

# Features and Benefits

## PHYSICAL STRENGTH

The MG Series offers Alnico or Indox magnets which exhibit good physical strength.

## MAGNETIC FIELD

Rare Earth (SmCo-Samarium Cobalt) magnets from MG Series offer strong magnetic field in compact sizes.

*Choose the best fit option*

## MAGNETIC MATERIAL

Honeywell's MG Series offer magnets made from different magnetic materials allowing customers to choose the most suitable option for their application.

## OPERATING TEMPERATURE

The MG Series magnets exhibit good stability over a wide range of operating temperatures, as low as -40 °C [-40 °F] or as high as 140 °C [284 °F] to 300 °C [572 °F], depending on the magnet.

## OPERATING MAGNETIC GAUSS LEVELS

The MG Series offers a wide selection of magnets operating across various magnetic Gauss levels to choose from.

## Potential Applications



These magnets are used as actuators for Hall-effect and magnetoresistive sensor ICs which in turn can be used in a number of potential industrial and medical applications.

### INDUSTRIAL

- **Door or lid closure detection in appliances or electronically controlled containers**

The unipolar sensor recessed in the door frame with a magnet embedded in the door can help in sensing the open and close positions in doors or lids in appliances or electronically controlled containers.

- **Simple speed and RPM (revolutions per minute) sensing in fitness and industrial equipment**

A single magnet of appropriate polarity mounted on the motor shaft of a treadmill when actuates a unipolar Hall-effect sensor IC generates single digital pulse for each revolution which in turn can help measure the speed or RPM of the equipment.



### MEDICAL

- **Position sensor in hospital beds and medical equipment**

Magnets can be used to determine the home or end-of-travel position of the equipment on an activator arm of hospital beds and medical equipment.

- **Medication bin monitor on portable drug carts**

These magnets can be mounted on a drug dispensing drawer to detect the open or close position using a unipolar Hall-effect sensor IC.

# MG Series

## MAGNET CURVES

The curves shown on the graphs are typical plots of induction (Gauss) versus distance for various magnets.

Mode of operation: Head-on

Figure 1. 101MG2L1

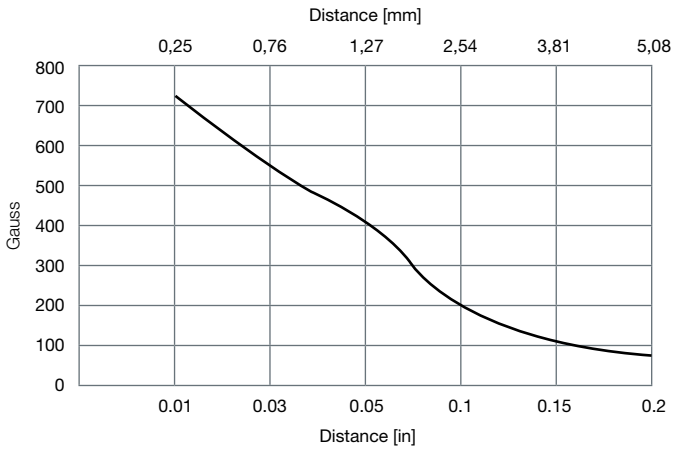


Figure 2. 101MG3

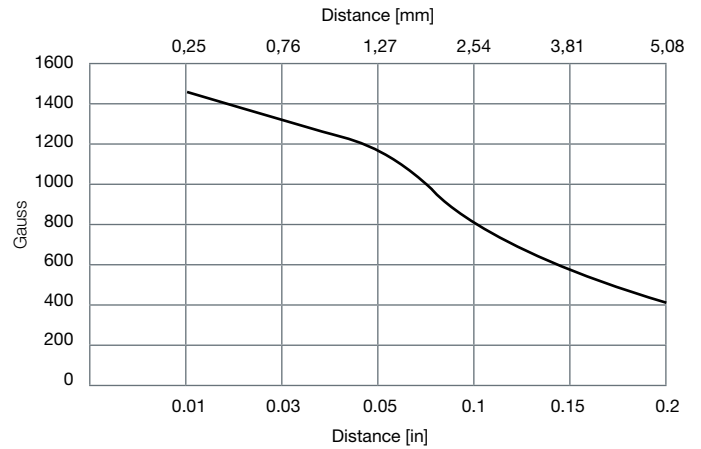


Figure 3. 101MG7

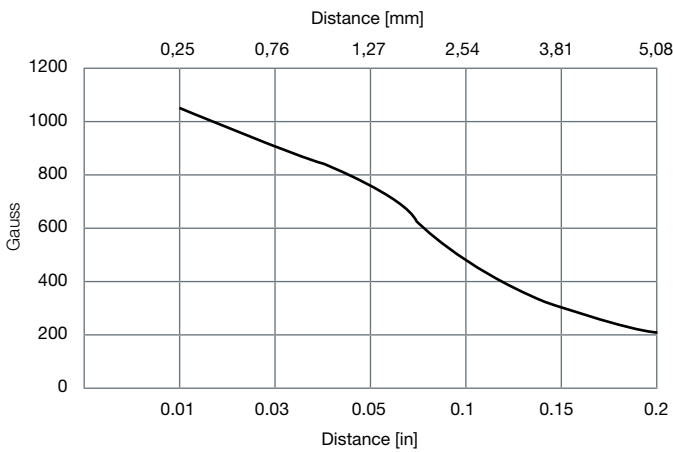


Figure 4. 101MG8

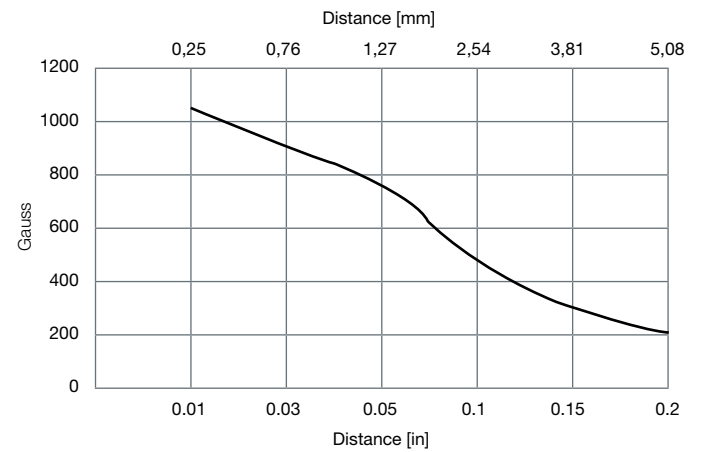


Figure 5. 102MG11

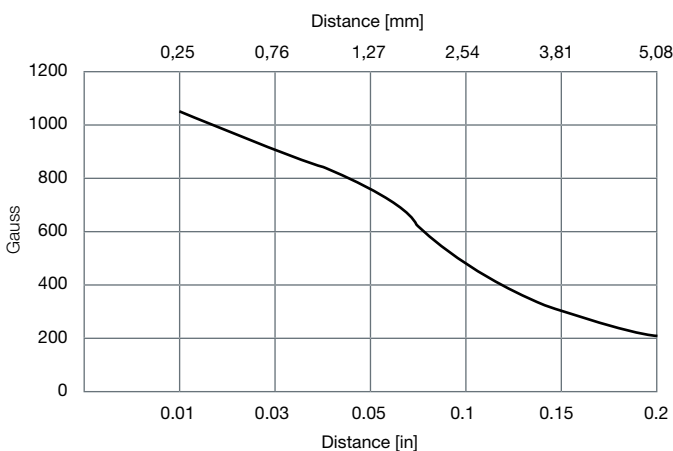


Figure 6. 102MG15

