Honeywell

Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new Interactive Catalog. The Interactive Catalog is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



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Sensing and Control

Honeywell Inc. 11 West Spring Street Freeport, Illinois 61032

Analog

Solid State Sensors

Magnets

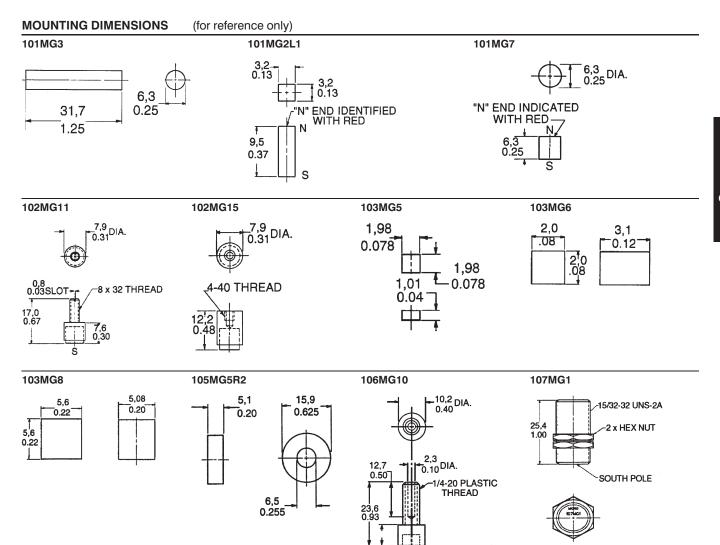
GENERAL INFORMATION

Several bar and ring magnets for actuating Hall effect sensors are available from MICRO SWITCH. Bar magnets, in various sizes and strengths, are ideal for sensors with unipolar magnetic characteristics. The ring magnets, with alternate South and North poles on the outside diameter, are especially useful for sensors with bipolar magnetic characteristics. (For more information on magnets and methods of magnet actuation, see Application Data.)



FEATURES

- Wide variety of sizes and shapes
- Wide variety of magnetic materials
- Threaded bushings available on some listings for easy installation



MG Series **Solid State Sensors**

Magnets

MG ORDER GUIDE — BAR MAGNETS

Catalog Listings	101MG3	101MG7*	101MG2L1*	102MG11*	102MG15*	103MG5**	103MG6***	103MG8	106MG10*	107MG1
Outside Diameter	6,3 0.25	,	3,2 0.125	7,9 0.31	7,9 0.31	2,0 .078	2,0 .080	5,6 .220	10,2 0.40	15/32-32 UNS21
Length	31,7 1.25		9,5 0.375	17,0 0.67	12,2 .48	2,0 .078	3,1 .120	5,6 .220	23,6 0.93	25,4 1.00

^{*} Bulk packaging in 100 unit lots. Add -BP to catalog listing.

MG ORDER GUIDE — RING MAGNETS

Catalog Listings	105MG5R2	105MG5R4			
Outside Diameter	15,9 0.625	15,9 0.625			
# Pole Pairs	2	4			

MAGNET SELECTION GUIDE

This guide is designed to aid in determining the best magnet for use with a Hall effect sensor. There are several factors to consider when choosing a magnet. The most important is gap distances. There must be adequate magnetic gauss to operate the sensor at the correct distance. By using the maximum operate magnetic gauss characteristics (see sensor order guides), you can determine which magnet(s) will operate the sensor. Other important factors include temperature range and the physical environment of the application.

		Temperature Range*	Magnetic Shock Resistance	Resistance To Demagnetization	Gap Distance** & Gauss Level @ 25°C†						
	Physical Strength				0,25 .010	0,76 .030	1,27 .050	2,54 .100	3,81 .150	5,08 .200	Catalog Listing
Alnico V Cast	Good	−40 to 300°C	Poor	Fair	1460	1320	1170	810	575	420	101MG3
Alnico VIII Sintered	Good	-40 to 250°C -40 to 140°C -40 to 140°C	Good	Excellent	1050 7800	900 7800	755 7800	470 750	295 550	195 375	101MG7 102MG11 102MG15 107MG1***
Alnico VI Sintered	Good	−40 to 250°C	Good	Good	730	550	410	205	115	75	101MG2L1
ndox 1 Pressed	Good	0 to 100°C	Good	Excellent	700	520	375	175	85	45	105MG5R2 105MG5R4
Rare Earth Pressed	Poor	-40 to 250°C	Good	Excellent	1110 2900 2620 2620	630 1400 2100 2100	365 850 1600 1600	120 260 940 940	55 130 550 550	25 70 350 350	103MG5 103MG6 103MG8 106MG10

^{*} Magnet will not be damaged over temperature range. ** Gap distance from sensing surface. *** Measurement device saturated @ 800 gauss.

 \pm milliTesla = Gauss \times 10

^{** 125} pieces per tube. Poles not marked.

^{*** 75} pieces per tube. Poles not marked.