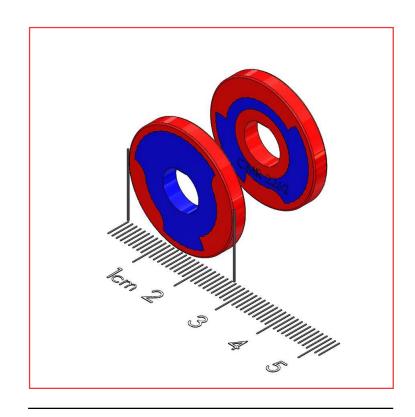
www.polymagnet.com

1002288 Spring-Latch pair – Keyed Center Hole -1" Diameter

The keyed spring latch pair is designed to have the same functionality as the spring latch demo, but with keyed center holes to allow for different mounting methods. Must be axially constrained



Features and Benefits

- Behaves like a spring in one position, and an attractive magnet pair when rotated 180 degrees.
- 1002262 1" OD 0.125" Thick keyed hole
- 1002263 1" OD 0.125" Thick keyed hole

Technical Specifications:

Shape Type: Disc w/ keyed hole

Diameter: 1.0"

Weight: 0.06 oz (3.7 g)

Material: NdFeB
Magnet Grade: N50
Coating: Ni-Cu-Ni

Temperature

Rating: 140° F (60 C)

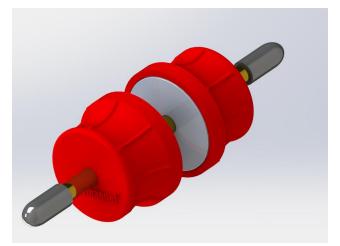


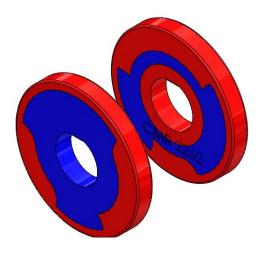
10/10/2017 1002288 1

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These Polymagnet exibit unique behaviours at 0 and 180 degree positions. When aligned, the perform as a spring. When rotated 180 degrees, they clamp like regular magnets. The following plots show the expected behavior at the two positions.

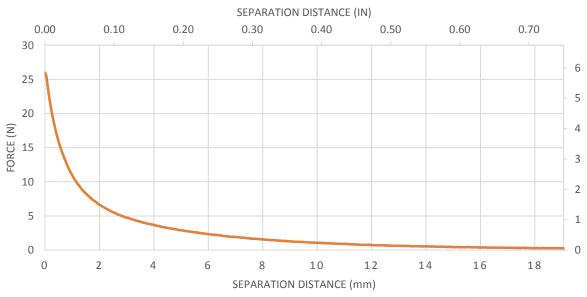
*In the images below, north poles are indicated by the red regions, south poles are indicated by the blue regions, and steel is indicated by the grey region.





ALIGNED

HOLDING FORCE VS SEPARATION DISTANCE MAGNET TO MAGNET

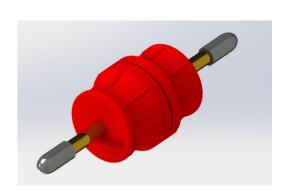


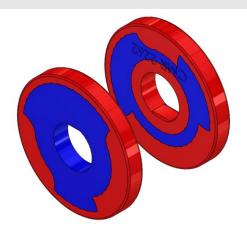
FORCE (LE

2



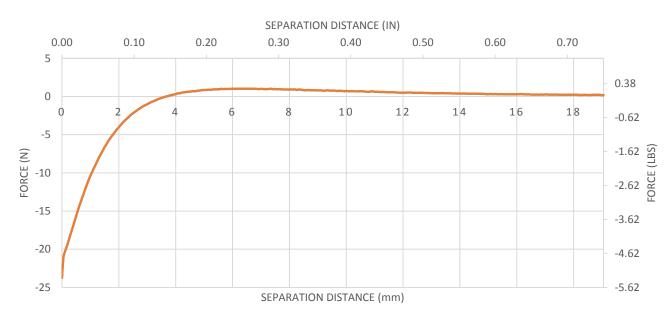
www.polymagnet.com





180° ROTATION

HOLDING FORCE VS SEPARATION DISTANCE MAGNET TO MAGNET



These Polymagnets are D-shaped which provides an indexing feature. This aids in the assembly process as well as provides a flat surface to resist the torque created as the magnets are rotated.

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

