

CPC Series Plastic Housing

CMC Series Stainless Steel Housing

CMC-F Series Stainless Steel Housing Rear Mount

- Coded magnetic actuation
- Universal housing suitable for most general applications
- Can be high-pressure hosed at high temperature - IP69K rated
- LED indication
- Wide 14 mm sensing distance, high tolerance to misalignment
- Long life switching capability up to 0.2A
- Will operate with most safety relays
- Available with 2m, 5m, or 10m cable or 250mm pigtail with quick-disconnect cable

CMC Series Only

- Specifically designed for food processing applications
- Suitable for CIP SIP cleaning Food Splash Zones per EHEDG guidelines
- 316 Stainless steel mirror polished finish

CMC-F Only

- Same as CMC series, but with no-food-trap housing rear mounting holes
- 5m cable only

See Dimensions later in this section.

Actuator Operating Direction



CPC, CMC, and CMC-F Non-Contact Coded Magnetic Safety Switches					
Part Number	Price	Body Material	Cable Length	Circuits	Contact Rating
Pigtail Versions					
CPC-115005	\$110.00		2m		
<u>CPC-115006</u>	\$119.00	Plastic	5m		
<u>CPC-115007</u>	\$135.00		10m	2 NC. 1 NO	0.2A
CMC-138005	\$189.00		2m	Z NO, I NO	U.ZA
CMC-138006	\$198.00	Stainless steel	5m		
CMC-F-135006	\$198.00		5m		
Quick Disconnect Versions (M12 8-pin)					
CPC-115008	\$141.00	Plastic	250mm	2 NC. 1 NO	0.2A
CMC-138008	\$221.00	Stainless steel	250mm	Z INO, I INO	U.ZA

Female Quick Disconnect Lead					
Part Number	Price	Description	Exit Type/Cable Length		
<u>140101</u>	\$59.00	Famala OD Land	M12 Female 5m, 8-pin		
140102	\$88.00	Female QD Lead	M12 Female 10m, 8-pin		



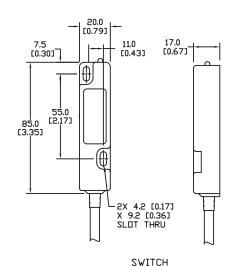
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Dimensions

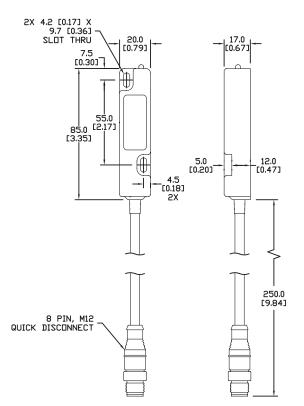
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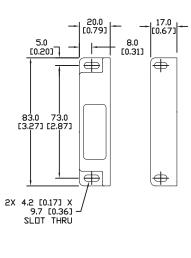
CPC Series





Quick Disconnect





See our website: www.AutomationDirect.com for complete Engineering drawings.

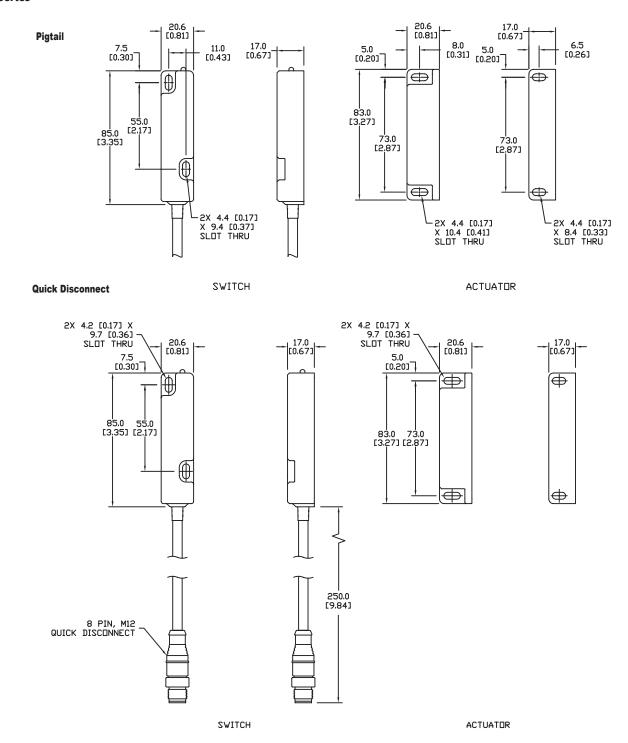
SWITCH

ACTUATOR

Dimensions

mm [in]

