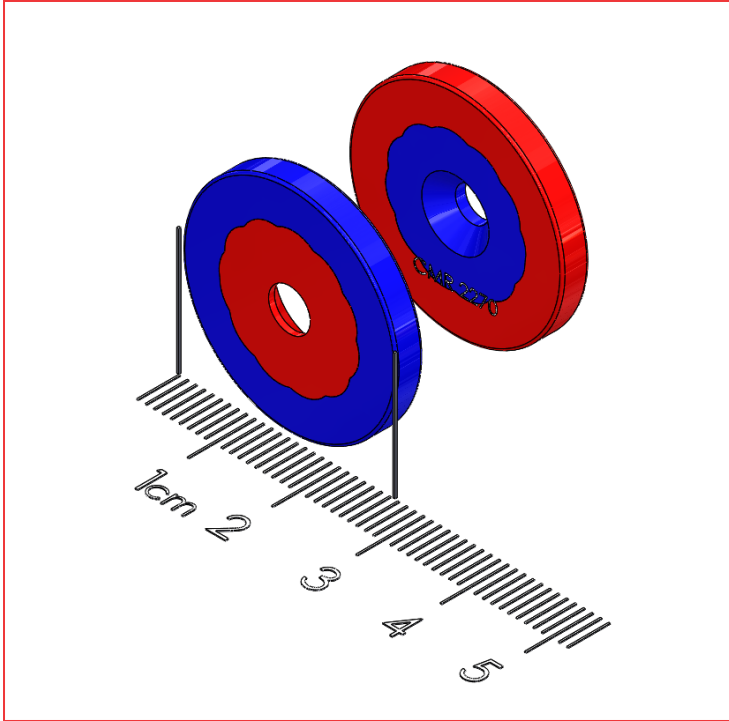


# 1002308 Center Alignment Polymagnet Pair – Long Range

These Attach Polymagnets are designed to have a very high attachment force in both magnet to magnet and magnet to metal applications. They are designed to have a high peak holding force over a short working range and very tightly controlled magnetic field compared to other Polymagnets. These Neodymium magnets provide a high radial shear resistance when used with their Polymagnet counterpart. The focused magnetic field allows systems to be tightly controlled to minimize stray fields that interfere with sensitive devices.



## Features and Benefits

- Mobile phone case and stand design
- Radial alignment
- M4 countersunk
- 1002270 – 1" OD 0.125" Thick
- 1002271 – 1" OD 0.125" Thick

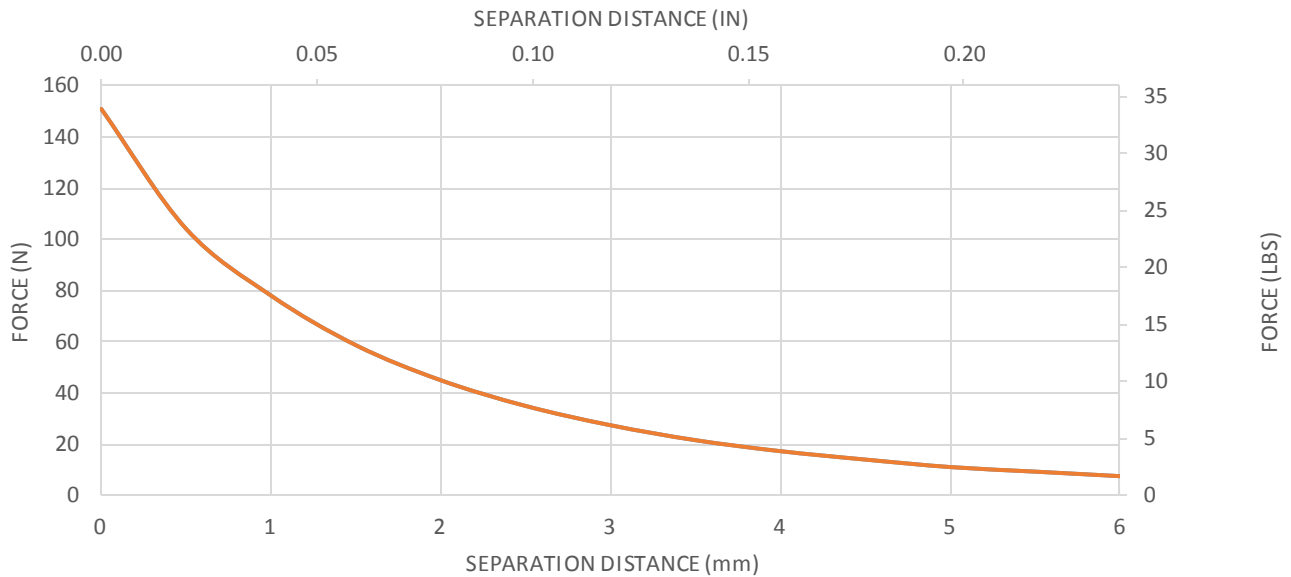
### Technical Specifications:

