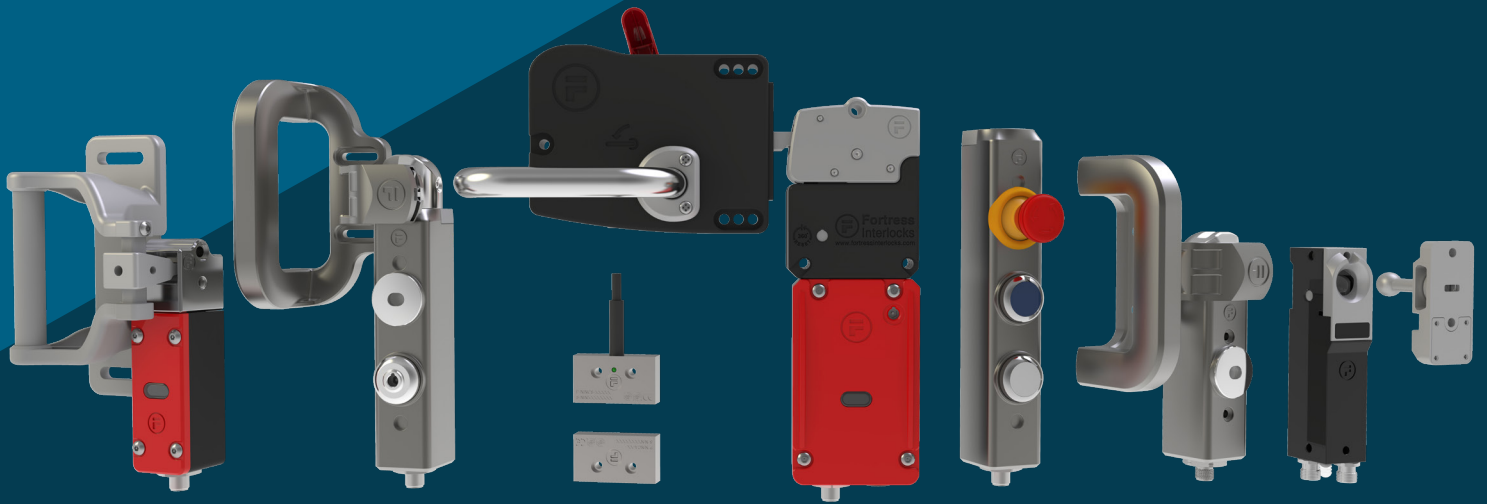




FORTRESS



Safety Switches for Automation



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INTERNATIONAL TRADE
2018



Safety Switches for Automation

Who are Fortress?

Fortress designs and manufactures customised safety equipment, protecting people working in hazardous workplaces. We offer a tailored safety solution which is reliable and extremely durable, guaranteeing minimal downtime while always keeping your people as safe as possible. This brochure lists a selection of our standard safety switch and guard locking products. To learn more visit our website at www.fortressinterlocks.com or get in touch via email using the contact details available on the back page.

What is a Safety Switch?

A safety switch device is used to create a stop command upon a guard opening. These products use positive break dual channel safety (2NC) to signal an access request.

What is Guard Locking?

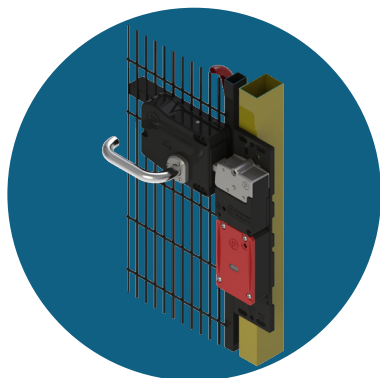
Guard Locking is used to keep a guard locked and closed until it is safe to enter. Typically a stop command is created upon the guard unlocking. These products use a solenoid to control access and enforce a run down time.

