

# LabelX

## L A B E L   S E N S O R

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.

# LBX



INDUSTRIES

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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

<b>Light source</b>	High intensity IR min.100,000 hours	<b>Indicators</b>	<b>Green LED</b> Detect <b>Red LED</b> Key lock
<b>Fork width</b>	3mm	<b>Connector M8</b>	<b>Pin 1</b> Power <b>Pin 2</b> Remote Teach <b>Pin 3</b> Power <b>Pin 4</b> Discrete output PNP/NPN
<b>Minimum gap or label size</b>	2mm		
<b>Response time</b>	<40uS		
<b>Switching Frequency</b>	12.5kHz		
<b>Controls</b>	Teach-in key		
<b>Light ON/Dark ON control</b>	By connections		
<b>Digital Output</b>	PNP / NPN, 100mA		
<b>Detect indicator</b>	Green LED		
<b>2-press teach indicator</b>	Yellow LED		
<b>Key lock indicator</b>	Red LED		
<b>Fault indicator</b>	Flashing red/green		
<b>Programming indicator</b>	Yellow/green LED		
<b>Data retention</b>	EEPROM non—volatile memory		
<b>Dimensions</b>	1.5"(38mm) x 3.2"(80mm) x 0.5"(12mm)		
<b>Weight</b>	0.21 lbs. (95 g)		
<b>Supply Voltage</b>	10...30 VDC		
<b>Operating Current</b>	40mA, (not including output)		
<b>Short Circuit Protection</b>	Discrete output		
<b>Overload / Reverse Polarity Protection</b>	Supply voltage		
<b>Operating temperature</b>	-20°C...55°C		
<b>Storage temperature</b>	-20°C...70°C		
<b>Connector</b>	M8, 4 pin		
<b>Housing</b>	Plastic		
<b>Mechanical protection</b>	IP65		



LBX-100 detects semi-clear label on clear web



Industry standard connector, wiring and mounting configuration

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PERSONAL SAFETY APPLICATIONS.

MADE IN THE USA

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