

OPACITY MODE SPECIAL PURPOSE SENSOR

Designed specifically for the detection of labels

The *LABEL*•*EYE*[™] is a photoelectric sensor designed specifically to sense a variety of adhesive labels. Since the *LABEL*•*EYE*[™] is an automatic one-touch sensor...not the conventional "teach mode" sensor...set-up is simple. Position the gap between the labels directly under the sensors sight guide and push the appropriate Autoset[™] 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*TM is a special purpose gap/slot sensor optimized to sense a wide variety of adhesive labels adhering to a roll of backing paper. The web of labels is directed from a "roll" across a peeler plate and around a sharp edge. As the web passes around the sharp edge of the peeler plate, the adhesive label dislodges from the backing material. The function of the *LABEL•EYE*TM is to look through the backing paper to detect the "gap" between the labels and to 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 $LABEL \bullet EYE^{TM}$ operates on 10 to 30 VDC and is pulse-modulated to prevent any problems from ambient light. Although designed for label detection, the $LABEL \bullet EYE^{TM}$ can be useful in a variety of applications.

Other Possible Uses:

- Opacity mode sensing
- · Double sheet detection
- Envelope contents sensing
- · Edge guiding
- Splice detection
- Label counting
- Unwinder, rewinder
- Die cutter
- Label hot-printing
- Rotary die cutting & converting
- High speed dispensing





SPECIFICATIONS



SUPPLY VOLTAGE

- 10 to 30 VDC
- Polarity Protected
- · Intended for use in class two circuits

CURRENT REQUIREMENTS

45 milliamps (exclusive of load)

OUTPUT TRANSISTORS

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

REMOTE AUTOSET INPUT

opto isolated momentary sinking input (10 milliamps)
Note: Remote models only

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 set-up routines based on web opacity
- One push button set-up
- Simultaneously pushing both buttons inverts the 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 ... immune to most ambient light

INDICATORS

- Green LED flashes when AUTOSET routine is activated and stays illuminated when AUTOSET is completed
- Red LED illuminates when sensors output transistors are "ON".

Note: The status of the output transistors can be inverted by pushing both buttons simultaneously.

AMBIENT TEMPERATURE

• -40°C to 70°C (-40°F to 158°F)

RUGGED CONSTRUCTION

- Chemical resistance to harsh cleaners such as detergents, alcohols, and ketones
- Waterproof, ratings: NEMA 2
- Conforms to heavy industry grade CE and UL requirements

Nano Cable (M8) Selection Guide



RoHS Compliant Product subject to change without notice.

Model Numbers:

LI

<u>Label•Eye</u>	Description	<u>P/N</u>	<u>Length</u>	Thread Coupling
_ER	Red LED, 4 conductor 6 ft. cable	GEC-6	6 ft. (1.8m	Straight Female
LERC	Red LED, 4-pin Nano connector	GEC-15	15 ft. (4.6m)	Straight Female
_ERR	Red LED, 5 Conductor, 6 ft. Cable	RGEC-6	6 ft. (1.8m)	90° Female
_ERRC-M12	Red LED, 5-Pin M12 Pigtail Connector	RGEC-15	15 ft. (4.6m)	90° Female
_ERC-M12	Red LED, 4-Pin M12 Pigtail Connector		· · ·	

DIMENSIONS

