

CT Series Capacitive Proximity Sensors

M30 (30mm) Metal



- Potentiometer sensitivity adjustment
- N.O. or N.C. units
- IP65 rated
- LED status indicators
- 2m (6.5 ft) axial cable
- Mounting accessories available



CT Series Capacitive Proximity Selection Chart

Part Number	Price	Sensing Distance	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Metal Housing								
CT1-AN-1A	\$87.00	15mm [0.59 in]	Flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CT1-AP-1A	\$87.00	15mm [0.59 in]	Flush	N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CT1-AN-2A	\$87.00	20mm [0.79 in]	Non-flush	N.O.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CT1-AP-2A	\$87.00	20mm [0.79 in]	Non-flush	N.O.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1
CT1-CN-2A	\$87.00	20mm [0.79 in]	Non-flush	N.C.	NPN	2m [6.5 ft] axial cable	Diagram 1	Figure 1
CT1-CP-2A	\$87.00	20mm [0.79 in]	Non-flush	N.C.	PNP	2m [6.5 ft] axial cable	Diagram 2	Figure 1

CT Series Capacitive Proximity Specifications

Part Number	CT1-xx-1X	CT1-xx-2X
Mounting Type	Flush	Non-flush
Nominal Sensing Distance	15mm [0.59 in]	20mm [0.79 in]
Sensitivity	20-turn potentiometer	
Operating Distance	NA	
Material Correction Factors		
Output Type	NPN/PNP; N.O./N.C.	
Operating Voltage	10 to 30VDC	
No-load Supply Current	8mA	
Operating (Load) Current	m200mA	
Off-state (Leakage) Current	m10µA	
Voltage Drop	1.8 volts maximum	
Switching Frequency	100Hz	
Differential Travel (% of Nominal Distance)	2 to 20%	
Repeat Accuracy	10%	
Ripple	m10%	
Time Delay Before Availability (tv)	100ms	
Reverse Polarity Protection	Yes	
Short-circuit Protection	Yes (switch auto-resets after overload is removed)	
Operating Temperature	-25 to +70°C [-13 to 158°F]	
Protection Degree (DIN 40050)	IEC IP65	
Indication/Switch Status	Green (supply, Red [NO output energized])	
Housing Material	Nickel-plated brass	
Sensing Face Material	Polybutylene Terephthalate [PBT]	
Shock/Vibration	DIN EN 60947-5-2	
Tightening Torque	50N•m [36.9 lb•ft]	
Weight	280g [19.88oz]	
Connectors	2m [6.5 ft] axial cable, 2 lock nuts included	
Agency Approvals	CE	

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 Diagrams

Diagram 1

NPN Cable

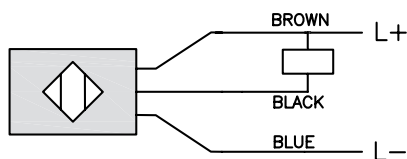
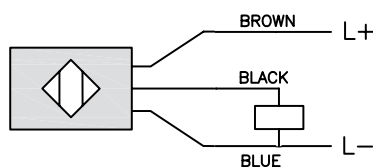


Diagram 2

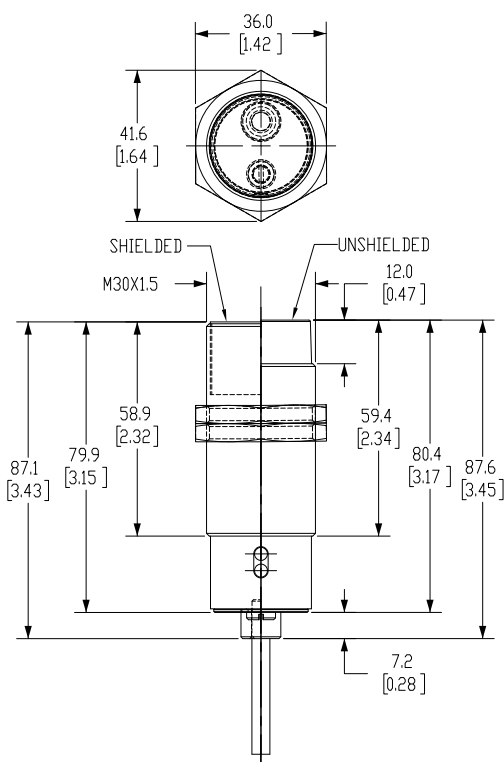
PNP Cable



Dimensions

mm [inches]

Figure 1



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

Capacitive Proximity Sensors - Accessories



Mounting Well

Mounting Adapter

Capacitive Proximity Sensors Accessory Chart				
Part Number	Price	Description	Material	Dimensions
Mounting Adapter				
CR1-ADPTR	\$4.50	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	\$52.00	30mm [1.18 in] sensor mounting well	PTFE - Polytetrafluoroethylene (Teflon®) Temp: -25 to 246°C [-13 to 474.8°F] Max. pressure: 100 PSI [6.9 bar]	Figure 2
MWK-01	\$42.50	18mm [0.71 in] sensor mounting well		Figure 3

Dimensions

mm [inches]

