

# DR10 Series Inductive Proximity Sensors

## 10 x 16 mm Plastic – DC



- Compact plastic housing
- Axial cable or M8 quick-disconnect models
- Complete overload protection
- IP67 rated
- Purchase cable separately
- Lifetime warranty



### DR10 Series Rectangular DC Inductive Proximity Selection Chart

| Part Number                | Price   | Sensing Range  | Mounting  | Output State | Logic | Connection              | Wiring    | Dimensions |
|----------------------------|---------|----------------|-----------|--------------|-------|-------------------------|-----------|------------|
| <a href="#">DR10-AN-1A</a> | \$30.50 | 3mm [0.118 in] | Flush     | N.O.         | NPN   | 2m [6.5 ft] axial cable | Diagram 1 | Figure 1   |
| <a href="#">DR10-AP-1A</a> | \$30.50 |                |           |              | PNP   | 2m [6.5 ft] axial cable | Diagram 2 | Figure 1   |
| <a href="#">DR10-AN-1F</a> | \$30.50 |                |           |              | NPN   | M8 [8mm] connector      | Diagram 1 | Figure 2   |
| <a href="#">DR10-AP-1F</a> | \$30.50 |                |           |              | PNP   | M8 [8mm] connector      | Diagram 2 | Figure 2   |
| <a href="#">DR10-AN-2A</a> | \$30.50 | 6mm [0.236 in] | Non-flush | N.O.         | NPN   | 2m [6.5 ft] axial cable | Diagram 1 | Figure 1   |
| <a href="#">DR10-AP-2A</a> | \$30.50 |                |           |              | PNP   | 2m [6.5 ft] axial cable | Diagram 2 | Figure 1   |
| <a href="#">DR10-AN-2F</a> | \$30.50 |                |           |              | NPN   | M8 [8mm] connector      | Diagram 1 | Figure 2   |
| <a href="#">DR10-AP-2F</a> | \$30.50 |                |           |              | PNP   | M8 [8mm] connector      | Diagram 2 | Figure 2   |

### DR10 Series Rectangular DC Inductive Proximity Specifications

| Mounting Type                       | Flush                                              | Non-flush     |
|-------------------------------------|----------------------------------------------------|---------------|
| Nominal Distance                    | 3mm [0.118in]                                      | 6mm [0.236in] |
| Operating Distance                  | NA                                                 |               |
| Material Correction Factors         | See the <a href="#">Material influence table</a>   |               |
| Output Type                         | NPN or PNP/N.O. only/3-wire                        |               |
| Operating Voltage                   | 10-30VDC                                           |               |
| No-load Supply Current              | ≤ 10mA                                             |               |
| Operating (Load) Current            | ≤ 300mA                                            |               |
| Off-state (Leakage) Current         | ≤ 10µA                                             |               |
| Voltage Drop                        | ≤ 1.5 V                                            |               |
| Switching Frequency                 | 3kHz                                               |               |
| Differential Travel                 | ≤ 1-10%                                            |               |
| Repeat Accuracy                     | ≤ 1%                                               |               |
| Ripple                              | m 10%                                              |               |
| Time Delay Before Availability (tv) | 2ms                                                |               |
| Reverse Polarity Protection         | Yes                                                |               |
| Short-Circuit Protection            | Yes [switch auto-resets after overload is removed] |               |
| Operating Temperature               | -25 to +75° C [-13 to 167° F]                      |               |
| Protection Degree (DIN 40050)       | IEC IP67                                           |               |
| Indication/Switch Status            | Yellow [output energized]                          |               |
| Housing Material                    | Plastic                                            |               |
| Sensing Face Material               | Plastic                                            |               |
| Shock/Vibration                     | See <a href="#">Proximity Sensor Terminology</a>   |               |
| Tightening Torque                   | NA                                                 |               |
| Weight                              | 113g [3.99oz]/6g [0.21oz]                          |               |
| Connection                          | 2m [6.5 ft] PVC axial cable or M8 [8mm] connector  |               |
| Agency Approvals                    | CE                                                 |               |

## Dimensions

mm [inches]

Figure 1

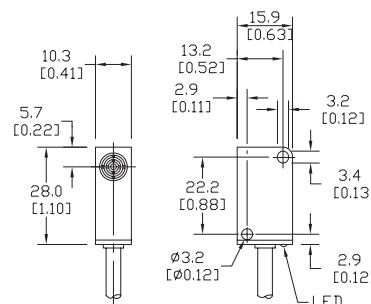
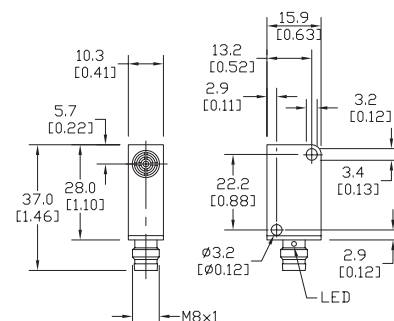
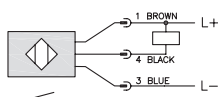
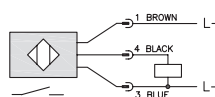


Figure 2



## Wiring Diagrams

Diagram 1  
NPN OutputDiagram 2  
PNP OutputConnector  
M8 connector