

## FF5 Series

### Magnetically Actuated Non-Contact Safety Switches



#### DESCRIPTION

Honeywell FF5 switches are magnetically operated, non-contact safety switches designed for use in many machine-guarding applications. The FF5 is available in both ABS and 316 grade stainless steel and is capable of switching up to 300 mA at 24 Vdc as per features below. The switch and actuator

are fully sealed to IP67 and can often be used in wet or dusty environments. With correct installation, the FF5 safety switches comply with the guidelines given in EN1088.

#### FEATURES

- Non-contact safety switches
- Switches can be magnetically actuated from almost any angle
- Compact, rugged design
- Tested to over 1,000,000 operations, full-load
- 6 mm [0.24 in] operating distance
- Up to 300 mA at 24 Vdc switching capability
- IP67
- Stainless steel option
- CE, UL approvals

#### POTENTIAL APPLICATIONS

- Can forming and filling (aluminum, steel, and plastic)
- Pick and place packaging equipment
- Pick and place/assembly equipment
- Semicon equipment
- Plastic molding equipment
- Woodworking machinery
- Textile machinery
- Printing machinery

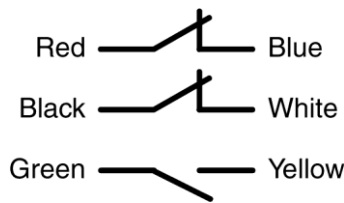
# FF5 Series

## TECHNICAL SPECIFICATIONS

| Type                                 | FF5                                       | FF5-SS                                    |
|--------------------------------------|---|---|
| Contact arrangement                  | Max: 2NC safety and 1NO auxiliary         | Max: 2NC safety and 1NO auxiliary         |
| Safety contact rating                | 24 Vdc/0.3 A inductive/resistive          | 24 Vdc/0.3 A inductive/resistive          |
| Safety contact operating distance    | 6 mm [0.24 in] ON;<br>17 mm [0.67 in] OFF | 6 mm [0.24 in] ON;<br>17 mm [0.67 in] OFF |
| Safety contact close/drop/bounce     | 3 ms/2.1 ms/0.7 ms                        | 3 ms/2.1 ms/0.7 ms                        |
| Auxiliary contact rating             | 24 Vdc/0.3 A inductive/resistive          | 24 Vdc/0.3 A inductive/resistive          |
| Auxiliary contact operating distance | 6 mm [0.24 in] OFF;<br>17 mm [0.67 in] ON | 6 mm [0.24 in] OFF;<br>17 mm [0.67 in] ON |
| Auxiliary contact close/drop/bounce  | 0.5 ms/0.3 ms/0.7 ms                      | 0.5 ms/0.3 ms/0.7 ms                      |
| Internal fuse                        | Not applicable                            | Not applicable                            |
| External fuse (customer supplied)    | dc: 0.2 A fast acting                     | dc: 0.2 A fast acting                     |
| IP rating                            | IP67                                      | IP67                                      |
| Vibration/shock                      | 50 Hz to 100 Hz/10 g                      | 50 Hz to 100 Hz/10 g                      |
| Operating temperature                | -10 °C to 55 °C<br>[14 °F to 131 °F]      | -10 °C to 55 °C<br>[14 °F to 131 °F]      |
| Mounting and fixture                 | Target to target                          | Target to target                          |
| Construction                         | Red ABS resin filled                      | 316 grade stainless steel resin filled    |

## FF5 CONTACTS

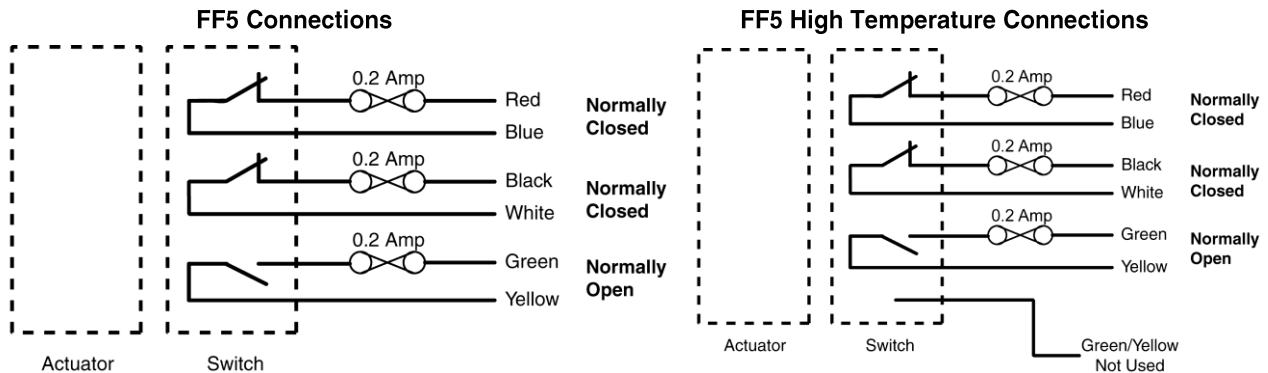
### FF5-21-DC-03 FF5-21-DC-03-SS



NOTE: Contact configurations show under closed condition for guard device.

