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**A Top Minnesota Company**

NVE is number 68 in the new Minneapolis / St. Paul Business Journal rankings of Minnesota's Top 75 Public Companies. [More »](#)

**Trending on YouTube**

[Detecting Tiny Gear Teeth](#)

[Low Supply Current with the World's Only TMR Isolators](#)

[Mechatronic Xylophone using ASR002 Angle Sensors](#)

[Self-contained Smart Magnetometer programmer](#)



NVE will be closed  
May 27  
for Memorial Day.

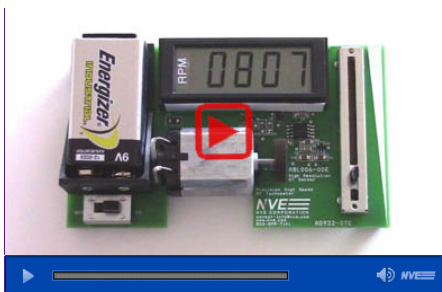
**Detecting Tiny Gear Teeth**

ABL-Series Gear-Tooth sensors can detect sub-millimeter pitch gear teeth. We did a demonstration to prove it to skeptical customers.

We use an ABL006 Gear-Tooth sensor biased by an inexpensive ferrite magnet.

A high-speed motor spun a fine-tooth gear, and we could vary the motor speed. A digital meter displayed the speed measured by the sensor, and a microcontroller ran the motor and read the sensor.

The demonstration gear was module 0.26 mm; the pitch was 0.83 mm, and tooth depth was only 0.55 mm:



The sensor provided accurate speed measurement from DC to 10,000 RPM. This requires a fast, sensitive sensor, and ABL Gear-Tooth sensors fit the bill.

Key features and specifications include:

- Sensitive to small teeth
- 1 MHz operating frequency
- Single- and dual-bridge versions
- Up to 30 V supply
- 150°C operating temperature
- Miniature MSOP8 and 2.5 mm x 2.5 mm TDFN6 packages

[Download GT Sensor Catalog »](#)

**Buy Online**  
\$9.95 shipping

**In the News**

An article on magnetic angle sensors and magnets in *Magnetic Business & Technology*:

**“TMR sensors are more sensitive and have wider operating field ranges than Hall-effect sensors.”**

[Read »](#)

A paper in the latest edition of the *IEEE Sensors Journal*, titled **“Non-Invasive Measurement of Glaucoma Disease at Earlier Stage Through GMR Sensor AH Biomagnetic Signal From Eye and RADWT Algorithm,”** describes NVE sensors to measure the biomagnetic signal of the aqueous humor for glaucoma detection.

[Abstract »](#)

**German Subtitles**



“Frau Daniella”

Many of NVE's most popular [YouTube videos](#) now have German subtitles available—bad puns and all.

Thanks to our friends at long-time distributor [Hy-Line Power Components](#) for their clever translations.

[YouTube »](#)

**Recent Conferences**

**ESEC Spring**

Spring) in Tokyo.

NVE distributor K.K. Rocky demonstrated NVE smart sensors at the Embedded Systems Expo (ESEC

**Upcoming Exhibitions**

**Power Conversion and Intelligent Motion (PCIM),**  
May 7 to 9, Nürnberg, Germany.



NVE distributor Hy-Line Power Components (stand 9-519) will display our products, including the new [IL01x Low-Power Isolators](#) and [IL2985E Low-Power Transceivers](#).



**PCB Design & Manufacturing Live,**  
May 9, 2019, Silverstone Circuit,  
Northamptonshire, England in cooperation  
with distributor Rhopoint Components.



**Sensors Expo and Conference**  
June 25 to 27, San Jose, Calif.  
Booth 1344 in the *IoT and Wireless Pavilion*.