prosense® CE1 Series Capacitive Proximity Sensors

M8 (8mm) Stainless Steel – DC

- Sensitivity adjustment via potentiometer (adjustment tool included with each sensor)
- IP65 rated
- LED status indicators
- M8 quick-disconnect (purchase cable separately), or cabled models

NEED CABLES?

ProSense CE1 Series Capacitive Proximity Sensors Selection Chart								
Part Number	*Price*	*Sensing Distance*	*Mounting*	*Output State*	*Logic*	*Connection*	*Wiring*	*Drawing Link*
CE1-AP-1A		1.5 mm [0.06 in]	Flush	N.O.	PNP	3-wire cable, 2m [6.56 ft]	Diagram 1	PDF
CE1-CP-1A		1.5 mm [0.06 in]	Flush	N.C.	PNP	3-wire cable, 2m [6.56 ft]	Diagram 1	PDF
CE1-AN-1A		1.5 mm [0.06 in]	Flush	N.O.	NPN	3-wire cable, 2m [6.56 ft]	Diagram 2	PDF
CE1-AP-1F		1.5 mm [0.06 in]	Flush	N.O.	PNP	M8x1, 3-pin	Diagram 1	PDF
CE1-CP-1F		1.5 mm [0.06 in]	Flush	N.C.	PNP	M8x1, 3-pin	Diagram 1	PDF
CE1-AP-2A		3mm [0.12 in]	Non-flush	N.O.	PNP	3-wire cable, 2m [6.56 ft]	Diagram 1	PDF
CE1-CP-2A		3mm [0.12 in]	Non-flush	N.C.	PNP	3-wire cable, 2m [6.56 ft]	Diagram 1	PDF
CE1-AN-2A		3mm [0.12 in]	Non-flush	N.O.	NPN	3-wire cable, 2m [6.56 ft]	Diagram 2	PDF
CE1-AP-2F		3mm [0.12 in]	Non-flush	N.O.	PNP	M8x1, 3-pin	Diagram 1	PDF
CE1-CP-2F		3mm [0.12 in]	Non-flush	N.C.	PNP	M8x1, 3-pin	Diagram 1	PDF

Wiring diagrams

Diagram 1

PNP Output

1 BROWN — L+
4 BLACK
3 BLUE — L−

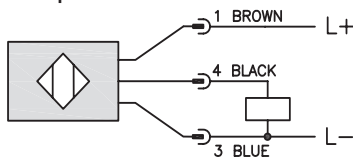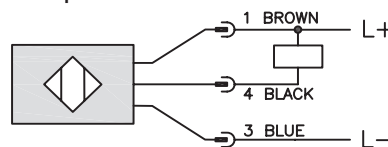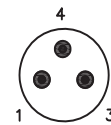**Diagram 2**

NPN Output

1 BROWN — L+
4 BLACK
3 BLUE — L−

M8 connector

4
1   3

Warning: These products are not safety sensors and are not suitable for use in personal safety applications.

prosense® CE1 Series Capacitive Specifications

ProSense CE1 Series Capacitive Specifications	
Nominal Sensing Distance	See Selection Table
Operating Distance	See Installation Guide
Material Correction Factors	N/A
Output Type	See Selection Table
Operating Voltage	11-30 VDC
No-load Supply Current	10mA
Operating (Load) Current	50mA
Voltage Drop	2V static max
Switching Frequency	100Hz
Hysteresis (% of Sr)	15%
Repeat Accuracy	2%
Ripple	10% max
Time Delay Before Availability (tv)	100ms
Reverse Polarity Protection	Yes
Short-circuit Protection	Yes
Operating Temperature	-10 to +70°C [+14 to +158°F]
Protection Degree (DIN 40050)	IP65
Indication/Switch Status	LED function indicator
Housing Material	Stainless steel
Sensing Face Material	PTFE (Polytetrafluoroethylene)
Shock/Vibration	IEC 60947-5-2
Tightening Torque	6 N•m [4.42 lb•ft]
Weight	Cabled Models: 58.98 g [2.08 oz] M8 Models: 31.75 g [1.11 oz]
Connections	M8x1, 3-pin, 0.30 m [0.98 ft] or cable, 2m [6.56 ft], PUR, 26 AWG (0.14 mm²)
Agency Approvals	CE, cULus

Warning: These products are not safe sensors and are not suitable for use in personal safety applications.

Accessories for 8mm Sensors

Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3 mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
ST08A		Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	PDF	0.04

ST08A

Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3mm screws) and allows the rotation of an optical axis for right-beam-angle-adapter sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
ST08C		Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	PDF	0.04

ST08C

Accessories for 8mm Sensors

Right-angle Mounting Bracket

Mounting bracket, right-angle, plastic. For use with 8mm sensors.

Accessories for 8mm Sensors				
Part Number	**Price**	**Description**	**Drawing Link**	**Weight [lb]**
OPT2101		Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	PDF	0.02

OPT2101

Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment. For use with 8mm sensors. Available in all stainless steel or with an aluminum head and stainless steel mounting plate.

Accessories for 8mm Sensors						
Part Number	**Price**	**Description**	**Mounting Head**	**Mounting Plate**	**Drawing Link**	**Weight [lb]**
OPT2112		Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 8mm sensors.	Aluminum	304 Stainless Steel	PDF	0.14
OPT2113		Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 8mm sensors.	304 Stainless Steel	304 Stainless Steel	PDF	0.26

Note: 304 Stainless steel mounting rods sold separately: OPT2109 (200mm length), OPT2110 (300mm length), and OPT2111 (500mm length).

OPT2112 & OPT2113