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PRODUCT INFORMATION BULLETIN

SUPER SLOW SPEED MONITOR Zero Speed Switch MODEL 22-8900-5

DESCRIPTION

The EAGLE SUPER SLOW SPEED MONITOR is a highly accurate, fail-safe zero-speed switch specifically designed to monitor a pulley or shaft moving at a very slow speed. This particular model is programmed at the factory to de-energize its control relay when it detects a speed slower than 12 pulses per hour (5 minutes between pulses)..

INSTALLATION

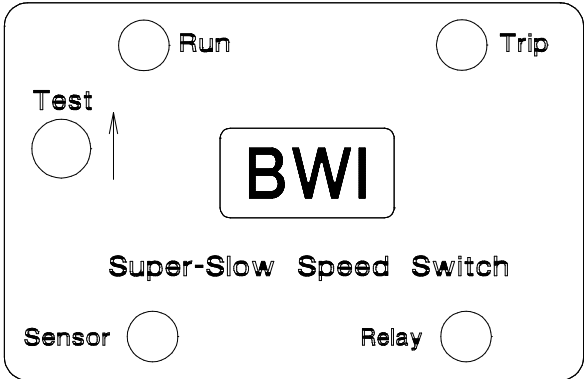
Disconnect AC power before proceeding with installation

1. Mount the socket inside an existing control panel or other suitable protective enclosure
2. Install EAGLE PROX SENSOR at drum or drum shaft. See sensor installation sheet
3. Make the following connections on the socket:

TERMINAL	CONNECTION
1	Sensor - Common (-)
2	Sensor - Positive (+)
3 - 4	Momentary Reset Input from N/O Dry Contacts or Switch
5 - 6	120 VAC Input
* 7	Relay - N/C (1)
* 8	Relay - Common (1)
* 9	Relay - N/O (1)
* 10	Relay - N/C (2)
* 11	Relay - Common (2)
* 12	Relay - N/O (2)

* NOTE: When AC power is applied to the unit, the relay will energize. If an underspeed condition or AC power loss is detected, the relay will de-energize.

CONTROLS AND INDICATORS



RUN LED - Under normal conditions, this LED will be blinking to indicate the unit is monitoring for an underspeed condition. The LED will go out when the unit has detected an underspeed condition.

TRIP LED - When illuminated, indicates the unit has de-energized its control relay due to an underspeed condition. This is a latching LED that will automatically clear when a reset signal is sent to the module.

SENSOR LED - This LED will be very dim when the sensor is connected to the unit. It will "pulse" bright when the sensor detects a target from the monitored shaft. If this LED is continuously illuminated very bright, the sensor or sensor cable may be shorted.

RELAY LED - Illuminated under normal running conditions. LED will go out and the relay contacts will change state when an "underspeed" or power loss is detected.

TEST SWITCH - Pushing this switch in the "UP" position will simulate an underspeed condition. The "TRIP LED" will illuminate and the relay will de-energize. This provides the user the capability of checking all of the control circuit wiring without removing the sensor to simulate an underspeed condition. The reset signal will have to be applied to the unit to "Restart" the system.

SUPER SLOW SPEED MONITOR

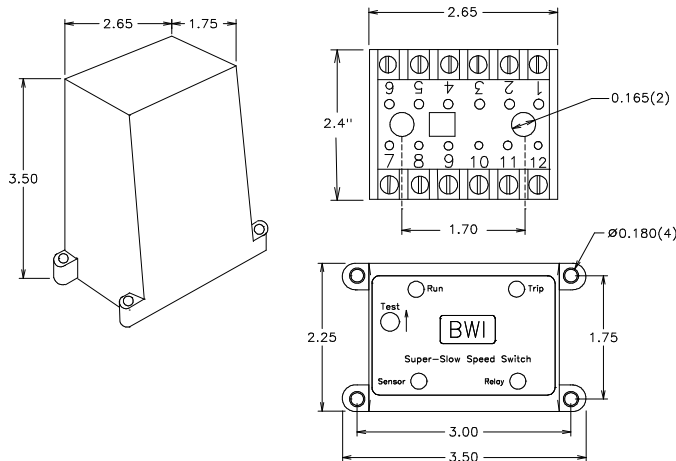
Zero Speed Switch

MODEL 22-8900-5

SPECIFICATIONS

AC Input	120VAC 8W
Fuse Protected	1 amp
Underspeed Trip Point	12 PPH
Timing Accuracy	+/- 0.4%
Repeatability	+/- 0/1%
Relay Contacts	DPDT 5 amp @120VAC
Enclosure	ABS Plastic

DIMENSIONS



REPLACEMENT AND OPTIONAL PARTS

Control Module	22-8902-5
Mounting Socket	22-8003
Threaded PVC Proximity Sensor	10-7139
I.S. Threaded PVC Proximity Sensor	10-7039
I.S. Zener Barrier	10-7072

DOCUMENT DATE: 2-May-02



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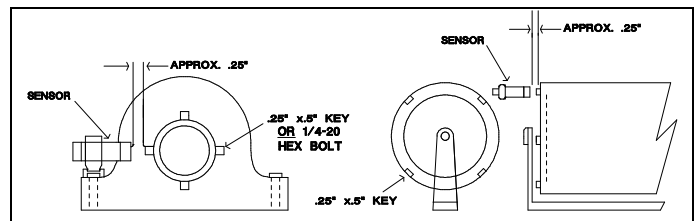
PROX SENSOR

Inductive Proximity Type

MODELS 10-7135, 10-7139, 10-7140

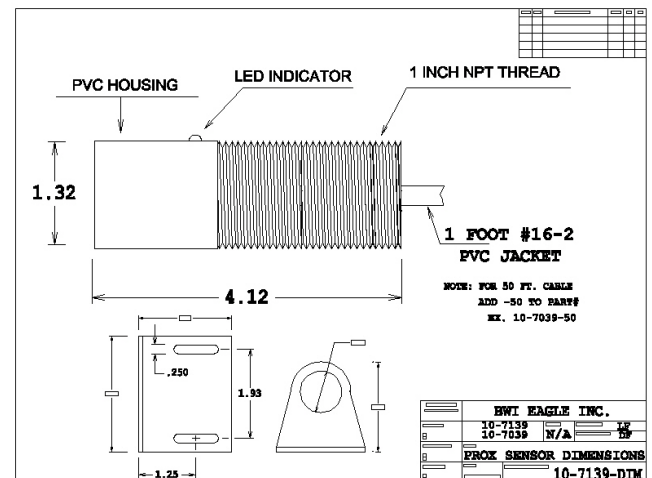
INSTALLATION

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 ** 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.