

DW Series 30mm Triple Sensing Proximity Sensors

M30 (30mm) Chrome Plated Brass – DC



- Sixteen models available
- 30mm threaded triple distance proximity sensor
- 22mm and 40mm sensing
- Complete overload protection
- IP67 rated
- Two M30 lock nuts included
- Chrome plated brass construction
- LED status indicator
- Lifetime warranty



| DW Series 30mm Stainless Steel Triple Distance Inductive Prox Selection Chart | | | | | | | | | |
|---|---------|------|--------------------|------------|--------------|-------|-----------------------|-----------|------------|
| Part Number | Price | Size | Sensing Range | Housing | Output State | Logic | Connection | Wiring | Dimensions |
| Triple Distance Shielded | | | | | | | | | |
| DW-AD-501-M30 | \$58.00 | M30 | 22mm (0.866 in) | Shielded | NO | NPN | 2m (6.5') axial cable | Diagram 1 | Figure 1 |
| DW-AD-503-M30 | \$58.00 | | | | | PNP | | Diagram 2 | Figure 1 |
| DW-AS-501-M30-002 | \$58.00 | | | | | NPN | M12 quick disconnect | Diagram 3 | Figure 3 |
| DW-AS-503-M30-002 | \$58.00 | | | | | PNP | | Diagram 4 | Figure 3 |
| DW-AD-502-M30 | \$58.00 | | | | NC | NPN | 2m (6.5') axial cable | Diagram 1 | Figure 1 |
| DW-AD-504-M30 | \$58.00 | | | | | PNP | | Diagram 2 | Figure 1 |
| DW-AS-502-M30-002 | \$58.00 | | | | | NPN | M12 quick disconnect | Diagram 3 | Figure 3 |
| DW-AS-504-M30-002 | \$58.00 | | | | | PNP | | Diagram 4 | Figure 3 |
| Triple Distance Unshielded | | | | | | | | | |
| DW-AD-511-M30 | \$62.00 | M30 | 40mm (1.574 in) | Unshielded | NO | NPN | 2m (6.5') axial cable | Diagram 1 | Figure 2 |
| DW-AD-513-M30 | \$62.00 | | | | | PNP | | Diagram 2 | Figure 2 |
| DW-AS-511-M30-002 | \$62.00 | | | | | NPN | M12 quick disconnect | Diagram 3 | Figure 4 |
| DW-AS-513-M30-002 | \$62.00 | | | | | PNP | | Diagram 4 | Figure 4 |
| DW-AD-512-M30 | \$62.00 | | | | NC | NPN | 2m (6.5') axial cable | Diagram 1 | Figure 2 |
| DW-AD-514-M30 | \$62.00 | | | | | PNP | | Diagram 2 | Figure 2 |
| DW-AS-512-M30-002 | \$62.00 | | | | | NPN | M12 quick disconnect | Diagram 3 | Figure 4 |
| DW-AS-514-M30-002 | \$62.00 | | | | | PNP | | Diagram 4 | Figure 4 |

Wiring diagrams

Diagram 1

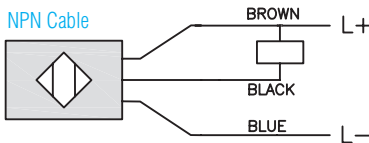


Diagram 2

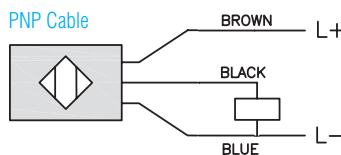


Diagram 3

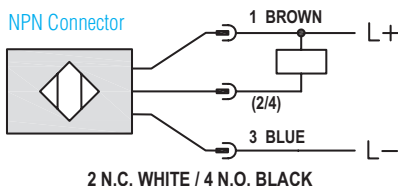
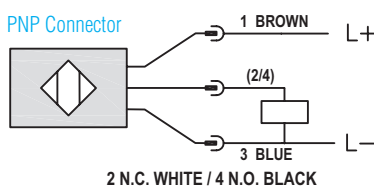
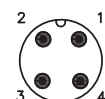


