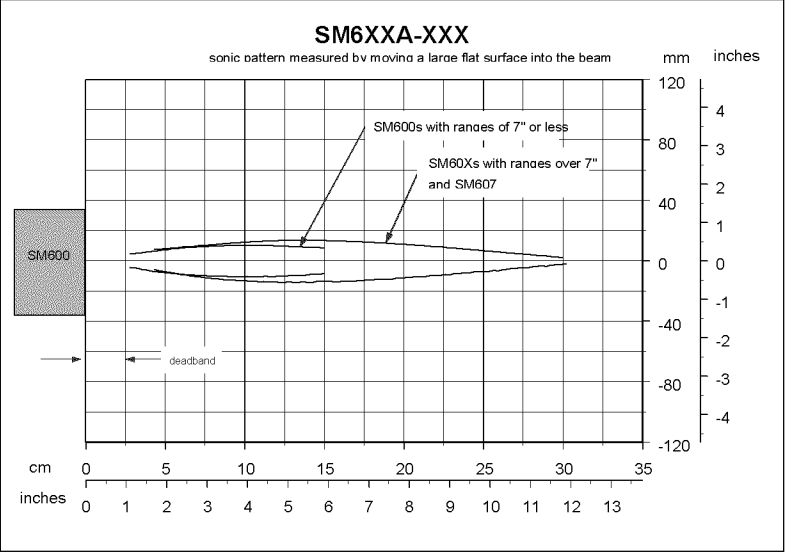


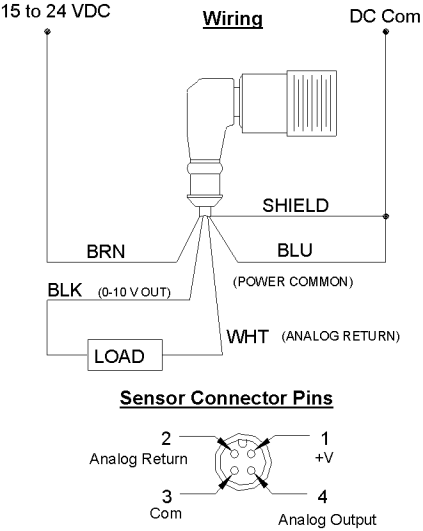
Beam Plot



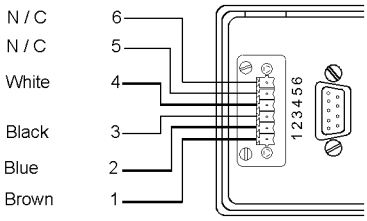
Mounting / Alignment

Mount the sensor so that the sensor face is parallel to the liquid or material surface and free of air currents. Mount the sensor firmly to avoid vibration.

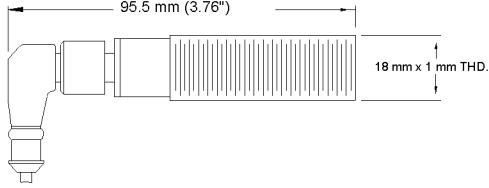
Wiring Connections, Connector Model



AC441A Connections



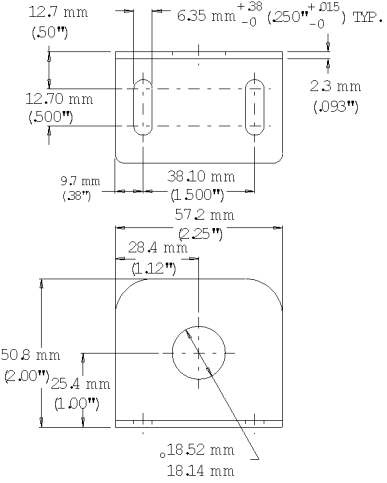
Dimensions



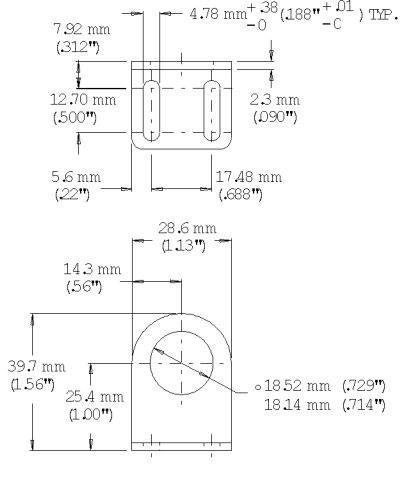
Accessories

- Model AC119 Rt. Angle Connector Cable - 5 meters (16 ft.)
- Model AC129 Straight Connector Cable - 5 meters (16 ft.)
- Model AC226 Conveyor Rail Clamp/Bracket Set
- Model AC227 Mounting Bracket, Large (ACxxx Retrofit)
- Model AC228 Mounting Bracket, Small
- Model AC441 Handheld Configurator