Figure 1

CR1 Adapter

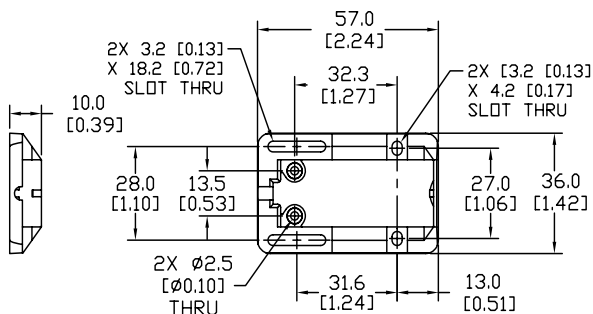


Figure 2

30mm Sensor Mounting Well

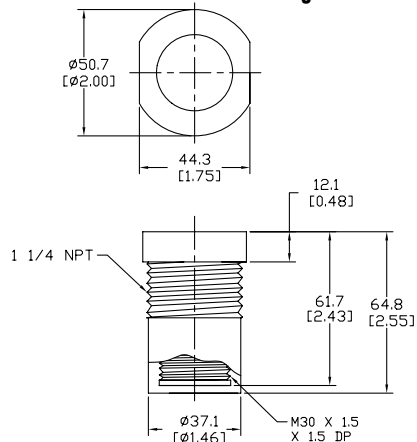
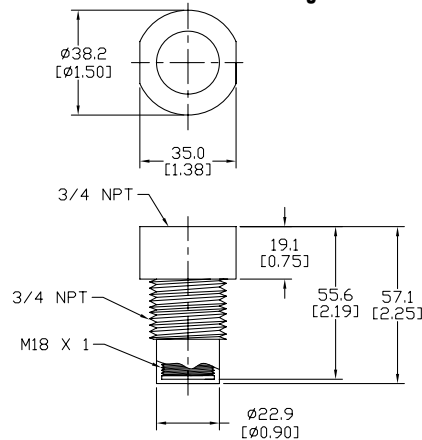


Figure 3

18mm Sensor Mounting Well

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

Accessories for 30mm Sensors

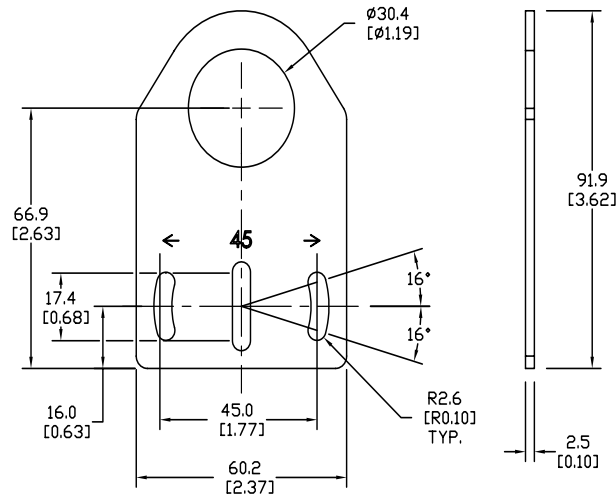
Axial Mounting Bracket

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-adaptor sensors. Hexagonal nuts not included.

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

Dimensions

mm [inches]



ST30A

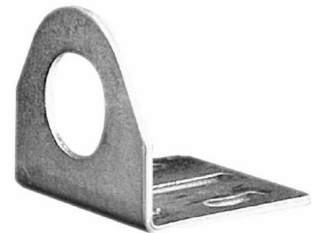
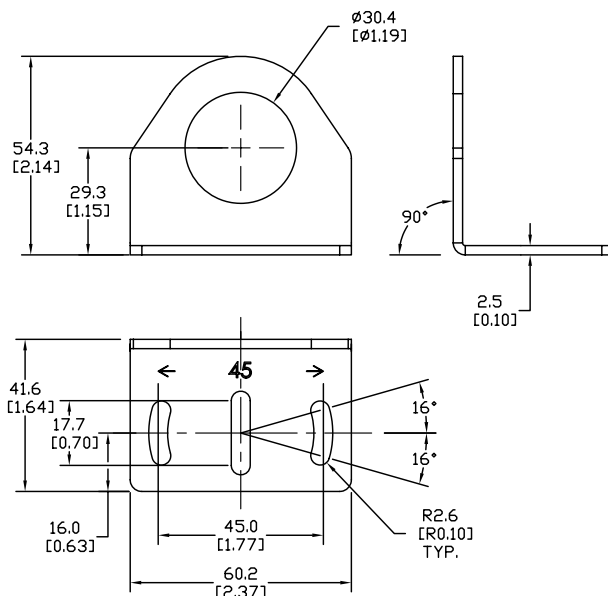
Right-angle Mounting Bracket

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]
ST30C	\$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

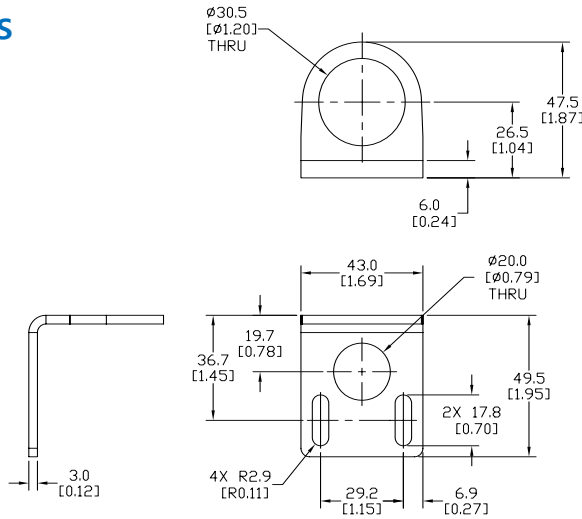
Right-angle Mounting Bracket

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

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight lb [g]
ST30C6W	\$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]
OPT2118	\$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	PDF	0.18 [81.7]
OPT2119	\$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	PDF	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)
OPT2109	\$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]
OPT2110	\$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]
OPT2111	\$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 [OPT2109](#), [OPT2110](#) & [OPT2111](#).

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