Dimensions:	1 OD x 0.125 in
	25.4 OD x 3.18 mm
Weight:	0.4 oz (12.0g)
Material:	NdFeB
Magnet Grade:	N50
Coating:	NI-CU-NI
Temperature Rating:	140° F (60° C)
Holding Force at contact:	33.9lbs (151N)
Peak Shear Force at 0.060" (1.5mm) separation:	5.9lbs (26.4N)

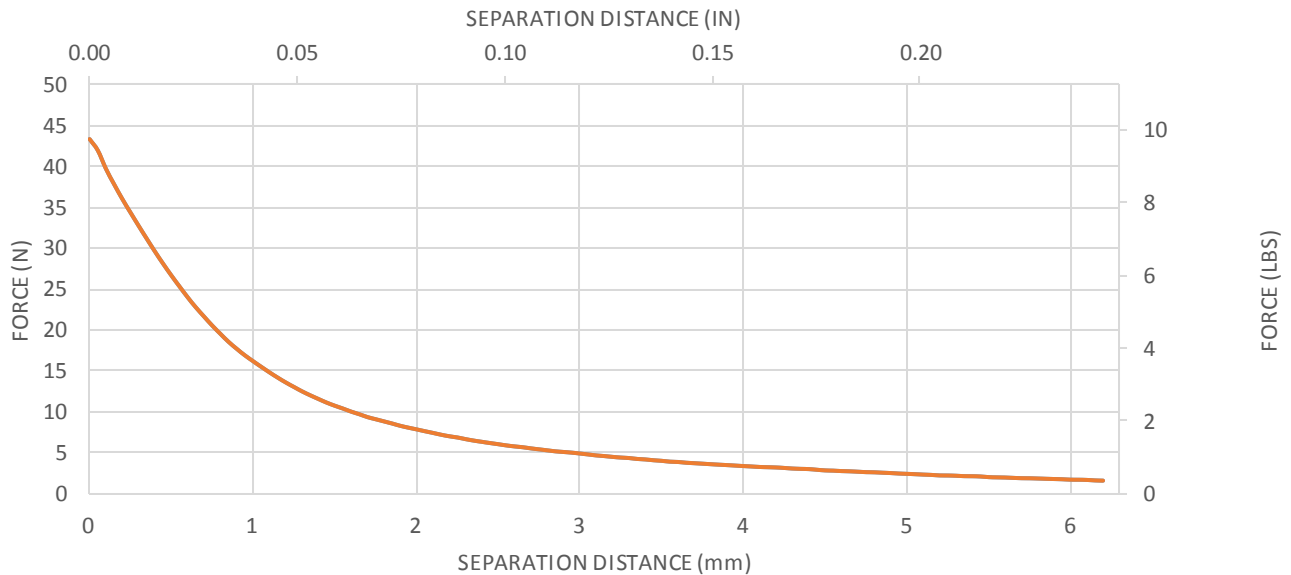


www.polymagnet.com

### HOLDING FORCE VS SEPARATION DISTANCE MAGNET TO MAGNET



### HOLDING FORCE VS SEPARATION DISTANCE MAGNET TO 0.010" (0.25mm) STEEL



These Polymagnets provide very strong, tightly focused attachment forces to steel or their mating Polymagnet. These magnets are suitable for use with a metal target or another 1002308 Polymagnet.



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These Polymagnets provide a self-aligning feature as the magnet is moved into and out of position. The holding force decreases, as one magnet is moved off center, while the shear force pulling the magnet back to center increases. This decrease in holding force minimizes friction and provides self-alignment for the system.

