

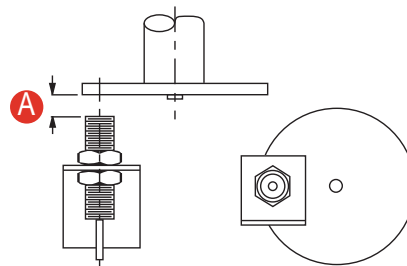
- Digital Pulse Signal
- High/Low Alternating Output
- NPN Open Collector digital output
- Gap distance of up to 3/8 inch
- Threaded aluminum body



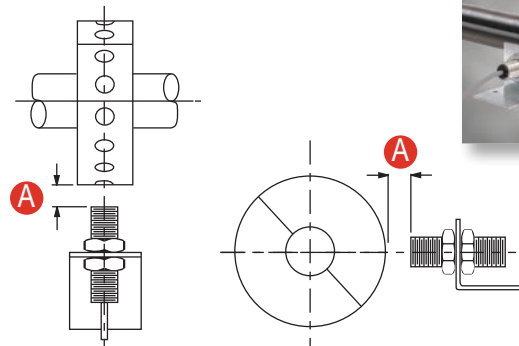
Description

The 906 and 906B Digital Speed Sensors use Hall-effect technology to produce digital pulse signals for use with speed switches, tachometers, counters, signal conditioners, or as direct pulse input into programmable controllers. As a pulser disc or shaft wrap mounted on the monitored shaft rotates, the target magnets pass in front of the sensor. The sensor switches high and low as it is exposed to the alternating polarity of the magnets on the disc or wrap, which produces one pulse for every two magnets. The 906 and 906B Sensors allow a gap distance up to 3/8" **A** between the surface of the sensor and the target magnets. The gap flexibility makes the sensors tolerant of vibration, slight shaft run-out, and minor misalignment. The 906 and 906B Sensors are waterproof and suitable for most applications, including environments where dirt, dust, grease, or moisture are present. The 906 and 906B Sensors can be mounted up to 1500 feet from the control unit, speed switch, tachometer, etc. They are powered by 5-24 VDC and provide an NPN Open Collector output. The 906 and 906B Sensors have a threaded aluminum body and are supplied with a mounting bracket.


906 with Pulser Disc



906 with Pulser Wrap



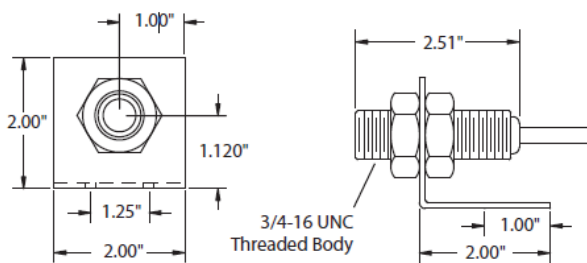
Product Specifications

906/906B Specifications	
Supply 906	5-24 Vdc @ 10 mA
Radio (internal)	5-24 Vdc @ 20 mA
Output Type	NPN Open Collector
Current Sink	25 mA Max
Max Frequency	20 kHz
Temp Range	-40° C to +60° C*
Gap Distance	1/4" +/- 1/8" w 1/2" Magnets
Max Cable Length	1500 feet
Body Material	Aluminum
Cable	3-Conductor (standard), Shielded 4-Conductor (B version), Shielded
Mounting Bracket	Zinc Plated Steel, Included
906 & 906B Sensor	 Control Number: 69003 Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II and III Div I Hazardous Classified Locations UL913 (1997) CAN/CSA-C22.2 No. 157-92

* Higher temperature versions available, consult factory.

Part Dimensions

906 or 906B Sensor



Additional Information

For more information about Digital Speed Sensors, please contact us at:

Email: sales@electro-sensors.com

Tel: (800)328-6170

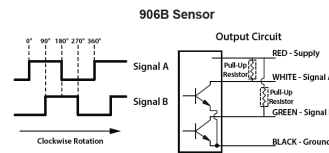
Fax: (952)930-0130

We also have more information online at:

www.electro-sensors.com

Wiring Chart

Color	Connect To	Description
Shield	Circuit Ground	Transducer Shield
Black	Circuit Ground	Transducer Ground
Red	Supply	Transducer Supply Voltage
White or Clear	Sensor A	Signal A
Green	Sensor B	Signal B (906B Only)



Sensor Installation

The standard sensor is supplied with a mounting bracket and two jam nuts. Sensors should be installed so the center line of the magnets pass in front of the center of the sensor as the disc or wrap rotates. When using the pulser disc, the center of the magnetized area of the disc, shown as Dimension B in figures 1 and 3, is 1-3/4" ±1/8" from the center hole of the disc. The recommended gap distance between the sensor and the disc or wrap, Dimension A in the diagrams, is 1/4" ±1/8" using 1/2" magnets. To achieve the proper gap distance, adjust the jam nuts holding the standard sensor in the mounting bracket.

Important: A label has been placed on the face of the 906B sensor. The sensor must be positioned so that the magnets pass down that line (the center line of the magnets and the line on the sensor must be parallel with each other). See illustration below.

Note: If your device reads in the wrong direction, reverse the sensor A and sensor B leads.

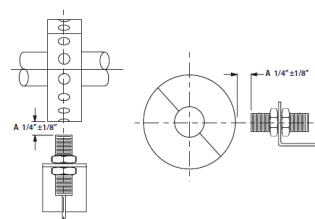


Figure 2: 906 or 906B with Pulser Wrap

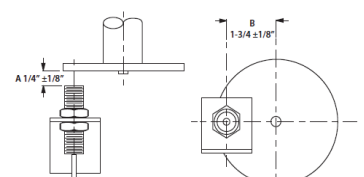


Figure 1: 906 or 906B with Pulser Disc

