

CR8 Series Inductive Proximity Sensors



8 x 8 mm rectangular metal – DC

- 12 models available
- Compact 8 x 8 x 40 mm metal housing
- Axial cable or M8 quick-disconnect models; purchase cable separately
- Complete overload protection
- IP67 rated
- Screws included
- Lifetime warranty

CR8 Series 8x8 Rectangular DC Inductive Prox Selection Chart

Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection	Wiring	Dimensions
Standard Distance								
CR8-AN-1A	\$25.00	0 to 1.5 mm (0 to 0.06 in)	Shielded	NO	NPN	2 m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-1A	\$25.00				PNP	2 m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-1F	\$25.00				NPN	M8 (8 mm) connector	Diagram 1	Figure 2
CR8-AP-1F	\$25.00				PNP	M8 (8 mm) connector	Diagram 2	Figure 2
Extended Distance								
CR8-AN-2A	\$35.00	0 to 2 mm (0 to 0.08 in)	Shielded	NO	NPN	2 m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-2A	\$35.00				PNP	2 m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-2F	\$35.00				NPN	M8 (8 mm) connector	Diagram 1	Figure 2
CR8-AP-2F	\$35.00				PNP	M8 (8 mm) connector	Diagram 2	Figure 2
Triple Distance								
CR8-AN-3A	\$78.00	3 mm (0.118 in)	Shielded	NO	NPN	2 m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-3A	\$78.00				PNP	2 m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-3F	\$78.00				NPN	M8 (8 mm) connector	Diagram 1	Figure 2
CR8-AP-3F	\$78.00				PNP	M8 (8 mm) connector	Diagram 2	Figure 2

Wiring diagrams

Diagram 1

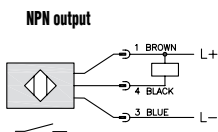
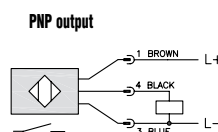
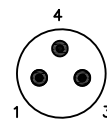


Diagram 2



Connector

M8 connector



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Specifications	Standard Distance Models	Extended Distance Models	Triple Distance Models
Mounting Type	Shielded	Shielded	Shielded
Nominal Distance	1.5 mm (0.06 in)	2 mm (0.08 in)	3 mm (0.118 in)
Operating Distance	NA	NA	NA
Material Correction Factors	See the Material influence table		
Output Type	NPN or PNP/NO 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	1 kHz		
Differential Travel (% of Nominal Distance)	≤10%		
Repeat Accuracy	≤5%		
Ripple	≤20%		
Time Delay Before Availability (tv)	10 ms		50 ms
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		Chrome-plated brass
Sensing Face Material	Polybutylene Terephthalate (PBT)		
Shock/Vibration	See Proximity Sensor Terminology		
Tightening Torque	4 Nm (2.95 lb-ft)		
Weight (cable/M8 connector)	43 g (1.52 oz)/15 g (0.53 oz)		54 g (1.90 oz)/21 g (0.74 oz)
Connection	2 m (6.5') axial cable or M8 (8 mm) connector		
Agency Approvals	UL file E328811, CE		

Dimensions

mm [inches]

