

## Key Features

- 2-wire, sine wave output, clipped at  $\pm 20$  V level
- 1" NPT conduit port (917A)
- Non-contact, large gap distance sensing
- Work with magnetic pulser discs/wraps
- 916A – Optional EZ-3/4in mounting bracket and mounting magnet available
- 917A – Optional EZ-100 mounting bracket and mounting magnet available



916A

917A

## Description

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.

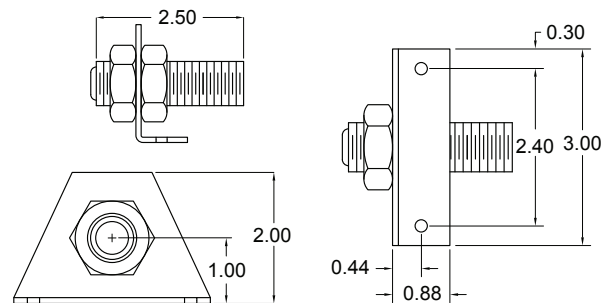
917A sensors are mounted in a rugged cast aluminum enclosure, are supplied with a mounting bracket, and are recommended for use with pulser discs and split collar pulser wraps.

## Principle of Operation

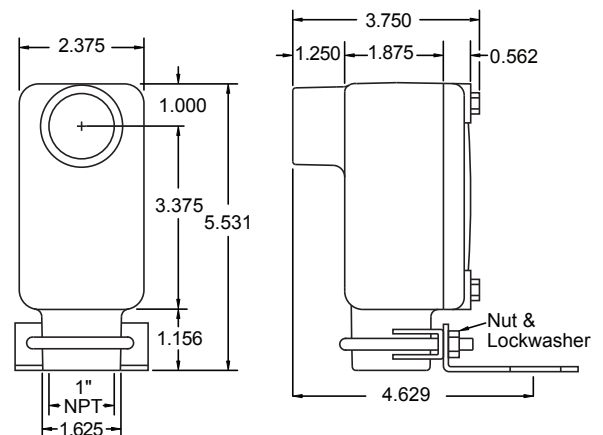
The output signal from the 916A and 917A analog sensors is clipped at 20 VAC. These sensors switch high and low in the presence of alternating magnetic fields and generate a sine wave signal when used with a pulse generator, which have evenly spaced magnets of alternating polarity.

916A and 917A analog sensors allow for a large gap distance of  $1/4" \pm 1/8"$  between the sensing surface and the pulse generator's target magnets. Standard 916A and 917A sensors come with 10 feet of 2-wire shielded PVC cable and can be mounted up to 1,500 feet from the control unit (i.e. speed switch or tachometer).

## Dimensions



916A Standard Triangle Bracket  
(Square Bracket Available)



917A Standard

## 916A/917A Analog Specifications

| Product                  |                                                                       |
|--------------------------|-----------------------------------------------------------------------|
| Operating Frequency      | 0 Hz to 20 KHz                                                        |
| Operating Temperature    | -40 °F to +140 °F<br>-40 °C to +60 °C                                 |
| Gap Distance             | 1/4" ± 1/8"                                                           |
| Distance to Input Device | 1,500 feet maximum                                                    |
| Cable (22 AWG)           | 2-conductor shielded, 22 AWG                                          |
| Standard Cable Length    | 10 ft                                                                 |
| Wiring Code              | Clear = Signal<br>Black = Common                                      |
| Output Type              | Sinusoidal wave limited to<br>20 VAC by zener diode                   |
| Material                 | 916A: Aluminum, 3/4"-16<br>UNF threads<br>917A: Cast aluminum housing |

*Specifications subject to change without notice.*

## Ordering

### 916A

| Model                                            | Part Number |
|--------------------------------------------------|-------------|
| 916A, Triangle Bracket, 10' PVC Cable – Standard | 775-000801  |
| 916A, Triangle Bracket, 50' PVC Cable            | 775-000802  |
| 916A, Triangle Bracket, 100' PVC Cable           | 775-000803  |
| 916A, Triangle Bracket, 10' Teflon Cable         | 775-000804  |
| 916A, Triangle Bracket, 50' Teflon Cable         | 775-000805  |
| 916A, Triangle Bracket, 100' Teflon Cable        | 775-000806  |
| 916A, Square Bracket, 10' PVC Cable              | 775-000807  |
| 916A, Square Bracket, 50' PVC Cable              | 775-000808  |
| 916A, Square Bracket, 100' PVC Cable             | 775-000809  |
| 916A SS, Stainless Steel, 10' PVC Cable          | 775-000810  |

### 917A

|                                |            |
|--------------------------------|------------|
| 917A, 10' PVC Cable – Standard | 775-000811 |
| 917A, 50' PVC Cable            | 775-000812 |
| 917A, 100' PVC Cable           | 775-000813 |

## 916A/917A Analog Standard System

- Shaft Speed Pulse Generator

These are the most popular system components. Many other options are available.

| System Options                                            | Part Number             |
|-----------------------------------------------------------|-------------------------|
| Standard 255 Nylon Pulser Disc, 4" Diameter, 16 Magnets   | 700-000200              |
| Split Collar Pulser Wrap (PVC, Aluminum, Stainless Steel) | Custom<br>(See Website) |

| Other Options                                                | Part Number |
|--------------------------------------------------------------|-------------|
| EZ-3/4in Bracket Assembly (916A)                             | 810-000040  |
| EZ-100 Bracket Assembly (917A)                               | 810-000001  |
| MM-1.25 Mounting Magnet (must use EZ-3/4in Bracket Assembly) | 810-000060  |
| MM-2.00 Mounting Magnet (must use EZ-100 Bracket Assembly)   | 810-000050  |
| Standard Disc Guard                                          | 725-005300  |
| EZ-Mount Disc Guard                                          | 725-005200  |
| EZ-Mount Lower Disc Guard                                    | 725-005201  |



*EZ-100 Mounting Option (917A)*



*EZ-3/4in Mounting Option (916A)*



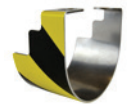
*Mounting Magnet Options (must be used with EZ-Mounts)*



*Standard Disc Guard*



*EZ-Mount Disc Guard*



*Lower EZ-Mount Guard*

## Customization

If one of our standard products does not meet your specifications, please call one of our applications specialists. Many of our products can be customized to fit specific needs.

## Additional Information

Please call Electro-Sensors for more information.