



KEEP THIS GUIDE FOR FUTURE REFERENCE

This information is designed to help suitably qualified personnel install and operate Mechan Safety Switch equipment.

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 its amendments, Provision and Use of Work Equipment Regulations.

**Further information can be obtained from
Mechan Controls**

Description

MAGNASAFE MS-M18 switches are magnetically operated non-contact safety switches for use in machine guarding applications.

The MS-M18 are manufactured in robust ABS housings, with both switch and actuator fully sealed to IP67 making them suitable for use in wet or dusty environments. The M18 barrel mount housings are easy to install and adjust, providing a simple reliable solution to machine guard interlocking. With correct installation,

Operation

When the switch and actuator are within the specified operating range, the **contact** will be closed (See table on page 3 for switching distances)

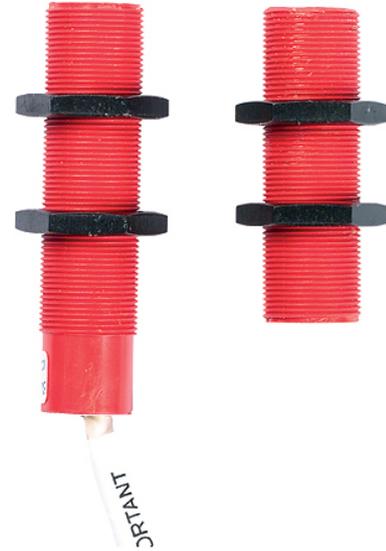
When the actuator moves out of the operating range, the **contacts** will open.

The MS-M18 switches and actuators are designed to approach each other from most angles. When the switch is closed the targets on the printed face of the switch must be aligned.

Applications

Machinery 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.

MS-M18-10-DC-03M



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

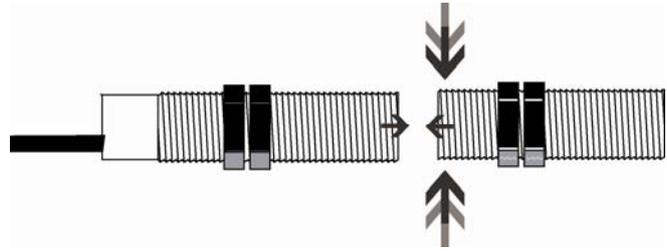
EN292	Safety of Machinery Basic concepts, general principles for design.
EN 60204	Safety of Machinery Electrical equipment of machines.
EN 954-1	Safety of Machinery Safety related parts of controls systems
EN 1088	Interlocking devices associated with guards.
EN 60947-5-3	Safety of Machinery Specification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

Declaration Conformity

A Declaration of Conformity may be obtained from Mechan Controls PLC, Tel +44(0)1695 722264 or from the Mechan Web Site at www.mechancontrols.co.uk

Mounting

The MS-M18 switches can approach each other from most angles. When the guard is closed the targets on the printed face of the switch and actuator must be aligned.



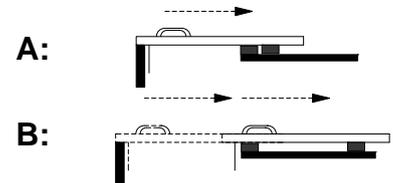
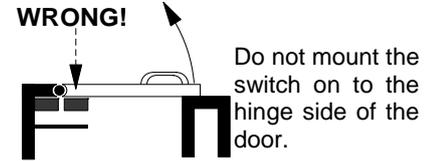
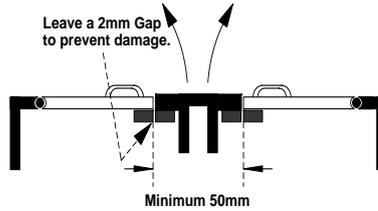
Mount the switch on to the machine frame and the Actuator on to the opening edge of the door. Always try to mount the switch on non-ferrous material. (*Ferrous materials may reduce the switching distance.*)

Do not use the switch as a door stop.

Leave a minimum of 50 mm between any adjacent switches.

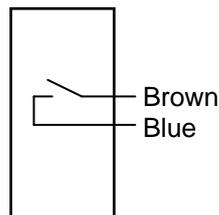
EN 1088
Provides some mounting suggestions, see example opposite.

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

MS-M18-10-DC-03M



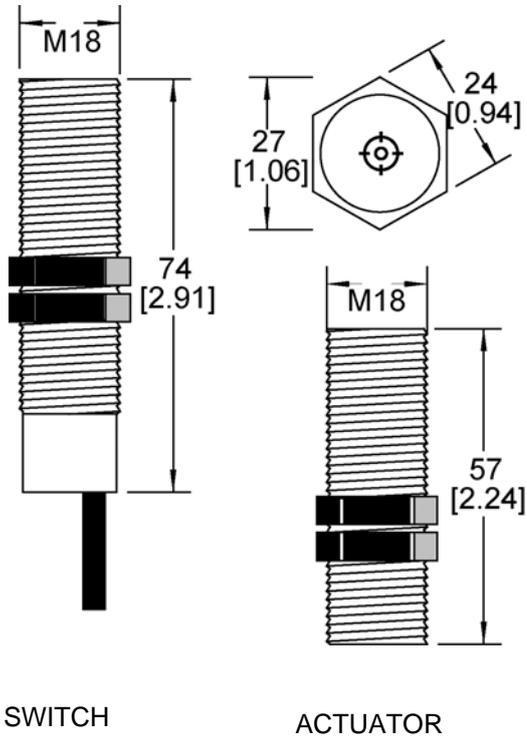
All contacts should be fused externally

		External Fuse DC
MS-M18-10-DC-03M		

Dimensions

MS-M18 RED ABS HOUSING

Dimensions in mm and [inches in brackets]



SWITCH

ACTUATOR

Technical Specifications

Type	MS-M18-10-DC-03M
Contact Arrangement	1 x N/O Safety
Contact Rating	24Vdc / 0.5Amp Inductive/Resistive
Operating Distance	10mm ON / 30mm OFF
Contact Close/Drop/Bounce	3ms / 2.1ms / 0.7ms
Internal Fuse	0.5 Amp Fast Acting
External Fuse (Customer Supplied)	0.4 Amp Fast Acting
IP Rating	IP67
Vibration / Shock	50—100Hz / 10g
Operating Temperature	-10 to +55C
Mounting & Fixture	Target to Target
Connection	Pre-wired cable
Construction	Red ABS Resin Filled

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 Mechan Equipment is believed to be accurate at the time of printing. Responsibility cannot be accepted for errors or omissions.



MECHAN CONTROLS PLC
14/16 Seddon Place
Stanley Industrial Estate
Skelmersdale
Lancashire WN8 8EB

UNITED KINGDOM
Tel: +44 (0)1695 722264
Fax: +44 (0)1695 729664

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Email: sales@mechancontrols.co.uk
Web Site: www.mechancontrols.co.uk