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HALL-EFFECT ACTUATION SYSTEMS FOR AEROSPACE APPLICATIONS

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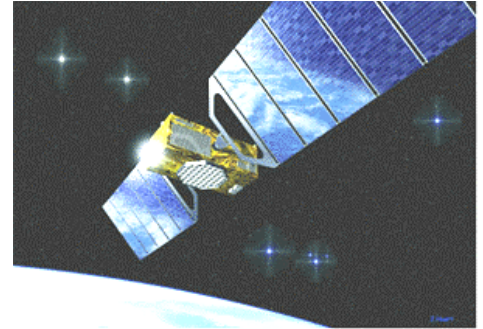
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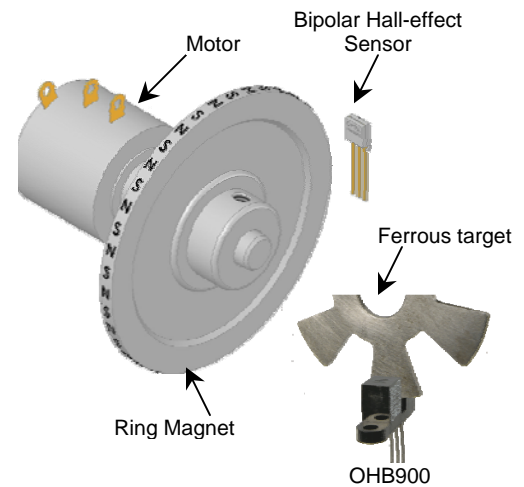
Application

Actuation Systems address the precise motion control requirements of spacecraft, aircraft, satellites and missiles. Functions requiring motion control include: optical filter selection, camera control, antenna positioning, fin positioning, solar panel orientation and door open/close mechanisms.



Requirement

Actuation systems can use a combination of linear and rotary actuators to perform their motion-controlled functions. A ring magnet and a bipolar Hall-effect sensor can determine the precise position and speed of the linear actuator shaft. Similarly, a slotted Hall-effect assembly and a ferrous target can be used to indicate the position of a rotary shaft.

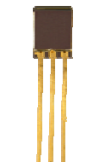


Solutions from OPTEK: Hi-Reliability Unipolar, Bipolar or Slotted Assembly Hall-effect Sensors

- Excellent temperature stability to operate in harsh environments.
- Suitable for military and space applications.
- COTS Plus processing patterned after Class "B" or "S" of MIL-STD-883 available.
- Designed for non-contact switching operation.
- Low power consumption. The sensors typically draw only 4mA to 5mA of supply current.



OMB900
Slotted
Hall-effect
Assembly



OMB
Hallogtic
Hall-effect
Sensor

OPTEK Technology is a leading provider of custom sensing solutions which incorporate the use of infrared, visible light, magnetic and fiber optic technologies focused on applications in office machines, industrial equipment, encoders, automotive electronics, military and high-reliability applications and medical diagnostic equipment.