CR5 Series Inductive Proximity Sensors



5 x 5 mm rectangular metal - DC

- Eight models available
- Compact 5 x 5 x 25 mm metal housing
- Axial cable or M8 quick-disconnect models; purchase cable separately
- Complete overload protection
- IP67 rated
- Screws included
- Lifetime warranty



CR5 Series 5x5 Rectangular DC Inductive Prox Selection Chart									
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions	
Standard Distance									
CR5-AN-1A		0.8 mm (0.03 in)	Flush	N.O.	NPN	2m (6.5') axial cable	Diagram 1	Figure 1	
CR5-AP-1A					PNP	2m (6.5') axial cable	Diagram 2	Figure 1	
CR5-AN-1F					NPN	M8 (8mm) connector	Diagram 1	Figure 2	
CR5-AP-1F					PNP	M8 (8mm) connector	Diagram 2	Figure 2	
Extended Distance									
CR5-AN-2A		1.5 mm (0.06 in)	Flush	N.O.	NPN	2m (6.5') axial cable	Diagram 1	Figure 1	
CR5-AP-2A					PNP	2m (6.5') axial cable	Diagram 2	Figure 1	
CR5-AN-2F					NPN	M8 (8mm) connector	Diagram 1	Figure 2	
CR5-AP-2F					PNP	M8 (8mm) connector	Diagram 2	Figure 2	

Specifications	Standard Distance	Extended Distance		
Mounting Type	Flush	Flush		
Nominal Distance	0.8 mm (0.03 in)	1.5 mm (0.06 in)		
Operating Distance	NA			
Material Correction Factors	See the Material influence table			
Output Type	NPN or PNP/N.O. only/3-wire			
Operating Voltage	10 to 30 VDC			
No-load Supply Current	≤ 10 mA			
Operating (Load) Current	≤ 200 mA			
Off-state (Leakage) Current	≤ 10µA			
Voltage Drop	≤ 2.0 V			
Switching Frequency	5kHz	3kHz		
Differential Travel (% of Nominal Distance)	≤ 10%			
Repeat Accuracy	≤ 1.5%			
Ripple	≤ 20%			
Time Delay Before Availability (tv)	10ms			
Reverse Polarity Protection	Yes			
Short Circuit Protection	Yes (switch auto-resets after overload is removed)			
Operating Temperature	-25° to +70°C (-13° to 158°F)			
Protection Degree (DIN 40050)	IEC IP67			
Indication/Switch Status	Yellow (output energized)			
Housing Material	Nickel-plated brass			
Sensing Face Material	Polyester			
Shock/Vibration	See Proximity Se	See Proximity Sensor Terminology		
Tightening Torque	1.5 Nm (1.1 lb-in)			
Weight	26g (0.92 oz) 27g (0.95 oz)			
Connection	2m (6.5') axial cable or M8 (8mm) connector			
Agency Approvals	UL file E328811			

Dimensions

mm [inches]

Figure 1

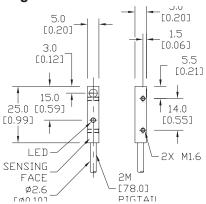
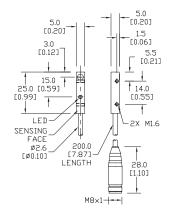


Figure 2



Wiring diagrams

Diagram 1
NPN output

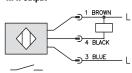
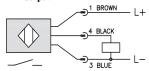


Diagram 2

PNP output



Connector

M8 connector