Step 1:
Choose your
switch type

Step 2:
Choose your
duty type

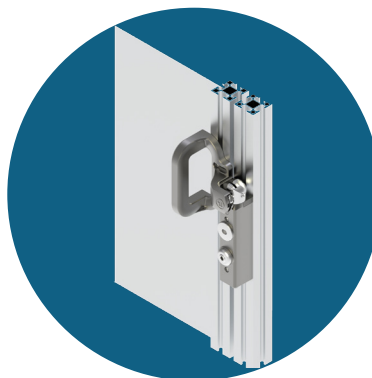
Step 3:
Select your
product, go to
page #...

Heavy Duty



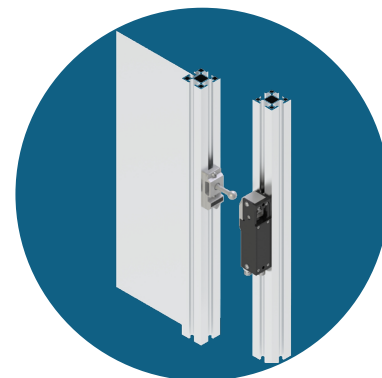
amGardpro is the ultimate range of safety gate products for heavy duty applications. Available pre-mounted to a plate and pre-wired for simple installation.

Medium Duty



tGard is an easily customisable range of compact aluminium alloyed products for medium duty applications.

Compact Guard Lock



Atom is a range of highly robust, high coded and compact guard locking and safety switch products.

Safety Switches			Safety Switches with Guard Locking			Non-Contact Safety Switches	
Heavy	Medium	Compact	Heavy	Medium	Compact	NCS	FRNK
Page 3	Page 5	Page 8	Page 4	Page 6	Page 8	Page 7	



Non-Locking	✓	✓	✓				✓	✓
Locking				✓	✓	✓		
Safety Contacts	2NC	2NC	OSSD PNP	2NC	2NC	OSSD PNP	2NC	2NC
Performance Level	Ple	PLd	Ple	Ple	PLd	Ple	Ple	Ple
Monitoring	1NO & LED Status	1NO & LED Status	1NO & LED Status	2 x 1NO & LED Status	2 x 1NO & LED Status	2 x 1NO & LED Status	1NO & LED Status	1NO
Locking or Unlocking Power				24V	24V	24V		
House Material	Zinc Alloy with Stainless Steel	Aluminium Alloy	Zinc Alloy with Stainless Steel	Zinc Alloy with Stainless Steel	Aluminium Alloy	Zinc Alloy with Stainless Steel	Stainless Steel	ABS Polymer
Misalignment Capability (X,Y,Z)	+/-10/10/10mm	+/- 4/4/4mm	+/- 8/8/8mm	+/-10/10/10mm	+/- 4/4/4mm	+/- 8/8/8mm	+/- 20/20/20mm	+/- 15/8/8mm
Actuator Retention Force	N/A	N/A	N/A	10,000N	2500N	8000N	N/A	N/A
Coding Level	Low	Low	High	Low	Low	High	Low	High
Cascadable			✓			✓		
Cable Connection	M12	M12	Up to 2x M12	M12	M12	Up to 2x M12	M12	M12

Misalignment capability; misalignment of actuator and sensor or with actuator and guard; X/Y/Z where X is distance to actuator, Y is horizontal misalignment and Z is vertical misalignment.

