

LabelX

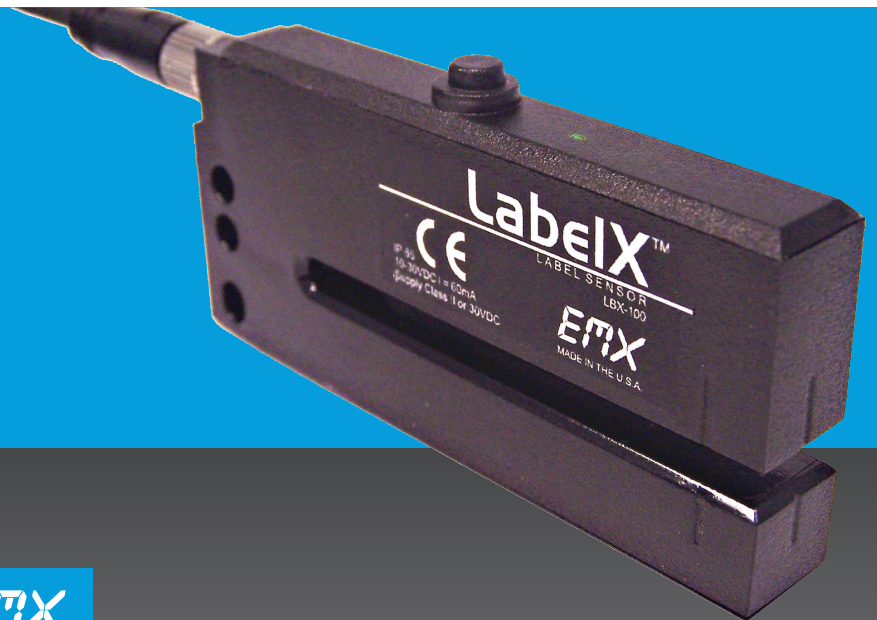
LABEL SENSOR

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.

LBX





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



LBX-100 detects semi-clear label on clear web



Industry standard connector, wiring and mounting configuration

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