



ClearSight 9000



ClearSight RightSight



ClearSight 7000

## Specifications

	9000	RightSight	7000
<b>Environmental</b>			
Certifications	cULus Listed and CE Marked for all applicable directives		
Operating Environment	NEMA 3, 4X, 6P, 12, 13, IP67 (IEC529); 1200 psi (8270 kpa) washdown for RightSight and Series 9000 models		
Operating Temperature [C (F)]	-34...+70° (-29...+158°)	-25...+55° (-13...+131°)	-40...+65° (+13...+150°)
Vibration	10...55 Hz, 1 mm amplitude, meets or exceeds IEC 60947-5-2		
Shock	30 g with 1 ms pulse duration, meets or exceeds IEC 60947-5-2		
Relative Humidity	35...85%		
Ambient Light Immunity	Incandescent light: 5000 lux		
<b>Optical</b>			
Sensing Modes	Clear object		
Sensing Range	1.2 m max	1 m max	1.5 m max
Field of View	See Product Selection table on page 1-149		
Light Source	Visible red LED (660 nm)		
<b>Electrical</b>			
Voltage	10...40V DC; 70...264V AC/DC	10.8...30V DC	11.8...28V DC
Current Consumption	30 mA max	35 mA max	46 mA max
Sensor Protection	Short circuit, false pulse, reverse polarity, overload		
<b>Outputs</b>			
Response Time	See Product Selection table on page 1-149		
Output Type	PNP and NPN, SDPT, SS relay, diagnostic output, see Product Selection table on page 1-149		
Output Mode	Light or dark operate selectable, light or dark operate by cat. no. (see Product Selection table on page 1-149)		
Output Current	Refer to Product Selection table on page 1-149		
<b>Mechanical</b>			
Housing Material	Valox®	Mindel®	Valox
Lens Material	Acrylic		
Connection Types	See Product Selection table on page 1-149		
Supplied Accessories	92-90 Reflector		
Optional Accessories	See mounting brackets and cordsets on page 1-150		

## Features

Three product families for application flexibility

- Configurable ClearSight 9000 for harsh duty glass and PET bottle detection
- ClearSight RightSight and 7000 for general purpose plastic film and stretch-wrap detection

## Wiring Diagrams

For Wiring Diagrams, please refer to base product specifications:

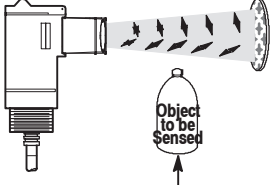
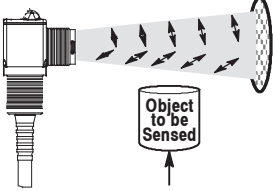
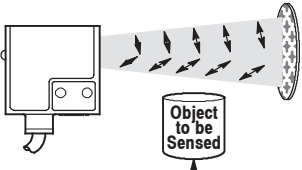
ClearSight RightSight see page 1-32

ClearSight 9000 see page 1-66

ClearSight 7000 see page 1-103



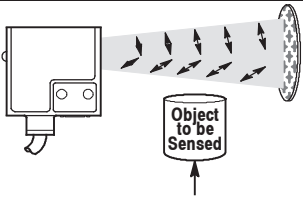
Product Selection

Sensing Mode	Operating Voltage Supply Current	Sensing Distance	Output Energized	Output Type Capacity Response Time	Connection Type	Cat. No.				
<b>On/Off Sensors and Timing</b>										
 <p>9000</p> <p>Field of View: 1.5° Emitter LED: Visible red 660 nm</p>	10...40V DC 30 mA	0.025...1.2 m (0.08...4 ft)	Light/Dark Selectable	NPN/PNP 250 mA 2 ms	2 m 300V cable	42G⊗C-9200				
	70...264V AC/DC 50/60 Hz 15 mA				4-pin DC micro	<b>42G⊗C-9200-QD</b>				
					4-pin mini	42G⊗C-9200-QD1				
	45...264V DC/ 40...264V AC 50/60 Hz 15 mA				2 m 300V cable	42G⊗C-9202				
					5-pin mini	<b>42G⊗C-9202-QD</b>				
					2 m 300V cable	42G⊗C-9203				
4-pin mini	42G⊗C-9203-QD									
	4-pin AC micro	<b>42G⊗C-9203-QD1</b>								
 <p>RightSight</p> <p>Field of View: 1.5° Emitter LED: Visible red 660 nm</p>	21.6...264V AC/DC 15 mA	25 mm...1 m (1 in...3.28 ft)	Dark Operate	N-MOSFET/100 mA 8.3 ms	2 m 300V cable	42EF-C2SCA-A2				
	10.8...30V DC 35 mA				4-pin AC micro	42EF-C2SCA-G4				
					2 m 300V cable	42EF-C2KBA-A2				
	4-pin DC micro					<b>42EF-C2KBA-F4</b>				
					<b>Linear Polarized Sensors for Detection of Clear Films</b>					
	 <p>7000</p> <p>Field of View: 3° Emitter LED: Visible red 660 nm</p>				11...28V DC 46 mA	50 mm...1.5 m (2 in...4.9 ft)	Comple- mentary L.O./D.O.	NPN 100 mA 1 ms	3 m cable	42SMU-7250
4-pin DC micro		42SMU-7250-QD								
PNP 100 mA 1 ms		3 m cable	42SMU-7251							
		4-pin DC micro	<b>42SMU-7251-QD</b>							

⊗ R for standard (i.e. 42GRC-9200)  
T for timing (i.e. 42GTC-9200)

Refer to page 1-150 for cordsets and accessories.

Product Selection (continued)

Sensing Mode	Operating Voltage Supply Current	Sensing Distance	Output Energized	Output Type Capacity Response Time	Connection Type	Cat. No.
<b>Circular Polarized Sensors for Detection of Clear Objects (Bottles, Clear Packages)</b>						
 <p>7000</p> <p>Field of View: 3° Emitter LED: Visible red 660 nm</p>	11...28V DC 46 mA	50 mm...1.5 m (2 in...4.9 ft)	Complementary L.O./D.O.	NPN 100 mA 1 ms	3 m cable	42SMU-7260
					4-pin DC micro	42SMU-7260-QD
				PNP 100 mA 1 ms	3 m cable	42SMU-7261
					4-pin DC micro	42SMU-7261-QD

Cordsets and Accessories

Description	Cat. No.	Description	Cat. No.
2 m (6.5 ft), 4-pin DC Micro QD Cordset	889D-F4AC-2	Mounting Bracket Swivel/Tilt for ClearSight 7000	60-2619
2 m (6.5 ft) 5-pin DC Micro QD Cordset	889D-F5AC-2	Mounting Bracket Swivel/Tilt for ClearSight RightSight	60-2649
2 m (6.5 ft), 4-pin AC Micro QD Cordset, Straight	889R-F4AEA-2	Mounting Bracket Swivel/Tilt for ClearSight 9000 and 10,000	60-2681
1.8 m (6 ft) 4-pin, Mini QD Cordset	889N-F4AF-6F	Reflector	92-90 (included)
1.8 m (6 ft) 5-pin Mini QD Cordset	889N-F5AF-6F		