

Thinner! More sensitive! Measures the movement and vibration of the object

Machine failure prediction

Robosensor Technology Research, Inc.

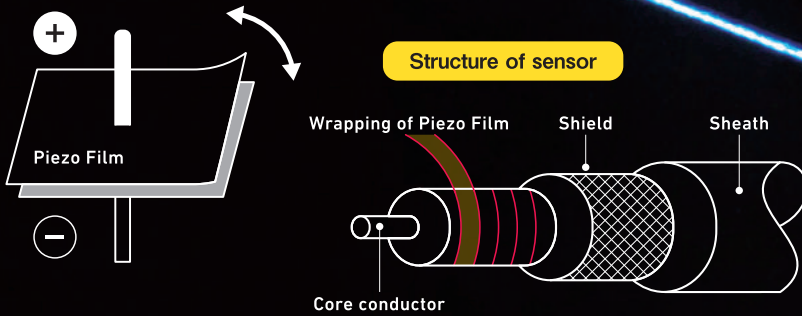
Piezoelectric Wire Sensor

We have developed the Piezoelectric Wire Sensor as ultra fine, 0.5mm coaxial wire, which is made of piezo thin film wound around the core. We are in research and development phase of application products.

By thin and supple nature of the wire adding to the self-powered ability, it allows you easy and flexible installation to both narrow and wide area of objects, or machinery. Low-cost in mass production has also achieved in comparing with conventional sensors.

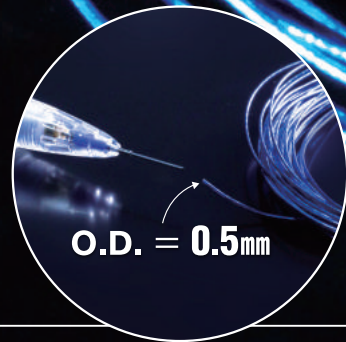
It is expected in applications of machine failure prediction not only for the rotation mechanism such as bearings or drill bits, but also for sliding mechanism because it can sense the abnormal vibration caused by abrasion of parts.

Charge generation by piezo effect



Features of the product

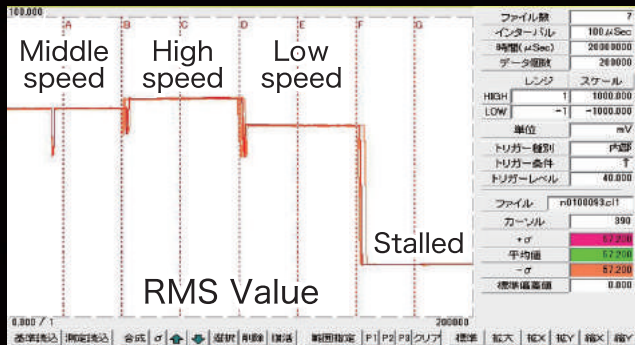
- ① Flexible installation, thin and supple
- ② Self-powered and battery-less
- ③ Low production cost



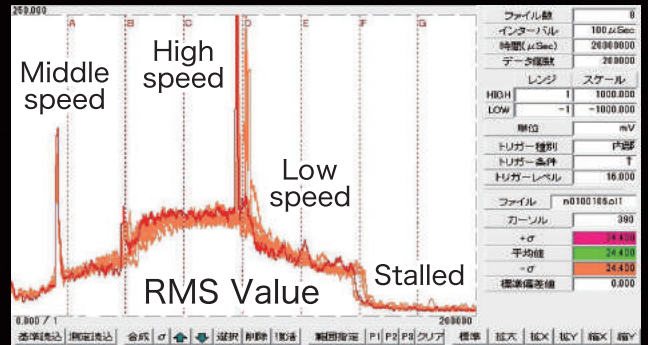
Comparison with conventional vibration sensor

Sensor used : Piezo Electric Wire Sensor, 2m Sensor setting : wound around the motor

In application as vibration sensor, our Piezoelectric Wire Sensor gets signal strength at the same timing as conventional MEMS acceleration sensors, and shows clear stepwise changes like left figure below. The sensor wire just needs to be wrapped around the vibration part such as a motor. For more details, please feel free to contact us.



Robosensor TRI / Piezo Electric Wire Sensor



MEMS Method / 3-Dimensional Acceleration Sensor

Robosensor TechnologyResearch, Inc.

1064-10, Mikataharacho, Kita-ku Hamamatsu-shi, Shizuoka, 433-8105, Japan

Tel&Fax | +81-53-438-1700

Web | <https://robosensor.co.jp>

mail | info@robosensor.co.jp