

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	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Standard Distance								
CR8-AN-1A		0-1.5 mm (0-0.06 in)	Flush	N.O.	NPN	2m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-1A		0-1.5 mm (0-0.06 in)	Flush	N.O.	PNP	2m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-1F		0-1.5 mm (0-0.06 in)	Flush	N.O.	NPN	M8 (8mm) connector	Diagram 1	Figure 2
CR8-AP-1F		0-1.5 mm (0-0.06 in)	Flush	N.O.	PNP	M8 (8mm) connector	Diagram 2	Figure 2
Extended Distance								
CR8-AN-2A		0-2 mm (0-0.08 in)	Flush	N.O.	NPN	2m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-2A		0-2 mm (0-0.08 in)	Flush	N.O.	PNP	2m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-2F		0-2 mm (0-0.08 in)	Flush	N.O.	NPN	M8 (8mm) connector	Diagram 1	Figure 2
CR8-AP-2F		0-2 mm (0-0.08 in)	Flush	N.O.	PNP	M8 (8mm) connector	Diagram 2	Figure 2
Triple Distance								
CR8-AN-3A		3mm (0.118 in)	Semi-flush	N.O.	NPN	2m (6.5') axial cable	Diagram 1	Figure 1
CR8-AP-3A		3mm (0.118 in)	Semi-flush	N.O.	PNP	2m (6.5') axial cable	Diagram 2	Figure 1
CR8-AN-3F		3mm (0.118 in)	Semi-flush	N.O.	NPN	M8 (8mm) connector	Diagram 1	Figure 2
CR8-AP-3F		3mm (0.118 in)	Semi-flush	N.O.	PNP	M8 (8mm) connector	Diagram 2	Figure 2

Wiring diagrams

Diagram 1

NPN output

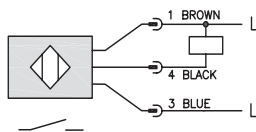
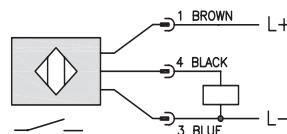


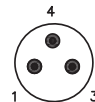
Diagram 2

PNP output



Connector

M8 connector



CR8 Series Inductive Proximity Sensors

Specifications	Standard Distance Models	Extended Distance Models	Triple Distance Models
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	≤ 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') axial cable or M8 (8mm) connector		
Agency Approvals	UL file E328811, CE		

Dimensions

mm [inches]