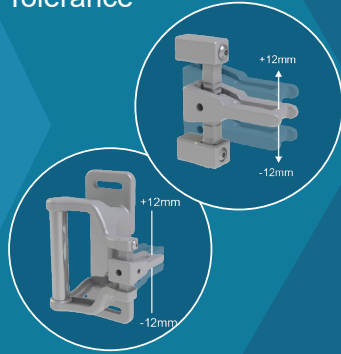
Heavy Duty Safety Switch

Robust
Metal Alloy
Enclosure



Built to Last

Resilient
High Misalignment
Tolerance

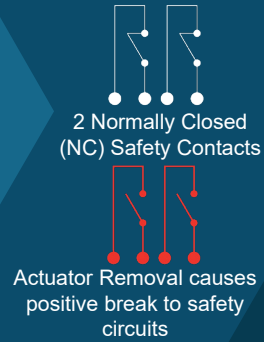


Effortless
Installation



2x M8 Fixings

Redundancy
Positive Break Dual
Channel 2NC Safety



Monitor
System State



Normally Open
(NO) Monitoring
Contact

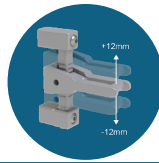


Red LED
Indication

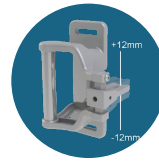
Part Number

Select a Heavy Duty Safety Switch beginning HDSS-

Choose from
Two Actuators



Sliding Doors



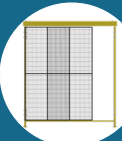
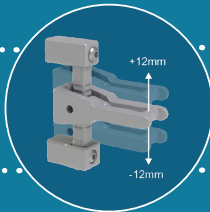
Hinged Doors

Select your
Actuator Entry

Left Entry (Sliding / Hinged to Left of Door)

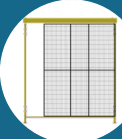
Right Entry (Sliding / Hinged to Right of Door)

HDSS-001



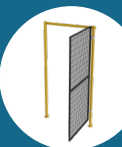
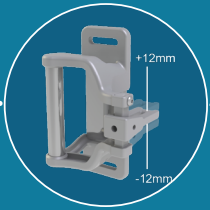
Slide from
Left

HDSS-002



Slide from
Right

HDSS-003



Hinged
Door

Safety Switch

24V



2 NC Safety



1 NO Monitor



**Pre-Wired
Disconnect**



M12 8-Pin

Do you need a cable with this product?

CABLE-5M-D3

5m Cable to Suit 8-Pin Connector

5m
(16.4ft)

CABLE-10M-D3

10m Cable to Suit 8-Pin Connector

10m
(32.8ft)

CABLE-20M-D3

20m Cable to Suit 8-Pin Connector

20m
(65.6ft)



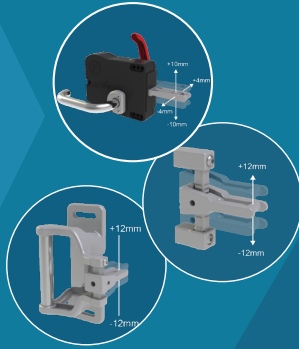
Heavy Duty Guard Lock

Robust
Metal Alloy
Enclosure

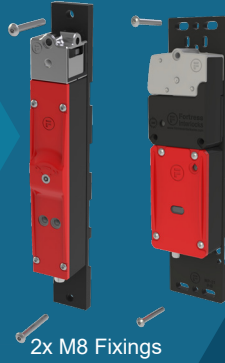


Head Retention Force
10,000N

Resilient
High Misalignment
Tolerance



Effortless
Installation



Redundancy
Positive Break Dual
Channel 2NC Safety



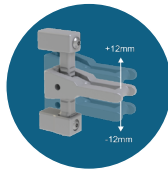
Monitor
System State via
Feedback



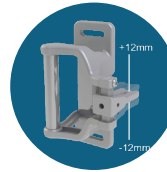
Part Number

Select a Heavy Duty Guard Lock beginning HDGL-

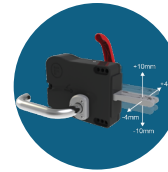
Choose from
Three Actuators



**Sliding
Doors**



**Hinged
Doors**

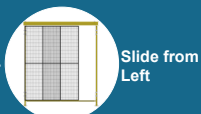
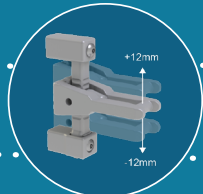


**Escape
Release
Handle**

Select your
Actuator Entry

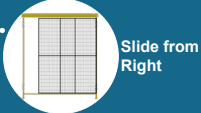
Left Entry (Sliding / Hinged to Left of Door)
Right Entry (Sliding / Hinged to Right of Door)

