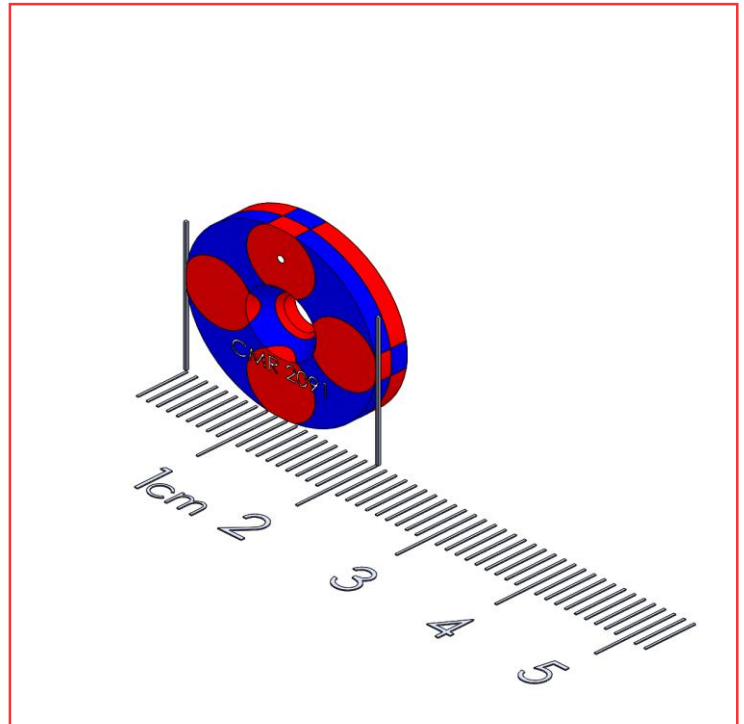


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1002091

Attach Polymagnets are designed to have maximum attachment force in magnet-to-metal applications. These magnets exhibit increased attachment force compared with their conventional counterparts, especially on 0.040in or thinner steel. Attach Polymagnets' magnetic fields are concentrated close to the surface resulting in higher peak forces and a steeper force vs. distance curve; this allows the behavior of magnetic systems to be tightly controlled.



Features and Benefits

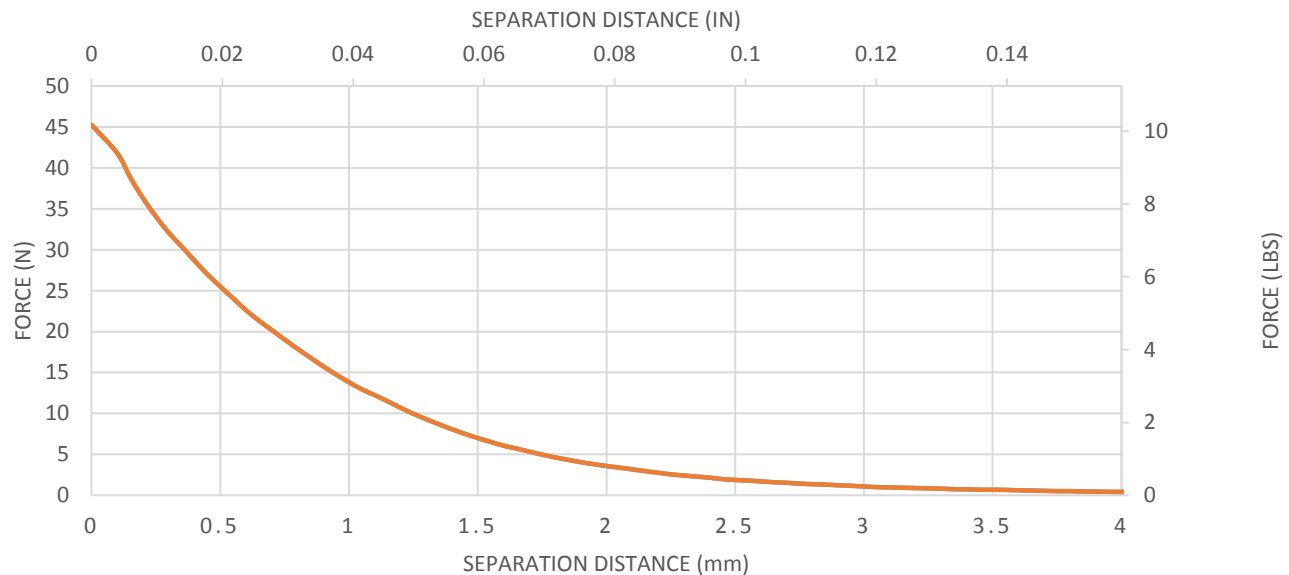
- Magnet-To-Metal
- 82° CTSK #6

Technical Specifications:

