



# DW Series 4mm Inductive Proximity Sensors

## Miniature M4 (4mm) Stainless Steel – DC



- Complete overload protection
- IP67 rated
- Two M4 lock nuts included
- Stainless steel construction
- LED status indicator
- Lifetime warranty



### DW Series M4 DC Inductive Proximity Selection Chart

| Part Number                       | Price   | Size | Sensing Range     | Mounting | Output State | Logic | Connection                 | Wiring    | Drawing Link        |
|-----------------------------------|---------|------|-------------------|----------|--------------|-------|----------------------------|-----------|---------------------|
| <b>Extended Distance</b>          |         |      |                   |          |              |       |                            |           |                     |
| <a href="#">DW-AD-621-M4-960</a>  | \$119a: | M4   | 1mm<br>[0.039 in] | Flush    | N.O.         | NPN   | 2m [6.5 ft]<br>axial cable | Diagram 1 | <a href="#">PDF</a> |
| <a href="#">DW-AD-623-M4-960*</a> | \$119b: |      |                   |          |              | PNP   |                            | Diagram 2 | <a href="#">PDF</a> |
| <a href="#">DW-AD-622-M4</a>      | \$119c: |      |                   |          | N.C.         | NPN   |                            | Diagram 1 | <a href="#">PDF</a> |
| <a href="#">DW-AD-624-M4</a>      | \$119d: |      |                   |          |              | PNP   |                            | Diagram 2 | <a href="#">PDF</a> |

\* IO-Link model

## Wiring Diagrams

Diagram 1

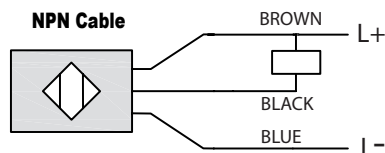
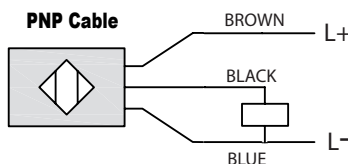


Diagram 2





# DW Series 4mm Inductive Proximity Sensors



## Miniature M4 (4mm) Nickel Silver – DC

- 4mm smooth triple distance proximity sensor
- Complete overload protection
- IP67 rated
- Nickel silver construction
- LED status indicator
- Lifetime warranty



### DW Series 4mm Smooth Triple Distance Inductive Proximity Selection Chart

| Part Number                  | Price     | Size               | Sensing Range        | Mounting   | Output State | Logic | Connection              | Wiring    | Drawing Link        |
|------------------------------|-----------|--------------------|----------------------|------------|--------------|-------|-------------------------|-----------|---------------------|
| <b>Triple Distance</b>       |           |                    |                      |            |              |       |                         |           |                     |
| <a href="#">DW-AD-501-04</a> | \$;0119f: | Ø4 (Smooth barrel) | 2.5 mm<br>[0.098 in] | Semi-flush | N.O.         | NPN   | 2m [6.5 ft] axial cable | Diagram 1 | <a href="#">PDF</a> |
| <a href="#">DW-AD-503-04</a> | \$0119e:  |                    |                      |            | N.O.         | PNP   | 2m [6.5 ft] axial cable | Diagram 2 | <a href="#">PDF</a> |
| <a href="#">DW-AS-501-04</a> | \$0119h:  |                    |                      |            | N.O.         | NPN   | M8 quick-disconnect     | Diagram 3 | <a href="#">PDF</a> |
| <a href="#">DW-AS-503-04</a> | \$0119g:  |                    |                      |            | N.O.         | PNP   | M8 quick-disconnect     | Diagram 4 | <a href="#">PDF</a> |
| <a href="#">DW-AD-504-04</a> | \$-0119i: |                    |                      |            | N.C.         | PNP   | 2m [6.5 ft] axial cable | Diagram 2 | <a href="#">PDF</a> |

## Wiring Diagrams

Diagram 1

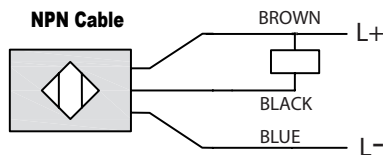
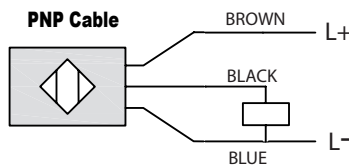


Diagram 2



Connectors

M8 connector

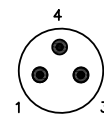


Diagram 3

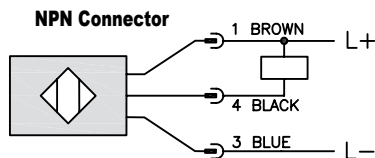
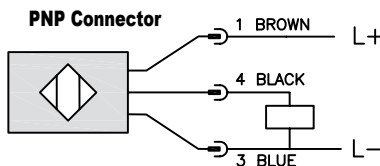


Diagram 4



# DW Series 4mm Inductive Proximity Sensors

| DW Series 4mm Inductive Proximity Specifications |                                                  |              |                                    |
|--------------------------------------------------|--------------------------------------------------|--------------|------------------------------------|
| Specifications                                   | DW-Ax-62x-M4-96x                                 | DW-Ax-62x-M4 | DW-Ax-50x-04                       |
| Mounting Type                                    | Flush                                            | Flush        | Semi-flush                         |
| Nominal Sensing Distance                         | 1mm                                              |              | 2.5 mm                             |
| Operating Distance                               | -                                                |              |                                    |
| Material Correction Factors                      | See the <a href="#">Material influence table</a> |              |                                    |
| Output Type                                      | NPN or PNP, N.O. or N.C.                         |              |                                    |
| Operating Voltage                                | 10 to 30 VDC                                     |              |                                    |
| No-load Supply Current                           | ≤10mA                                            |              |                                    |
| Operating (Load) Current                         | ≤100mA                                           |              | ≤200mA                             |
| Off-state (Leakage) Current                      | ≤ 0.1 mA                                         |              |                                    |
| Voltage Drop                                     | ≤ 2V                                             |              |                                    |
| Switching Frequency                              | ≤ 8kHz                                           | ≤ 3kHz       | ≤ 800Hz                            |
| Differential Travel (% of Nominal Distance)      | ≤10%                                             |              |                                    |
| Repeat Accuracy                                  | 0.02 mm                                          |              |                                    |
| Ripple                                           | ≤ 20%                                            |              |                                    |
| Time Delay Before Availability (tv)              | ≤ 10ms                                           |              | ≤30ms                              |
| 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                         | Yellow LED                                       |              |                                    |
| Housing Material                                 | Stainless steel                                  |              | Nickel silver                      |
| Sensing Face Material                            | PET [Polyester]                                  |              |                                    |
| Shock/Vibration                                  | IEC 60947-5-2/7.4                                |              |                                    |
| Tightening Torque                                | -                                                |              |                                    |
| Weight                                           | 20g [0.71 oz] or 6g [0.211 oz]                   |              | 31g [1.09 oz] or 3g [0.11 oz]      |
| Connection                                       | 2m [6.6 ft] cable                                |              | 2m [6.5 ft] cable or M8 connection |
| IO-Link                                          | PNP/N.O. only                                    | -            |                                    |
| Agency Approvals                                 | 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.

# 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                                                                  | Drawing Link        | Weight [lb] |
| <a href="#">OPT2106</a>     | \$-1nlv: | Wenglor mounting bracket, right-angle, plastic.<br>For use with 4mm sensors. | <a href="#">PDF</a> | 0.02        |



[OPT2106](#)