

CONTRINEX DW Series 30mm Triple Sensing **Proximity Sensors**

M30 (30mm) Chrome Plated Brass – DC

- 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 Triple Distance Inductive Proximity Selection Chart | | | | | | | | | |
|--|---------|------|-----------------|------------|-----------------|-------|-------------------------|-----------|------------|
| Part Number | Price | Size | Sensing Range | Mounting | Output State | Logic | Connection | Wiring | Dimensions |
| Triple Distance Semi-flush | | | | | | | | | |
| DW-AD-501-M30 | \$71.00 | | | | N.O. | NPN | 2m [6.5 ft] axial cable | Diagram 1 | Figure 1 |
| DW-AD-503-M30 | \$71.00 | | 22mm [0.866 in] | Semi-flush | N.O. | PNP | 2m [6.5 ft] axial cable | Diagram 2 | Figure 1 |
| DW-AS-501-M30-002 | \$71.00 | M30 | | | N.O. | NPN | M12 quick-disconnect | Diagram 3 | Figure 3 |
| DW-AS-503-M30-002 | \$71.00 | | | | N.O. | PNP | M12 quick-disconnect | Diagram 4 | Figure 3 |
| DW-AS-504-M30-002 | \$71.00 | | | | N.C. | PNP | M12 quick-disconnect | Diagram 4 | Figure 3 |
| Triple Distance Non-flush | | | | | | | | | |
| DW-AD-511-M30 | \$78.00 | | | | N.O. | NPN | 2m [6.5 ft] axial cable | Diagram 1 | Figure 2 |
| DW-AD-513-M30 | \$78.00 | M30 | 40mm [1.574 in] | Non-flush | N.O. | PNP | 2m [6.5 ft] axial cable | Diagram 2 | Figure 2 |
| DW-AS-511-M30-002 | \$78.00 | | | | N.O. | NPN | M12 quick-disconnect | Diagram 3 | Figure 4 |
| DW-AS-513-M30-002 | \$78.00 | | | | N.O. | PNP | M12 quick-disconnect | Diagram 4 | Figure 4 |
| DW-AS-514-M30-002 | \$78.00 | | | | N.C. | PNP | M12 quick-disconnect | Diagram 4 | Figure 4 |

Wiring Diagrams

Diagram 1

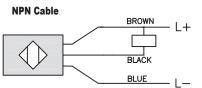


Diagram 3

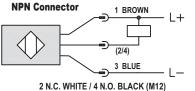
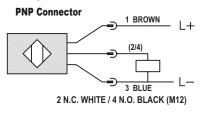


Diagram 2 PNP Cable BROWN 1 +BLACK BLUE

Diagram 4



Connectors

M12 connector



For the latest prices, please check AutomationDirect.com.

1-800-633-0405 **DW Series 30mm Triple Sensing Proximity Sensors**

| DW Series 30mm Triple Distance Inductive Proximity Specifications | | | | | | | |
|---|----------------------------------|--------------------------------|--|--|--|--|--|
| Specifications | DW-Ax-50x-M30 | DW-Ax-51x-M30 | | | | | |
| Mounting Type | Semi-flush | Non-flush | | | | | |
| Nominal Sensing Distance | 22mm [0.866 in] | 40mm [1.574 in] | | | | | |
| Operating Distance | NA | | | | | | |
| Material Correction Factors | See the Material influence table | | | | | | |
| Output Type | NPN or PNP, | N.O. or N.C. | | | | | |
| Operating Voltage | 10 to 3 | 0 VDC | | | | | |
| No-load Supply Current | ≤ 10 | DmA | | | | | |
| Operating (Load) Current | ≤ 20 | 0mA | | | | | |
| Off-state (Leakage) Current | ≤ 0.1 | 1 mA | | | | | |
| Voltage Drop | ≤2 | 2 V | | | | | |
| Switching Frequency | ≤ 200Hz | ≤ 100Hz | | | | | |
| Differential Travel (% of Nominal Distance) | ≤1 | 0% | | | | | |
| 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 pl | ated brass | | | | | |
| Sensing Face Material | PBT [Polybutyle | ne terephthalate] | | | | | |
| Shock/Vibration | IEC 6094 | 7-5-2/7.4 | | | | | |
| Tightening Torque | | | | | | | |
| Weight | 215g [7.58 oz], 155g [5.47 oz] | 212g [7.48 oz], 143g [5.04 oz] | | | | | |
| Connection | 2m [6.5 ft] cable, | M12 connection | | | | | |
| IO-Link | NA | | | | | | |
| Agency Approvals | CE, cULus | s E239373 | | | | | |

