

# DW Series 4mm Stainless Steel Proximity Sensors



## Miniature (4mm) stainless steel – DC

- Four models available
- Complete overload protection
- Factor 1 on steel and aluminum
- IP67 rated
- Stainless steel construction
- Full metal housing
- LED status indicator
- IO-Link versions available
- Lifetime warranty



| DW Series Ø4mm DC Inductive Prox Selection Chart |         |      |                |            |              |       |                         |           |            |
|--|---------|------|----------------|------------|--------------|-------|-------------------------|-----------|------------|
| Part Number                                      | Price   | Size | Sensing Range  | Housing    | Output State | Logic | Connection              | Wiring    | Dimensions |
| <i>Extended Distance</i>                         |         |      |                |            |              |       |                         |           |            |
| <b>DW-AD-711-04</b>                              | \$99.00 | 4mm  | 3mm (0.118 in) | Unshielded | NO           | NPN   | 2m (6.5 ft) axial cable | Diagram 1 | Figure 1   |
| <b>DW-AV-711-04-276</b>                          | \$99.00 |      |                |            |              | NPN   | M8 with 0.2 m cable     | Diagram 3 | Figure 2   |
| <b>DW-AD-713-04*</b>                             | \$99.00 |      |                |            |              | PNP   | 2m (6.5 ft) axial cable | Diagram 2 | Figure 1   |
| <b>DW-AV-713-04-276*</b>                         | \$99.00 |      |                |            |              | PNP   | M8 with 0.2 m cable     | Diagram 4 | Figure 2   |

\* IO-Link model

# DW Series 4mm Stainless Steel Proximity Sensors

| DW Series 4mm Specifications                        |   |
|---|---|
|   | DW-Ax-71x-04  |
| <b>Mounting Type</b>                                | Unshielded  |
| <b>Nominal Sensing Distance</b>                     | 3mm (0.118 in)  |
| <b>Operating Distance</b>                           | -   |
| <b>Material Correction Factors</b>                  | See the <a href="#">Material influence table</a>  |
| <b>Output Type</b>                                  | NPN or PNP, NO  |
| <b>Operating Voltage</b>                            | 10 to 30 VDC  |
| <b>No-load Supply Current</b>                       | ≤ 10mA  |
| <b>Operating (Load) Current</b>                     | ≤ 200mA   |
| <b>Off-state (Leakage) Current</b>                  | ≤ 0.1 mA  |
| <b>Voltage Drop</b>                                 | ≤ 2V  |
| <b>Switching Frequency</b>                          | ≤ 1200Hz  |
| <b>Differential Travel (% of Nominal Distance)</b>  | ≤ 10%   |
| <b>Repeat Accuracy</b>                              | 0.15 mm   |
| <b>Ripple</b>                                       | ≤ 20%   |
| <b>Time Delay Before Availability (tv)</b>          | ≤ 10ms  |
| <b>Reverse Polarity Protection</b>                  | Yes   |
| <b>Short-Circuit Protection</b>                     | Yes   |
| <b>Operating Temperature</b>                        | -25 to 85°C (-13 to 185°F)  |
| <b>Protection Degree (DIN 40050)</b>                | IP67  |
| <b>Indication/Switch Status</b>                     | Yellow LED (LED on continuously - secured operating zone)   |
| <b>Housing Material</b>                             | Stainless steel V2A   |
| <b>Sensing Face Material</b>                        | Stainless steel V2A   |
| <b>Shock/Vibration</b>                              | IEC 60947-5-2/7.4   |
| <b>Tightening Torque</b>                            | 25 N•m (221.27 lb•in)   |
| <b>Weight</b>                                       | 29g (1.02 oz) with cable, 9g (0.32 oz) without cable  |
| <b>Connection</b>                                   | 2m cable (PUR [polyurethane] 3 x 0.14mm <sup>2</sup> ≈ 26 AWG) or 0.2 m cable (PUR [polyurethane]) with M8 connection |
| <b>Minimum Mounting Distance (center to center)</b> | 40.0 mm (1.57 in)   |
| <b>IO-Link</b>                                      | PNP/NO version only   |
| <b>Agency Approvals</b>                             | CE, cULus E239373   |

