

# CT Series Capacitive Proximity Sensors



## M30 (30mm) plastic – AC/DC

- Plastic Housing
- Push button teach
- N.O./N.C. selectable
- IP65/IP67 rated
- LED status indicators
- 1/2 inch Micro AC quick-disconnect; purchase cable separately
- Mounting accessories available



### CT Series Capacitive Prox Selection Chart

| Part Number               | Price    | Sensing Distance | Mounting  | Output State | Logic | Connection                         | Wiring    | Dimensions |
|---------------------------|----------|------------------|-----------|--------------|-------|------------------------------------|-----------|------------|
| <a href="#">CTV-00-2M</a> | \$112.00 | 40mm [1.58 in]   | Non-flush | N.O./N.C.    | -     | 1/2 inch micro AC quick-disconnect | Diagram 1 | Figure 1   |

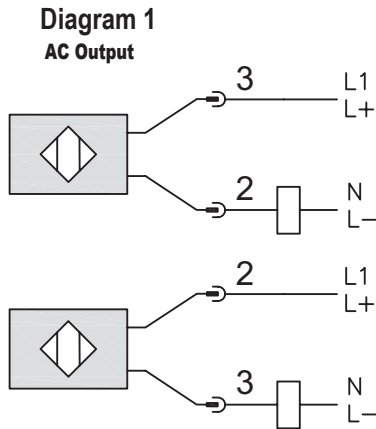
### CT Series Specifications

| Part Number  | <a href="#">CTV-00-2M</a>   |
|--|---|
| <b>Mounting Type</b>                               | Non-flush   |
| <b>Nominal Sensing Distance</b>                    | 40mm [1.58 in]  |
| <b>Sensitivity</b>                                 | Push to teach   |
| <b>Operating Distance</b>                          | NA  |
| <b>Material Correction Factors</b>                 | NA  |
| <b>Output Type</b>                                 | AC/DC; N.O./N.C.  |
| <b>Operating Voltage</b>                           | 20 to 250VDC; 30 to 250VAC  |
| <b>No-load Supply Current</b>                      | NA  |
| <b>Operating (Load) Current</b>                    | 150mA [40°C]/100mA [80°C] continuous; 1.0 A [20ms/ 0.5 Hz] peak       |
| <b>Off-state (Leakage) Current</b>                 | < 2.5mA (250VAC)<br>< 1.7mA (110VAC)<br>< 1.5mA (24VDC)               |
| <b>Voltage Drop</b>                                | < 8VDC/ <10VAC  |
| <b>Switching Frequency</b>                         | 10Hz  |
| <b>Differential Travel (% of Nominal Distance)</b> |   |
| <b>Repeat Accuracy</b>                             |   |
| <b>Ripple</b>                                      | NA  |
| <b>Time Delay Before Availability (tv)</b>         |   |
| <b>Reverse Polarity Protection</b>                 | Yes   |
| <b>Short-circuit Protection</b>                    | No  |
| <b>Operating Temperature</b>                       | -25 to 80°C [-13 to 176°F]; Sensing face: -25 to 110°C [-13 to 230°F] |
| <b>Protection Degree (DIN 40050)</b>               | IEC IP65/IP67   |
| <b>Indication/Switch Status</b>                    | Yellow [output energized]   |
| <b>Housing Material</b>                            | Polybutylene Terephthalate [PBT]                                      |
| <b>Sensing Face Material</b>                       | Polybutylene Terephthalate [PBT]                                      |
| <b>Shock/Vibration</b>                             | DIN EN 60947-5-2  |
| <b>Tightening Torque</b>                           | 8.0 N•m [5.9 lb•ft]   |
| <b>Weight</b>                                      | 122g [4.30 oz]  |
| <b>Connectors</b>                                  | 0.5 in [12.7 mm] micro AC connector, 2 lock nuts included             |
| <b>Agency Approvals</b>                            | cULus file E328811, CE, RoHS  |

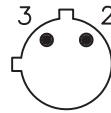
To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

# CT Series Capacitive Proximity Sensors

## Wiring Diagram



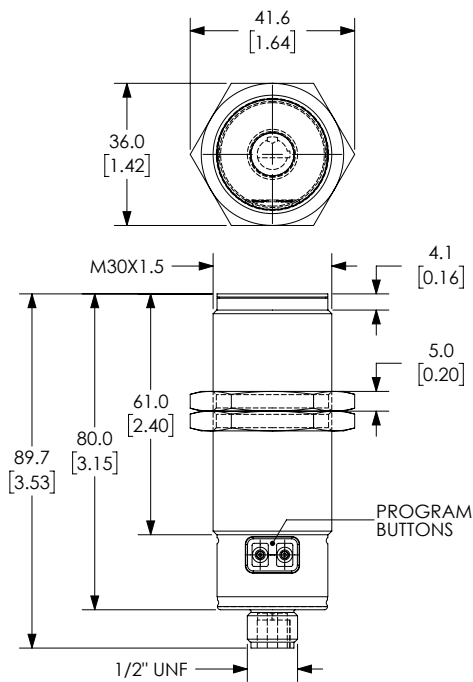
**Connector**  
**1/2" micro AC**



## Dimensions

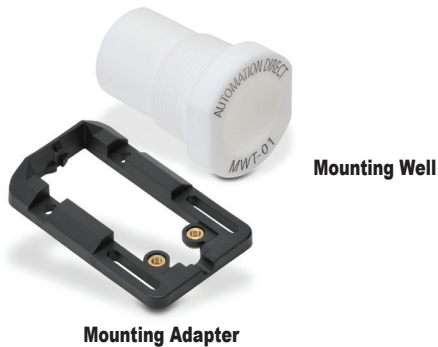
mm [inches]

**Figure 1**



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

# Capacitive Proximity Sensors - Accessories



| Capacitive Proximity Sensors Accessory Chart |         |   |   |            |
|--|---------|---|---|------------|
| Part Number                                  | Price   | Description                               | Material  | Dimensions |
| <b>Mounting Adapter</b>                      |         |   |   |            |
| <b>CR1-ADPTR</b>                             | \$4.50  | Adapter for CR1 series capacitive sensors | Housing: Polybutylene Terephthalate (PBT)<br>Included Screws: M3 x 6 Steel (0.5 N•m [0.37 lb•ft])                   | Figure 1   |
| <b>Mounting Wells</b>                        |         |   |   |            |
| <b>MWT-01</b>                                | \$52.00 | 30mm [1.18 in] sensor mounting well       | PTFE - Polytetrafluoroethylene (Teflon®)<br>Temp: -25 to 246°C [-13 to 474.8°F]<br>Max. pressure: 100 PSI [6.9 bar] | Figure 2   |
| <b>MWK-01</b>                                | \$42.50 | 18mm [0.71 in] sensor mounting well       |   | Figure 3   |

## Dimensions

mm [inches]

Figure 1

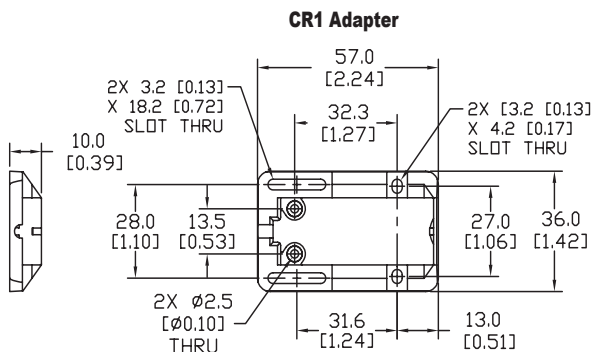


Figure 2

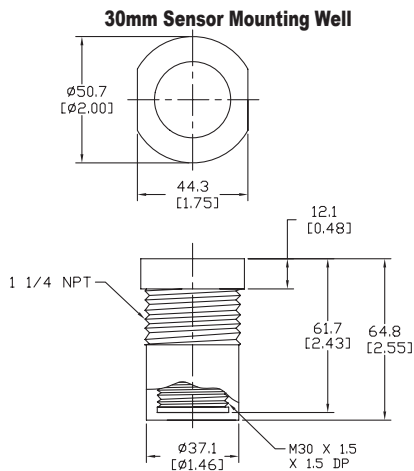
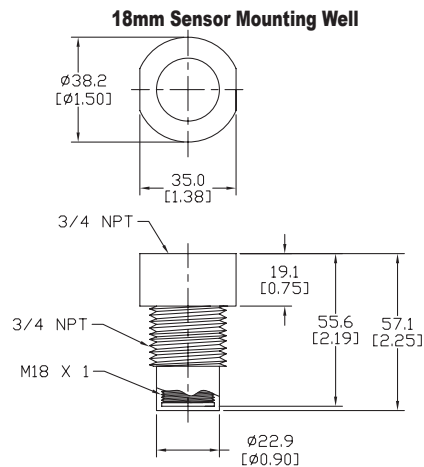


Figure 3



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

# Accessories for 30mm Sensors

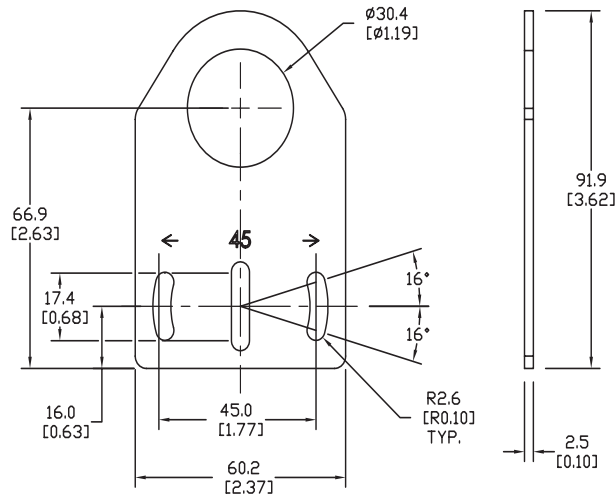
## Axial Mounting Bracket

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-adaptor sensors. Hexagonal nuts not included.

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

### Dimensions

mm [inches]



**ST30A**

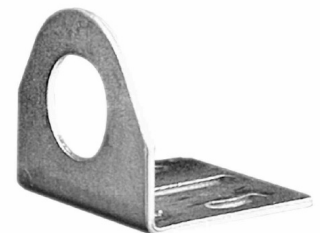
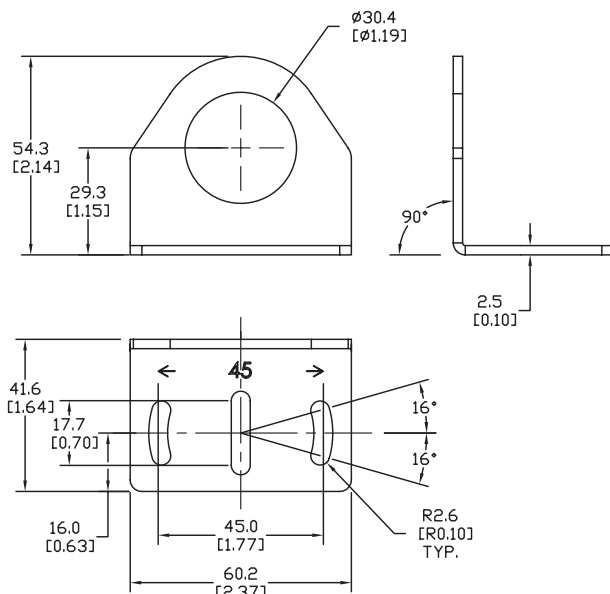
## Right-angle Mounting Bracket

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.

| Accessories for 30mm Sensors |        |  |               |
|------------------------------|--------|--|---------------|
| Part Number                  | Price  | Description  | Weight lb [g] |
| <b>ST30C</b>                 | \$2.25 | Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7]   |

### Dimensions

mm [inches]



**ST30C**

# Accessories for 30mm Sensors

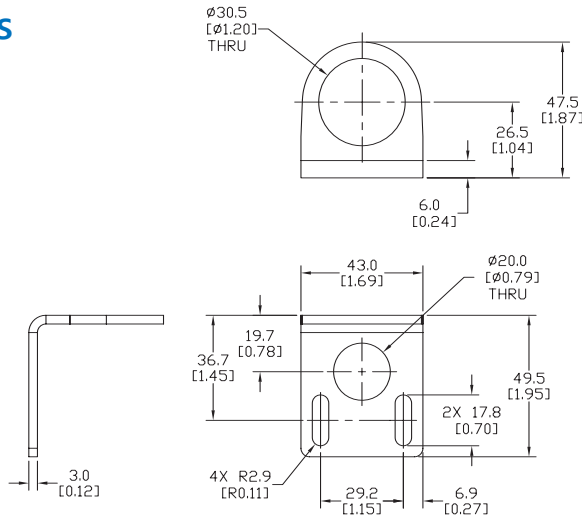
## Right-angle Mounting Bracket

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

| Accessories for FW Series Sensors |        |   |               |
|-----------------------------------|--------|---|---------------|
| Part Number                       | Price  | Description   | Weight lb [g] |
| <a href="#">ST30C6W</a>           | \$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 lb [g] |
| <a href="#">OPT2118</a>      | \$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 | <a href="#">PDF</a> | 0.18 [81.7]   |
| <a href="#">OPT2119</a>      | \$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 | <a href="#">PDF</a> | 0.18 [81.7]   |

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



[OPT2118](#), [OPT2119](#)

# Mounting Rods and Brackets

## 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   | Drawing Link        | Weight lb (g)    |
| <a href="#">OPT2109</a>                                 | \$13.00 | Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.41<br>[185.97] |
| <a href="#">OPT2110</a>                                 | \$16.00 | Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.60<br>[272.16] |
| <a href="#">OPT2111</a>                                 | \$21.00 | Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel. | <a href="#">PDF</a> | 0.98<br>[444.52] |



## Right-angle Mounting Bracket

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

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