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

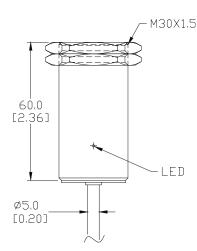
1-800-633-0405 **DW Series 30mm Triple Sensing Proximity Sensors**

Figure 2

Dimensions

mm [inches]

Figure 1



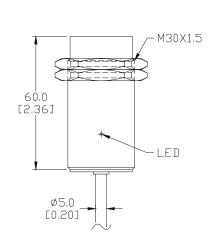
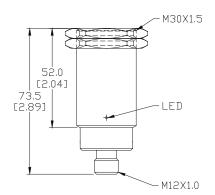
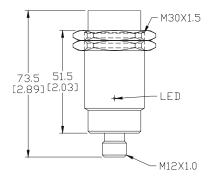


Figure 3







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

Accessories for 30mm Sensors

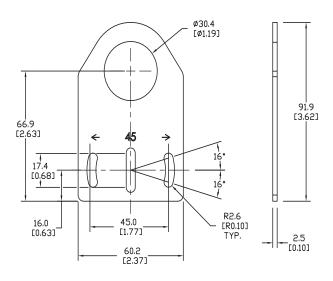
Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for right-beam-angle-adapter sensors. Hexagonal nuts not included.

| Accessories for 30mm Sensors | | | | | | |
|------------------------------|--------|--|------------------|--|--|--|
| Part Number | Price | Description | Weight Ib [g] | | | |
| <u>ST30A</u> | \$2.25 | Micro Detectors mounting bracket, axial, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7] | | | |

Dimensions

mm [inches]

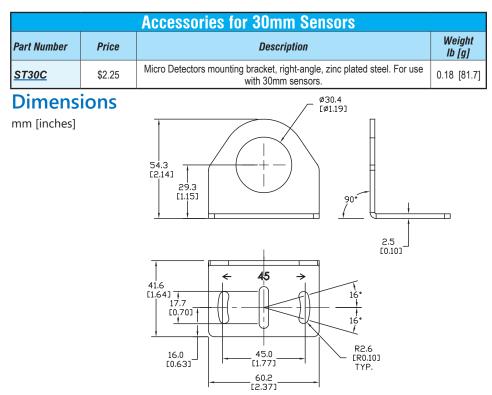




<u>ST30A</u>

Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.





<u>ST30C</u>

1-800-633-0405 Accessories for 30mm Sensors

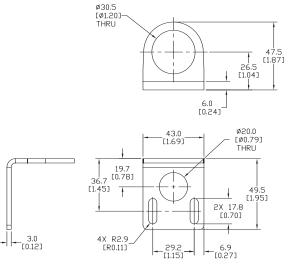
Right-angle Mounting Bracket

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

| Accessories for FW Series Sensors | | | | | | |
|-----------------------------------|------------------------|---|------------------|--|--|--|
| Part Number | nber Price Description | | Weight Ib [g] | | | |
| <u>ST30C6W</u> | \$5.50 | AutomationDirect mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors. | 0.15 (68.0) | | | |

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 | Drawing Link | Weight Ib [g] | | |
| <u>OPT2118</u> | \$11.50 | Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors. | Aluminum | 304 Stainless steel | <u>PDF</u> | 0.18 [81.7] | | |
| <u>OPT2119</u> | \$21.00 | Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors. | 304 Stainless Steel | 304 Stainless steel | <u>PDF</u> | 0.18 [81.7] | | |



Note: 304 Stainless steel mounting rods sold separately: <u>OPT2109</u> (200mm [7.87 in] length), <u>OPT2110</u> (300mm [11.81 in] length), and <u>OPT2111</u> (500mm [19.69 in] length).

OPT2118, OPT2119

1-800-633-0405 Mounting Rods and Brackets

Mounting Rods

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

| M | Mounting Rods for OPT2112-2127 Swivel Mounting Brackets | | | | | | | |
|----------------|---|---|-----------------|------------------|--|--|--|--|
| Part Number | Price | Description | Drawing Link | Weight Ib (g) | | | | |
| <u>OPT2109</u> | \$13.00 | Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel. | PDF | 0.41 [185.97] | | | | |
| <u>OPT2110</u> | \$16.00 | Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel. | PDF | 0.60 [272.16] | | | | |
| <u>OPT2111</u> | \$21.00 | Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel. | PDF | 0.98 [444.52] | | | | |



Right-angle Mounting Bracket

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

| Right-angle Mounting Brackets for 12mm Sensors | | | | | | | |
|--|-------------------------------|---|-----------------|------------------|--|--|--|
| Part Number | Part Number Price Description | | Drawing Link | Weight Ib [g] | | | |
| <u>OPT2108</u> | \$16.00 | Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111. | <u>PDF</u> | 0.07 [31.8] | | | |

