



105 Bonnie Drive  
Butler, PA 16002  
724-283-4681  
724-283-5939 (fax)  
www.bwieagle.com

# PRODUCT INFORMATION BULLETIN

## I.S. PROX SENSOR Intrinsically Safe Inductive Proximity Type MODEL 10-7039

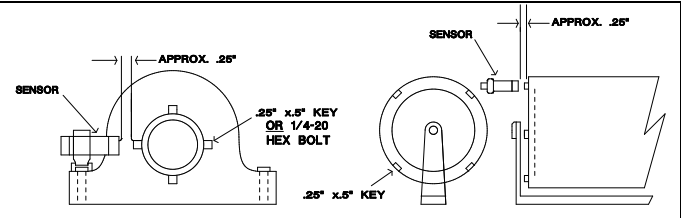
### APPROVALS

MSHA - IA444-1  
PA - BISC 121-94

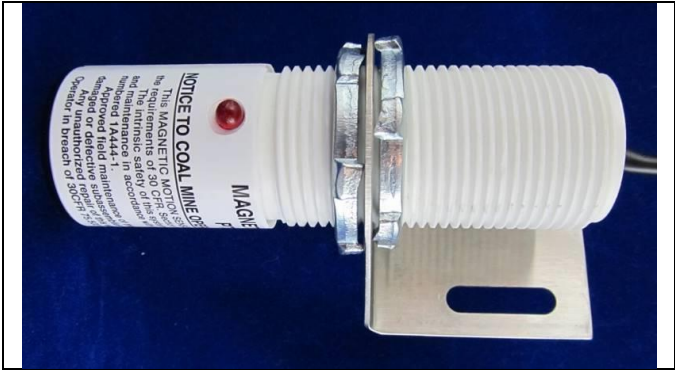
### INSTALLATION

- Select the roller or shaft to be monitored. If a roller is to be monitored, be sure it is always contacting the belt.
- Affix a target on the roller or shaft. The target should be a piece of key-stock, 1/4-20 Hex Nut, etc. (Figure 1) **NOTE:** The use of a notch or a dent is not an acceptable target for the prox sensor. This sensor must see the presence of a target, not an absence of a target as there would be with a notch or dent.
- Mount sensor firmly with hose clamps or U-bolts to prevent it from moving or working loose. Tape is **NOT** recommended as a fastener.
- Before tightening, check that the target passes through the center area of the sensor face. This will produce the greatest sensitivity and sensing distance. With the roller or shaft spinning, move the sensor toward the target. The LED on the sensor should blink in direct proportion to the speed of the shaft or roller. Effective distance between the sensor and target is approximately .1 inch to .5 inch depending on the size of the target.

**FIGURE 1**



Note: When mounting sensor on small idler rollers (less than 6 inches in diameter), install a maximum of 2 targets

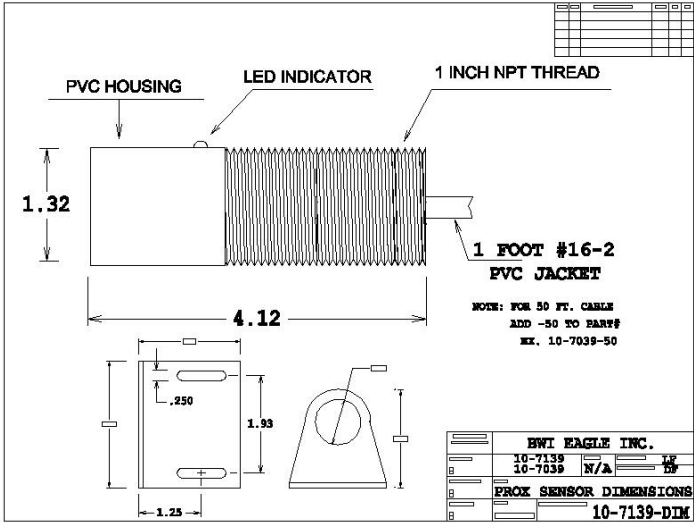


### SPECIFICATIONS

Dimensions	4.12 in. x 1.32 in. O.D.
Sensor Type	Inductive Proximity (Metal)
Housing / Mounting	Threaded PVC / Conduit or Bracket Mounting
Sensor Power Requirement	Current Limited 12VDC from Zener Barrier
Unit Sensor Cable	Unshielded** Twisted Pair 16/2 - 3 Ft. Pigtail
Distance	Sensor to Control Unit - 1 Mile
Sensing Speed Range	Less than 1 RPM to 6000 RPM

\*\*NOTE - Shielded cable is recommended for all above ground applications. The shield of the cable should be attached to earth ground within 2 feet of the sensor head. In severe noise environments, grounding the shield at the control module also, will eliminate any E.M.I. interference.

