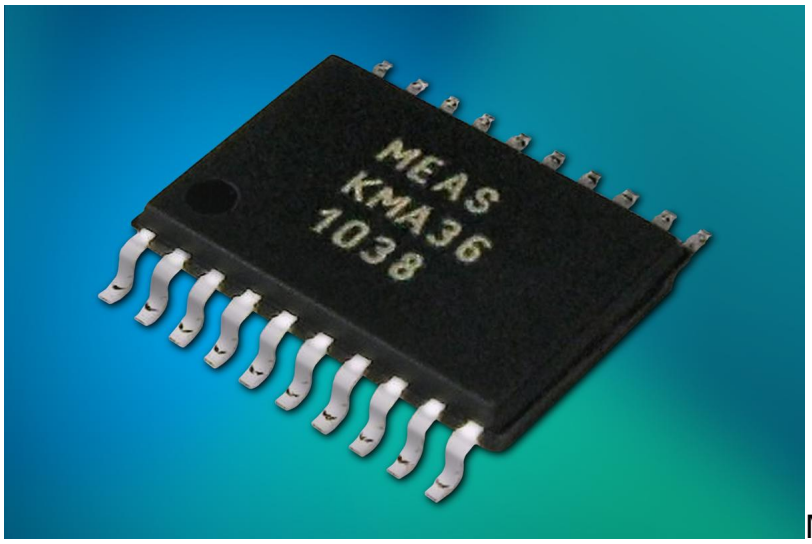
Digital position sensor designed for precise rotational and incremental measurement of magnetic field fluctuations



Measurement Specialties has released the KMA36, a digital position sensor for precise rotational and incremental measurement of magnetic field fluctuations.

Using anisotropic magneto resistive (AMR) technology, the contactless sensor measures angles of an exterior magnet over a 360° rotation as well as incremental positions along a linear magnetic pole strip with a 5 mm pole length.

Housed in a standard TSSOP package and able to withstand harsh environmental elements, the low-power KMA36 is ideal for use in industrial, engine, robotics and motor machine applications. Specific implementations include potentiometer replacement, motor feedback control and gauge reading, precise linear displacement readings or steering wheel measurements.

The sensor can detect disturbances ranging from extremely weak fields, as found in traffic detection sensors, to strong field sensors used in precision encoders. The reliable unit is less susceptible to external noise, as found with Hall Effect position sensors, and its robust construction withstands harsh environments where optical sensor bearings fail.

The KMA36 is a system-on-chip that features an integrated analog-to-digital converter and signal processing capabilities. This provides easy sensor data access in analog signal or digital formats via the TSSOP pinheads, making it useful in a number of less rugged applications including laboratory research, medical equipment and conveyor instrumentation.

Included software features a self-diagnostic sequence at power-on that tests the electronic circuit before integration into the assembly and during field use. It also

communicates faults and failures to the system with which it is interfacing.

Measurement Specialties
http://www.meas-spec.com [1]

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