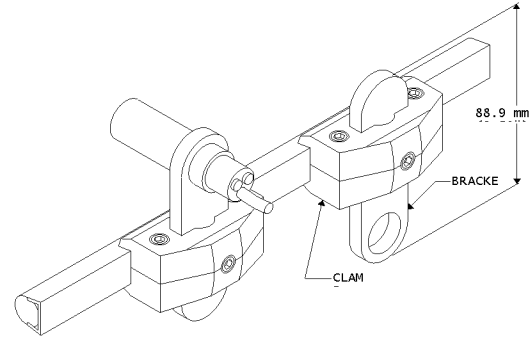
Mounting Bracket Dimensions



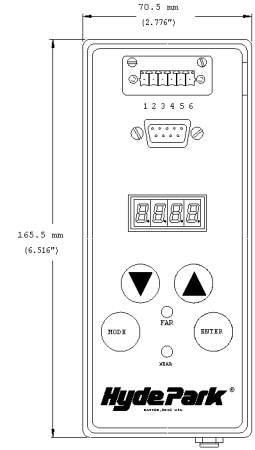
AC227



AC228



AC226 (1 CLAMP & 1



AC441A - Handheld Configurator

## General Specifications

### Power Supply:

Supply: + 15 to 24 VDC @ 50 mA max  
Protection: ESD and reverse-polarity

### Analog Output:

Output Voltage: 0 Volt (minimum) to 10 Volts (maximum)  
Output Resolution: 9.77 mV (millivolts)  
Output Load: 1000 ohms (minimum)  
Protection: Short-circuit to common and ESD

### Operating Temperature:

@ 15 VDC supply 0 to 60°C (32°F to 140°F) @ 100% relative humidity  
@ 24 VDC supply 0 to 50°C (32°F to 122°F) @ 100% relative humidity

### Sensing:

Maximum far limit: 254.0 mm (10.00 in.)  
Resolution, object position, worst case:  $\pm 0.69$  mm (0.027 in.)  
Repeatability:  $\pm 0.69$  mm (0.027 in.)  
Minimum object area, flat smooth: 40 mm<sup>2</sup> (0.027 in.) @ 152 mm (6.0 in.) distance  
Minimum object diameter: 1.6 mm (0.06 in.) @ 152 mm (6.0 in.) distance  
Maximum plane-reflector angle:  $\pm 10^\circ$   
Sonic Cone Angle: 7°

### Sensor Dimensions:

Threads: 18 mm x 1 mm  
Length: 64.7 mm (2.55 in.)

### Sensor Cable:

Model No. AC119 - 5 meters (16 ft.) rt. Angle  
Model No. AC129 - 5 meters (16 ft.) straight  
(Must be purchased separately)

### Sensor Materials:

Housing: PEI  
Transducer face: FDA approved silicone rubber  
Cable: Non-toxic PVC jacket  
LED: Polycarbonate

### Sensor Environmental Ratings:

NEMA 4X (Indoor Use Only) 5, 12, 12K, 13, and IP67

Installation/Overvoltage Category: 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 a 2.0A Max UL Listed Fuse

# SUPERPROX<sup>®</sup>

## SC656A-BV0

### Ultrasonic Analog Output Sensor

#### 18 mm Diameter, Reconfigurable Sensor

#### Maximum Far Limit Distance 254.0 mm (10.00 in.) from Sensor Face

**HydePark**  
Sensors for the Real World



## OPERATOR INSTRUCTIONS

This self-contained, ultrasonic proximity sensor is capable of sensing most objects within its sensing range (Fig.1). Objects that are transparent, opaque, plastic, glass, metal, liquid or solid can be detected if located within the sensing window. Sensor is reconfigured via the AC441A handheld configurator and SUPERPROX+ configuration software.

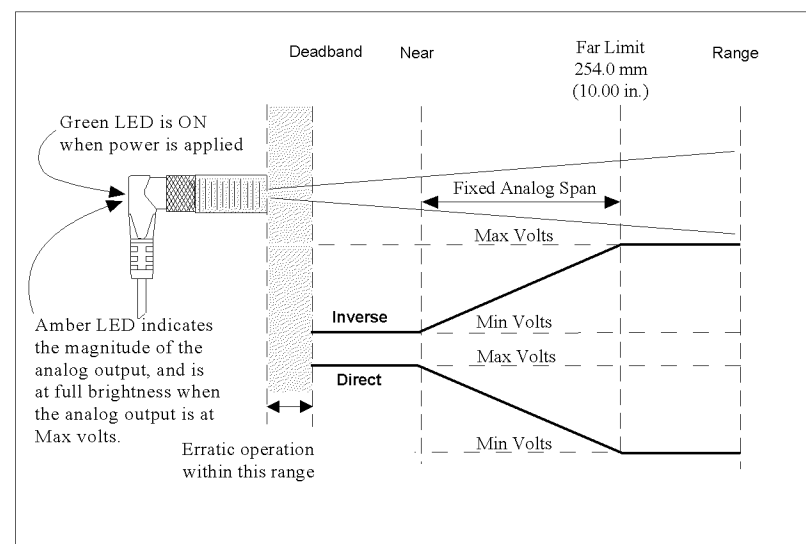


Figure 1

### 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.

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.

## HYDE PARK ELECTRONICS LLC

1875 Founders Drive  
Dayton, Ohio 45420-4017  
Phone (937) 252-2121 Fax (937) 258-5830  
Email: [help@sesensors.com](mailto:help@sesensors.com)  
Web Site: <http://www.sesensors.com>  
© 1997-2008 Hyde Park Electronics LLC

## ⚠ 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.