

## All the Power at a Fraction of the Cost

The 6 mm Strain Gage sensor (MCSG-B-60-XX) is a robust, indirect (under the pin) pressure sensor that works in conjunction with the eDART System™ to assist molders in diagnosing processes and automatically sorting suspect parts. The 6 mm sensor head is the smallest strain gage sensor available, permitting the use in molds that may have tight clusters of pins with limited room.

The MCSG-B-60-XX model is designed with a sensor head that matches the dimension and installation pocket of the Piezoelectric 9211 6 mm button. That means it contains all of the capability of the Piezo 9211 at a more cost effective price—approximately 20% below comparable Piezo Multi-Channel Systems. Unlike Piezo, though, the connector cables can be bent and folded without damage, making them more flexible and easier to maneuver around obstacles.

The 6 mm Strain Gage sensor is available in two models:

- MCSG-B-60-50 (50 lb. full scale) – typically used with pins up to 3/32" (2.5 mm) in diameter
- MCSG-B-60-250 (250 lb. full scale) – typically used with pins 3/32 - 5/32" (2.5 - 4.5 mm) in diameter

This sensor is part of our Multi-Channel Strain Gage sensor line, is connected to the SG-8 plate, and is compatible with the MCSG extension cable and adapter. The 16 bit adapter and a software update are required.

### Features and Benefits

- 6 mm diameter and height
- Small footprint in the mold
- More cost effective than Piezoelectric options
- Flexible, robust sensor cable
- Not susceptible to moisture or contamination

Lynx™ Strain Gage Adapter  
SG/LX8-S-ID



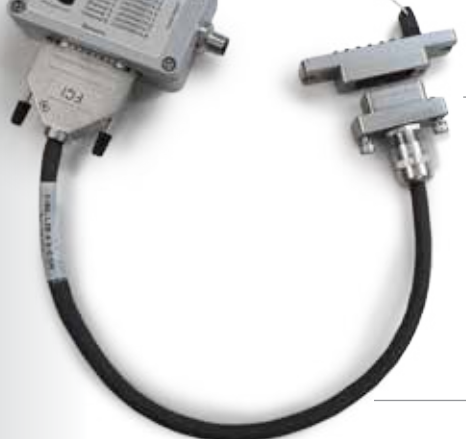
Multi-Channel Strain Gage Sensor—6 mm  
MCSG-B-60-xx



Sensor Plate  
SG-8



Connecting Cable  
C-SG-LX8-.5M (1M, 2M)

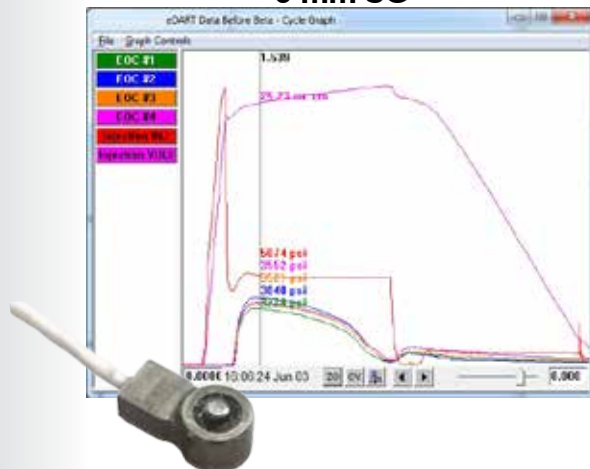


## 6 mm SG Comparison with 9211 PZ

	MCSG-B-60-50	MCSG-B-60-250	Piezo 9211
<b>General</b>			
<b>Full Scale</b>	50 lb (0.22)	250 lb (1.1 kN)	562 lb (2.5 kN)
<b>Max Pin Size</b>	3/32" (2.5 mm)	5/32" (4.5 mm)	1/4" (6 mm)
<b>Minimum Recommended Pin Size</b>	1/32" (1 mm)	3/32" (2.5 mm)	1/32" (1 mm)
<b>Accuracy % Full Scale</b>	+/- 2%	+/- 2%	+/- 1%
<b>Maximum Temperature—Connector</b>	185° F (85° C)	185° F (85° C)	392° F (200° C)
<b>Maximum Temperature—Sensor Head</b>	250° F (120° C)	250° F (120° C)	392° F (200° C)
<b>Sensor Resolution</b>	0.01 lb (0.04 N)	0.01 lb (0.04 N)	.02 lb (.08 N)
<b>Physical</b>			
<b>Installation pocket</b>	Same as Piezo 9211	Same as Piezo 9211	6 mm dia x 6 mm deep
<b>Min Cable Bend Radius</b>	Cable can be bent and folded without damage	Cable can be bent and folded without damage	5 mm internal bend radius
<b>Min Length from Sensor Head to Cable Bend</b>	10 mm	10 mm	35 mm
<b>Cable can be repaired</b>	Yes	Yes	No
<b>Detachable cable</b>	No	No	Yes
<b>Custom cable length</b>	Yes	Yes	No
<b>Environmental</b>			
<b>Moisture/Contamination Susceptibility</b>	No	No	Yes
<b>Connector Maintenance</b>	None	None	Requires special cleaners
<b>Sensor Drift</b>	No	No	Yes, if connector is contaminated
<b>Automatic Sensor Diagnostics</b>	Yes	Yes	No
<b>Pricing</b>			
<b>System Pricing</b>	The MCSG System is approximately 20% below comparable MCPZ	The MCSG System is approximately 20% below comparable MCPZ	

## Data from the Same Mold with 1 mm Pins Can You Tell the Difference?

6 mm SG



9211 PZ

