

Label Sensor





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The LABEL•EYE® is a photoelectric sensor designed specifically to sense labels on a roll. Since the LABEL•EYE® is a one-touch AUTOSET sensor and not the conventional "teach mode" sensor, set-up is simple. Position the gap between the labels directly under the sensor's sight guide and push the "Normal" or "Translucent" button. The sensor does the rest, adjusting itself to the perfect setting. Sensing labels has never been easier.

The Label Applicator Process

The LABEL•EYE® is a special purpose gap or slot sensor optimized to sense adhesive labels adhering to a roll of backing paper. The web of labels is directed from a "roll" across a peeler plate or around a sharp edge. As the web passes around the sharp edge of the peeler plate, the adhesive label peels from the backing material. The function of the LABEL•EYE® is to look through the backing paper to detect the "gap" between the labels and signal the labeling machine to stop the dispensing mechanism before the label is completely dislodged from the backing material. With the next "up" label protruding off the end of the peeler plate, it is now perfectly positioned to be applied to the next product as it passes by on a conveyor.

The LABEL•EYE® operates on 10 to 30 VDC and is pulse-modulated to prevent any problems from ambient light. Although designed for label detection, the LABEL•EYE can be useful in a variety of applications such as edge guiding, small parts counting, and splice detection.



Features

- 100µs response time
- Two AUTOSET Modes: Normal or Translucent
- Cable and quick disconnect models
- NPN and PNP outputs
- One button AUTOSET

Benefits

- Easy to Setup
- Accurate and repeatable
- Easy to mount
- Common style and configuration for compatibility

Applications

- Double sheet detection
- Envelope contents sensing
- Edge guiding
- Splice detection
- Label counting
- Winder, re-winder
- Die cutter
- Label hot-printing
- High speed dispensing

How to Specify



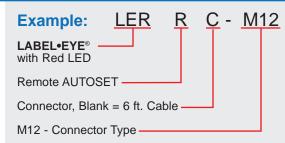
1. Select sensor model number required:

2. Model Numbers Description

LER Red LED, 4 conductor, 6 ft (1.8m) cable

LERC Red LED, 4-pin M8 connector
LERR Red LED, 5 conductor, 6 ft (1.8m) cable
LERRC-M12 Red LED, 5-pin M12 pigtail connector

LERC-M12 Red LED, 5-pin M12 pigtall connector



Features

One button AUTOSET!

LOCATOR TABS

Help to center gap for proper detection

NORMAL BUTTON

- AUTOSET: Press and hold for 1 second when backing is paper, mylar, plastic, or opaque material.
- 2. Hold down both buttons for 2 seconds to change output from Dark On to Light On.

TRANSLUCENT BUTTON

- AUTOSET: Press and hold for 1 second when backing is translucent or transparent.
- 2. Hold down both buttons for 2 seconds to change output from Dark On to Light On.

NOTE: Optimized for label sensing.

CENTER of DETECTION

This point marks the exact center of light source and receiver through-beam.

RED LED OUTPUT INDICATOR

Illuminates when output in on Flashes when sensor is shorted or overloaded

GREEN LED AUTOSET

AUTOSE TRI-TRONICS

MODEL LERC

ABEL OPACITY

Flashes rapidly during AUTOSET, for about 1/2 a second, and remains illuminated when complete

Flashes rapidly during AUTOSET, for about 1 second, and then flashes slowly with red LED Output Indicator four times when AUTOSET incomplete

Accessories

4-Wire Nano Cable, M8



GEC-6

6' (1.8m) Shielded cable with connector

GEC-15

15' (4.6m) Shielded cable with connector

GEC-25

25' (7.62m) Shielded cable with connector



RGEC-6

6' (1.8m) Right angle shielded cable

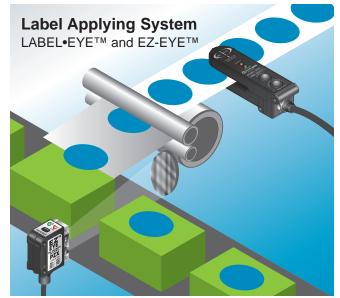
RGEC-15

15' (4.6m) Right angle shielded cable



GFX-9

9' (2.7m) extension cable



Specifications

SUPPLY VOLTAGE

- 10 to 30 VDC
- Polarity Protected

CURRENT REQUIREMENTS

• 45mA (exclusive of load)

OUTPUT TRANSISTORS

- (1) NPN and (1) PNP output transistors
- Sensor outputs can sink or source up to 150mA (current limit)
- All outputs are continuously short circuit protected

RESPONSE TIME

- Light state response = 100 microseconds
- Dark state response = 100 microseconds

LED LIGHT SOURCE

- High intensity red LED
- Pulse modulated

PUSH BUTTON CONTROL

- Automatic setup routines based on web opacity
- One push button setup
- Pushing both buttons simultaneously inverts output

HYSTERESIS

 Minimal hysteresis promotes the detection between the backing material and the label depending on the settings

LIGHT IMMUNITY

 Responds to sensor's pulsed modulated light source, resulting in high immunity to most ambient light

INDICATORS

- Green LED flashes when AUTOSET routine is activated and stays illuminated when AUTOSET is completed
- Red LED illuminates when sensor's output transistors are "ON". NOTE: The status of the output transistors can be inverted by pushing both buttons simultaneously. If Output LED flashes, a short circuit condition exists.



AMBIENT TEMPERATURE

• -40°C to 70°C (-40°F to 158°F)

RUGGED CONSTRUCTION

- Chemical resistant high thermoplastic PPS housing
- Waterproof, ratings: NEMA 4 and IP66
- Conforms to heavy industry grade CE and UL requirements

RoHS Compliant Product subject to change without notice

Connections and Dimensions LABEL•EYE® 0.709" Product subject to change without notice. (18.00 mm) Consult Factory for RoHS Compliance. 2.116" Ø 0.167" (53.76 mm) (2 Places) 0.926" (23.53 mm) BROWN POS LERC NPN WHITE 0.100" 0.709" Nano Cable (M8) (2.54 mm) (SINK) 10 TO 0.465" (18.00 mm) 150 MA MAX 30 VDC (11.80 mm) 1.071" PNP (27.21 mm) (SOURCE) LOAD NEG RED POS 6 FT. Cable (182.9 cm) LOAD WHITE NPN (SINK) 6-32 x 1/4" Deep 10 TO Mounting Holes 30 VDC 150 MA MAX 2.520" (64.00 mm) GREEN PNF 0.630" (SOURCE) 3.641" (16.00 mm) 0.984" (92.47 mm) **BLACK** (25.00 mm) ₩ €€ 0.472" (€ c(UL)us (12.00 mm)