

CR8 Series Inductive Proximity Sensors

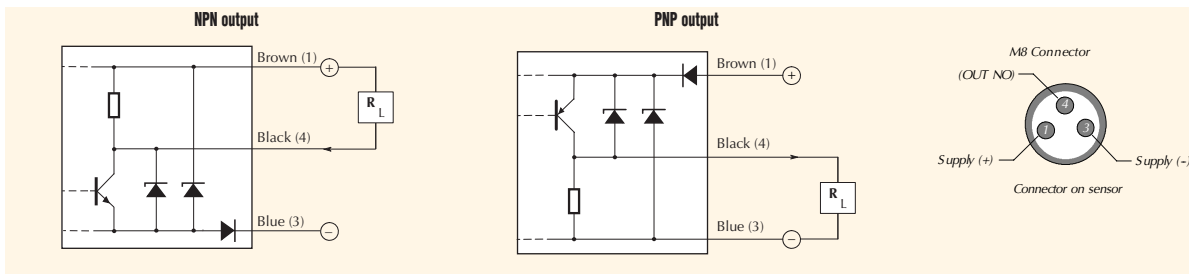


8 x 8 mm rectangular metal – DC

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

| CR8 Series 8x8 Rectangular DC Inductive Prox Selection Chart | | | | | | | |
|--|-------|------------------------------|----------|--------------|-------|-----------------------|------------|
| Part Number | | Sensing Range | Housing | Output State | Logic | Connection | Dimensions |
| Standard Distance | | | | | | | |
| CR8-AN-1A | <---> | 0 to 1.5mm (0 to 0.059in) | Shielded | N.O. | NPN | 2m (6.5') axial cable | Figure 1 |
| CR8-AP-1A | <---> | | | | PNP | 2m (6.5') axial cable | Figure 1 |
| CR8-AN-1F | <---> | | | | NPN | M8 (8mm) connector | Figure 2 |
| CR8-AP-1F | <---> | | | | PNP | M8 (8mm) connector | Figure 2 |
| Extended Distance | | | | | | | |
| CR8-AN-2A | <---> | 0 to 2.0mm (0 to 0.079in) | Shielded | N.O. | NPN | 2m (6.5') axial cable | Figure 1 |
| CR8-AP-2A | <---> | | | | PNP | 2m (6.5') axial cable | Figure 1 |
| CR8-AN-2F | <---> | | | | NPN | M8 (8mm) connector | Figure 2 |
| CR8-AP-2F | <---> | | | | PNP | M8 (8mm) connector | Figure 2 |
| Triple Distance | | | | | | | |
| CR8-AN-3A | <---> | 3mm (0.118in) | Shielded | N.O. | NPN | 2m (6.5') axial cable | Figure 1 |
| CR8-AP-3A | <---> | | | | PNP | 2m (6.5') axial cable | Figure 1 |
| CR8-AN-3F | <---> | | | | NPN | M8 (8mm) connector | Figure 2 |
| CR8-AP-3F | <---> | | | | PNP | M8 (8mm) connector | Figure 2 |

Wiring diagrams



Cables and Accessories

Cables and accessories can be found starting on page 17–48.

CR8 Series Inductive Proximity Sensors

| Specifications | Standard Distance Models | Extended Distance Models | Triple Distance Models |
|---|--|--------------------------|----------------------------------|
| Type | Shielded | Shielded | Shielded |
| Operating Distance | 1.5mm (0.059in) | 2mm (0.079in) | 3mm (0.118in) |
| Material Correction Factors | *See Material Influence table #1 | | *See Material Influence table #2 |
| Differential Travel | ≤10% | | |
| Repeat Accuracy | ≤5% | | |
| Operating Voltage | 10-30VDC | | |
| Ripple | ≤20% | | |
| No-load Supply Current | ≤10mA | | |
| Load Current | ≤200mA | | |
| Leakage Current | ≤10μA | | |
| Voltage Drop | ≤2.0 V | | |
| Output Type | NPN or PNP/N.O. only/3 wire | | |
| Switching Frequency | 1kHz | | |
| (tv) Time Delay Before Availability | 10ms | | 50ms |
| Input Voltage Transient Protection | Up to 30VDC | | |
| Input Power Polarity Reversal Protection | Yes | | |
| Output Power Short-Circuit Protection | Yes (switch auto-resets after overload is removed) | | |
| Temperature Range | -25° to +70° C (-13° to 158° F) | | |
| Temperature Drift | ≤10% Sr | | |
| Protection Degree (DIN 40050) | IEC IP67 | | |
| LED Indicators | Yellow (output energized) | | |
| Housing Material | Nickel-plated brass | | Chrome-plated brass |
| Sensing Face Material | PBT | | |
| Tightening Torque | 4Nm (35lb./in.) | | |
| Weight (cable/M8 connector) | 43g (1.52oz)/15g (0.53oz) | | 54g (1.90oz)/21g (0.74oz) |

*See Material Influence tables #1 and #2 on page 17-53

Dimensions

Figure 1

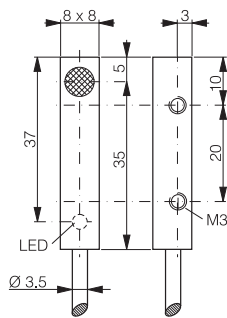


Figure 2