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

## Wiring diagrams

Diagram 1

NPN Cable

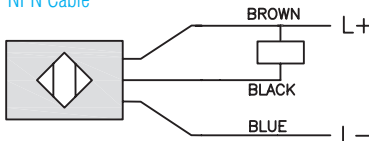
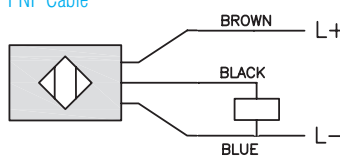


Diagram 2

PNP Cable



Connectors

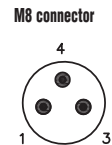


Diagram 3

NPN Connector

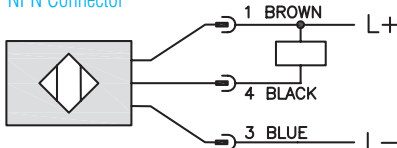
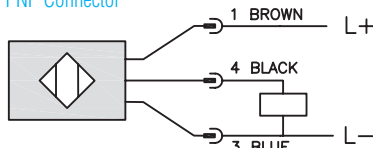


Diagram 4

PNP Connector



# DW Series 4mm Stainless Steel Proximity Sensors

## Dimensions

mm [inches]

Figure 1

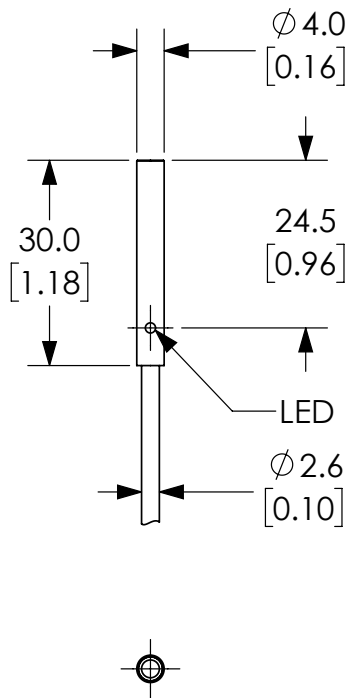
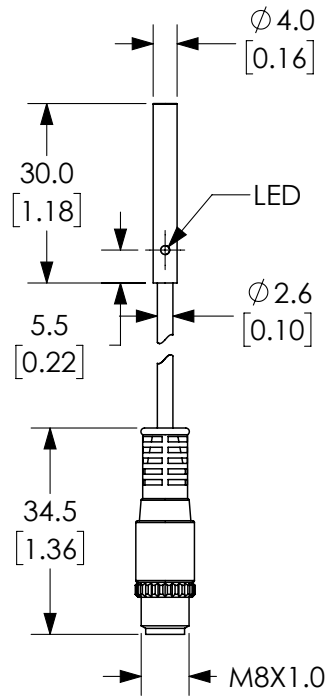


Figure 2



See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete engineering drawings.

# Accessories for 4mm Sensors

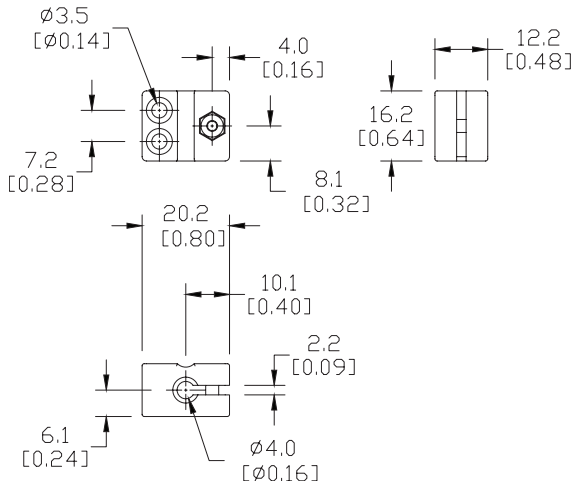
## Right-angle Mounting Bracket

Mounting bracket, right-angle, plastic. For use with 4mm sensors.

| Accessories for 4mm Sensors |        |   |             |
|-----------------------------|--------|---|-------------|
| Part Number                 | Price  | Description   | Weight [lb] |
| <b>OPT2106</b>              | \$6.25 | Mounting bracket, right-angle, plastic. For use with 4mm sensors. | 0.02        |

## Dimensions

mm [inches]



**OPT2106**

See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete engineering drawings