



238 Pillow Street
Butler, PA 16001
724-283-4681
724-283-5939 (fax)
www.bwieagle.com

PRODUCT INFORMATION BULLETIN

DC EAGLE 2 Slope Car Monitor MODEL 11-7002PDC48-OSR1

INSTALLATION

DISCONNECT DC power before proceeding with installation.

- Mount the EAGLE PC Board in a safe, convenient location.
- Make the following connections:
 - Connect 48VDC to terminals on printed circuit board.
 - Connect control cable to proper terminal in the brake control circuit.
- Connect EAGLE PROX SENSOR cables to the sensor connectors on the control unit.
- Install sensor at rollers. See sensor installation section.

TERMINAL STRIP WIRING

SENSOR		CHANNEL 1		CHANNEL 2		48VDC	
1	Sensor 1 (+)	4	N/C (1)	10	N/C (1)	16	48VDC (-)
2	Sensor 1 & 2 (-)	5	C (1)	11	C (1)	17	48VDC (+)
3	Sensor 2 (+)	6	N/O (1)	12	N/O (1)		
		7	N/O (2)	13	N/O (2)		
		8	C (2)	14	C (2)		
		9	N/C (2)	15	N/C (2)		

NOTE: The SLOPE CAR MONITOR utilizes a fail-safe relay configuration. The relay contacts are shown above in their de-energized state. Ex: The normally closed contacts would be open during normal operation.

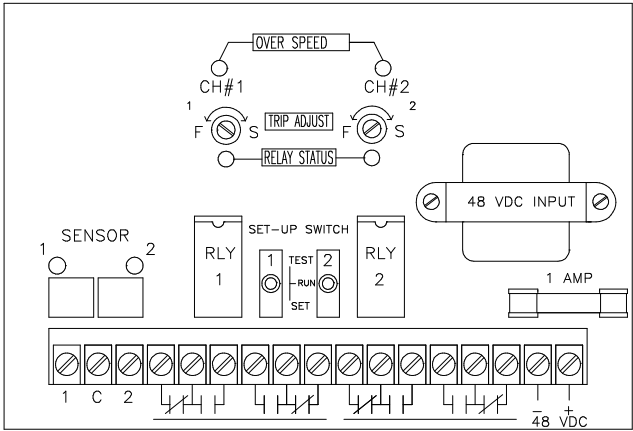
CALIBRATION

- Turn TRIP ADJUST POT counterclockwise SLOWLY until it stops (approximately 7 o'clock).
- With the slope car running at normal speed (or a pulse generator attached to the sensor input), turn the TRIP ADJUST POT clockwise slowly until the OVER SPEED LED begins to blink. (Note #1)
- Follow the same procedure for Channel #2. (Note #2)

Note #1: Following the above calibration, the relay will de-energize at approximately a 5% increase in speed.

Note #2: A jumper may be installed across terminals 1 & 3 (sensor input for both channels). This will allow you to operate both channels with one sensor if desired.

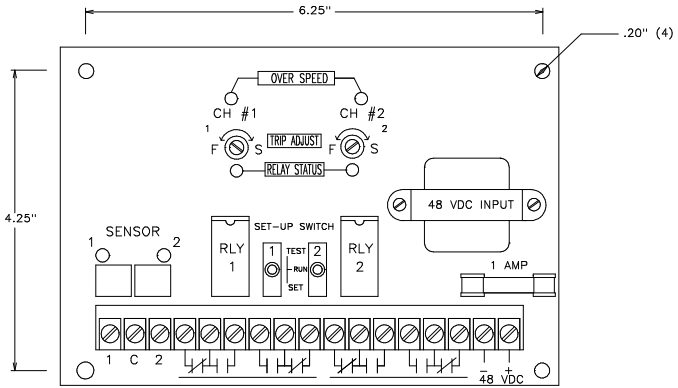
CONTROLS AND INDICATORS



SPECIFICATIONS

DC Input	20 - 55 VDC
Fuse Protected	2 amp
Operating Temperature	-40° to +60° C (-40° to +140° F)
Speed Channel 1	60 - 800 RPM
Speed Channel 2	60 - 800 RPM
Relay Contacts	DP/DT 4 amp @ 48VDC
Response Time	.5 Seconds or less

DIMENSIONS



REPLACEMENT AND OPTIONAL PARTS

P.C. Board	11-7002PDC48-OSR1
Threaded PVC Proximity Sensor	10-7139
Relay	99-REL-0001
Strain Relief (Power Input)	99-CON-0011
Strain Relief (Control)	99-CON-0012

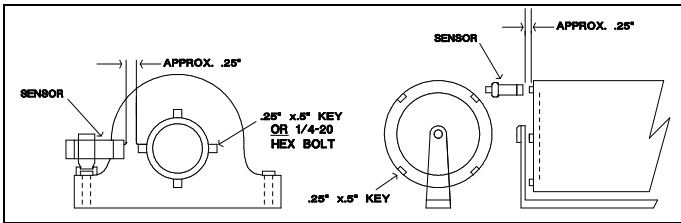
PROX SENSOR

Inductive Proximity Type

MODEL 10-7139

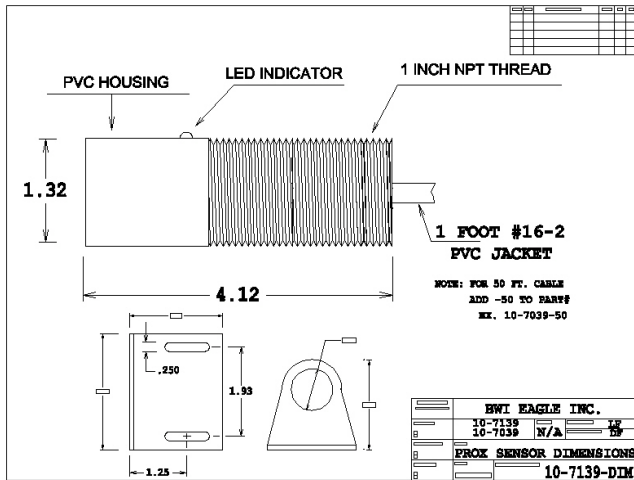
INSTALLATION

1. Select the roller or shaft to be monitored. If a roller is to be monitored, be sure it is always contacting the belt.
2. Affix a target on the roller or shaft. The target should be a piece of key-stock, 1/4-20 Hex Nut, etc. **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.
3. Mount sensor firmly with hose clamps or U-bolts to prevent it from moving or working loose. Tape is **NOT** recommended as a fastener.
4. 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.



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

DIMENSIONS



SPECIFICATIONS

Dimensions	4.12 in. x 1.32 in. O.D.
Sensor Type	Inductive Proximity (Metal)
Sensor Power Requirement	Current Limited 12VDC from Control
Unit Sensor Cable	Unshielded Twisted Pair 16/2 **
Distance	SEE NOTE BELOW
Distance	Sensor to Control Unit - 2 Miles
Minimum Sensing Speed	Less than 1 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.

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