

# CT SERIES CAPACITIVE PROXIMITY SENSORS



## M30 (30mm) metal – DC

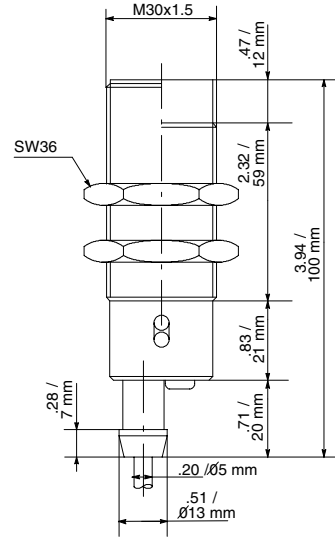
- 6 models available
- Sensitivity adjustment with 20-turns trimmer
- Metal housing with axial cable
- Detects metallic and non-metallic objects
- Complete overload protection
- IP65 rated
- Double LED status indicators

CT Series 30DC Capacitive Prox Sensor Selection Chart						
Part Number	Price	Sensing Range	Housing	Output State	Logic	Connection
CT1-AN-1A	<-->	2 to 15mm (0.079-0.59in)	Shielded	N.O.	NPN	2m (6.5') axial cable
CT1-AP-1A	<-->				PNP	2m (6.5') axial cable
CT1-AN-2A	<-->	2 to 20mm (0.079-0.70in)	Unshielded	N.O.	NPN	2m (6.5') axial cable
CT1-AP-2A	<-->				PNP	2m (6.5') axial cable
CT1-CN-2A	<-->	2 to 20mm (0.079-0.70in)	Unshielded	N.C.	NPN	2m (6.5') axial cable
CT1-CP-2A	<-->				PNP	2m (6.5') axial cable

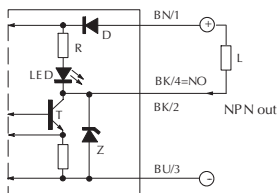
Specifications		
Type	Shielded	Unshielded
Operating Distance	2-15mm (0.079-0.59in)	2-20mm (0.079-0.70in)
Differential Travel	2 to 20%	
Repeat Accuracy	10%	
Operating Voltage	10-30VDC	
Ripple	≤10%	
No-load Supply Current	8mA	
Load Current	≤200mA	
Leakage Current	≤10µA	
Voltage Drop	1.8 volts maximum	
Output Type	NPN or PNP / N.O. or N.C. / 3 wire	
Switching Frequency	100Hz	
(tv) Time Delay Before Availability	100ms	
Input Voltage Transient Protection	Yes, only if transient peak does not exceed 30VDC	
Input Power Polarity Reversal Protection	Yes	
Output Power Short-Circuit Protection	Yes (switch autoresets after overload is removed)	
Temperature Range	-25° to +70° C (-13° to 158° F)	
Temperature Drift	20% Sr	
Protection Degree (DIN 40050)	IEC IP65	
LED Indicators	Green (supply), Red (N.O. output energized)	
Housing Material	Nickel-plated brass	
Sensing Face Material	PBT	
Tightening Torque	100Nm (73.7lb./ft.)	
Weight (cable/connector)	280g (19.88oz)	

## Dimensions

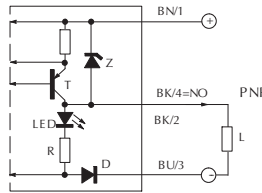


## Wiring diagrams

NPN output



PNP output



## Cables and Accessories

Cables and accessories can be found starting on page 17-48.

