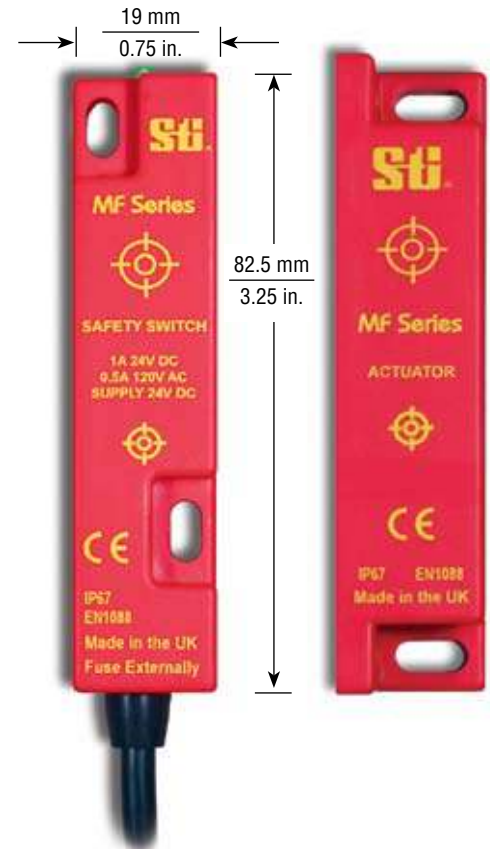




Conforms to EN292, EN60204, EN954-1, EN1088, EN60947-5-3

### Actual Size



# MF Series

## Tamper-Resistant Ferroresonant Safety Interlock Switch

- Tamper resistant—the combination of magnetic and ferroresonant signals required to close the safety contacts makes the MF Series switch very tamper resistant. Fulfills the requirements of category 3 (EN 954-1).
- Compact size—the MF Series switch is pre-wired and mounts easily on 1-in. square tubing
- Misalignment tolerant—actuator misalignment of up to 0.27 in. is tolerated by the MF Series switch
- Color LED Status Indicator on the MF Series switch makes it easy to determine the status of the switch
- NEMA 6 enclosure enables the MF Series switch to withstand high pressure steam cleaning
- Expandable system—the MF Series switches can be wired in Series/Parallel so that multiple doors may be guarded. The safety monitoring relay or control unit must accept 1 NC/ 1 NO inputs. See wiring diagram example.
- Long life—the MF Series switch is designed for a minimum of one million actuations.

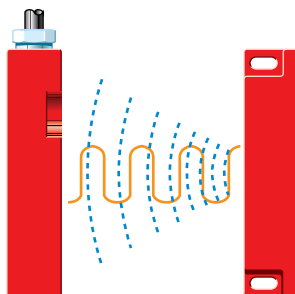
**A** **Go to the Engineering Guide**  
For in-depth information on safety standards and use.

**N** **For More Guarding Products**  
See Section N for safeguarding cutting and turning machines

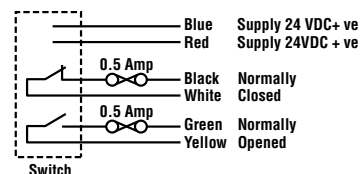
■ **Operation**

**Operating Principle**

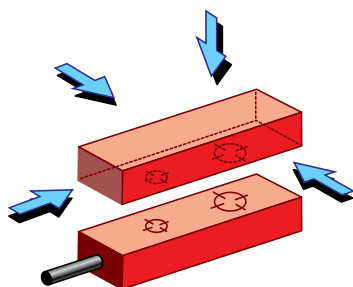
On presenting the actuator to the switch, the high intensity magnetic field, together with a resonant frequency signal, causes the contacts to close. On removing the actuator (opening the door), the safety contacts open, isolating the machine. The switch can not be overridden by magnets, tools, etc.



