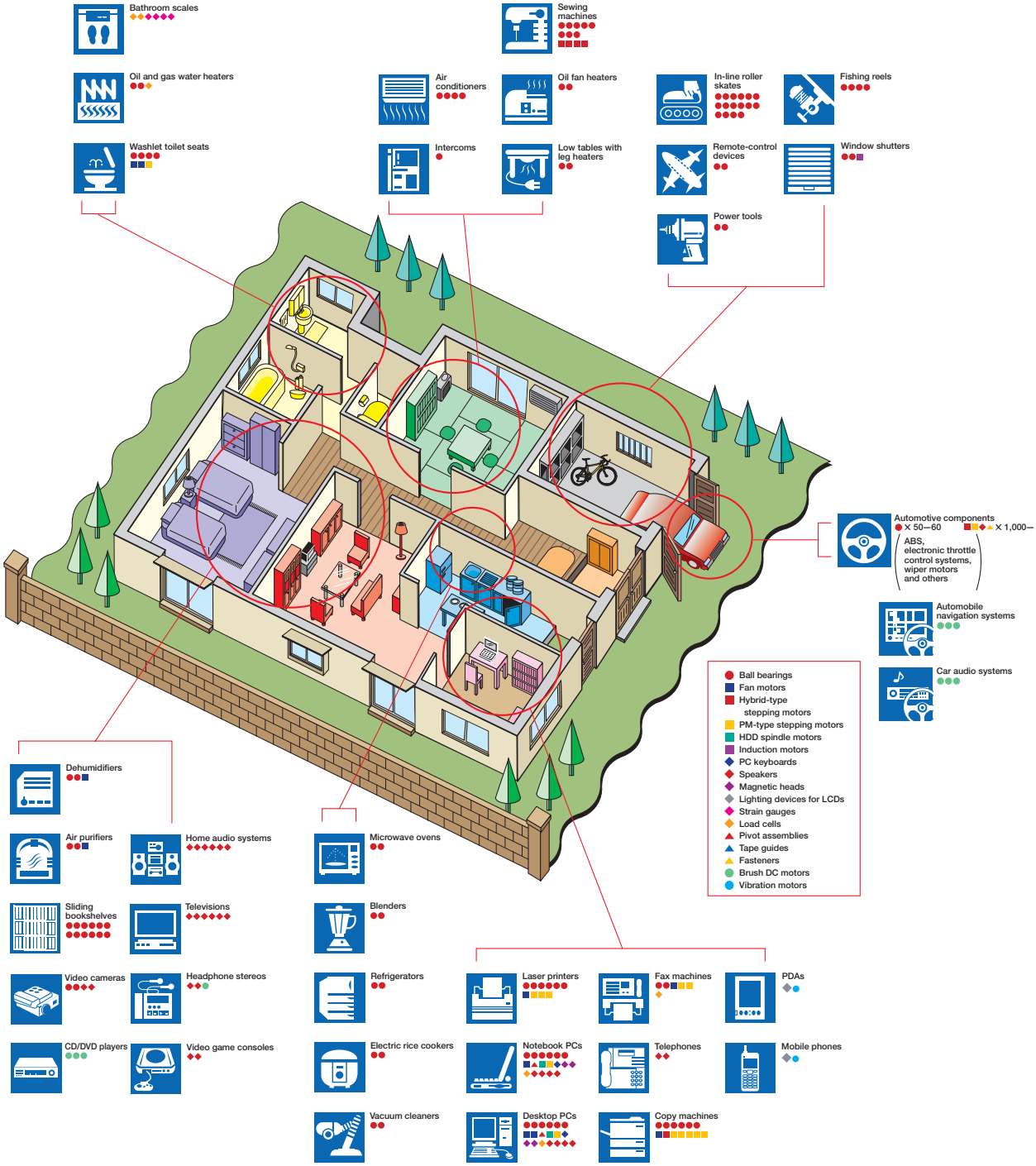
The Minebea Group manufactures ball bearings; machined components, notably aircraft and automotive components; and electronics components, including liquid crystal display (LCD) backlights, strain gages and PC keyboards. These products are used in a wide range of devices in everyday life. It is estimated that, for example, between 100 and 200 small-sized ball bearings are used in the average home. Ball bearings are bearings that contain rolling elements, that is, balls, which minimize friction, thus enabling devices to rotate smoothly. Miniature ball bearings are required in ever-greater numbers for advanced home and office electronic equipment and are contributing to efforts to develop models that are smaller, use less energy and last longer.

