

FF2 and FF3 Series

Magnetically Actuated Non-Contact Barrel Safety Switches



DESCRIPTION

The FF2 is an 18 mm barrel (thread) mounting magnetically actuated safety switch with one safety contact and an optional indicator contact, if required. The FF3 is a 30 mm barrel (thread) mounting magnetically actuated safety switch with up to two safety contacts and one indicator contact.

FEATURES

- Options of one or two safety contacts
- Tested to over 1,000,000 operations, full load
- Simple M18 and M30 barrel (thread) mounting
- Guard status indication available
- ac and dc versions
- CE and UL approvals

The barrel, thread, mount design is easy to install into the frame of a machine guard and allows for flush mounting, minimizing potential switch damage and space constraint issues. Both the FF2 and FF3 series are sealed to IP67 requirements enabling use in most harsh environments.

POTENTIAL APPLICATIONS

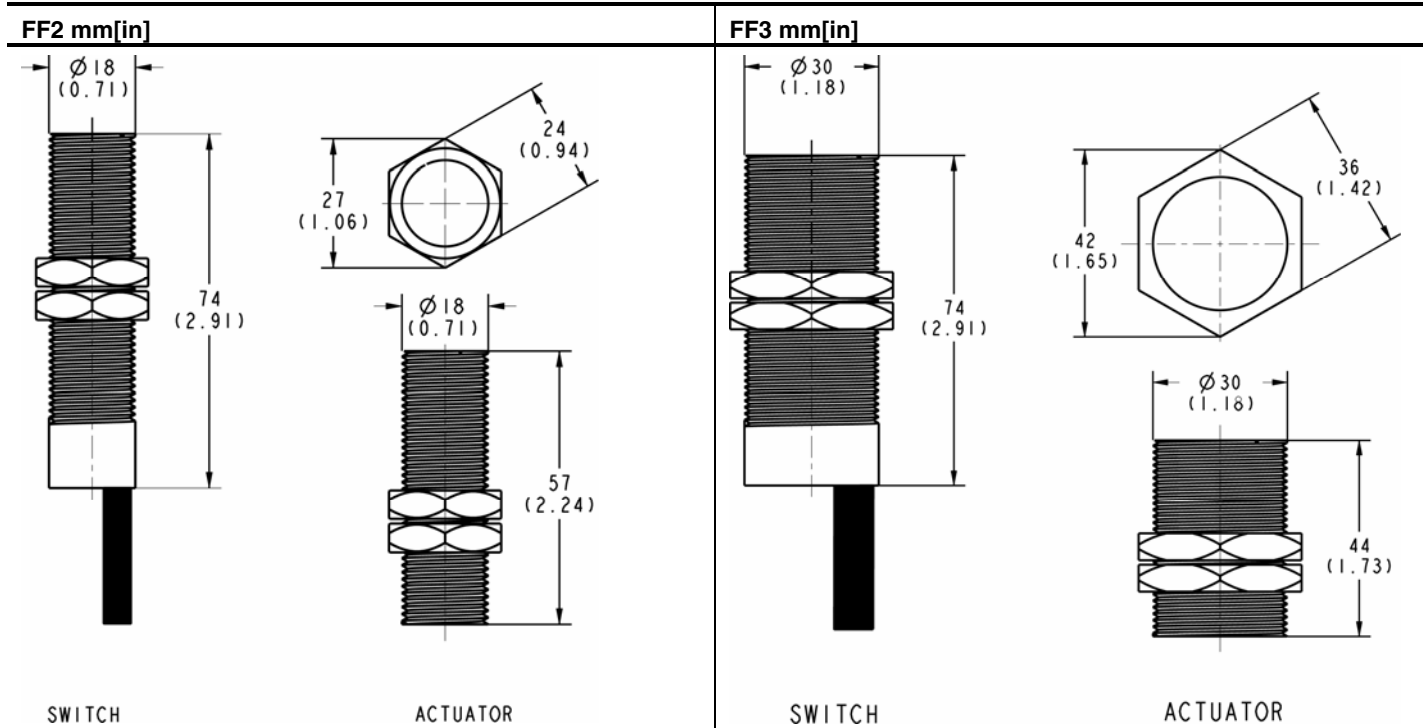
- Can forming and filling (aluminum, steel, and plastic)
- Pick and place packaging equipment
- Pick and place/assembly equipment
- Semicon equipment
- Plastic molding equipment
- Woodworking machinery
- Textile machinery
- Printing machinery

