

ELECTRO-SENSORS

Superior • Systems • Solutions

Analog Sensors

Models 916A Standard • 917A Explosionproof



- Large gap non-contact sensing.
- Signal transmission up to 1,500 feet.
- Easy to install - no maintenance.
- Rugged and reliable.

Product Information

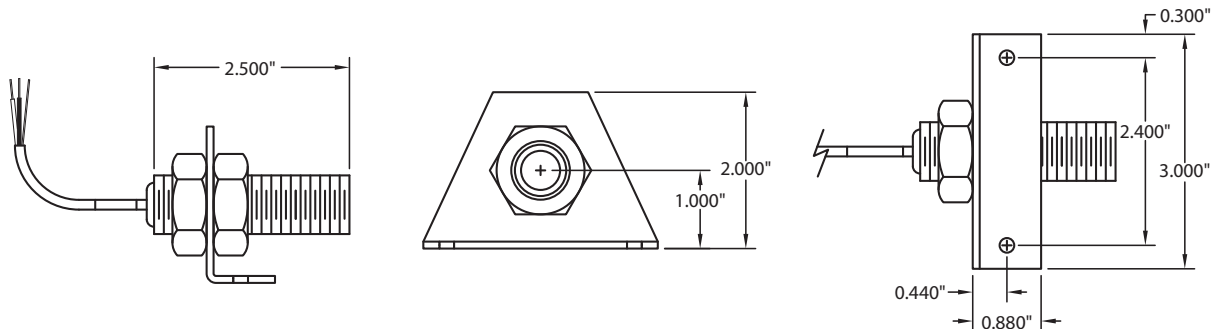
Description

Electro-Sensors' Model 916A and 917A passive analog sensors are designed for use with pulse generators that provide magnetic targets, such as Electro-Sensors' Pulser Discs and Split Collar Pulser Wraps. 916A sensors have a 3/4" threaded aluminum body, are supplied with a mounting bracket and jam nuts, and are recommended for use with Pulser Discs and Split Collar Pulser Wraps. 917A explosionproof sensors are mounted in a rugged cast aluminum enclosure, which is CSA approved and UL rated for Class I, Group D; Class II, Groups E, F, and G, and Class III environments. 917A sensors are also supplied with a mounting bracket and are recommended for use with Pulser Discs and Split Collar Pulser Wraps.

The output signal from the 916A and 917A analog sensors is clipped at 20vac. These sensors switch high and low in the presence of alternating magnetic fields, and generate a sine wave signal when used with Electro-Sensors' pulse generators, which have evenly spaced magnets of alternating polarity.

916A and 917A analog sensors allow for a large gap distance of $3/8" \pm 1/8"$ between the sensing surface and the pulse generator's target magnets. 916A and 917A sensors come with 10 feet of 2-wire shielded cable as standard, and can be mounted up to 1,500 feet from the control unit (i.e. speed switch or tachometer). Electro-Sensors' products bring efficiency and safety to your operations by preventing machine damage, product waste, and costly downtime.

Dimensional Drawings - 916A



Sensors and Pulse Generators

The standard sensor is supplied with a mounting bracket and two jam nuts, and is easily adjustable to achieve the proper gap distance. The optional explosionproof sensor is supplied with a slotted mounting bracket, also easily adjustable. Sensors should be installed allowing the center of the magnets to pass in front of the center of the sensing head during rotation. The gap distance between the sensor and disc or wrap (Dimension A in Figures 1-4) is 1/16" - 1/4". Gap distance reduces signal strength at higher speed. When using a standard 4" Pulser Disc, the center of the

magnetized area of the disc (Dimension B in Figures 1 and 3) is 1-3/4" from the center hole of the disc.

Available Options

- EZ100 Easy Mount Bracket Assembly for use with 917A Series explosionproof sensors (shown in Figure 5 below).
- 916A series sensors available in stainless steel.

(Consult factory for further options)

Figure 1
916A Standard Sensor and Disc

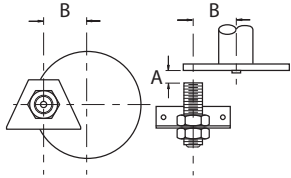


Figure 3
917A Sensor and Disc

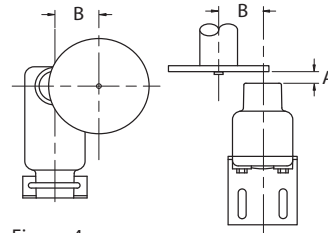


Figure 2
916A Standard Sensor and Wrap

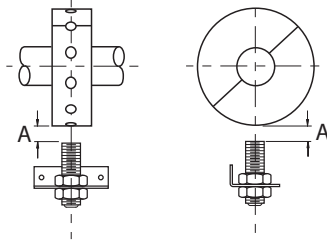


Figure 4
917A Sensor and Wrap

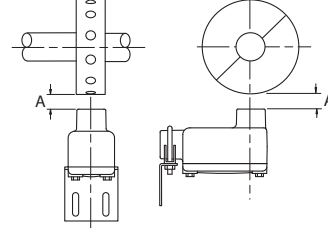
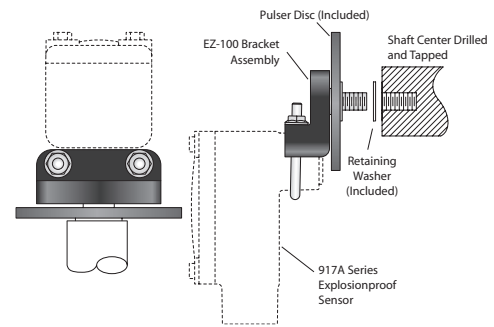
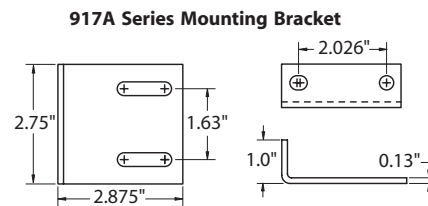
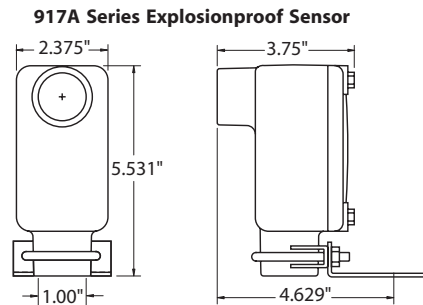


Figure 5
Optional EZ-100 Easy Mount Bracket



Dimensional Drawings - 917A



Specifications - Analog Sensors 916A • 917A

Operating Frequency..... 0 Hz to 20 KHz
 Operating temperature..... -40°C to +60°C*
 Gap Distance..... 1/16" - 1/4"
 Distance to input device..... 1,500 feet maximum
 Cable..... 2-conductor shielded, 22 AWG
 Standard Cable Length..... 10 feet

Wiring code.....916A/917A: Clear = Signal
 Black = Common
 Output Type..... Sinusoidal Wave Limited to
 20VAC by Zener Diode
 Material.....916A Series: Aluminum, 3/4"–16 UNF threads
 917A Series: Cast Aluminum Housing CSA
 approved. Meets UL Class I,
 Group D; Class II, Groups E, F,
 and G; Class III

**Contact factory for higher temperature ranges.
 Specifications subject to change without notice.*

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