NVE CORPORATION

Sensor and Isolator NEWS

October 2015 *Electrifying News From NVE*

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6 kV Isolator Datasheets

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- 6 kV isolation and 44000-year life
- 1 kV Working Voltage

Fun Fact

A coffee cup* could hold approximately 700,000 of NVE's 1.1 millimeter square ADL-Series magnetic switches.

*Although they're quite rugged, we don't recommend storing our parts in coffee cups.

More Fun Facts >

Application Corner

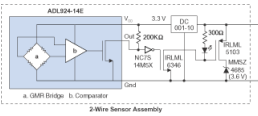
Two-Wire Magnetic Proximity Sensor

Two-wire sensors are common in industrial control to simplify wiring. But for many sensors, competing constraints make designing two-wire interface circuitry tricky.

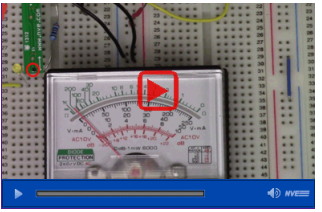
Two wire interfaces need to operate over a wide power supply range.
With the sensor off, the circuit must draw a minimal residual current, typically in the range of one milliamp. With the sensor on, the circuit must provide enough current to drive a significant load such as a motor or solenoid. Minimum holding current is another design constraint.

NVE's ADL-Series sensors are perfect for two-wire applications, because their low supply voltage and low quiescent current provide plenty of design margin.

Here's a simple reference circuit:



And here's a demonstration:



In addition to their impressive electrical specifications, ADL-Series sensors feature precise magnetic operate points and an ultraminiature 1.1 millimeter package.

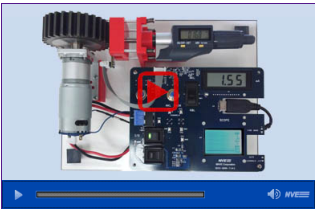
Standard ADL-Series magnetic operate points are 20 and 28 oersteds, with other ranges available by special order.

Buy Online
$9.95 shipping

New Video

Gear Tooth Sensor Demonstration

NVE Vice President for Sensors Jay Brown demonstrates the extraordinary wide air-gap range of NVE's unique GMR gear tooth sensors.



The demonstration shows the operation of ABL-Series analog gear-tooth sensors (both single and dual bridge) and AKL-Series digital gear-tooth sensors.

GT Sensor™ features include:
- Wide airgap tolerance
- DC (zero speed) operation
- Precise spacing between sensor elements
- Excellent performance over temperature and voltage

ABL-Series analog sensors provide sinusoidal outputs with one cycle per tooth. Dual bridge analog sensors have two out-of-phase outputs for determining direction. AKL-Series digital sensors include signal processing to provide a 50% duty cycle digital modulated current signal.

The demonstration shows a gear driven by a motor with a micrometer adjustment to change the air gap between the sensor and gear. This demonstrates the wide airgap range accommodated by GT sensors—a range of 5 millimeters or more.

Play in NVE Website

Play in YouTube

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