

KEEP THIS GUIDE FOR FUTURE REFERENCE

This information is designed to help suitably qualified personnel install and operate these safety switches. Before using this product, read this guide thoroughly along with any relevant European and/or National standards e.g. Machinery Directive 89/392/EEC and it's amendments, Provision and Use of Work Equipment Regulations.

Further information can be obtained from
NSC

Description

Magnet safety switch for use in machine guarding applications. Designed for use in applications where increased security is required

- **Tamper resistant magnetic**
- **Switching 300mA / 24VDC**
- **Robust, easy to fit**
- **IP67**

This safety switch is manufactured in a robust ABS housing and fully sealed to IP67 and can be used in wet or dusty environments.

Designed to work with low inrush current safety relays. With correct installation, this switch complies with the guidelines given in EN1088.

Operation

When installed on a machine guard, and the switch and actuator are within the specified operating range, the **Safety Contacts** will be closed and the **Auxiliary Contacts** will be open (See table on page 3 for switching distances)

When the actuator moves out of the operating range, the **Safety Contacts** will open. The **Auxiliary Contacts** will close for indication.

When the switch is closed the targets on the printed face of the switch must be aligned.

Applications

Interlocked guards where door locking is not required.
Food and Beverage packing/filling systems
Diary
Pharmaceutical
Paper Industry
Can Forming and Filling, (Aluminum, Steel, Plastic)
Semiconductor Manufacture/Assembly.

Safety Switch Installation Guide



A313A483F



Approvals

CE	Complies with the relevant sections of the CE marking directive.
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EUROPEAN DIRECTIVES

Machinery Directive 98/37/EC

Low Voltage Directive 73/23/EC

Electromagnetic Compatibility Directive 89/336/EC

EUROPEAN STANDARDS

EN292	Safety of Machinery Basic concepts, general principles for design.
EN 60204	Safety of Machinery Electrical equipment of machines.
EN 954-1	Safety of Machinery Safety related parts of controls systems
EN 1088	Interlocking devices associated with guards.
EN 60947-5-3	Safety of Machinery Specification for low voltage switchgear and control gear.

Mounting

The A313A483F safety switches can approach each other from most angles.

When the switch is closed the targets on the printed face of the switch must be aligned.

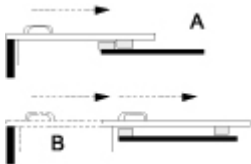
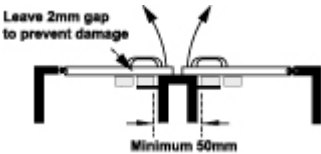
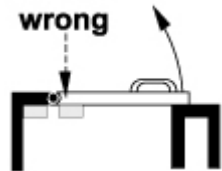
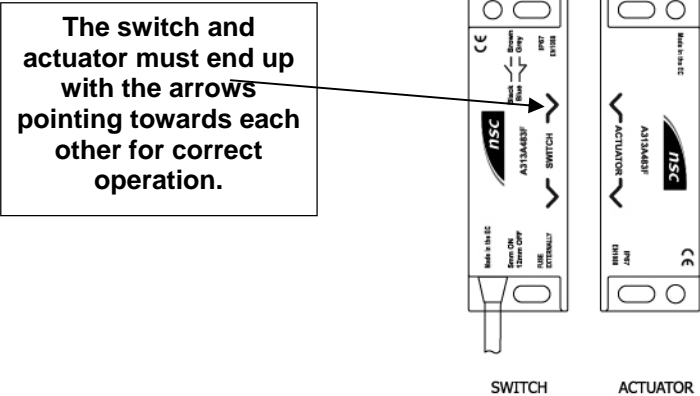
Mount the switch on to the machine frame and the Actuator on to the opening edge of the door. Always try to mount the switch on non-ferrous material.
Ferrous materials may reduce the switching distance.

Use the tamper proof screws.

Do not use the safety switch as a door stop. Leave a minimum of 50 mm between any adjacent switches.

EN 1088
Provides some mounting suggestions, see example opposite.

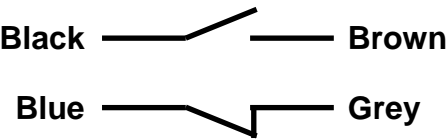
When fixing the safety switch to a sliding door (A), ensure that when the door is opened (B) it is not easily accessible, helping prevent the system being overridden.



