

SENSORS LX100:48.48.02

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.

The LX100 series of sensors are often used for automotive and aerospace seating design and comfort analysis. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

SENSING	
Sensor Technology	Capacitive Pressure Imaging
Pressure Range	0.1–3.87psi
	0.07–2.7N/cm ²
Spatial Resolution	0.5" 12.7mm
Accuracy	± 10% full scale*
Sampling Frame Rate	33 frames/s**

PHYSICAL CHARACTERISTICS		
Total Area	32" x 32"	81.2cm x 81.2cm
Sensing Area	24" x 24"	60.9cm x 60.9cm
Thickness (Sensing Area, uncompressed)	0.024"	0.06cm
Thickness (Border – cabling side)	0.04"	0.1cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.62cm
Cable	42" x 2" x 0.18"	106.7cm x 5.1cm x 0.5cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

SENSING	
Ambient Temperature	10°C–40°C
Ambient Humidity	5% to 90% RH

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KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,304 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 LX100:48.48.02 sensor must be connected to one X3 PRO SENSOR PACK
- The X3 PRO SENSOR PACK must 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.