

## Description

The Ferrogard range of magnetically actuated switches offers non contact reliability together with tolerance to misalignment. They are designed to be installed so that when a guard door is opened, the action of the magnetic actuator being removed from the switches opens the N.C. safety contacts which are intended for the isolation of control power to a machine primary control element.

The FRS 3, 4 and 5 have terminal connections. The user must drill a hole in the housing at a convenient location to allow the wiring to enter the housing. The cover is secured with anti-tamper security screws.

Unlike some magnetic switches the Ferrogards have protected safety contacts to help ensure that they do not fail to danger. In addition, some versions have independent auxiliary signal contacts to indicate the guard condition.

All Ferrogards have internal non-resettable overload protection on the safety contact. They should be protected by an external fuse rated as shown in the specifications table.

## Features

- Non contact actuation
- High tolerance to misalignment
- High switching current (up to 2A)
- Various contact arrangements
- Terminal connections

Specifications

| Standards | EN 954-1, ISO 13849-1, IEC/EN 60204-1, <br> N FPA 79, EN 1088, ISO 14119, <br> AN SI B11.19, A S4024.1 |
| :--- | :--- |
| C ategory | Cat. 1 D evice per EN 954-1 <br> D ual channel interlocks suitable for C at. <br> 3 or 4 systems |
| Approvals | CE marked for all applicable directives <br> and cU Lus |
| Reed Contacts FRS4 | FRS5 |

Product Selection

| Safety Contact Switching Capability | Connection | Housing Material | Safety Contacts | Auxiliary Contacts | Type | Catalogue Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 250VAC 2A | Terminals | ABS Plastic | 1 N.C. | 1 N.C | FRS 3 | $440 N-G 02003$ |
|  |  |  |  | 1 N.0. | FRS 4 | 440N-G02008 |
|  |  |  |  | $N$ one | FRS 5 | 440N-G02009 |

Note: C ontacts are described with the guard door closed, that is, actuator in place.
Accessories

| Description | Page Number | Catalogue Number |
| :---: | :---: | :---: |
| Replacement Actuator | - | 440N-A02005 |

## Approximate Dimensions-mm (inches)

D imensions are not intended to be used for installation purposes.


Typical Wiring Diagrams

FRS 3


FRS 4


FRS 5


## Application Details

See page $3-54$ for operating principles and mounting examples.