Diagram 4



Connectors

M12 connector



DW Series 30mm Triple Sensing Proximity Sensors

| DW Series Specifications | | |
|--|--|--------------------------------|
| | DW-Ax-50x-M30 | DW-Ax-51x-M30 |
| Mounting Type | shielded | unshielded |
| Nominal Sensing Distance | 22mm | 40mm |
| Operating Distance | NA | |
| Material Correction Factors | See the Material influence table | |
| Output Type | NPN or PNP, NO or NC | |
| Operating Voltage | 10 to 30 VDC | |
| No-load Supply Current | ≤ 10mA | |
| Operating (Load) Current | ≤ 200mA | |
| Off-state (Leakage) Current | ≤ 0.1 mA | |
| Voltage Drop | ≤ 2 V | |
| Switching Frequency | ≤ 200 Hz | ≤ 100Hz |
| Differential Travel (% of Nominal Distance) | ≤ 10% | |
| Repeat Accuracy | 1.1 mm | 2.0 mm |
| Ripple | ≤ 20% | |
| Time Delay Before Availability (tv) | ≤ 200ms | |
| 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 | Chrome plated brass | |
| Sensing Face Material | PBT (Polybutylene terephthalate) | |
| Shock/Vibration | IEC 60947-5-2/7.4 | |
| Tightening Torque | -- | |
| Weight | 215g (7.58 oz), 155g (5.47 oz) | 212g (7.48 oz), 143g (5.04 oz) |
| Connection | 2m cable, M12 connection | |
| IO-Link | NA | |
| 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

DW Series 30mm Triple Sensing Proximity Sensors

Dimensions

mm [inches]

Figure 1

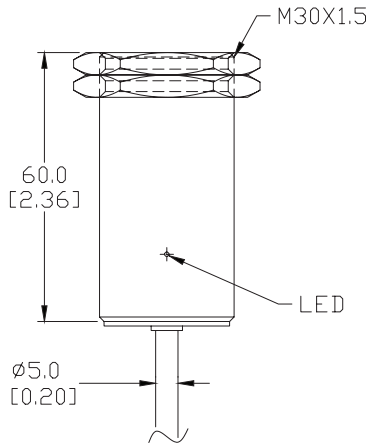


Figure 2

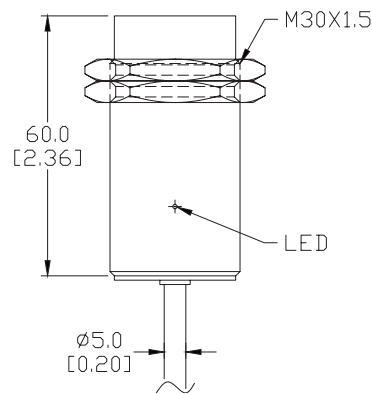


Figure 3

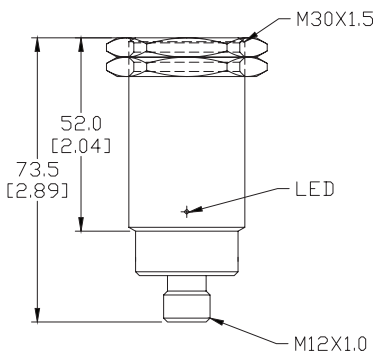
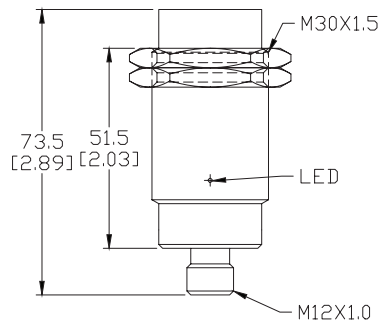


Figure 4



SEE OUR WEBSITE: WWW.AUTOMATIONDIRECT.COM FOR COMPLETE ENGINEERING DRAWINGS.

Accessories for 30mm Sensors

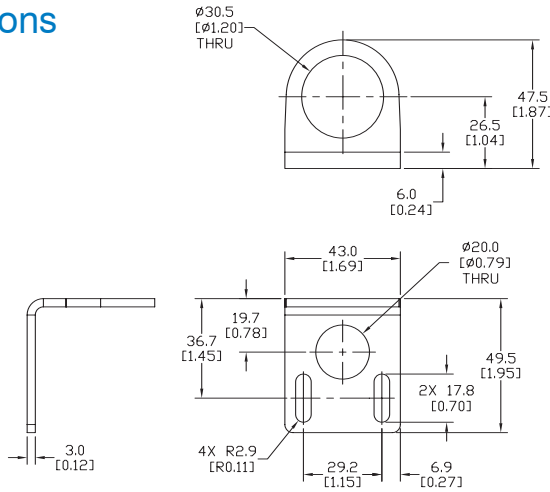
Right-angle Mounting Bracket

Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.

| Accessories for FW Series Sensors | | | |
|-----------------------------------|--------|--|-------------|
| Part Number | Price | Description | Weight [lb] |
| ST30C6W | \$2.50 | Mounting bracket, right angle, 304 stainless steel. For use with 30mm sensors. | 0.15 |

Dimensions

mm [inches]



