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New Products

AKL-Series Gear-Tooth Demonstrator

6 kV Isolators

Basic Isolated CAN Transceiver

Document Updates

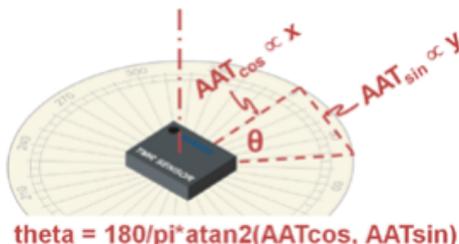Isolator Catalog (Includes IL41050TT CAN transceiver and more 6 kV Isolators).

Spring Forward

Daylight Saving Time begins Sunday, March 13. Set your clocks forward an hour.

It's also a good time to prepare for Pi Day (see story at right).

Pi Day Applications

In honor of **Pi Day** 3/14/16, here's a typical angle calculation for AAT-Series angle sensors:

$$theta = 180/pi*atan2(AATcos, AATsin)$$

The equation can be used in C++ or Arduino to calculate the angle, in degrees, indicated by an AAT sensor's two outputs.

We could take the inverse sine and cosine of each output, but the values would have to be scaled. Because the arctangent is a ratio calculation, it doesn't need scaling, and cancels power supply variations.

Unlike the one-variable arctan function, the two-variable function provides a full 360-degree angle range.

Here's a video with more information.

Embedded World

Distributor HY-LINE Power Components showed IsoLoop isolators at the recent **Embedded World** exhibition in Nürnberg, Germany. There was strong interest in NVE isolators, particular for I²C and SPI.
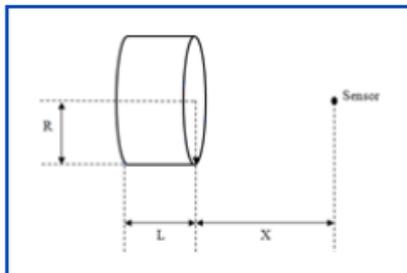
Application Tools

Magnetic Field Strength vs. Magnet Distance

Quick.

What's the field strength one inch from the face of a 6 mm diameter, 4 mm long Ceramic 8 magnet?

You could dust off Maxwell's equations and do some multivariate calculus.

Or you can download our Flux Density Calculator Excel spreadsheet.

The spreadsheet calculates magnetic field intensity in Oersteds from a disk or bar magnet at various distances. It's invaluable for the design of magnetic sensor systems, and can make you the life of any party.

This video shows a live demonstration: