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 | Part Number Price Sensing Distance | | Mounting | Output State | Logic | Connection | Wiring | Dimensions | |
| <u>CTV-00-2M</u> | \$0097k: | 40mm [1.58 in] | Non-flush | N.O./N.C. | - | 1/2 inch micro AC quick-disconnect | Diagram 1 | Figure 1 | |

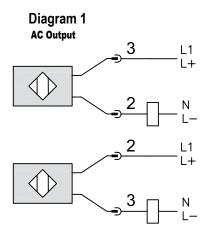
| CT Series Specifications | | | | | |
|---|---|--|--|--|--|
| Part Number | <u>CTV-00-2M</u> | | | | |
| Mounting Type | Non-flush | | | | |
| Nominal Sensing Distance | 40mm [1.58 in] | | | | |
| Sensitivity | Push to teach | | | | |
| Operating Distance | NA | | | | |
| Material Correction Factors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

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Wiring Diagram



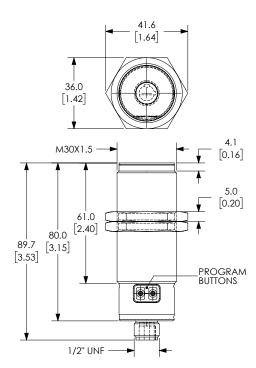
Connector 1/2" micro AC



Dimensions

mm [inches]

Figure 1



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

Capacitive Proximity Sensors - Accessories



Mounting Adapter

| Capacitive Proximity Sensors Accessory Chart | | | | | | |
|--|---------|---|--|------------|--|--|
| Part Number | Price | Description | Material | Dimensions | | |
| Mounting Adapter | | | | | | |
| <u>CR1-ADPTR</u> | \$4b?: | Adapter for CR1 series capacitive sensors | Housing: Polybutylene Terephthalate (PBT) Included Screws: M3 x 6 Steel (0.5 N•m [0.37 lb•ft]) | Figure 1 | | |
| Mounting Wells | | | | | | |
| MWT-01 | \$06e#: | 30mm [1.18 in] sensor mounting well | PTFE - Polytetrafluoroethylene (Teflon®) | Figure 2 | | |
| <u>MWK-01</u> | \$06e_: | 18mm [0.71 in] sensor mounting well | Temp: -25 to 246°C [-13 to 474.8°F] Max. pressure: 100 PSI [6.9 bar] | Figure 3 | | |

Dimensions

mm [inches]

Figure 1

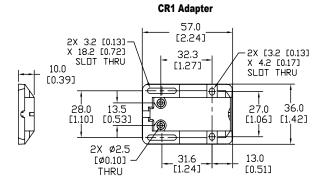
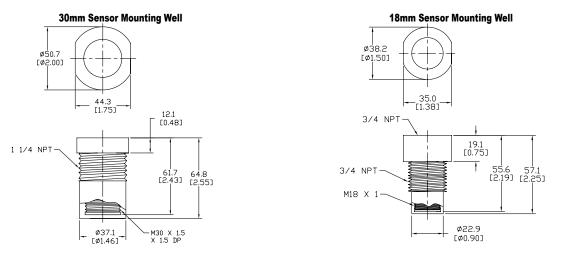


Figure 2

Figure 3



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

Accessories for 30mm Sensors

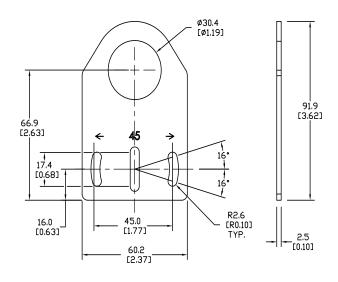
Axial Mounting Bracket

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 lb [g] | | | |
| <u>ST30A</u> | \$983: | Micro Detectors mounting bracket, axial, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7] | | | |

Dimensions

mm [inches]





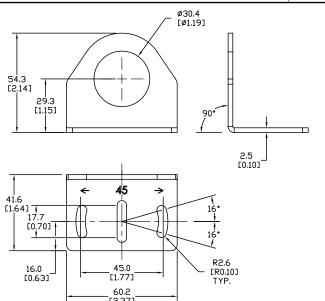
Right-angle Mounting Bracket

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 Ib [g] | | | |
| ST30C | \$984: | Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 30mm sensors. | 0.18 [81.7] | | | |

Dimensions

mm [inches]



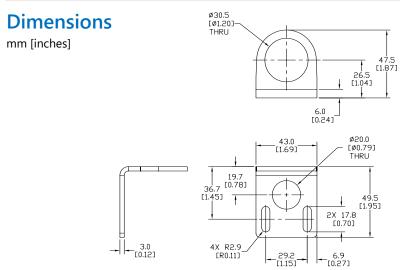


Accessories for 30mm Sensors

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] | | | |
| <u>ST30C6W</u> | AutomationDirect mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors. | | 0.15 (68.0) | | | |





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> | \$-1nl?: | 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> | \$;-1nl,: | 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

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 | art Number Price Description | | | | | | | | |
| <u>OPT2109</u> | \$1nn9: | Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel. | <u>PDF</u> | 0.41 [185.97] | | | | | |
| <u>OPT2110</u> | \$1nna: | Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel. | PDF | 0.60 [272.16] | | | | | |
| <u>OPT2111</u> | \$1nnb: | Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel. | <u>PDF</u> | 0.98 [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 Ib [g] | | | | | |
| <u>OPT2108</u> | \$-1nly: | Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111. | <u>PDF</u> | 0.07 [31.8] | | | | |



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