CMC Series

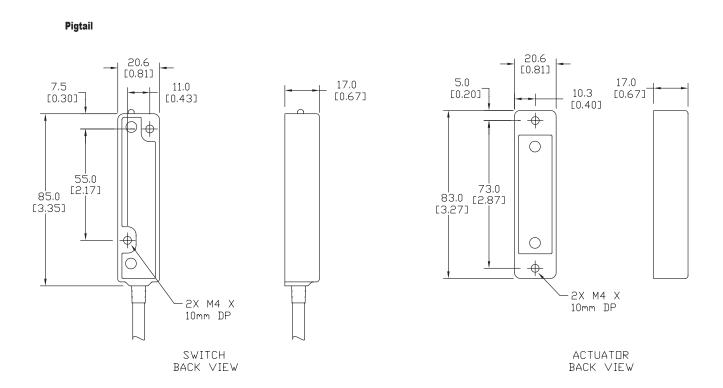


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Dimensions

mm [in]

CMC-F Series

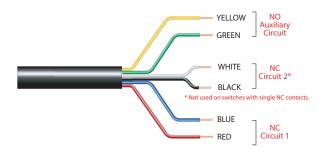


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IDEM Non-Contact Safety Switches Electrical Connections and Dimensions

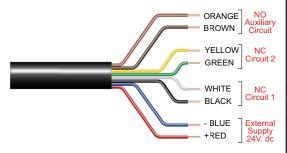
Electrical Connections

Magnetic Switches



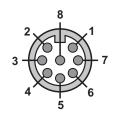
Magnetic Switches - Electrical Connections			
Quick Disconnect Connector Pin Out	Lead Color	Type of Circuit (Actuator Present)	
4	Yellow	Auxiliary (NO)	
6	Green	Auxiliary (NO)	
7	Black	NC2	
1	White	NC2	
2	Red	NC1	
3	Blue	NC1	

Coded Magnetic and RFID Switches



Coded Magnetic Switches - Electrical Connections				
Quick Disconnect Connector Pin Out	Lead Color	Type of Circuit (Actuator Present)	Output Types (Solid State)	
8	Orange	Auxiliary (NO)	200 mA max. 24 VDC	
5	Brown	Auxiliary (NO)	200 MA Max. 24 VDC	
4	Yellow	NC2 +	200 mA max. 24 VDC (Optocoupler)	
6	Green	NC2 -		
7	Black	NC1 +	200 mA max. 24 VDC (Optocoupler)	
1	White	NC1 -		
2	Red	Supply +24 VDC	Supply 24 VDC +10% / -15%	
3	Blue	Supply 0VDC		