HDGL-001



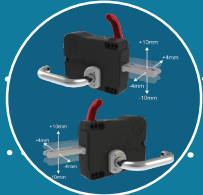
Slide from
Left

HDGL-002



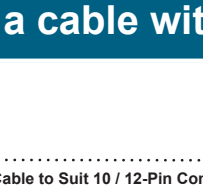
Slide from
Right

HDGL-003



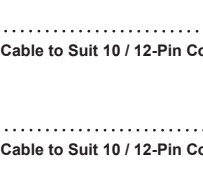
Hinged
Left / Right

HDGL-004



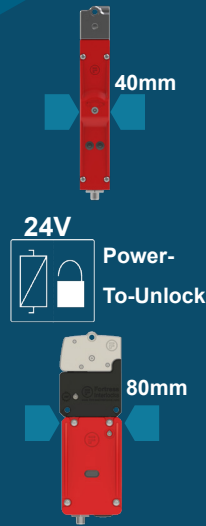
Hinged
Left

HDGL-005



Hinged
Right

**Guard Locking
Type**



**Pre-Wired
Disconnect**



M12 10-Pin

**Power-to-Lock
version of this
product Instead?**



HDGL-001-PTL

HDGL-002-PTL

HDGL-003-PTL

HDGL-004-PTL

HDGL-005-PTL

Do you need a cable with this product?

CABLE-5M-D8

5m Cable to Suit 10 / 12-Pin Connector

**5m
(16.4ft)**

CABLE-10M-D8

10m Cable to Suit 10 / 12-Pin Connector

**10m
(32.8ft)**

CABLE-20M-D8

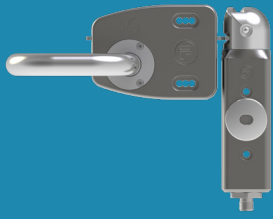
20m Cable to Suit 10 / 12-Pin Connector

**20m
(65.6ft)**



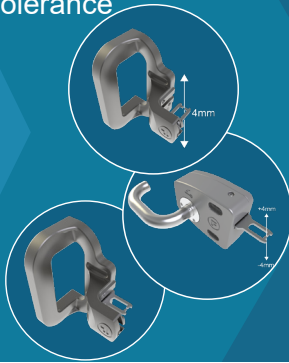
Medium Duty Safety Switch

Robust
Metal Alloy
Enclosure



Up to Performance
Level d

Resilient
High Misalignment
Tolerance



Effortless
Installation



2x M5 Fixings

Redundancy
Positive Break Dual
Channel 2NC Safety



Monitor
System State

2 Normally Closed
(NC) Safety
Contacts

Actuator Removal
causes positive break
to safety circuits



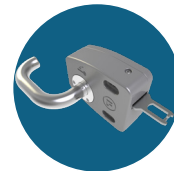
Part Number

Select a Medium Duty Safety Switch beginning TH-

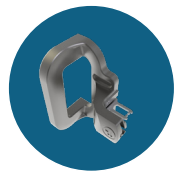
Choose from
Three Actuators



**Hinged
Handle**

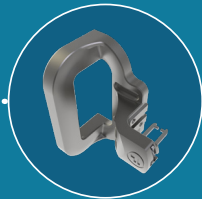


**Ergonomic
Handle**

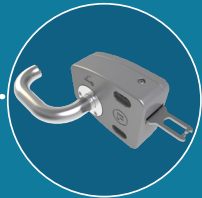


**Sliding
Handle**

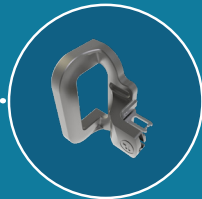
THHSMQ3



THNSMQ3



THSSMQ3



Safety Switch

24V



2 NC Safety



1 NO Monitor



**Pre-Wired
Disconnect**



M12 8-Pin

Do you need a cable with this product?

