

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

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Standard Distance								
CR5-AN-1A	\$-09ln:	0.8 mm [0.03 in]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CR5-AP-1A	\$-09ls:				PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CR5-AN-1F	\$-09lo:				NPN	M8 [8mm] connector	Diagram 1	Figure 2
CR5-AP-1F	\$-09lt:				PNP	M8 [8mm] connector	Diagram 2	Figure 2
Extended Distance								
CR5-AN-2A	\$-09lp:	1.5 mm [0.06 in]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CR5-AP-2A	\$-09lu:				PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CR5-AN-2F	\$-09lq:				NPN	M8 [8mm] connector	Diagram 1	Figure 2
CR5-AP-2F	\$-09lv:				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 Sensor Terminology	
Tightening Torque	1.5 Nm (1.1 lb-in)	
Weight	26g [0.92 oz]	27g [0.95 oz]
Connection	2m [6.5 ft] axial cable or M8 (8mm) connector	
Agency Approvals	UL file E328811	

Dimensions

mm [inches]

Figure 1

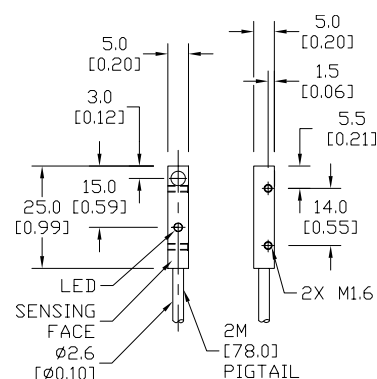
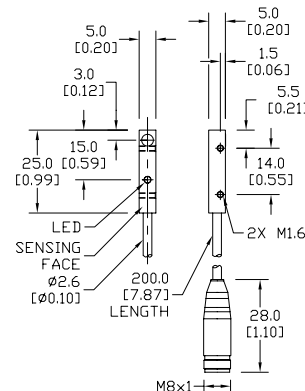
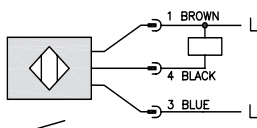
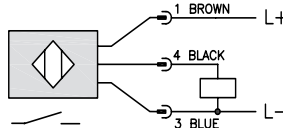


Figure 2



Wiring Diagrams

Diagram 1
NPN outputDiagram 2
PNP outputConnector
M8 connector