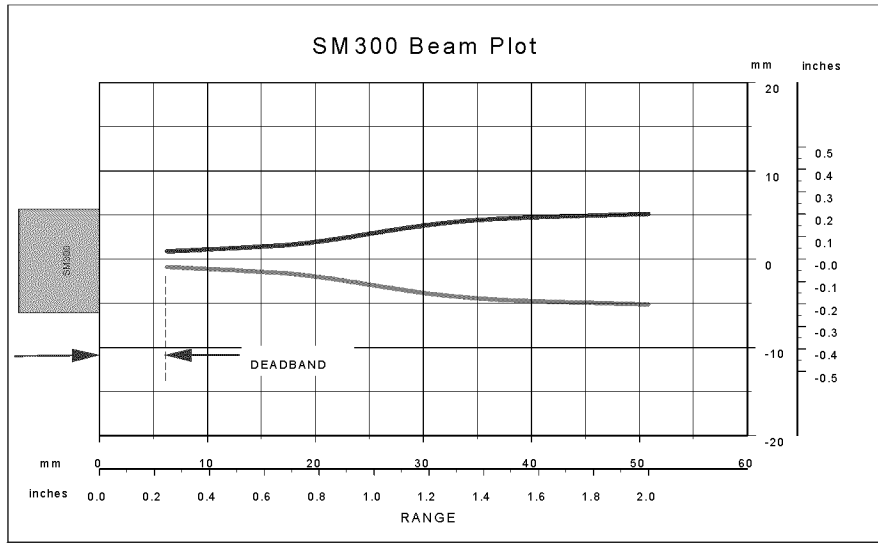


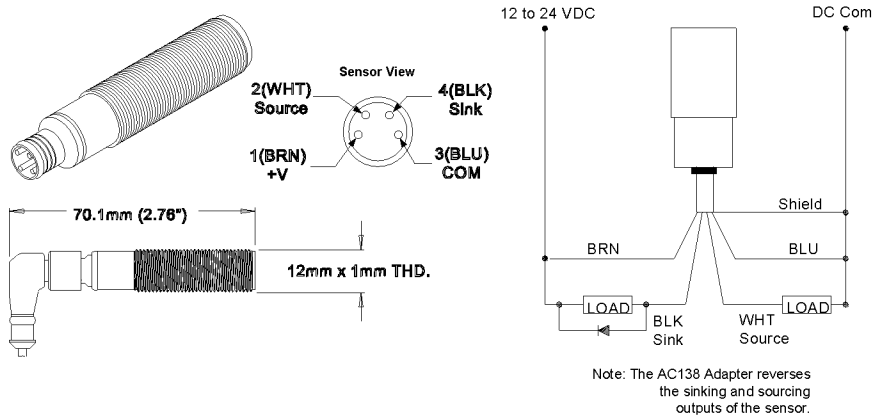
Beam Plot



Mounting / Alignment

Mount the sensor such that the surface of the object to be detected is approximately centered within the sensor's sensing field. Mount the sensor firmly to avoid vibration. The sensor face should be parallel to the liquid or material surface and free of air currents. For best results in sensing small objects, for sensors with a Far Limit more than 38.1 mm (1.50 in.), mount the sensor about 38.1 mm (1.50 in.) away from the object.

