## **CR5 Series Inductive Proximity Sensors**



### 5 x 5 mm Rectangular Metal - DC

- 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 Output State Sensing Logic Mounting Wiring Part Number Price **Connection Dimensions** Range Standard Distance CR5-AN-1A \$47.50 NPN 2m [6.5 ft] axial cable Diagram 1 Figure 1 \$47.50 PNP Figure 1 CR5-AP-1A 2m [6.5 ft] axial cable Diagram 2 0.8 mm Flush N.O. [0.03 in] CR5-AN-1F \$54.00 NPN M8 [8mm] connector Diagram 1 Figure 2 CR5-AP-1F \$54.00 **PNP** M8 [8mm] connector Diagram 2 Figure 2 Extended Distance CR5-AN-2A \$75.00 NPN 2m [6.5 ft] axial cable Diagram 1 Figure 1 CR5-AP-2A \$75.00 PNP 2m [6.5 ft] axial cable Diagram 2 Figure 1 1.5 mm Flush N.O. [0.06 in] CR5-AN-2F \$86.00 NPN M8 [8mm] connector Diagram 1 Figure 2 CR5-AP-2F \$86.00 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	N	NA	
Material Correction Factors	See the Materia	See the Material influence table	
Output Type	NPN or PNP/N	NPN or PNP/N.O. only/3-wire	
Operating Voltage	10 to 3	10 to 30 VDC	
No-load Supply Current	≤ 10	≤ 10 mA	
Operating (Load) Current	≤ 20	≤ 200 mA	
Off-state (Leakage) Current	≤ 1	≤ 10µA	
Voltage Drop	≤ 2	≤ 2.0 V	
Switching Frequency	5kHz	3kHz	
Differential Travel (% of Nominal Distance)	≤ ′	≤ 10%	
Repeat Accuracy	≤ 1	≤ 1.5%	
Ripple	≤ 2	≤ 20%	
Time Delay Before Availability (tv)	10	10ms	
Reverse Polarity Protection	Y	Yes	
Short Circuit Protection	Yes (switch auto-resets a	Yes (switch auto-resets after overload is removed)	
Operating Temperature	-25 to +70°C	-25 to +70°C [-13 to 158°F]	
Protection Degree (DIN 40050)	IEC	IEC IP67	
Indication/Switch Status	Yellow (outp	Yellow (output energized)	
Housing Material	Nickel-pla	Nickel-plated brass	
Sensing Face Material	Poly	Polyester	
Shock/Vibration	See Proximity Se	See Proximity Sensor Terminology	
Tightening Torque	1.5 Nm	1.5 Nm (1.1 lb-in)	
Weight	26g [0.92 oz)	27g [0.95 oz]	
Connection	2m [6.5 ft] axial cable	2m [6.5 ft] axial cable or M8 (8mm) connector	
Agency Approvals	UL file I	UL file E328811	

#### **Dimensions**

mm [inches]

Figure 1

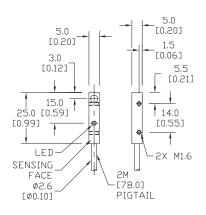
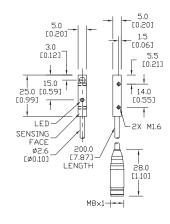


Figure 2



# Wiring Diagrams

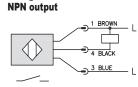
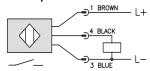


Diagram 1

### Diagram 2 PNP output



Connector M8 connector

