

DH SERIES

Zero Velocity - Magnetic Hall Effect Sensors - 5/8 and 3/4 Threads

AI-Tek has taken its years of experience of designing and manufacturing Hall Effect sensors for harsh applications and has developed a line of durable products for industrial, rail, military and automotive use.

The new AI-TEK DH series sensors are differential based, zero-speed, precision, single channel, speed sensors. At power-up, they calibrate themselves to the unique magnetic signature of their installed application and continue to update the calibration as the sensor is running. This unique combination of differential sensing technology and calibration make these sensors highly tolerant of installation mis-alignment, target geometry and composition, target run-out, vibration and air gap changes.

In comparison, the RH series are single-element based, zero speed, single channel speed sensors and are an excellent choice for general purpose speed sensing. Unlike the DH series that requires rotational alignment at installation, the RH requires no alignment. Air gap adjustment is precise and easy and similar to a VR type sensor.

The new DH sensor can sense each change in target movement, regardless of speed, from zero to 15 kHz frequency range, generating a steady pulse train of frequency proportional to target speed. Typically, each time a gear tooth (or any ferrous discontinuity) passes in front of the sensor the output changes state. This type of sensor is known as a "P" type because it uses N-P-N transistor logic (as opposed to "N" type, which uses P-N-P transistor logic).

Key features:

- Reverse voltage protection, to prevent damage if miswired
- Extended temperature range
- Wide range of supply voltage
- Two output options of Supply Tracking or TTL Compatible
- Rugged design meeting IEC 77 Standards (European Railroad Applications)
- Require special alignment
- Improved duty cycle
- Improved fine pitch performance
- Increased air gaps
- Special circuitry provides high level of EM1 hardness
- Select versions equipped with RTD temperature measurement output

Suitable for 32 diametral pitch or coarser gear (target), the standard catalog sensors are easily applied to your various sensing needs. If you have a unique, special requirement which cannot be met with any of the standard options, we will gladly review your specs and work with you on a special sensor design.

It is the customer's responsibility to determine whether the product is proper for customer's use and application.