Minebea Products: Essential to Modern Lifestyles

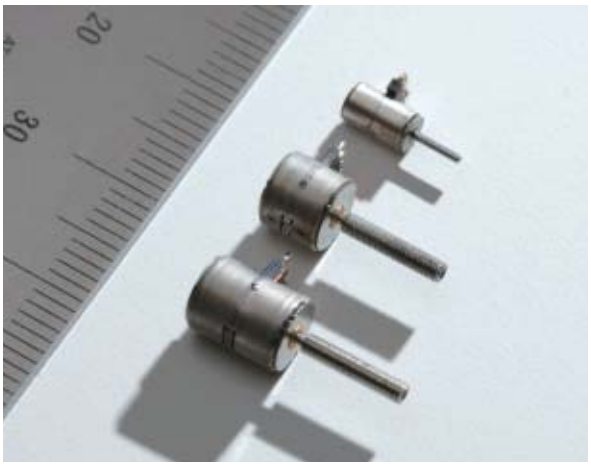


Development of Environment-Friendly Products

World's smallest-diameter stepping motor

In recent years, demand has grown rapidly for permanent magnet (PM) stepping motors for use in small lens actuators for digital cameras and other applications. Minebea has developed a PM stepping motor with a 3 mm diameter. The world's smallest in terms of diameter, the new motor achieves superior performance, combining sufficient output power as a lens drive actuator as well as high-precision step driving.

This new motor facilitates the construction of ultrasmall lens units for camera-equipped mobile phones, demand for which is expanding rapidly, making it possible to design thinner and smaller camera-equipped mobile phones. Higher resolution also makes it possible to incorporate autofocus and zoom functions. Minebea anticipates significant demand for use as actuator motors to enhance the performance of camera-equipped mobile phones. Smaller and requiring fewer resources and less energy than conventional models, this new stepping motor is also environment friendly.

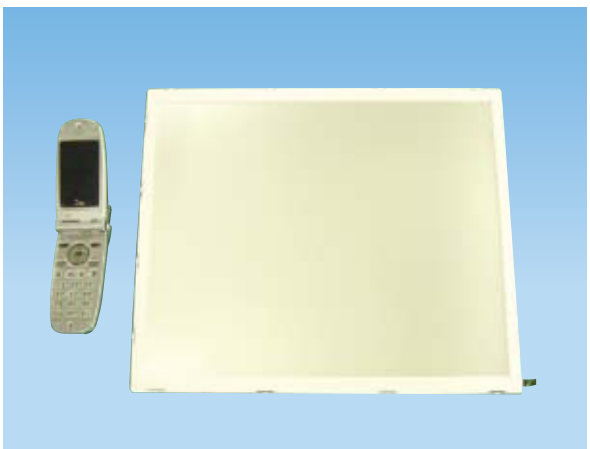


World's smallest-diameter stepping motor (right) and stepping motors with 6 mm diameter (center, left)
Source: Minebea (As of April 2007)

LED backlight for 15-inch PC monitors

Demand for thin, lightweight displays for PCs, particularly for laptop models, has increased recently. As a consequence, demand is increasing for light emitting diode (LED) backlights, which can be used instead of traditional cold-cathode fluorescent light (CCFL) tubes as the light source to produce slimmer, lighter-weight liquid crystal displays (LCDs). Moreover, unlike CCFL tubes LEDs are not subject to breakage, therefore enhancing the shock resistance of displays.

