



# The World's Most Popular Precision Label Sensors

*Clear • Paper • Metal • Hologram | Versatile • Easy to Use • Reliable*



**LION**  
PRECISION





### Customer Survey Responses

*"The sensors worked better than anything else we had, so we converted all our labelers to Lion."*

*"I was told that Lion Precision made the best sensor for clear label application. They didn't lie. Have your sensors on two of our main labelers and will be replacing others as they need it."*

*"The best out there. Seems to last forever and our customers usually buy more to put on other machines."*

Over 50,000 Sensors  
Installed Across the Globe

Sense Every Label Material

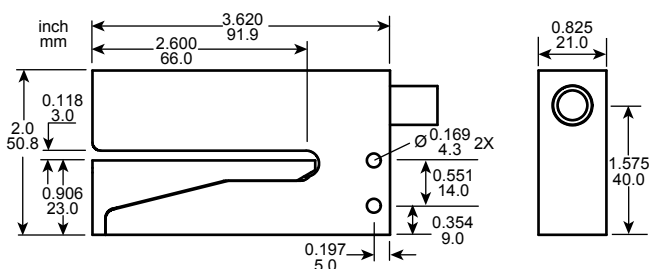
Unmatched Two-Year  
Warranty

Simple Adjustments that  
Stay Adjusted

Fastest Label Sensors  
Available

Most Accurate Label  
Sensors Available

Unparalleled Service



## LRD8200 NEW!

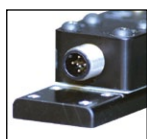
### Ultrasonic Technology for Every Label Type

Ultrasonic technology provides accurate sensing of any type of label. Wide fork for booklets and easy web threading.

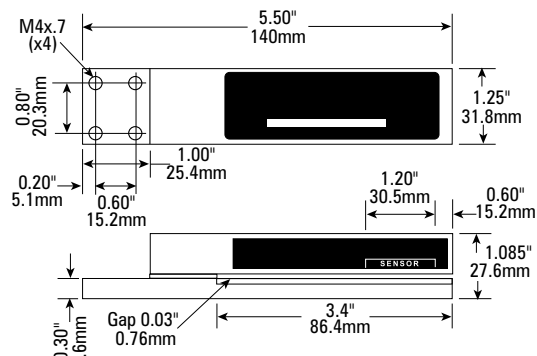
- Works on all label materials and designs
- Pushbutton adjustment
- Easy to read informative indicators

Response Time:	425 $\mu$ S (max delay)
Accuracy:	60 m/min: 0.15 mm (0.006") 250 m/min: 0.60 mm (0.024")
Switching Frequency:	1 kHz; 2 mm gaps at 250 m/min
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24 VDC
Short-Circuit and Overload Protection	
Requires 4-pin M12 sensor cable	
Works with all label materials	

Available with standard LRD style mounting adapter



LRD6110C includes an M12 connector instead of attached cable.



# LRD6110

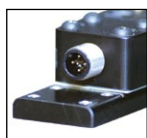
## High-Speed Accuracy for Virtually All Labels

Use the finest capacitive label sensor in the world for reliable, easy label sensing on applicators and slitter/rewinders.

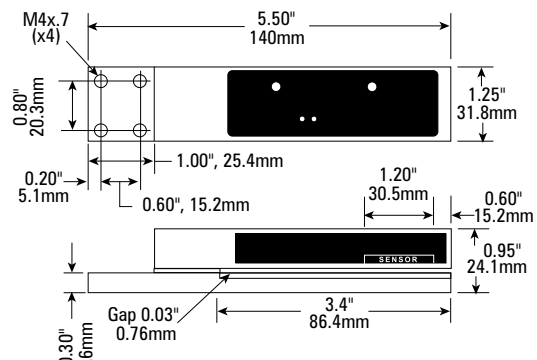
- Works on clear and paper labels
- Works with hot-stamp foils, metallic inks, and high-carbon black ink
- 10-segment light bar for easy setup

Response Time:	20 $\mu$ S
Accuracy:	0.4 mm (0.016")
Switching Frequency:	10 kHz
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24 VDC
Short-Circuit and Overload Protection	

Works with all label materials except solid foil.



LRD2100C includes an M12 connector instead of attached cable.



# LRD2100

## The Sensor that Started a Revolution

The world's first clear label sensor. Optics-free, capacitive sensing does not require changes in color or contrast to sense labels.

- Works with clear and paper labels
- Extremely stable setup
- Fast, accurate, reliable

Response Time:	20 $\mu$ S
Accuracy:	0.2 mm (0.008")
Switching Frequency:	10 kHz
Operating Temperature:	40°F-120°F, 4°C-50°C
Outputs:	NPN and PNP
Power In:	12 to 24 VDC
Short-Circuit and Overload Protection	

Works with all nonmetallic label materials

# Specialized Versions

These sensors use LRD2100 sensing technology in unique applications.



## LRD3100

### *Clear Label Technology for Small Spaces*

Same great performance as the LRD2100 in smaller spaces.

Sensor head can be used with supplied baseplate as pictured, or a baseplate system can be designed into the machinery.

10" (25.4mm) cable from main body to sensor head.

Same specifications as the LRD2100.



## LRD4100

### *Vertical, Multiple Mount for Slitter/Rewinders*

Thin, vertical design for accurate and reliable counting of multi-lane clear or paper labels at rewind speeds.

Proper mounting of the sensor is critical to reliable operation, see Lion Precision TechNote, LT04-0020, *LRD4100 Label Sensor Mounting Considerations* available at [www.labelsensors.com](http://www.labelsensors.com).

Same specifications as the LRD2100.



## LRD5100

### *Tear-Tape Sensor*

The LRD5100 senses the presence/absence of tear-tape on overwrap film. Works with all tear-tape materials and nonmetallic overwrap.

Same specifications as the LRD2100.

## Selection Chart

LRD sensors are also used for glue, splice, and hole detection. Ask a sales engineer about your unique sensing application.

	Adjustment Type	Paper	Clear	Metallic Ink	High-Carbon Black Ink	Hot Stamp	Solid Foil	Response Time	Switching Speed (kHz)	Accuracy mils / mm
LRD8200	Button	✓	✓	✓	✓	✓	✓	425 $\mu$ S	1	24 / 0.6
LRD6110	Screw	✓	✓	✓	✓	✓		20 $\mu$ S	10	15 / 0.4
LRD2100	Screw	✓	✓					20 $\mu$ S	10	8 / 0.2
LRD3100	Screw	✓	✓					20 $\mu$ S	10	8 / 0.2
LRD4100	Screw	✓	✓					20 $\mu$ S	10	8 / 0.2

**LION**  
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