Wiring Connections, Connector Model



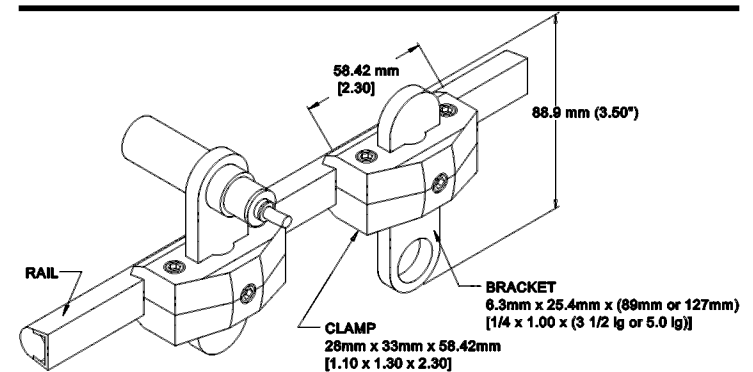
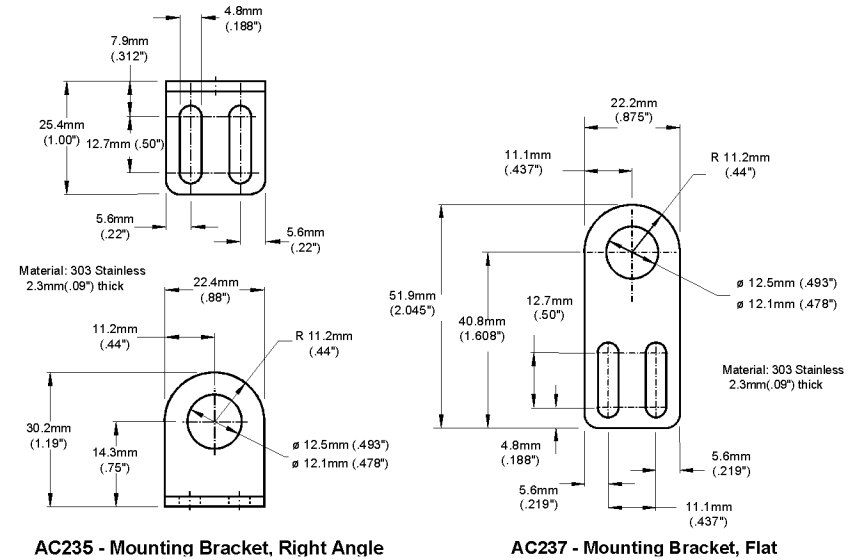
Indicator LED's

Amber LED: ON when object is sensed
Green LED: ON when object is not sensed

Accessories

Model AC134	Sensor Cable Right Angle - 5 meters (16 ft.)
Model AC135	Sensor Cable Straight - 5 meters (16 ft.)
Model AC137	Pico-to-Micro Pigtail Cable Adapter - 0.2 meters (7.9 in.)
Model AC138	Pico-to-Micro Pigtail Cable Adapter output pins reversed
Model AC235	Mounting Bracket, Right Angle
Model AC236	Conveyor Rail Clamp/Bracket Set
Model AC237	Mounting Bracket, Flat
Model AC242	18 mm to 12 mm Hex Mounting Adapter
Model AC243	30 mm to 12 mm Hex Mounting Adapter

Mounting Bracket Dimensions



AC236 (1 CLAMP & 1 BRACKET)

General Specifications

Power Supply:

Supply: +12 to 24 VDC @ 25 mA max. (excluding output load)
Protection: ESD and reverse-polarity

Sinking Output:

Maximum on-state voltage drop: 0.75 V @ 100mA
Maximum load current: 100 mA
Maximum applied voltage: 30 VDC
Protection: ESD and over-current

Sourcing Output:

Maximum on-state voltage drop: 1.10 V @ 100mA
Maximum load current: 100 mA
Maximum output voltage: Supply voltage - 0.95 volt @ 100mA
Protection: ESD and over-current

Response Time:

2 mS on / 2 mS off

Operating Temperature:

-20°C to 65°C (-4°F to 149°F)

Sensing: [T_A=20°C (68°F)] Large Flat Target

Range: 50.8 mm (2.00 in.)
Field: 6.4 to 50.8 mm (0.25 to 2.00 in.)
Maximum plane-reflector angle: ± 10°
Sonic Cone Angle: See beam plot
Window-edge accuracy: ± 1.57 mm (0.062 in.)
Minimum object size Rod: 2.5 mm (0.098 in) at 38.1 mm (1.50") range, 0° tilt
Large Flat Object: 1.0 mm (0.039 in) at 38.1 mm (1.50") range, 0° tilt

Sensor Dimensions:

Threads: 12 mm x 1 mm
Length: 70.1 mm (2.76 in.)

