E-931-S33PRGQ

33ft Polarized Reflective Photoelectric Beam Sensor

Manual

Intertek
Conforms to UL 325

- Polarized sensor is immune to shiny objects: Triggers only when correctly reflected light is detected
- Weatherproof (IP55)
- Anti-condensation housing
- 12-30V DC/AC 60Hz, 100mA
- Up to 33ft (10m) sensing range
- Round reflector, Ø 3¼" (82mm)
- Form C relay: 0.5A@30VAC/VDC
- Beam status LED
- N.C. Tamper switch: 500mA@30VAC/VDC

Caution:

- This sensor is not designed to prevent bodily injury or loss of life.
- This sensor is not designed for use in environments where explosive gasses may be present.
- Use of this sensor in certain security applications may be regulated by local laws or codes. SECO-LARM is not responsible for compliance with such laws or codes.

Specifications:

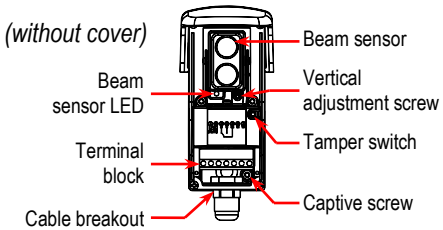
Type		Polarized reflective photoelectric beam sensor
Sensing range		33ft (10m)
Operating voltage		12-30V DC/AC 60Hz, 100mA
Current draw	Standby	55mA@12VDC
	Active	40mA@12VDC
Response time		10ms (max.)
Light source		IR LED/Wavelength 740nm
LED	Solid green	Good beam signal, properly aligned
	Alternating flash	Poor beam signal
	Solid red	No beam signal, triggered
Trigger output		SPDT Relay output (NO/NC/COM)
Switching capacity		0.5A@30VAC/VDC
Tamper switch		N.C., 500mA@30VAC/VDC
IP Rating		IP55
Operating temperature		-4°~131° F (-20°~55° C)

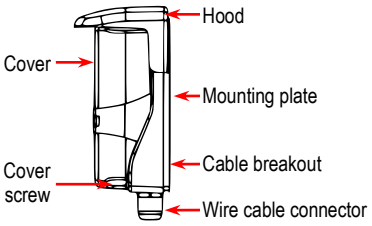
Parts List:

1x Sensor
1x Reflector
1x Mounting bracket
1x Sensor hood
1x Reflector hood
4x Cover screws
2x Mounting screws
1x Reflector mounting screw
1x Rubber ring
1x Cable connector
1x Manual
1x Removable terminal block
1x 10kΩ Resistor

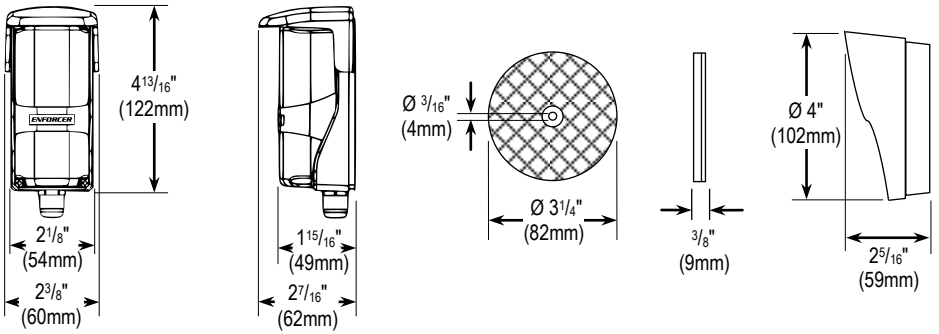
Note: Depending on the monitoring system used by the gate motor, it may be necessary to use either the N.C. output or connect the included 10kΩ resistor to the N.O. or N.C. output. Please refer to the gate operator manual or the gate operator manufacturer for the preferred monitoring method.