# PROXIMITY SENSORS ACCESSORIES: CABLES

## Cables with quick-disconnect plugs



- Industry standard M8 and M12 screw-lock connectors
- Axial cable and right-angle connector models available
- Available in 2m, 5m, and 7m cable lengths
- PVC (polyvinyl chloride) jacket available for typical industrial applications
- PUR (polyurethane) jacket available for oily and direct sunlight applications
- IP67 rated

## Dimensions

Figure 1

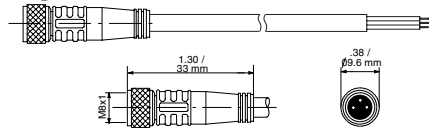


Figure 2

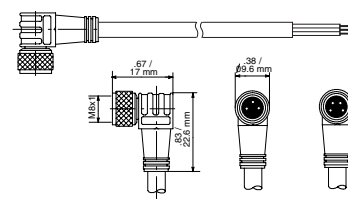


Figure 3

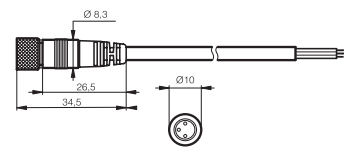


Figure 4

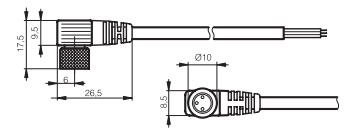


Figure 5

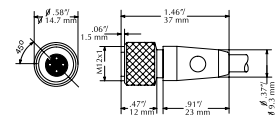
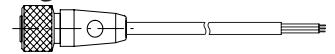


Figure 6

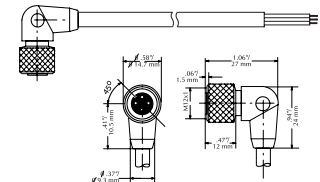


Figure 7

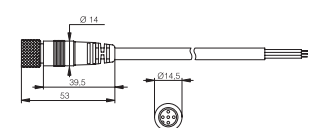
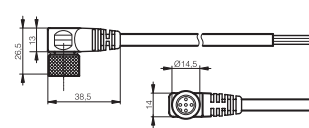


Figure 8



M8 Quick-Disconnect Cables						
Part Number	Price	Length	Poles	Connector	Jacket	Dimensions
<b>M8 Quick-Disconnects</b>						
CD08-0A-020-A1	<--->	2m (6.5ft.)	3	Axial	PVC	Figure 1
CD08-0A-020-C1	<--->	2m (6.5ft.)	3	Right-angle	PVC	Figure 2
CD08-0A-050-A1	<--->	5m (16.4ft.)	3	Axial	PVC	Figure 3
CD08-0C-050-A1	<--->	5m (16.4ft.)	3	Axial	PUR	Figure 3
CD08-0A-050-C1	<--->	5m (16.4ft.)	3	Right-angle	PVC	Figure 4
CD08-0C-050-C1	<--->	5m (16.4ft.)	3	Right-angle	PUR	Figure 4
CD08-0A-070-A1	<--->	7m (23ft.)	3	Axial	PVC	Figure 1
CD08-0A-070-C1	<--->	7m (23ft.)	3	Right-angle	PVC	Figure 2

M12 Quick-Disconnect Cables						
Part Number	Price	Length	Poles	Connector	Jacket	Dimensions
<b>M12 Quick-Disconnects</b>						
CD12L-0B-020-A0	<--->	2m (6.5ft.)	4	Axial	PVC	Figure 5
CD12L-0B-020-C0	<--->	2m (6.5ft.)	4	Right-angle	PVC	Figure 6
CD12M-0B-050-A1*	<--->	5m (16.4ft.)	3	Axial	PVC	Figure 7
CD12M-0D-050-A1*	<--->	5m (16.4ft.)	3	Axial	PUR	Figure 7
CD12M-0B-050-C1*	<--->	5m (16.4ft.)	3	Right-angle	PVC	Figure 8
CD12M-0D-050-C1*	<--->	5m (16.4ft.)	3	Right-angle	PUR	Figure 8
CD12M-0B-070-A1	<--->	7m (23ft.)	4	Axial	PVC	Figure 5
CD12M-0B-070-C1	<--->	7m (23ft.)	4	Right-angle	PVC	Figure 5

\* Note: Do not use with SU and TU series.