Connection Colors

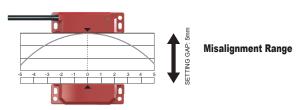


Pin View from Switch M12 Male

IDEM Non-Contact Safety Switches Specifications

	Non-contact Safety Swi	tches Specifications		
	Non-Contact Magnetic Switches	Non-Contact Coded Magnetic Switches	Non-Contact RFID Coded Switches	
Safety Classification and Reliability Data	non comuci magnetto omicinos	non comact couch magnetic emicros	non comuci in 12 coucu cinicines	
Switching Reliability (B10d)	3.3 x 10 ⁶ operations at 100mA load	No mechanical parts implemented	No mechanical parts implemented	
ISO 13849-1			The modification parts implemented	
ISO 13849-1	Up to Category 4			
EN 62061	Up to PLe depending upon system architecture			
Safety Data - Annual Usage	Up to SIL3 depending upon system architecture 8 cycles per hour / 24 hours per day / 365 days			
PFHd	2.8 x 10 ⁻¹⁰	2.6 x 10 ⁻¹⁰	4.77 x 10 ⁻¹⁰	
Proof Test Interval (Life)	2.0 X 10	2.0 x 10	4.77 X 10	
MTTFd	470 years	866 years	1100 years	
Agency Approvals	470 years	CE, cULus	Tioo years	
Electrical and General Specifications		CL, COLUS		
Electrical and General Specifications	MPR: Voltage free: 250VAC, 0.5 A max.			
	LPR, LMR, SPR, SMR, SMR-F: Voltage free: 250VAC, 1.0 A max.	24VDC, 0.2 A max (optocoupler)	24VDC, 0.2 A max (optocoupler)	
Contact Ratings: Safety Contact NC	CPR, CMR, CMR-F, WPR: Voltage free: 250VAC, 2.0 A max.			
Contact Batings Manitaging (Assiland)	BPR, BMR: 240VAC, 24VAC/DC, 1.0 A max.			
Contact Ratings: Monitoring (Auxilary) Contact NO	Voltage free: 24VDC, 0.2 A max.	24VDC, 0.2A max.	24VDC, 0.2A max.	
	MPR: Fuse externally 0.4 A (F)			
Recommended Fuses (NC Circuits)	LPR, LMR, SPR, SMR, SMR-F, CMR, CMR-F: Fuse externally 0.8 A (F)	NA NA	NA	
Recommended Fuses (NC Circuits)	CPR, WPR: Fuse externally 1.6 A (F)			
	BPR, BMR: Fuse externally 0.5 A (F)			
Contact Release Time	<2ms	NA	NA	
Initial Contact Resistance	<0.5 Ω	NA	NA	
Minimum Switched Current	10 DC, 1mA			
Dielectic Withstand	250VAC			
Insulation Resistance		100 Megohms		
Recommended Setting Gap		5mm [0.20 in]		
NC Switching Distance	Sao (assured C	DN) 8mm [0.31 in] close; Sar (assured OFF) 20mr	m [0.79 in] open	
NC Switching Operation	For all switches the NC	circuits are closed when the guard is closed and	the actuator is present.	
NO Switching Operation	Opens before NC circuits close			
Tolerance to Misalignment	5mm [0.20 in] in any direction	from 5mm [0.20 in] setting gap (See Misalignmer	nt Range drawing on this page)	
Switching Frequency	1.0 Hz Max.			
Approach Speed	200n	nm [7.87 in] per minute to 1000mm [39.37] per se	cond	
Body Material - Polyester	CPR, LPR, MPR, SPR, WPR, BPR	CPC, LPC, MPC, SPC, WPC	LPF, SPF, BPF	
Body Material - 316 Stainless Steel	CMR, CMR-F, LMR, SMR, SMR-F, BMR	CMC, CMC-F, LMC, SMC, SMC-F	LMF, BMF	
		Polyester: -25° to +80°C (-13° to +176° F)		
Operating Temperature Range	316 Stainless Steel: -25° to +105° C [-13° to +221° F]	316 Stainless Steel: -25° to +105° C [-13° to +221° F]	-25° to +80° C [-13° to +176° F]	
Storage Temperature (Low)	-55° to -40° C [-67° to -40° F]			
Enclosure Protection	IP	67, IP69K (QC versions are IP67 due to connecte	or)	
Shock Resistance		IEC 68-2-27 11ms 30g		
Vibration Resistance	IEC 68-2-6 10-55 Hz 1mm [0.04 in]			
Cable Type	PVC, 6.5 mm outside diameter max.	PVC, 6.5 mm outside diameter max.	PVC, 6mm [0.24 in] outer diameter max.	
Mounting Bolts (recommended)	İ	2 x M4; Tightening torque: 1.0 N•m [0.74 lb•ft]		

Note: Always mount onto non-ferrous materials.



Safety Products



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

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