ST30C6W

Right-angle Swivel Mounting Systems

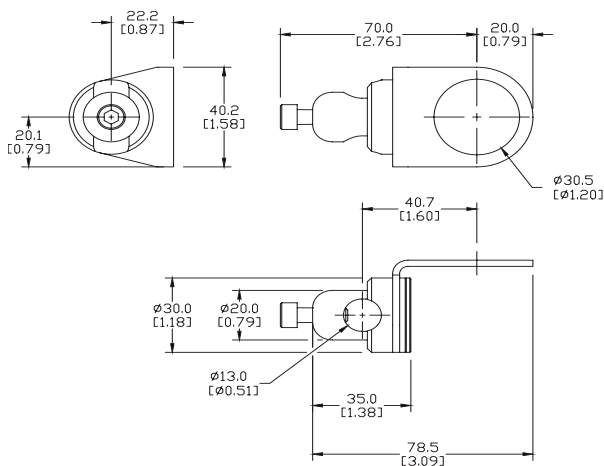
Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

| Accessories for 30mm Sensors | | | | | |
|------------------------------|---------|---|---------------------|---------------------|-------------|
| Part Number | Price | Description | Mounting Head | Mounting Plate | Weight [lb] |
| OPT2118 | \$9.00 | Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors. | Aluminum | 304 Stainless Steel | 0.18 |
| OPT2119 | \$16.00 | Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors. | 304 Stainless Steel | 304 Stainless Steel | 0.30 |

Note: 304 Stainless steel mounting rods sold separately: OPT2109 (200mm length), OPT2110 (300mm length), and OPT2111 (500mm length).

Dimensions

mm [inches]



OPT2118, OPT2119

See our website: www.AutomationDirect.com for complete engineering drawings

Mounting Rods

Mounting Rods

304 Stainless steel rods for mounting swivel brackets OPT2112 - OPT2127. Available in three lengths: 200mm, 300mm, and 500mm. 12mm diameter.

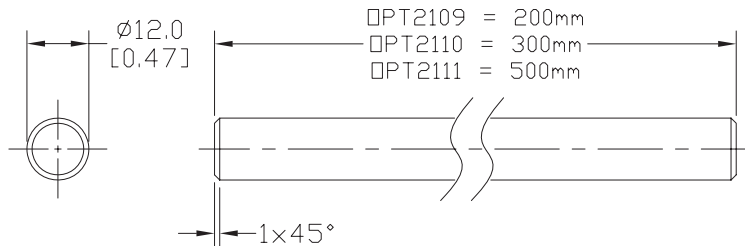
| Mounting Rods for OPT2112-2127 Swivel Mounting Brackets | | | |
|---|---------|---|-------------|
| Part Number | Price | Description | Weight [lb] |
| OPT2109 | \$10.00 | Mounting rod, 12mm diameter, 200mm length, 304 stainless steel. | 0.41 |
| OPT2110 | \$12.00 | Mounting rod, 12mm diameter, 300mm length, 304 stainless steel. | 0.60 |
| OPT2111 | \$16.00 | Mounting rod, 12mm diameter, 500mm length, 304 stainless steel. | 0.98 |



OPT2109, OPT2110, OPT2111

Dimensions

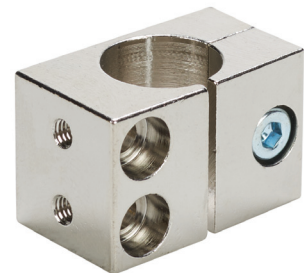
mm [inches]



Right-angle Mounting Bracket

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.

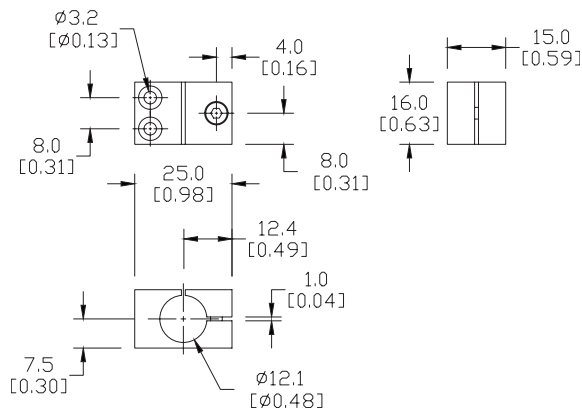
| Accessories for 12mm Sensors | | | |
|------------------------------|---------|---|-------------|
| Part Number | Price | Description | Weight [lb] |
| OPT2108 | \$12.00 | Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111. | 0.07 |



OPT2108

Dimensions

mm [inches]



See our website: www.AutomationDirect.com for complete engineering drawings