Cable Specifications	M8		M12	
Length	2m (6.5ft.)/ 7m (23ft.)	5m (16.4ft.)	2m (6.5ft.)/ 7m (23ft.)	5m (16.4ft.)
Nominal Voltage	50VAC/75VDC	60VAC/75VDC	300VAC	60VAC/75VDC
Nominal Current	4A	1.5A	4A	1.5A
Protection Degree	IEC IP67		IEC IP67	
Contact Body Material	ABS	PUR	ABS	PUR
Housing Material	PUR		PUR	
Contacts Material	CuSn	CuZn	CuSn	CuZn
Conductors Section	0.34mm <sup>2</sup>		0.34mm <sup>2</sup>	
Ø Outer Cable	5mm		5mm	
Temperature Range	-25° to +70°C (-13° to 158°F)		-25° to +70°C (-13° to 158°F)	

# PROXIMITY SENSORS ACCESSORIES: EXTENSION CABLES



## Extension cables with quick-disconnect plugs on each end

Available extension cables include:

- Industry standard M8 and M12 screw-lock connectors
- Axial and right-angle connector models
- 1m and 3m cable lengths
- PVC (polyvinyl chloride) jacket for typical industrial applications
- IP67 rated

## Dimensions

Figure 1

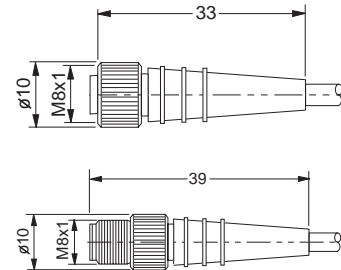


Figure 2

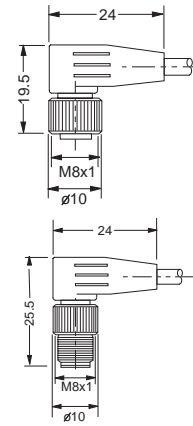


Figure 3

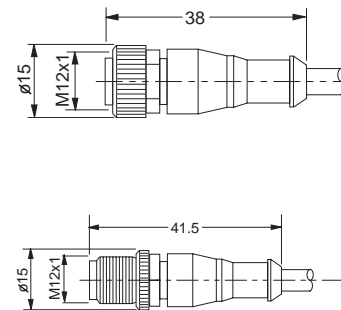
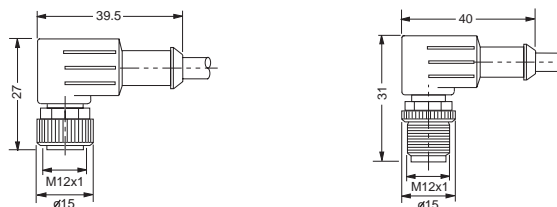


Figure 4



M8 Extension Cables with Quick-Disconnect on each end						
Part Number	Price	Length	Poles	Connectors	Jacket	Dimensions
<b>M8 Quick-Disconnect Extension Cables</b>						
CDP08-0A-010-AA	<-->	1m (3.28ft.)	3	2 Axial	PVC	Figure 1
CDP08-0A-010-BB	<-->	1m (3.28ft.)	3	2 Right-angle	PVC	Figure 2
CDP08-0A-030-AA	<-->	3m (9.84ft.)	3	2 Axial	PVC	Figure 1
CDP08-0A-030-BB	<-->	3m (9.84ft.)	3	2 Right-angle	PVC	Figure 2

M12 Extension Cables with Quick-Disconnect on each end						
Part Number	Price	Length	Poles	Connectors	Jacket	Dimensions
<b>M12 Quick-disconnect Extension Cables</b>						
CDP12-0B-010-AA	<-->	1m (3.28ft.)	4	2 Axial	PVC	Figure 3
CDP12-0B-010-BB	<-->	1m (3.28ft.)	4	2 Right-angle	PVC	Figure 4
CDP12-0B-030-AA	<-->	3m (9.84ft.)	4	2 Axial	PVC	Figure 3
CDP12-0B-030-BB	<-->	3m (9.84ft.)	4	2 Right-angle	PVC	Figure 4

Cable Specifications	M8 / M12
Length	1m (3.28ft.)/ 3m (9.84ft.)
Nominal Voltage	50VAC/75VDC
Nominal Current	4A
Protection Degree	IEC IP67
Contact Body Material	ABS
Housing Material	PUR
Contacts Material	CuSn
Conductors Section	0.34mm <sup>2</sup>
Ø Outer Cable	5mm
Temperature Range	-25° to +70°C (-13° to 158°F)

