



# Coded Non-Contact Safety Switches

## With Compact Slim Fitting Housing

CMC and CPC Series



- ✓ Coded Magnetic Actuation
- ✓ Wide Sensing at 14 mm (0.55") with High Tolerance to Misalignment
- ✓ Will Operate with Most Safety Relays
- ✓ Designed with a Slim Fitting Making it Suitable for All Industry Applications
- ✓ Easy to Install within Narrow Frame Constructions
- ✓ LED Indication
- ✓ Can be High Pressure Hosed at High Temperature Due to NEMA PW12 (IP69K) Rating
- ✓ Up to: PLe ISO13849-1
- ✓ 2 NC 1 NO Circuits—High Switching Life—No Moving Parts
- ✓ CMC Series: 316 SS Body Mirror Polished to Ra4—Specifically Designed for Food Processing and Pharmaceutical Applications
- ✓ CPC Series: High Specification and Durable Polyester Housing



CMC-138006 switch and actuator.



CPC-115006 switch and actuator.

All models shown actual size.

The CMC and CPC Series coded non-contact safety switches with compact slim fitting housing have been designed to enable the conformance to EN60947-5-3 and be used as directed by ISO12100, ISO14121 and EN60204-1. They have coded magnetic sensing which provides a wide sensing distance and provides a high tolerance to misalignment after sensing. They can be fitted behind stainless steel fittings and can operate from 4 directions even in extreme environments of temperature and moisture. When used in combination with most dual channel safety monitoring relays they can be used to provide up to PLe to ISO13849-1.

CMC and CPC Series coded non-contact safety switches are designed to interlock hinged, sliding or removable guard doors. CMC Series stainless steel safety switches have been designed for use in the pharmaceutical and food processing industries. CPC Series switches are suitable for all industry applications.

They are specifically advantageous when:

- Poor guard alignment exists
- Anti tamper sensing is required
- High hygiene requirements exist, e.g. food industry hose down
- Long life is required (no moving or touching parts)
- LED status indication is desirable

### Specifications

**Standards:** ISO14119, EN60947-5-1, EN60204-1, ISO13849-1, EN62061, UL508  
**Safety Classification and Reliability Data:**  
**ISO13849-1:** Up to PLe Category 4  
**EN62061:** Up to SIL3  
**PFHd:** 8.71 x 10<sup>-11</sup>  
**Proof Test Interval (Life):** 20 years  
**MTTFd:** 866 years  
**Safety Channel 1:** NC 24 Vdc, 0.2A max rating  
**Safety Channel 2:** NC 24 Vdc, 0.2 A max rating  
**Safety Channel 3:** NO 24 Vdc, 0.2 A max rating  
**Minimum Switched Current:** 10 Vdc, 1 mA  
**Dielectric:** Withstand 250 Vac



