

Mount the sensor firmly so that the object to be detected is never within 50.8 mm (2.00 inches) of the face of the sensor. For best results the sensor face should be parallel to the object surface. Also the sensor should be away from air currents.

Technical drawing of the M30 x 1.5 mm-6g THREDS component. The drawing shows a side view of the component with the following dimensions:

- Overall length: 94.24 mm [3.710]
- Length of the threaded section: 84.34 mm [3.320]
- Length of the unthreaded section: 78.00 mm [3.070]
- Length of the mounting flange: 20.10 mm [.790]
- Length of the mounting flange: 34.70 mm [1.365] DIA
- Length of the mounting flange: 28.20 mm [1.110] DIA

The component is labeled M30 x 1.5 mm-6g THREDS.

AC441A Connection

NOTE: The load must be connected between the analog signal and the analog return. Do not connect the analog return to the other grounds or chassis grounds.

The diagram shows a cable with four wires connected to a terminal block. The connections are as follows:

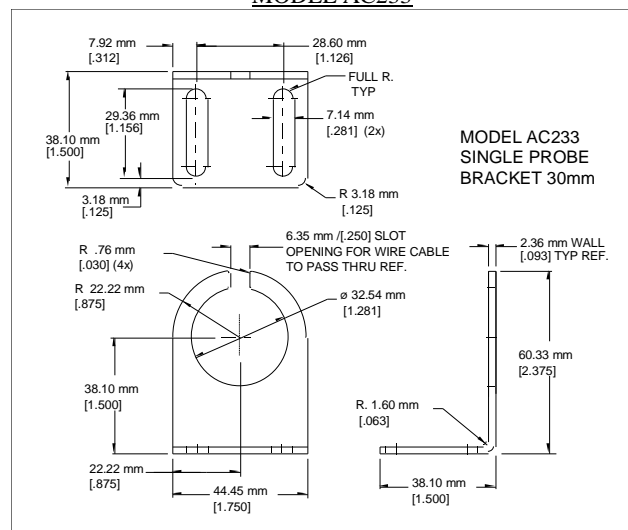
- Brn (Brown) → + 15 to 24 VDC
- Blk (Black) → Analog signal
- Wht (White) → Analog return
- Blu (Blue) → DC Com

The detailed diagram shows a terminal block with pins 1 through 6. The connections are:

- Pin 6: N / C
- Pin 5: N / C
- Pin 4: White
- Pin 3: Black
- Pin 2: Blue
- Pin 1: Brown

A separate diagram shows a terminal block with pins 1 through 6 and a screw terminal.

MODEL AC233

[illegible]

General Specifications

Power Supply: +15 to 24 VDC @ 80 mA, excluding load

Analog Output: min 0 mA - max 20 mA

Load Resistance: 10 to 500 Ω

Operating Temperature:

0°C to 50°C (32°F to 122°F) @ 100% relative humidity

Sensing:

Range: 50.8 to 1,000.0 mm (2.00 to 39.37 inches)

Limit Adjustment Resolution: 0.08 mm (0.003 inch)

Sensor Angle with respect to smooth flat surface: $90^\circ \pm 10^\circ$

Repeatability: ± 0.86 mm (0.034 inch) from smooth flat surface at constant air temperature

Sensor Cable Length: 5 Meters (16 Ft.) Standard

Sensor Housing Material:

Case: PEI

Face: FDA approved silicone rubber

Sensor Ratings and Approvals

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

Installation/Overvoltage Category: II

This Product is UL Listed if powered by a Class II Power Supply and protected by a 2.0A Max UL Listed Fuse

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.

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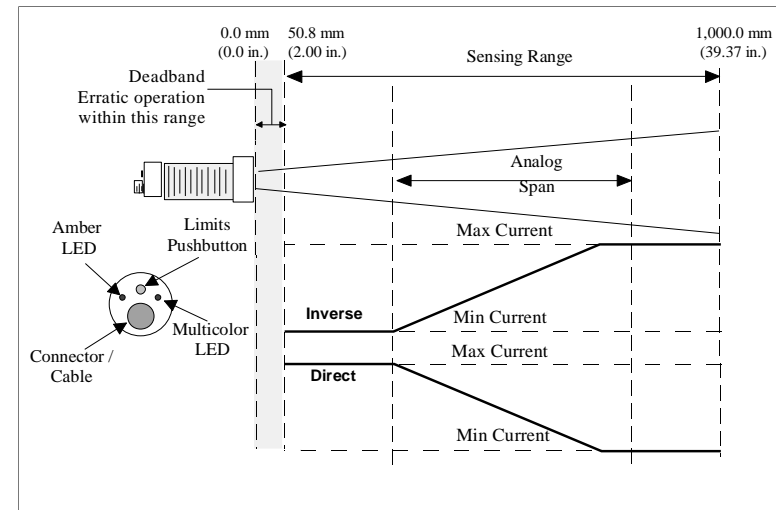
Ultrasonic Analog Output Sensor

30 mm, Configurable Unit

Analog Current Output

OPERATOR INSTRUCTIONS

This self-contained, reconfigurable ultrasonic sensor provides an analog output. Objects that are transparent, opaque, plastic, glass, metal, liquid, or solid can be detected within the sensing range. A multicolor LED indicates the zone of the object. This sensor is configured by connecting it to an AC441A unit and running SUPERPROX+ software on your PC.



Setting the Window Limits

Depress the SETUP pushbutton (the multicolor LED rapidly flashes amber to indicate the pushbutton is pressed) until the multicolor LED flashes green (about 3 seconds), and then release the SETUP pushbutton. The multicolor LED continues flashing green indicating the sensor is waiting for the first limit. Align a flat object parallel to the sensor face at the desired distance position for either the Far or Near window limit, then press the SETUP pushbutton once. Upon release of the SETUP pushbutton, the multicolor LED flashes amber indicating the first limit is set and the sensor is waiting for the second limit. Align a flat object parallel to the sensor face at the desired position for the second window limit and press the SETUP pushbutton once. Upon release of the SETUP pushbutton, the multicolor LED turns to the color that indicates where the object is located. The sensor has no timeout for setting limits. While the SETUP pushbutton is depressed, the multicolor LED turns amber to indicate the sensor detects the object. If the sensor does not detect the object, the multicolor LED is red while the SETUP pushbutton is depressed, and when the SETUP pushbutton is released after not detecting an object, the multicolor LED flashes red 2 seconds, and then requests that limit again by flashing green for the first limit or flashing amber for the second limit.

⚠ 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.