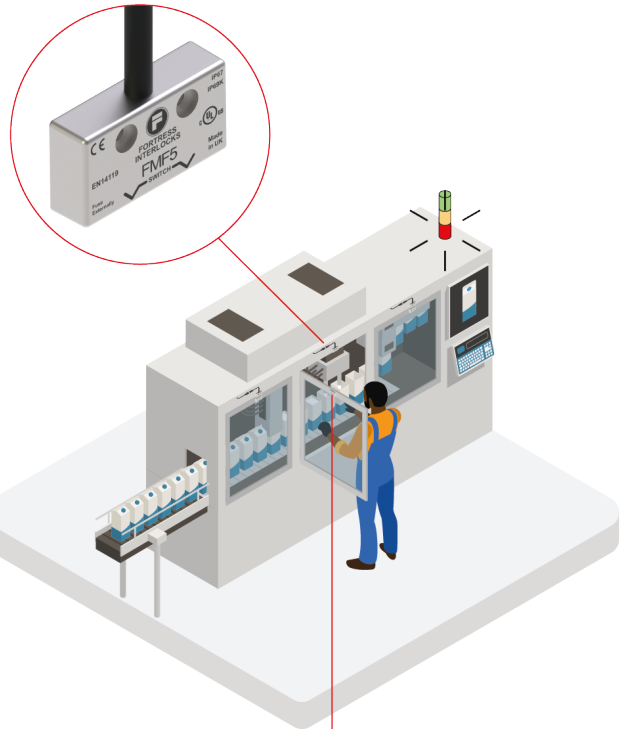


Machine safe to run when coded magnet actuator present, opening guard creates stop command by opening safety switches

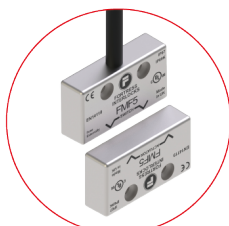
Non-Contact Switches fitted to conveyor machine hatches



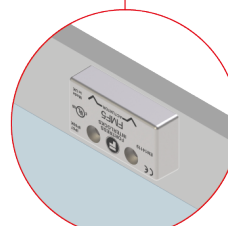
Opening hatch will disconnect non-contact connection to stop machine



Up to 17mm operating distance



Able to operate in temperatures up to 125°C



Switch & Actuator IP69 rated manufactured from 316 stainless steel



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“

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

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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

“

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.

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FORTRESS

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

”



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