

Press Release

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Akebono Brake to Release "Kanshinki" Seismoscope for Long-Period Ground Motion Detection Uses Innovative New Accelerometer Technology

TOKYO — Akebono Brake Industry Co., Ltd., announced today that it will soon release the new "Kanshinki" seismoscope for long-period ground motion detection. This innovative new device makes the most of the company's outstanding sensor technology, and is scheduled to be released in mid-December 2008.

The "Kanshinki" utilizes micromachined automotive capacitive accelerometers to detect seismic motion. The device works on the principle that any incline in the micromachined silicon sensor element due to changes in gravitational force can be detected as a difference in voltage and then displayed as a numerical value.

There are two primary types of seismic motion: short-period motions that occur rapidly over short durations, and long-period motions that occur slowly over durations from several seconds to more than 10 seconds. These long-period ground motions can cause structures such as oil tanks and high-rise buildings to resonate and vibrate significantly. The size of the structure determines the frequency that is likely to make the structure vibrate, with larger buildings and structures generally prone to vibrate in response to longer-period ground motions. This vibration can destroy structures and buildings, and can cause significant damage by rupturing oil tanks.

While pursuing its core business in brake products, Akebono continues to leverage its proprietary sensor technology developed for automotive applications to develop products for applications outside of the automotive industry. The new "Kanshinki" for detecting long-period ground motion is expected to help prevent earthquake damage in a wide range of applications from oil tanks and skyscraper elevators to long highway and railway bridge structures.