### DIMENSIONS



# I.S. ZENER BARRIER

## Intrinsically Safe Zener Barrier

### MODEL 10-7072

### APPROVAL

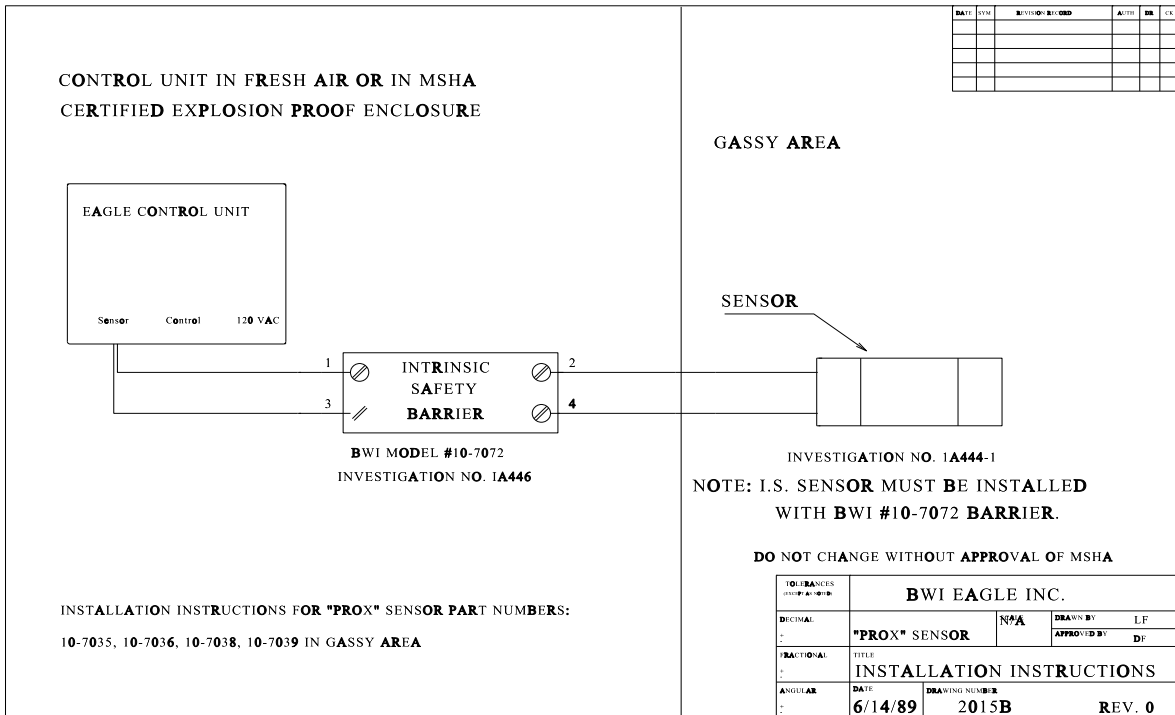
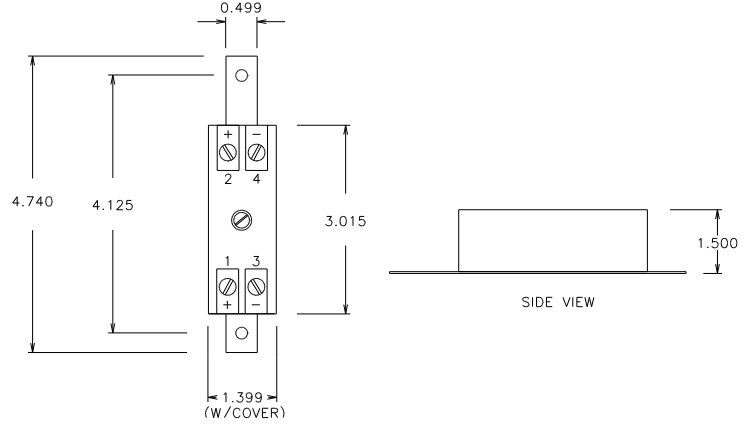
MSHA - IA446-0

### INSTALLATION

When installing a Zener Barrier to the control unit, the polarity of the wiring from the control unit to the barrier input **MUST BE OBSERVED.**

Terminal	Description
1	Input from control unit (+) positive
3	Input from control unit (-) common
2	Output to I.S. Sensor (no polarity)
4	Output to I.S. Sensor (no polarity)

### DIMENSIONS



DOCUMENT DATE: 9/20/17



105 Bonnie Drive  
Butler, PA 16002  
(724) 283-4681  
Fax (724) 283-5939  
[www.bwieagle.com](http://www.bwieagle.com)