Overview:



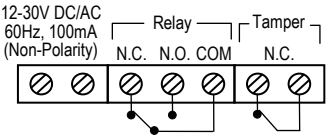


Dimensions:



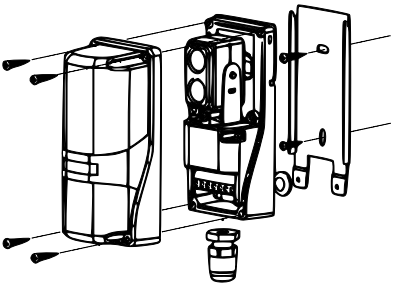
Wiring Diagram:

- Polarity does not matter for the power input.
- Connect the N.C. tamper terminal to the tamper circuit of an alarm control panel.



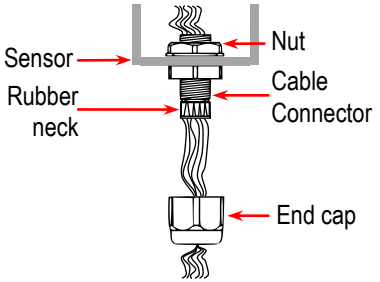
Mounting:

1. Unscrew the four cover screws and remove the cover.
2. Loosen the captive screw and remove the sensor from the mounting plate.
3. Using the included mounting screws, mount the mounting plate to the wall.
4. Use the cable breakout and cable connector at the bottom or rear of the sensor to run the wires.
5. Hang the sensor back on the plate and use the captive screw to secure it in place.
6. Re-attach the cover, replace the four screws, and attach the hood to the top of the sensor.



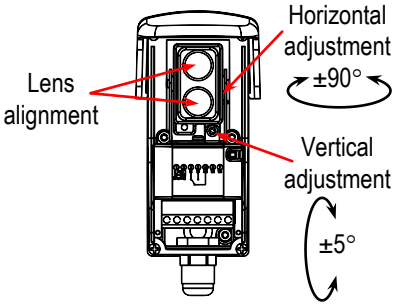
Wiring for the Bottom Cable Breakout

1. Puncture the cable breakout located at the bottom of the sensor using a screwdriver or other object.
2. Insert the short end side of the cable connector into the cable breakout hole and use the nut to secure it, tightening with a wrench as needed.
3. Run the wires through the end cap and cable connector.
4. Then screw the end cap into the external side of the cable connector to prevent water from entering the unit.



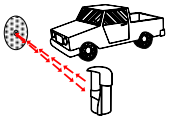
Alignment:

1. Mount the sensor and reflector so that they face each other.
2. Connect power to the sensor. The LED will light as indicated in the chart below.
3. Unscrew the four cover screws and remove the cover.
4. To find the correct alignment, slowly turn the lens assembly left and right to adjust the horizontal angle.
5. Loosen the vertical adjustment screw to adjust the vertical angle.
6. Place the hood on the sensor by sliding the hood's ridges into the slots on the sides of the sensor.
7. Re-attach the cover, replace the four screws, and attach the hood to the top of the sensor.

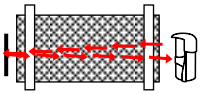


Solid green	Good beam signal, properly aligned
Alternating flash	Poor beam signal
Solid red	No beam signal, triggered

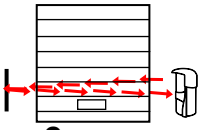
Sample Applications:



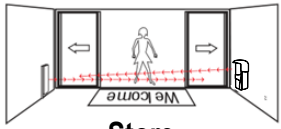
Parking Distance Monitor



Gate



Garage Door



Store Entrance

Other Sensors Available:

E-931-S50RRGQ 50ft Reflective Photobeam

Reflective Photobeam

Dual and Quad Beam

Curtain and Barrier

Troubleshooting:

Sensor does not detect the object	• Change the angle of the sensor or readjust the sensitivity setting
The beam sensor LED will not turn green	• Clean the sensor and reflector with a damp (not wet) cloth • Adjust the reflector and/or sensor for proper alignment
Beam sensor LED lights when object is detected, but there is no output	• Check wiring between the sensor and local alarm device

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