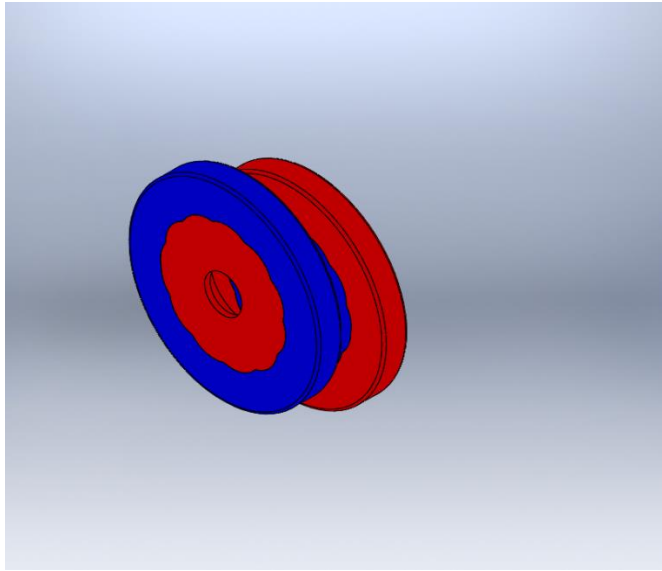
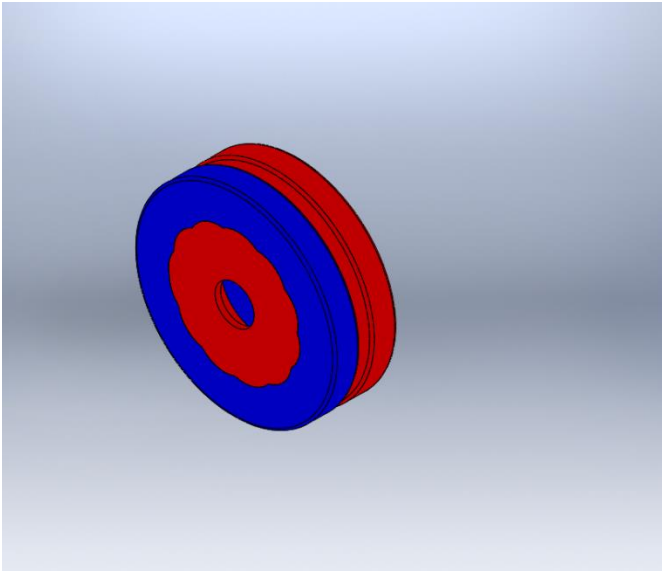
\*In the images below the polarity regions are indicated for the marked face of the magnet. North poles are indicated by the red regions, south poles are indicated by the blue regions, and steel is indicated by the grey region.

Attract Force:	13.2lbs (58.7N)
Shear Force:	0lbs (0N)

Attract Force:	2.8lbs (12.4N)
Shear Force:	5.9lbs (26.4N)

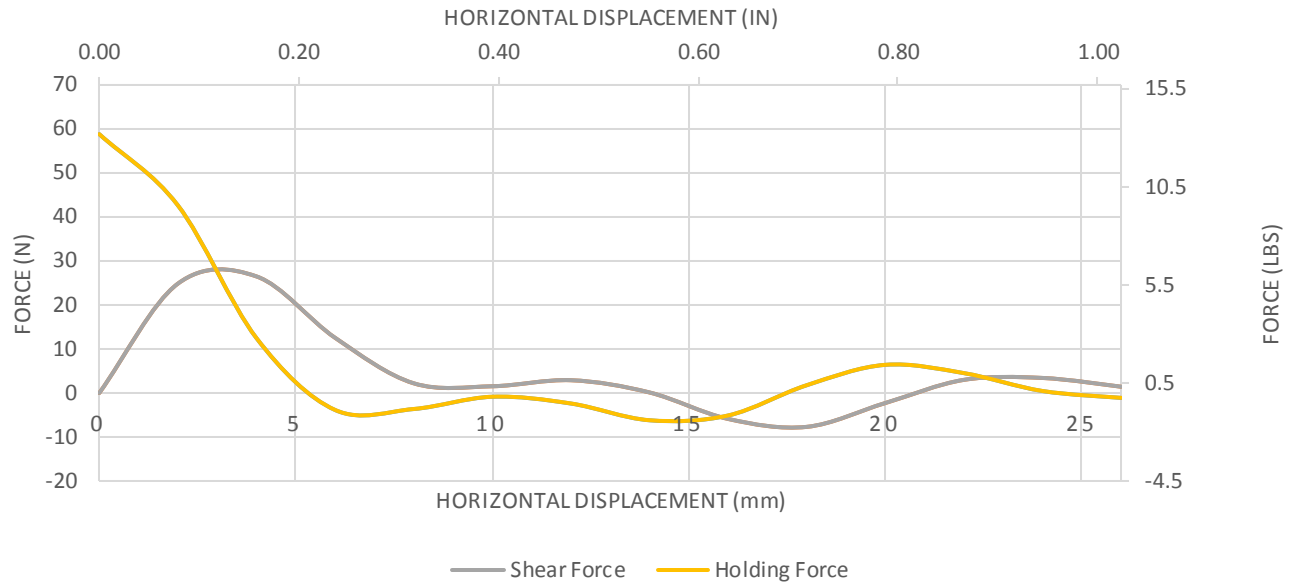
CENTERED

0.2" 4.0mm OFFSET



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### HOLDING FORCE VS HORIZONTAL DISPLACEMENT AT 1.5MM MAGNET TO MAGNET GAP



These Polymagnets provide very strong, tightly focused attachment forces to steel or their mating Polymagnet. These magnets are suitable for use with a metal target or as a 1002270/1002271 Polymagnet pair. A pair of 1002270/1002271 Polymagnets demonstrate a strong shear resistance against radial forces.

#### Notes on Performance Data

The performance information provided in this data sheet is derived from test or simulation results of directly comparable magnets of the same size and grade under consistent conditions. The magnets are tested under controlled environmental conditions. Unconstrained application testing may give lower forces due to the magnet tilting or shifting away from target during engagement and disengagement.

#### Patent Information

Pat. [www.cmrpatents.com](http://www.cmrpatents.com)