FF2 and FF3 Series

TECHNICAL SPECIFICATIONS

| Type | FF2-10-AC FF2-11-AC | FF2-10-DC FF2-11-DC | FF3-20-AC FF3-21-AC | FF3-20-DC FF3-21-DC |
|--------------------------------------|--|--|--|--|
| Contact arrangement | 1NC (FF2-10-AC) 1NC/1NO (FF2-11-AC) | 1NC (FF2-10-DC) 1NC/1NO (FF2-11-DC) | 2NC (FF3-20-AC) 2NC/1NO (FF3-21-AC) | 2NC (FF3-20-DC) 2NC/1NO (FF3-21-DC) |
| Safety contact rating | 230 Vac/2 A | 30 Vdc/1 A inductive/ resistive | 230 Vac/2A | 30 Vdc/1 A inductive/ resistive |
| Safety contact operating distance | 10 mm [0.4 in] ON; 30 mm [1.18 in] OFF | 10 mm [0.4 in] ON; 30 mm [1.18 in] OFF | 10 mm [0.4 in] ON; 35 mm [1.38 in] OFF | 10 mm [0.4 in] ON; 35 mm [1.38 in] OFF |
| Safety contact close/drop/bounce | 3 ms/2.1 ms/0.7 ms | 3 ms/2.1 ms/0.7 ms | 3 ms/2.1 ms/0.7 ms | 3 ms/2.1 ms/0.7 ms |
| Auxiliary contact rating | 15 W/10 VA | 15 W/10 VA | 15 W/10 VA | 15 W/10 VA |
| Auxiliary contact operating distance | 7 mm [0.28 in] OFF; 14 mm [0.55 in] ON | 7 mm [0.28 in] OFF; 14 mm [0.55 in] ON | 7 mm [0.28 in] OFF; 20 mm [0.79 in] ON | 7 mm [0.28 in] OFF; 20 mm [0.79 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 | 0.5 ms/0.3 ms/0.7 ms | 0.5 ms/0.3 ms/0.7 ms |
| Internal fuse | ac: 2 A fast acting | dc: 1 A fast acting | ac: 2 A fast acting | dc: 1 A fast acting |
| External fuse (customer supplied) | ac: 1.6 A fast acting | dc: 0.8 A fast acting | ac: 1.6 A fast acting | dc: 0.8 A fast acting |
| IP rating | IP67 | IP67 | IP67 | IP67 |
| Vibration/shock | 50 Hz to 100 Hz/10 g | 50 Hz to 100 Hz/10 g | 50 Hz to 100 Hz/10 g | 50 Hz to 100 Hz/10 g |
| Operating temperature | -10 °C to 55 °C [14 °F to 131 °F] | -10 °C to 55 °C [14 °F to 131 °F] | -10 °C to 55 °C [14 °F to 131 °F] | -10 °C to 55 °C [14 °F to 131 °F] |
| Mounting and fixture | Target to target | Target to target | Target to target | Target to target |
| Construction | Red ABS resin filled | Red ABS resin filled | Red ABS resin filled | Red ABS resin filled |

DIMENSIONS



Magnetically Actuated Non-Contact Barrel Safety Switches

ORDER GUIDE

| Catalog Listing | Description |
|-----------------|---|
| FF2-10-AC-03 | Barrel safety switch, 18 mm [0.70 in], 1NC, ac, 3 m pre-wired |
| FF2-11-AC-03 | Barrel safety switch, 18 mm [0.70 in], 1NC/1NO, ac, 3 m pre-wired |
| FF2-10-DC-03 | Barrel safety switch, 18 mm [0.70 in], 1NC, dc, 3 m pre-wired |
| FF2-11-DC-03 | Barrel safety switch, 18 mm [0.70 in], 1NC/1NO, dc, 3 m pre-wired |
| FF3-20-AC-03 | Barrel safety switch, 30 mm [1.18 in], 2NC, ac, 3 m pre-wired |
| FF3-21-AC-03 | Barrel safety switch, 30 mm [1.18 in], 2NC/1NO, ac, 3 m pre-wired |
| FF3-20-DC-03 | Barrel safety switch, 30 mm [1.18 in], 2NC, dc, 3 m pre-wired |
| FF3-21-DC-03 | Barrel safety switch, 30 mm [1.18 in], 2NC/1NO, dc, 3 m pre-wired |

WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

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.**

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