

# Honeywell

## Sensotec Load Cells



## Application Bulletin

**Title:** Smart Airbag Deployment testing using Sensotec Miniature Load Cells.

**Application:** The airbag must not deploy if there is a child in the seat. A minimum weight of >40 lbs must be present to arm the airbag circuit. The weight sensing is a safeguard dictated by the federal government.

**Solution:** Development and testing is in progress for a scheme to provide the passenger weight from the car seat. The customer is using Sensotec Model 13 load cells in ranges of 0-100 lbs and 0-250 lbs in separate tests for children and adults.



The Model 13 Load Cell is ideal for testing the feasibility of this measurement because the load cell is very small and lightweight.

Production quantities will require a custom strain gage load cell or an alternative technology load sensing device.

### Recap:

The Sensotec Miniature Model 13 Compression type load cells are mounted in development car seats to test potential production passenger weight sensors. The development car seats are subjected to "controlled crash" impacts to test the production type passenger weight sensors.