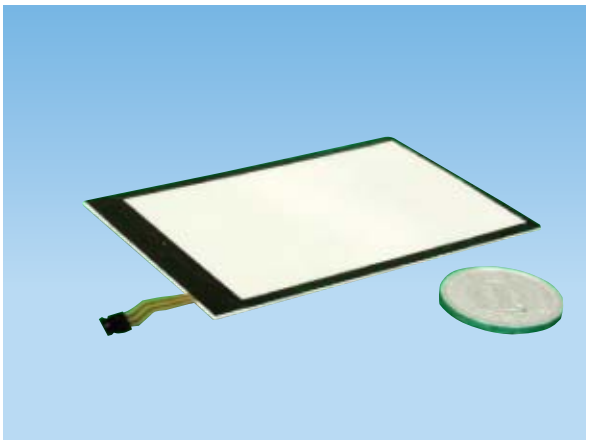
Compared with LCD backlights currently on the market, Minebea's new product features a light guide plate with a thickness of 0.6 mm, offering both support for displays of up to 15 inches and high brightness. Moreover, in addition to being mercury- and lead-free—unlike traditional CCFL tubes, which contain mercury—LED backlights consume little power, making them environment friendly.



LED backlight for 15-inch PC LCDs

Ultrathin LED backlight for mobile electronics devices

To date, Minebea has developed and manufactured numerous white LED backlights for LCDs used in mobile devices, including mobile phones, digital cameras and personal digital assistants (PDAs). In response to surging demand, Minebea recently developed an ultrathin LED backlight in which the thickness of the guide plate has been reduced to 0.285 mm and that of the display component is less than 0.5 mm. The 0.5-mm thickness of the display component is equal to or less than that of organic electroluminescent (EL) backlights made with glass substrates. This new backlight can be combined with a thin LCD panel to create an ultrathin (less than 1 mm) LCD module, thus contributing to the realization of thinner mobile phones and the use of fewer materials.

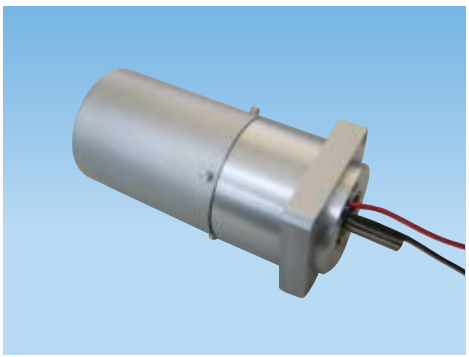


Ultrathin LED backlight for mobile electronic devices

DC brush motor for aircraft applications with environment-friendly design

Minebea has designed a new DC brush motor for use in auxiliary power unit (APU) door actuating systems for new aircraft models. This motor is used to drive the actuating system that opens and closes the APU door, a mechanism that supplies airflow to the engine.

In designing this new motor, Minebea reviewed its existing products, which have long been used in aircraft components, from an environmental perspective, as a result of which it succeeded in reducing both parts used and assembly stages, extending the life of the brush and lowering the motor's weight. Minebea also eliminated solder and other materials that exert a negative impact on the environment. The new motor is thus compatible with the Restriction of Hazardous Substances (RoHs) directive.



New DC brush motor

Reduction in fan motor material use thanks to environment-friendly design

By switching to an environment-friendly design for its fan motors, Minebea succeeded in reducing the number of fan blades to seven, from 11. This enabled Minebea to reduce the volume of materials used in fan blades by approximately 36%, thereby contributing to the more efficient use of resources.

Fan motor with seven fan blades, down from 11 in conventional fan motors

Environment-friendly DC four-pole six-slot brush motor

In line with the design concept behind this new product—is an ecologically sound motor—this new motor boasts a variety of environment-friendly features. These include compact size, high torque, low noise, a long product life, light weight and the reduction or elimination of materials that exert a negative impact on the environment. Particularly impressive is the highly efficient six-slot, rounded-edge design, which delivers outstanding torque (twice that of existing motors) and low power consumption (50% lower than that of existing motors.)

[Four-Pole Six-Slot Brush Motor]

[Structure of Four-Pole Six-Slot Brush Motor]