**Insulation Resistance:** 100 MΩ

**Recommended Setting Gap:** 5 mm (0.19")

**Switching Distance:** Sao 10 mm (0.39") close

**(Target to Target):** Sar 20 mm (0.78") open

**Tolerance to Misalignment:** 5 mm (0.19") in any direction from 5 mm setting gap

**Switching Frequency:** 1.0 Hz maximum

**Approach Speed:** 200 mm/min to 1000 mm/sec

**Body Material:**

**CMC Series:** 316 SS mirror polished to Ra4

**CPC Series:** UL approved polyester

**Operating Temperature:**

**CMC Series (CIP SIP Cleaning):** -25 to 105°C (-13 to 221°F)

**CPC Series:** -25 to 80°C (-13 to 176°F)

**Enclosure Protection:** NEMA PW12 (IP69K), NEMA 6 (IP67)

**Shock Resistance:** IEC68-2-27; 11 ms, 30 g

**Vibration Resistance:** IEC68-2-6; 10 to 55 Hz, 1 mm

**Cable Type:** PVC 6 or 8 core, 6 mm (0.023") OD; conductors, 0.25 mm<sup>2</sup>

**Mounting Bolts:** 2 x M4; tightening torque, 1.0 Nm

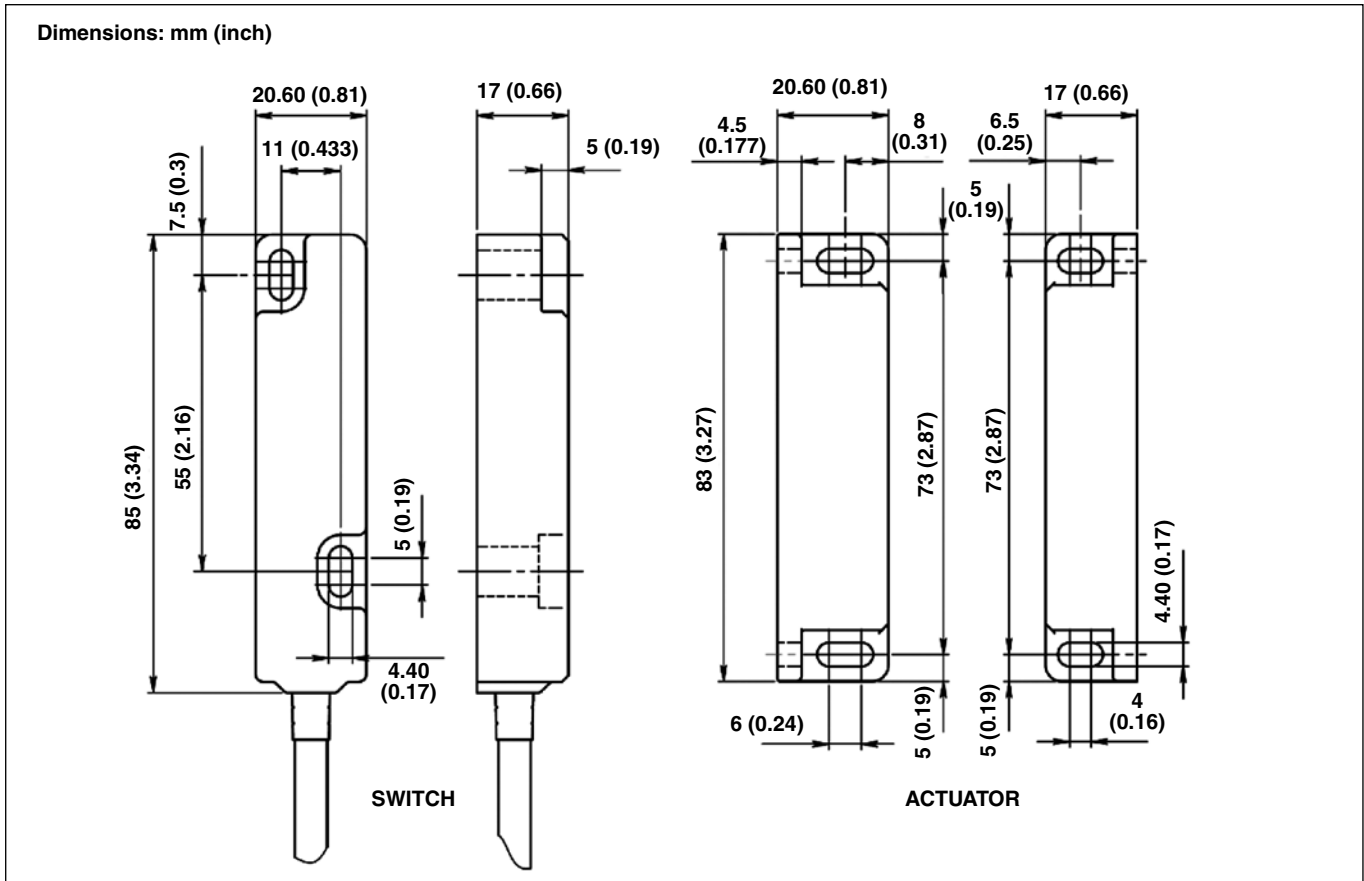
**Mounting Position:** Any

**Dimensions:** See diagram below

**Weight (of Switch, Actuator and Cable):**

**CMC Series:** 480 g (1.05 lb) with 5 m (16.4') cable; 730 g (1.61 lb) with 10 m (32.8') cable

**CPC Series:** 325 g (0.72 lb) with 5 m (16.4') cable; 575 g (1.27 lb) with 10 m (32.8') cable



## To Order

Model No.	Description	Circuits	Cable Length
CMC-138006	Coded non-contact stainless steel safety switch with compact slim fitting housing	2 NC (safety) 1 NO (auxiliary)	5 m (16.4')
CMC-138007	Coded non-contact stainless steel safety switch with compact slim fitting housing	2 NC (safety) 1 NO (auxiliary)	10 m (32.8')
CPC-115006	Coded non-contact safety switch with compact slim fitting housing	2 NC (safety) 1 NO (auxiliary)	5 m (16.4')
CPC-115007	Coded non-contact safety switch with compact slim fitting housing	2 NC (safety) 1 NO (auxiliary)	10 m (32.8')

All switches include actuator.

**Ordering Example:** CPC-115006 coded non-contact safety switch with 2 NC (safety) and 1 NO (auxiliary) circuits and 5 m (16.4') cable.