CABLE-5M-TQ3

5m Cable to Suit 8-Pin Connector

**5m
(16.4ft)**

CABLE-10M-TQ3

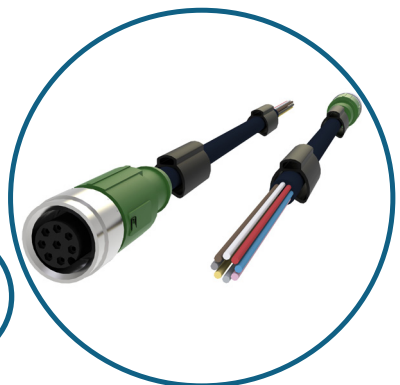
10m Cable to Suit 8-Pin Connector

**10m
(32.8ft)**

CABLE-20M-TQ3

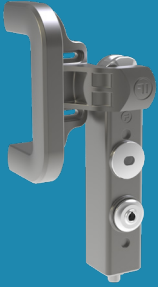
20m Cable to Suit 8-Pin Connector

**20m
(65.6ft)**



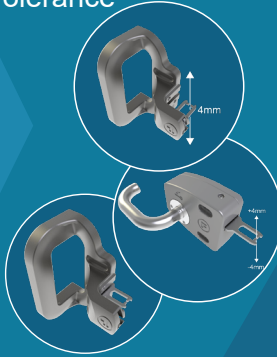
Medium Duty Guard Lock

Robust
Metal Alloy
Enclosure



Head Retention Force
2,500N

Resilient
High Misalignment
Tolerance



Effortless
Installation



2x M5 Fixings

Redundancy
Positive Break Dual
Channel 2NC Safety



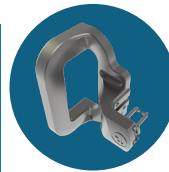
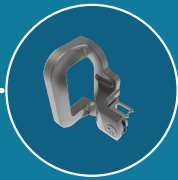
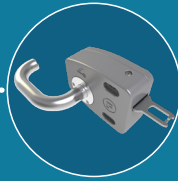
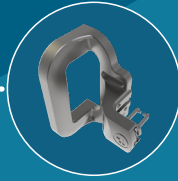
Monitor
System State via
Feedback



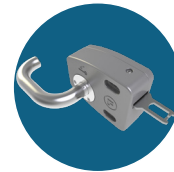
Part Number

Select a Medium Duty Guard Lock beginning TH-

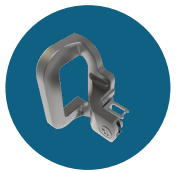
Choose from
Three Actuators



**Hinged
Handle**



**Ergonomic
Handle**



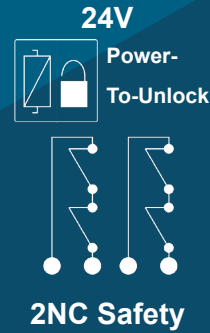
**Sliding
Handle**

THHSMDUQM

THNSMDUQM

THSSMDUQM

**Guard Locking
Type**



**Pre-Wired
Disconnect**



M12 12-Pin

Medium Duty Control Only

THCETP6P7QM

E-Stop



Blue Pushbutton



White Pushbutton



Do you need a cable with this product?

CABLE-5M-TQM

5m Cable to Suit 12-Pin Connector

5m
(16.4ft)

CABLE-10M-TQM

10m Cable to Suit 12-Pin Connector

10m
(32.8ft)

CABLE-20M-TQM

20m Cable to Suit 12-Pin Connector

20m
(65.6ft)

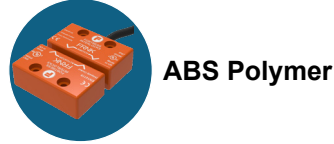


Compact Safety Switch

Part Number

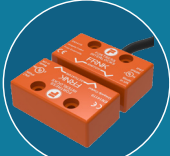
Select a Compact Safety Switch-

Material



Non-Contact Type

FRNK-21-DC-LQD



High Coded RFID

NCS-11SSR-A



Magnetic

Disconnect



M12 8-Pin

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

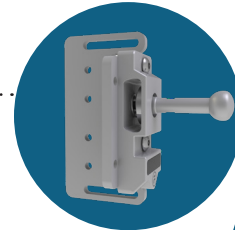
20m
(65.6ft)



