

proense® P8 Series Inductive Rectangular Proximity Sensors



8 x 16 mm rectangular – DC

- 7 models available
- Compact 8 x 16 x 4 mm plastic housing
- Axial cable or M8 quick-disconnect models; purchase cable separately
- Complete overload protection
- IP67 rated
- Lifetime warranty



| ProSense P8 Series Rectangular DC Inductive Prox Selection Chart | | | | | | | | |
|------------------------------------------------------------------|---------|------------------|-----------|--------------|-------|----------------------------|-----------|---------------------|
| Part Number | Price | Sensing Range | Mounting | Output State | Logic | Connection | Wiring | Drawing Link |
| P8-AP-1F | \$65.00 | 1.5 mm [0.06 in] | Flush | N.O. | PNP | M8x1, 3-pin | Diagram 1 | PDF |
| P8-CP-1F | \$65.00 | 1.5 mm [0.06 in] | Flush | N.C. | PNP | M8x1, 3-pin | Diagram 1 | PDF |
| P8-AN-1F | \$65.00 | 1.5 mm [0.06 in] | Flush | N.O. | NPN | M8x1, 3-pin | Diagram 2 | PDF |
| P8-CN-1A | \$65.00 | 1.5 mm [0.06 in] | Flush | N.C. | NPN | 3-wire cable, 2m [6.56 ft] | Diagram 2 | PDF |
| P8-AP-2F | \$65.00 | 2.5 mm [0.10 in] | Non-flush | N.O. | PNP | M8x1, 3-pin | Diagram 1 | PDF |
| P8-CP-2F | \$65.00 | 2.5 mm [0.10 in] | Non-flush | N.C. | PNP | M8x1, 3-pin | Diagram 1 | PDF |
| P8-AN-2A | \$65.00 | 2.5 mm [0.10 in] | Non-flush | N.O. | NPN | 3-wire cable, 2m [6.56 ft] | Diagram 2 | PDF |

Wiring diagrams

Diagram 1

PNP Output

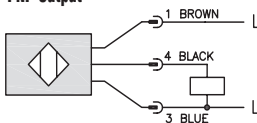
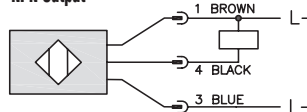
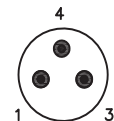


Diagram 2

NPN Output



M8 connector



Warning: These products are not safety sensors and are not suitable for use in personal safety applications.

pro^{sense}® P8 Series Inductive Rectangular Specifications

| ProSense P8 Series Rectangular DC Inductive Prox Selection Chart | | | | | | |
|------------------------------------------------------------------|-------------------|--------------------------|-----------------------------|--------------|---------------------|-----------------|
| Part Number | Operating Voltage | Operating (Load) Current | Off-state (Leakage) Current | Voltage Drop | Switching Frequency | Repeat Accuracy |
| P8-AP-1F | 10-30 VDC | 100mA | 50µA | 2.5 V | 2500Hz | 1.0 % |
| P8-CP-1F | 10-30 VDC | 100mA | 50µA | 2.5 V | 2500Hz | 1.0 % |
| P8-AN-1F | 5-30 VDC | 50mA | 50µA | 1.1 V | 2500Hz | 5.0 % |
| P8-CN-1A | 10-30 VDC | 100mA | 50µA | 1.8 V | 2500Hz | 1.0 % |
| P8-AP-2F | 10-30 VDC | 100mA | 1µA | 2.5 V | 3000Hz | 3.0 % |
| P8-CP-2F | 10-30 VDC | 100mA | 1µA | 2.5 V | 3000Hz | 3.0 % |
| P8-AN-2A | 10-30 VDC | 100mA | 50µA | 2.5 V | 2500Hz | 5.0 % |

| ProSense P8 Series Rectangular DC Inductive Prox Specifications | | |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------|
| Mounting Type | Flush | Non-flush |
| Nominal Distance | See Selection Table | |
| Assured Operating Distance | 1.2 mm [0.05 in] | 2.2 mm [0.09 in] |
| Material Correction Factors | See Material Influence Table | |
| Output Type | See Sensor Selection Chart | |
| No-load Supply Current | 3mA | |
| Ripple | 15% | |
| Time Delay Before Availability (tv) | 20ms | |
| Reverse Polarity Protection | Yes | |
| Short-Circuit Protection | Yes | |
| Operating Temperature | -25 to +70°C [-13 to +158°F] | |
| Protection Degree (DIN 40050) | IP67 | |
| Indication/Switch Status | Embedded function LED for switch status | |
| Housing Material | PA 6, GF30 (Nylon 6 Polymer) | |
| Sensing Face Material | PA 6, GF30 (Nylon 6 Polymer) | |
| Shock / Vibration | Shock: EN 60068-2-27 Vibration: EN 60068-2-6 | |
| Tightening Torque | 0.06 N•m [0.04 lb•ft] | |
| Weight (cable/M8 connector) | M8 Models 9.07 g [.031 oz] Cabled Models 22.68 g [.8 oz] | |
| Connections | M8x1, 3-pin 0.30 m [0.98 ft] or cable 2m [6.56 ft] PUR, 28AWG (0.09 mm ²) | |
| Agency Approvals | CE, cULus, IEC 60947-5-2 | |

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