

# SENSORS LX100:15.50.05

## PRODUCT DESCRIPTION

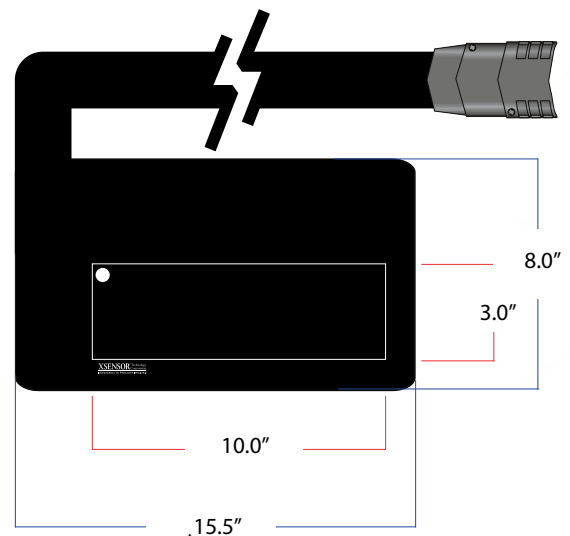
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

| SENSING                    |                             |
|----------------------------|-----------------------------|
| <b>Sensor Technology</b>   | Capacitive Pressure Imaging |
| <b>Pressure Range</b>      | 0.1-3.87psi                 |
|                            | 0.07 – 2.7N/cm <sup>2</sup> |
| <b>Spatial Resolution</b>  | 0.2"      5.08mm            |
| <b>Accuracy</b>            | ± 5% full scale*            |
| <b>Sampling Frame Rate</b> | 95 frames/s**               |

| PHYSICAL CHARACTERISTICS                         |                      |                       |
|--|----------------------|-----------------------|
| <b>Total Area</b>                                | 8" x 15.5"           | 21.6cm x 39.4cm       |
| <b>Sensing Area</b>                              | 3" x 10"             | 7.6cm x 25.4cm        |
| <b>Thickness</b><br>(Sensing Area, uncompressed) | 0.024"               | 0.06cm                |
| <b>Thickness</b><br>(Border – cabling side)      | 0.12"                | 0.3cm                 |
| <b>Border Width</b><br>(cabling side)            | 4"                   | 10.2cm                |
| <b>Border Width</b><br>(non-cabling side)        | 1.5"                 | 3.8cm                 |
| <b>Cable</b>                                     | 42" x 2" x 0.16"     | 118cm x 5.1cm x 0.4cm |
| <b>Connector</b>                                 | 4.76" x 2.76" x 0.9" | 12.1cm x 7cm x 0.2cm  |

| SENSING                    |              |
|----------------------------|--------------|
| <b>Ambient Temperature</b> | 10°C–40°C    |
| <b>Ambient Humidity</b>    | 5% to 90% RH |

## LX100:15.50.05



## KEY FEATURES

- High-resolution sensors with a 5.08mm pitch (resolution) and 750 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

## REQUIREMENTS FOR OPERATION

- Each LX100:15:50.05 sensor must be connected to one X3 PRO SENSOR PACK
- The X3 PRO SENSOR PACK needs to be connected to an X3 PRO
- The X3 PRO needs to be connected to a power supply and a computer running XSENSOR software to function

\* When verified using the standard XSENSOR verification process.

\*\*Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.