Accessories - Compact Guard Lock

ATM-KB

Single Angled Bracket for Sliding Gates



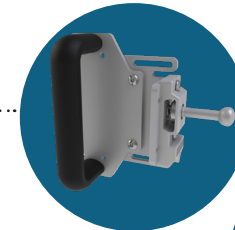
ATM-KC

Angled Bracket for Hinged Gates



ATM-KL

Actuator with Sliding Handle



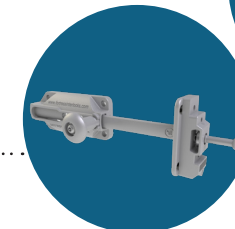
ATM-KH

Actuator with Hinged Handle



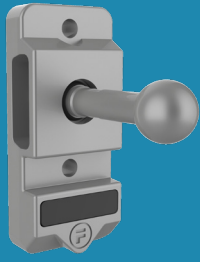
ATM-KS

Actuator with Slidebar



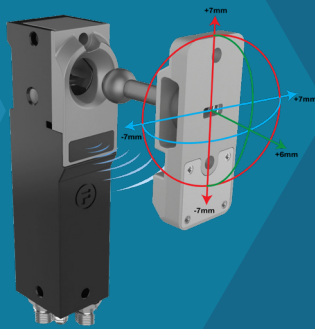
Compact Guard Lock

High-Coded
RFID Actuator

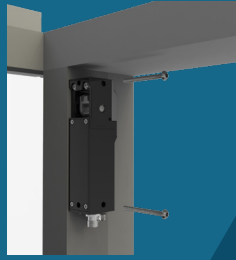


Over 4x10⁹ codes

Versatile
High Misalignment

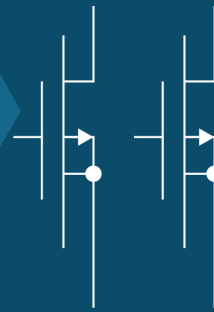


Compact
Perfect for Small
Guards

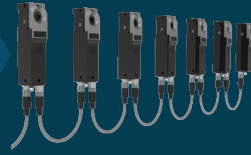


Easy to Install

Redundancy
Dual Channel OSSD
Safety Contacts



Expandable
Easily Extend Systems
with Daisy-Chaining



Part Number

Select a Compact Guard Lock beginning ATM-

**Safety on
Guard Locking**

ATM-100A2-A

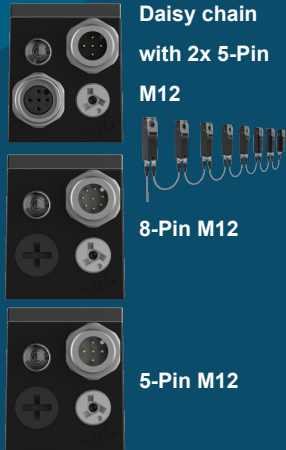
ATM-100A3-A

ATM-100A1-A

24V Power-
To-Unlock



**Disconnect
Option**



**Safety on
Guard Only**



ATM-110A2-A

ATM-110A3-A

ATM-110A1-A

**Safety on
Guard Only**



ATM-610A2-A

ATM-610A3-A

ATM-610A1-A

Do you need a cable with this product?

CABLE-5M-ATD

5m Cable to Suit 5-Pin Daisy Chain

5m
(16.4ft)

CABLE-10M-ATD

10m Cable to Suit 5-Pin Daisy Chain

10m
(32.8ft)

CABLE-20M-ATD

20m Cable to Suit 5-Pin Daisy Chain

20m
(65.6ft)

CABLE-5M-AT3

5m Cable to Suit 8-Pin Connector

5m
(16.4ft)

CABLE-10M-AT3

10m Cable to Suit 8-Pin Connector

10m
(32.8ft)

CABLE-20M-AT3

20m Cable to Suit 8-Pin Connector

20m
(65.6ft)

CABLE-5M-AT1

5m Cable to Suit 5-Pin Connector

5m
(16.4ft)

CABLE-10M-AT1

10m Cable to Suit 5-Pin Connector

10m
(32.8ft)

CABLE-20M-AT1

20m Cable to Suit 5-Pin Connector

20m
(65.6ft)

SHORTING-PLUG-ATD

5-Pin End of Chain





FORTRESS

FORTRESS

“

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

”



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.

”



FORTRESS

“

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

”



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