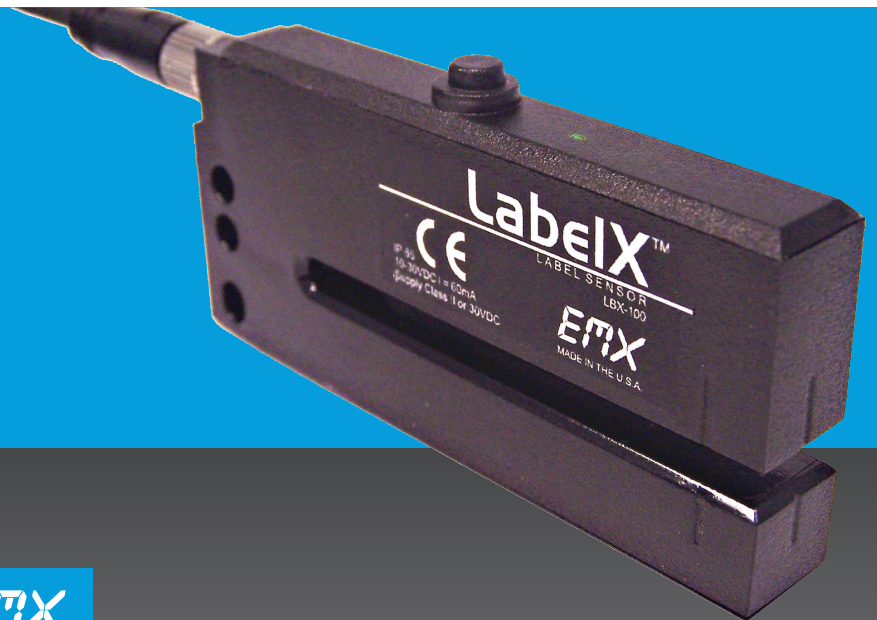# LabelX

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

EMX

INDUSTRIES

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	The LabelX is in operating mode in detect and undetect state
TEACH - STANDARD	One press sets switching point for standard labels
TEACH – THIN	Two presses sets switching point for low contrast labels
TEACH – CUSTOM	High sensitivity for nearly clear labels (LBX-100)
GREEN LED ON	Gap detected
RED LED ON	Teach key locked
RED/GREEN FLASHING	Output short circuit condition

Specifications

Light source	High intensity IR min.100,000 hours
Fork width	3mm
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

Indicators		
	Green LED	Detect
	Red LED	Key lock

Connector M8		
	Pin 1	Power
	Pin 2	Remote Teach
	Pin 3	Power
	Pin 4	Discrete output
		PNP/NPN

LBX-100 detects semi-clear label on clear web

Industry standard connector, wiring and mounting configuration

NOT INTENDED FOR USE IN
PERSONAL SAFETY APPLICATIONS.

MADE IN THE USA

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