**Switch Contacts and Connections**



**Mounting Examples**



■ **Specifications**

Electrical	All Models
<b>Power Supply:</b>	24 VDC
<b>Power Consumption:</b>	2 VA/2 W
<b>Internal Fuse:</b>	1 A on switch contacts
<b>External Fuse (Customer Supplied):</b>	0.5 A
<b>Contact Configuration:</b>	1 N/O + 1 N/C
<b>Contact Operating Distance:</b>	9 mm ON/10 mm OFF
<b>Max Switched AC:</b>	0.5 A/120 VAC
<b>Max Switched DC:</b>	0.5 A/24 VDC
<b>Min Switched Current/Voltage:</b>	10 mA/10 V
<b>Cable Length:</b>	100 m max.
Mechanical	
<b>Mounting:</b>	4 x M4 screws
<b>Case Material:</b>	ABS plastic
<b>Weight:</b>	270 g (9.5 oz.)
<b>Color:</b>	Red
<b>Dual Indicator:</b>	Green = Guard Closed; Red = Guard Open
Environmental	
<b>Protection:</b>	IP67 (NEMA 6)
<b>Operating Temperature:</b>	-10 to 55°C (14 to 131°F)
<b>Humidity:</b>	90% RH at 50°C (122°F)
Compliance	
<b>Standards:</b>	EN292, EN60204, EN954-1, EN1088, EN60947-5-3
<b>Approvals/Listings:</b>	CE marked for all applicable directives, UL and cULus pending

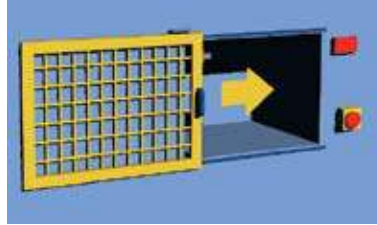
Specifications are subject to change without notice.

Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

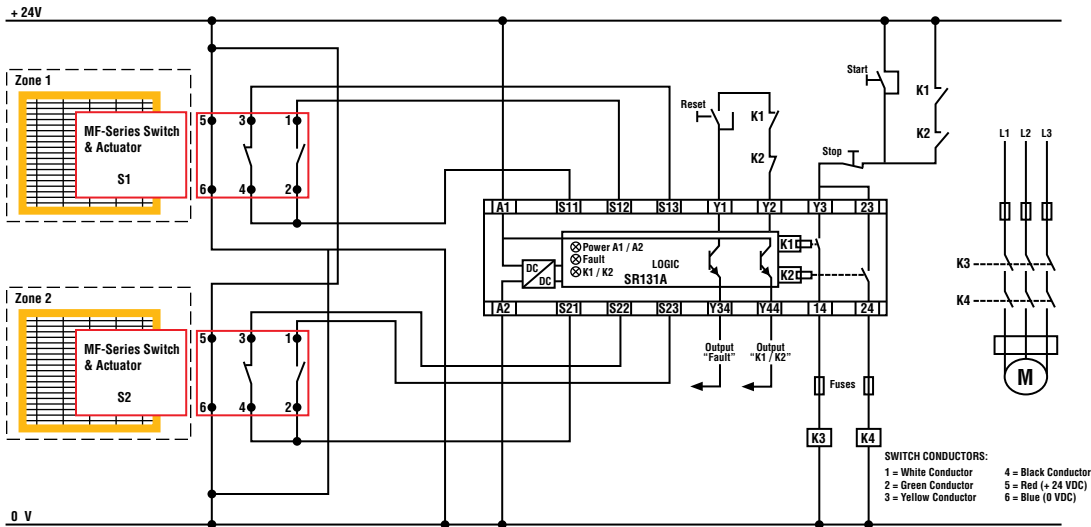
 Universal Mounting Brackets can be used with this product. See page G241 for details.

