# SENSORS LX100:50.50.05

## PRODUCT DESCRIPTION

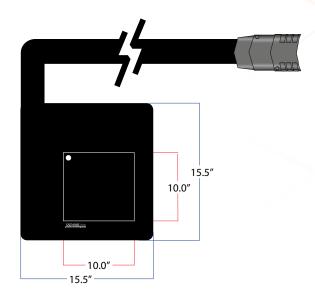
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-3.87psi	
	0.07 - 2.7N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	38 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	15.5" x 15.5"	39.9cm x 39.9cm
Sensing Area	10" x 10"	25.4cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	4"	10.2cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	46.5" x 2" x 0.16"	118cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 0.2cm

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

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### **KEY FEATURES**

- High-resolution sensors with a 5.08mm pitch (resolution) and 2,500 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 LX100:50:50.05 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
- $^{\star}$  When verified using the standard XSENSOR verification process.
- \*\*Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

