

CR8 Series Inductive Proximity Sensors



8 x 8 mm rectangular metal – DC

- 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 Proximity Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Standard Distance								
CR8-AN-1A	\$32.50	0-1.5 mm [0-0.06 in]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CR8-AP-1A	\$32.50				PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CR8-AN-1F	\$32.50				NPN	M8 [8mm] connector	Diagram 1	Figure 2
CR8-AP-1F	\$32.50				PNP	M8 [8mm] connector	Diagram 2	Figure 2
Extended Distance								
CR8-AN-2A	\$45.00	0-2 mm [0-0.08 in]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CR8-AP-2A	\$45.00				PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CR8-AN-2F	\$45.00				NPN	M8 [8mm] connector	Diagram 1	Figure 2
CR8-AP-2F	\$45.00				PNP	M8 [8mm] connector	Diagram 2	Figure 2
Triple Distance								
CR8-AN-3A	\$102.00	3mm [0.118 in]	Semi-flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CR8-AP-3A	\$102.00				PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CR8-AN-3F	\$102.00				NPN	M8 [8mm] connector	Diagram 1	Figure 2
CR8-AP-3F	\$102.00				PNP	M8 [8mm] connector	Diagram 2	Figure 2

Wiring Diagrams

Diagram 1

NPN output

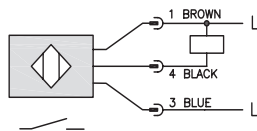
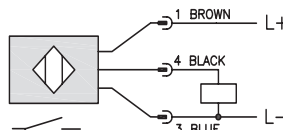


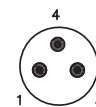
Diagram 2

PNP output



Connector

M8 connector



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CR8 Series 8x8 Rectangular DC Inductive Proximity Specifications

Models	Standard Distance	Extended Distance	Triple Distance
Mounting Type	Flush	Flush	Semi-flush
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/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	1kHz		
Differential Travel (% of Nominal Distance)	≤10%		
Repeat Accuracy	≤5%		
Ripple	m 20%		
Time Delay Before Availability (tv)	10ms		50ms
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)	43g [1.52 oz]/15g [0.53 oz]		54g [1.90 oz]/21g [0.74 oz]
Connection	2m [6.5 ft] axial cable or M8 [8mm] connector		
Agency Approvals	UL file E328811, CE		

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

Dimensions

mm [inches]

Figure 1

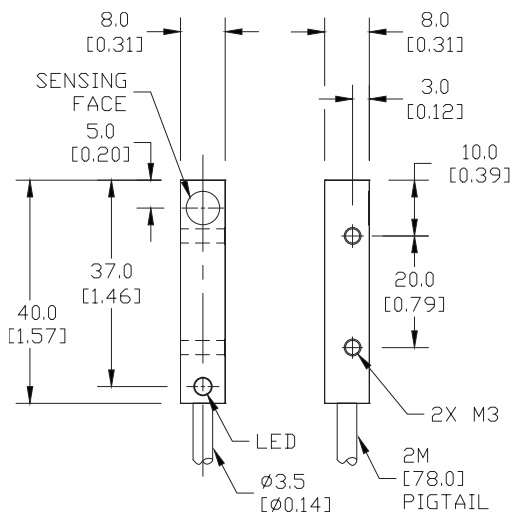


Figure 2