## Applications

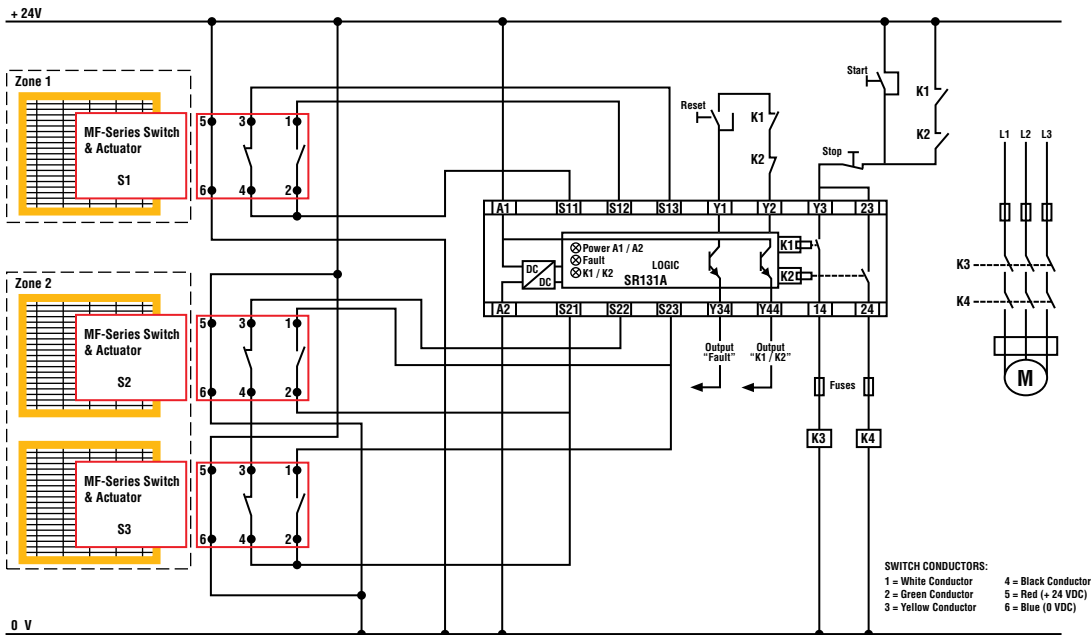
Typical applications are on sliding guard doors or swinging guard doors.



G  
safety interlock switches

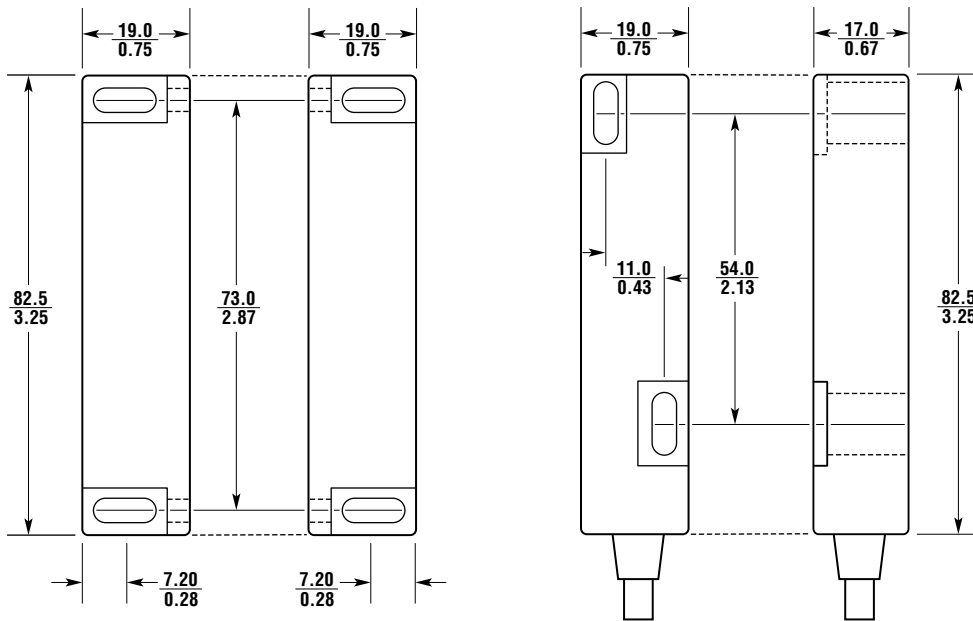


The MF Series switch and actuators are integrated with an SR131A safety monitoring relay. Each sensor has a dedicated channel for the highest level of safety.



The MF Series switch and actuators are integrated with an SR131A safety monitoring relay. The safety contacts of the MF switches for zone 2 are wired in Series/Parallel. This method allows multiple gates or switches to be wired to a single channel on the safety monitoring relay or control unit.

■ Dimensions — mm/in.



■ Ordering

Model	Contacts	Wiring Entry	Part No.
MF-2PC5 Switch & Actuator	1 N/C + 1 N/O	5 m	44518-1050
MF-2PC10 Switch & Actuator	1 N/C + 1 N/O	10 m	44518-1070
MF-2PSA Spare Actuator			44518-1700

Accessories (See page G238)

Recommended safety monitoring relay for this product: SR131A or SR231A.

 Universal Mounting Brackets can be used with this product. See page G241 for details.