

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)

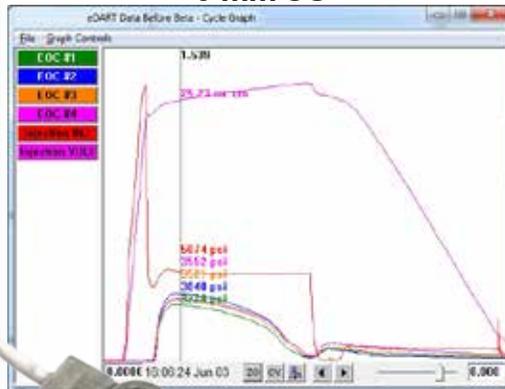


6 mm SG Comparison with 9211 PZ

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