Contacts & Connections

PRE-WIRED SWITCHES

A313A483F



External Fusing

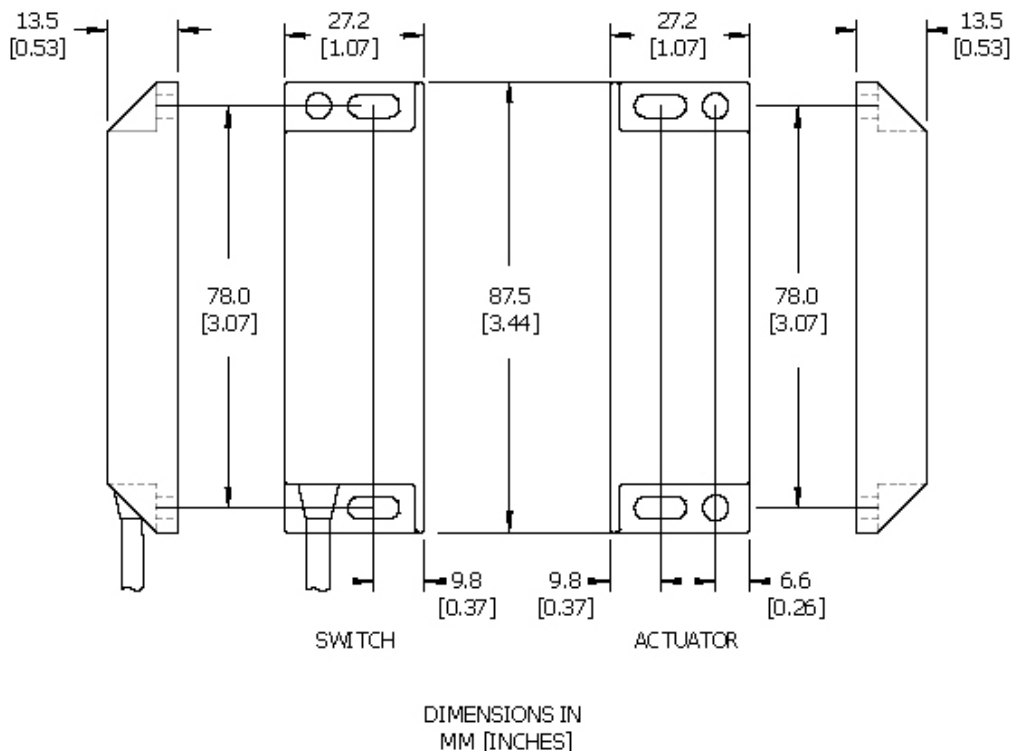
All contacts should be fused externally

	Safety Contacts DC Switching
A313A483F	0.2 Amps Quick Blow

Dimensions

A313A483F RED ABS HOUSING

Dimensions in mm and [inches
in brackets]



Technical Specifications

	DC Switching
Contacts Arrangements:	A313A483F
Safety Contact Rating	1 x N/O Safety + 1 x N/C Auxiliary
Safety Contact Operating Distance	24Vdc / 0.3Amp Inductive/Resistive
Safety Contact Close/Drop/Bounce	7mm ON / 12mm OFF
Auxiliary Contact Rating	3ms / 2.1ms / 0.7ms
Auxiliary Contact Operating Distance	24Vdc / 0.3Amp Inductive/Resistive
Auxiliary Contact Close/Drop/Bounce	7mm OFF / 10mm ON
	0.5ms / 0.3ms / 0.7ms
External Fuse (Customer Supplied)	
	0.2 Amp Fast Acting
IP Rating	IP67
Vibration / Shock	50—100Hz / 10g
Operating Temperature	-10 to +55C
Mounting & Fixture	Target to Target
Connection	Pre-wired
Construction	Red ABS Resin Filled
LONGER CABLES AVAILABLE	

Part Numbers

PART NUMBER	DESCRIPTION
PRE-WIRED	
A313A483F	1 x N/O + 1 x N/C, DC, ABS, Safety Switch & Coded Actuator, 9 metre Pre-wired

Specification Changes

In the interest of product development, specifications are subject to change without notice.

It is the responsibility of the user to ensure compliance with any acts or by-laws that may be in force.

All information regarding this equipment is believed to be accurate at the time of printing. Responsibility cannot be accepted for errors or omissions.