Sensor Cable:

AC134 Right angle, 4-conductor, 5 meters (16 ft.)

(Must be purchased separately)

AC135 Straight, 4-conductor, 5 meters (16 ft.)

Sensor Materials:

Housing: PEI
Transducer face: Epoxy
Cable: Non-toxic PVC jacket
LED ring: Polycarbonate

Sensor Ratings and Approvals:

Installation/Overvoltage Category: NEMA 4X (Indoor Use Only) 5, 12, 12K, 13, and IP67

II

CE Mark Compliant:

Declaration of conformity available upon request.

This Product is UL Listed if powered by a Class II Power Supply and protected by an 0.8A Max UL Listed Fuse

SUPERPROX[®]

SM350A-228-00

Proximity Sensor, 12 mm Diameter, Ultrasonic

Normally Open Outputs

Sensing Field 50.8 mm (2.00 in.) from Sensor Face

Hyde Park
Sensors for the Real World



LISTED
IND. CONT. EQ.
3KYC
SUPPLY CLASS 2
FUSE .8A UL LISTED

OPERATOR INSTRUCTIONS

This Hyde Park self-contained, ultrasonic, proximity sensor is capable of sensing most objects within a 50.8 mm (2.00 in.) sensing field (Fig.1). Objects that are transparent, opaque, plastic, glass, metal, liquid or solid can be detected if located within the sensing field.

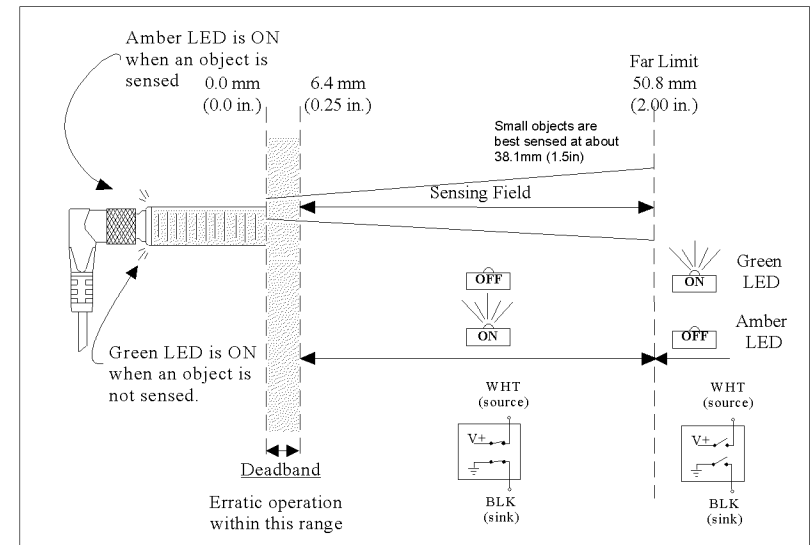


Figure 1

LIMITATIONS AND EXCLUSION OF WARRANTIES

All goods purchased from Hyde Park Electronics LLC shall be free from defects in materials, design and workmanship under normal conditions of use for one year from the date of shipment. THIS WARRANTY IS THE SOLE WARRANTY AND IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF HYDE PARK TO ANY PURCHASER SHALL BE LIMITED EXCLUSIVELY TO THE COST OF REPLACEMENT OR REPAIR OF DEFECTIVE PARTS, AND SHALL NOT INCLUDE LIABILITY FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER, WHETHER FORESEEN OR UNFORESEEN, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST SALES, OR INJURY TO PERSONS OR PROPERTY.

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Literature and application engineering assistance are provided by Hyde Park and its authorized distributors to aid the customer in selecting the product for an application. The customer, however, is responsible for determining the suitability of the product in the application.

⚠ WARNING

UNINTENDED OPERATION

Do not use this product to detect objects within the deadband.

Failure to follow this instruction can result in death, serious injury or equipment damage.