APPLICATION DATA

Solid State Sensors

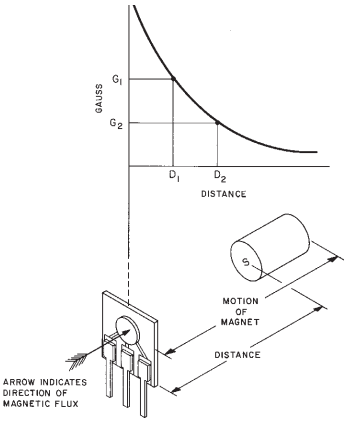
Method of Magnet Actuation

There are many ways to apply Hall effect in position sensing application. The more common methods are described below. Further information is as near as your telephone. Just call your nearest MICRO SWITCH sales office and one of our trained field engineers will be happy to discuss your application with you.

Head-on

For ''head-on'' actuation, there should be sufficient magnet travel to provide at least 10% flux overdrive of both maximum operate and minimum release characteristics of the sensor. The target is centered over the point of maximum sensitivity and is moved ''head-on'' to the sensor, then backed off.

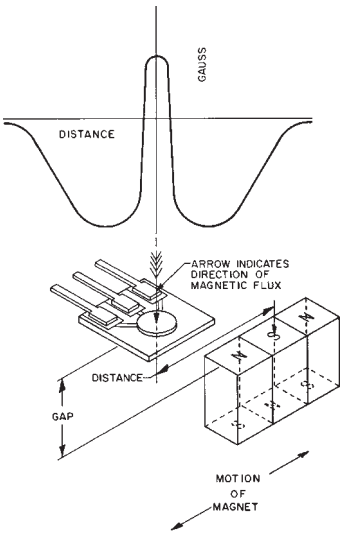
Unipolar Head-on



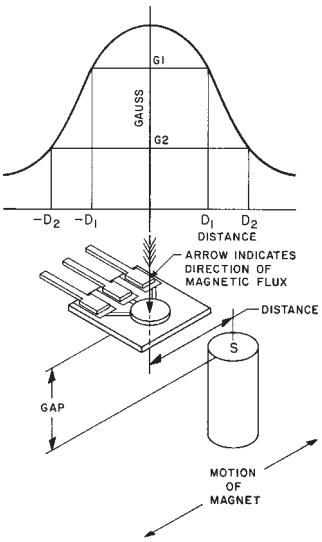
Slide-by

For ''slide-by'' actuation, the magnet should pass the sensing surface at a distance which provides at least 10% flux overdrive above maximum operate. The target is moved across the face of the sensor at a specified distance.

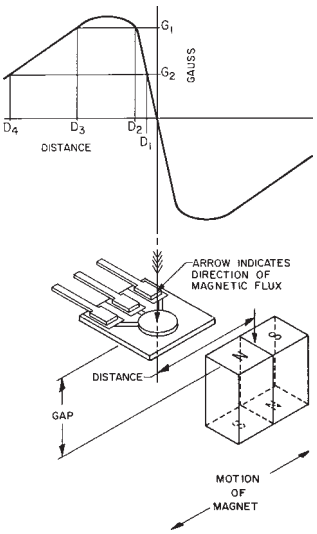
Bipolar Slide-by (3 Magnets)



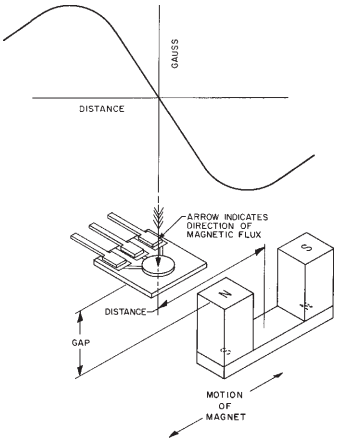
Unipolar Slide-by



Bipolar Slide-by (1 Magnet)



Bipolar Slide-by (2 Magnets)



Rotary

A rotating target, such as a ring magnet, provides an alternating pattern of On-Off actuation.

Bipolar Slide-by (Ring Magnet)