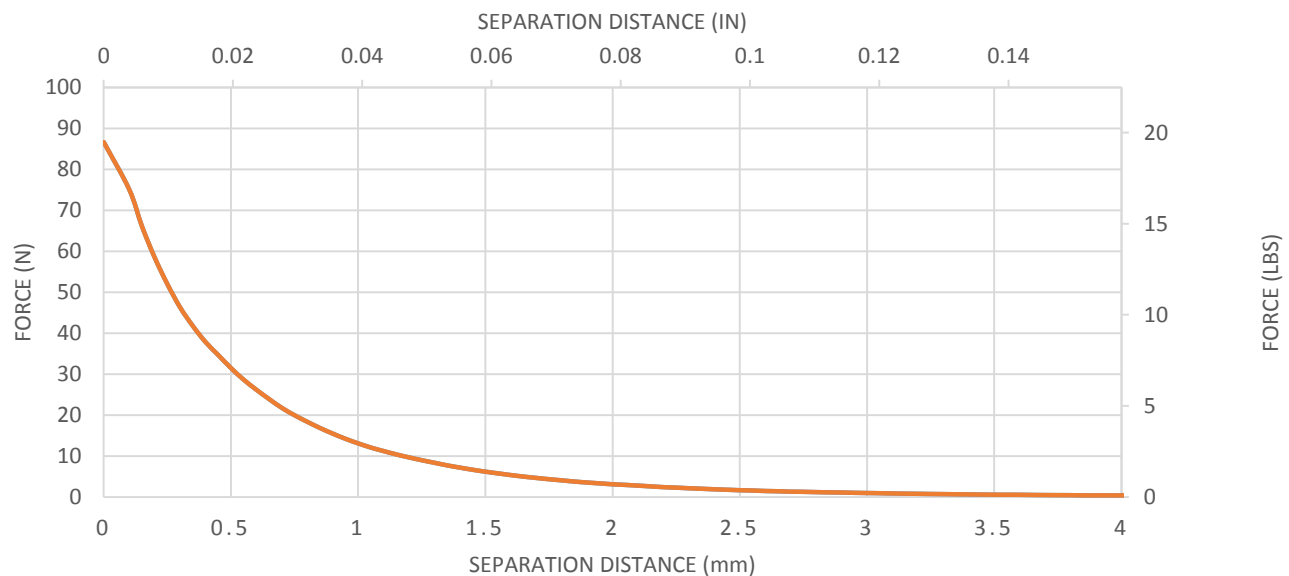
Dimensions:	0.75 OD x 0.125 in (19.05 OD x 3.175 mm)
Weight:	0.2 oz (6.3 g)
Material:	NdFeB
Magnet Grade:	N50
Coating:	Ni-Cu-Ni
Temperature Rating:	176 ° F (80 ° C)

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



HOLDING FORCE VS SEPARATION DISTANCE MAGNET TO 0.031" (0.79mm) STEEL



Technical Data Sheet

Application Notes

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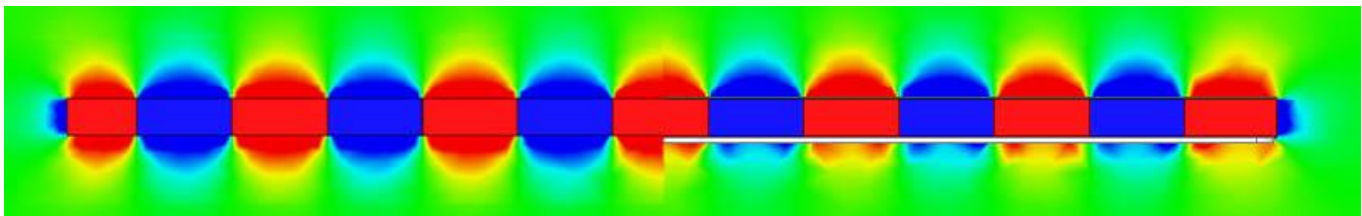
Steel Thickness	Contact	0.02in (0.5mm)	0.04in (1.0mm)	0.06in (1.5mm)	0.08in (2.0mm)	0.10in (2.5mm)	0.12in (3.0mm)
0.010in (0.254mm)	45.2LBF (10.2N)	25.5LBF (5.7N)	13.8LBF (3.1N)	7.0LBF (1.6N)	3.6LBF (0.8N)	1.9LBF (0.4N)	1.1LBF (0.2N)
0.031in (0.7874mm)	86.7LBF (19.5N)	31.5LBF (7.1N)	13.1LBF (2.9N)	6.2LBF (1.4N)	3.1LBF (0.7N)	1.7LBF (0.4N)	1.0LBF (0.2N)

This Polymagnet provides very strong attachment force to steel over its effective range compared to conventional magnets. The holding strength for Attach Polymagnets can be enhanced in many applications by using a steel shunt directly against the back of the Polymagnet, and this steel shunt will also help limit stray fields from the shunt side of the magnet.

* The image below shows the magnetic field differences between a Polymagnet without a shunt and a Polymagnet with a shunt. This image refers to Polymagnet 1000325.

Polymagnet with no shunt

Polymagnet with shunt



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. Magnetic performance may vary by up to 7%, the values presented here are based on nominal magnetic properties

Patent Information

Pat. www.cmrpatents.com