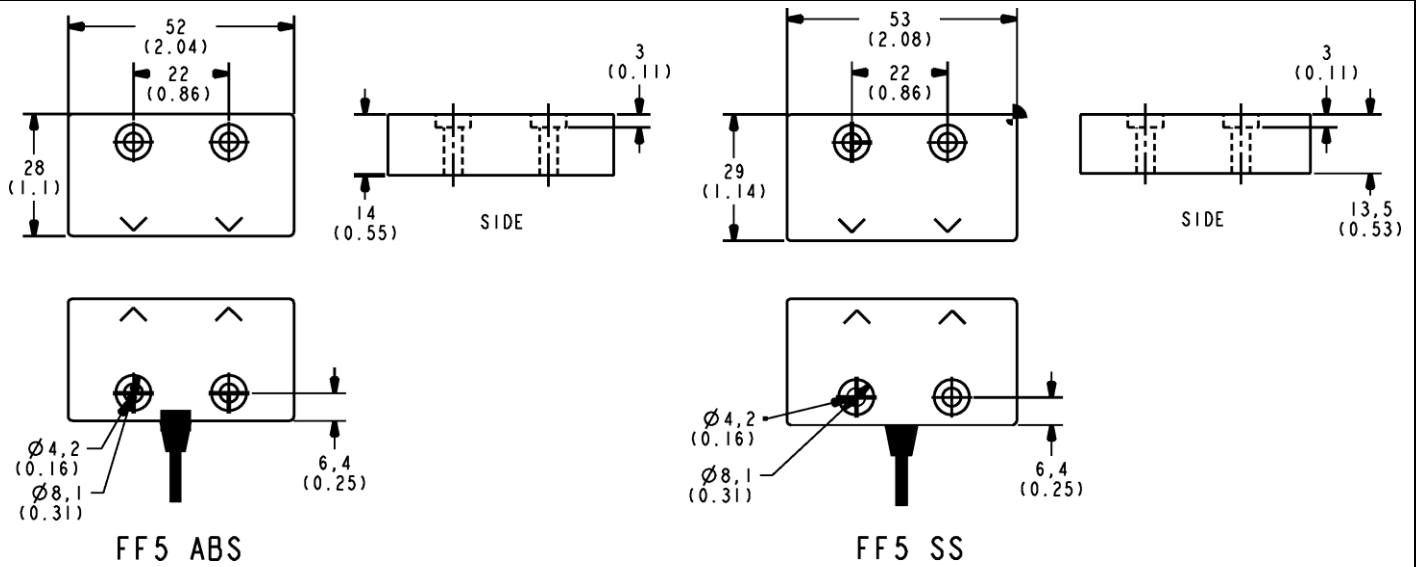
## FF5 CONNECTIONS

*The safety contact must be fused externally. dc switch – external fuse= 0.2 A fast acting*



# Magnetically Actuated Non-Contact Safety Switches

## FF5 DIMENSIONS mm[in]



## ORDER GUIDE

| Catalog Listing | Description  |
|-----------------|--|
| FF5-21-DC-03    | Safety switch and actuator, red ABS, 2NC/1NO, dc, 3 m pre-wired          |
| FF5-21-DC-03-SS | Safety switch and actuator, stainless steel, 2NC/1NO, dc, 3 m pre-wired  |
| FF5-21-DC-10    | Safety switch and actuator, red ABS, 2NC/1NO, dc, 10 m pre-wired         |
| FF5-21-DC-10-SS | Safety switch and actuator, stainless steel, 2NC/1NO, dc, 10 m pre-wired |

### **WARNING**

#### **RISK TO LIFE OR PROPERTY**

Never use this product for an application involving serious risk to life or property without ensuring that the system as a whole has been designed to address the risks, and that this product is properly rated and installed for the intended use within the overall system.

**Failure to comply with these instructions could result in death or serious injury.**

### **WARNING**

#### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

## SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

**E-mail:** [info.sc@honeywell.com](mailto:info.sc@honeywell.com)

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