# LabelX

#### LABEL SENSOR

The LabelX sensor combines small spot size and fast response to achieve high-speed label detection. LabelX is capable of detecting a wide variety of adhesive labels on many different types of web backings by differentiating between the gap and the label. The fast response of the sensor allows for precise spatial resolution of the label edge. The Teach key provides Standard Teach-in and Thin Teach-in. The LBX-100 also provides Custom Teach-in. Custom Teach-in records a separate measurement on the gap and on the label to allow for optimal detection of difficult labels.

Status LEDs provide visual indication of teach and error conditions. Key lock mode is available to lock the Teach key. Remote teach input is provided. Light-ON / Dark-ON functionality is provided via the wiring connections.

The sensor provides a discrete output that can be connected for NPN and PNP operation. A PLC can be used to monitor the status of the discrete output signal indicating label or gap presence as required.



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# **Applications**

- Label applicator machines
- Label counting
- Double sheet detection
- · Mark detection on translucent film
- Splice detection
- · Winder, re-winder
- · Label registration
- High-speed dispensing

### **Design & Features**

- Fast and easy teach-in
- Remote teach-in
- · Output status indicator
- PNP or NPN output
- Light-on/dark on connections
- M8 connector
- Key lock

# Ordering Information



LBX-50 LabelX sensor 2 programming modes



LBX-100 LabelX sensor 3 programming modes

### **Functions**

OPERATING MODE
TEACH - STANDARD
TEACH - THIN
TEACH - CUSTOM
GREEN LED ON
RED LED ON
RED/GREEN FLASHING

The LabelX is in operating mode in detect and undetect state One press sets switching point for standard labels Two presses sets switching point for low contrast labels High sensitivity for nearly clear labels (LBX-100) Gap detected

Teach key locked

Output short circuit condition

# **Specifications**

**Light source** 

Fork width Minimum gap or label size Response time **Switching Frequency** Controls Light ON/Dark ON control **Digital Output** Detect indicator 2-press teach indicator **Key lock indicator Fault indicator Programming indicator** Data retention **Dimensions** Weight **Supply Voltage Operating Current Short Circuit Protection Overload / Reverse Polarity Protection** Operating temperature Storage temperature Connector Housing **Mechanical protection** 

High intensity IR Indicators min.100,000 hours Green LED | Detect 3mm Red LED Key lock 2mm <40uS Connector M8 12.5kHz Pin 1 Power Teach-in key Pin 2 Remote Teach By connections Pin 3 Power PNP / NPN, 100mA Discrete output Green LED PNP/NPN Yellow LED

0.21 lbs. (95 g)
10...30 VDC
40mA, (not including output)
Discrete output
Supply voltage
-20°C...55°C
-20°C...70°C
M8, 4 pin

Red LED Flashing red/green

Plastic

IP65

Yellow/green LED

EEPROM non—volatile memory

1.5"(38mm) x 3.2"(80mm) x 0.5"(12mm)



LBX-100 detects semi-clear label on clear web



Industry standard connector, wiring and mounting configuration

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