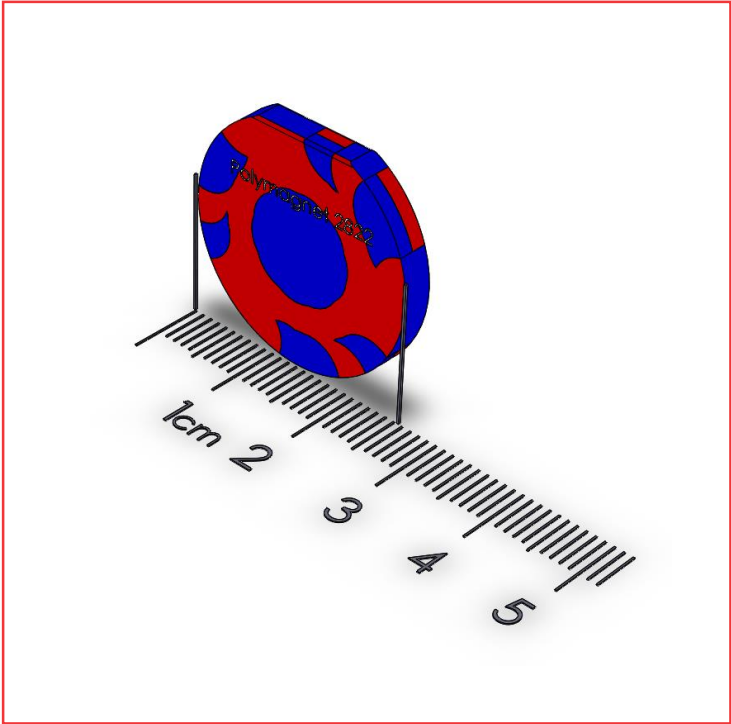


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Detent Polymagnet – 3 Position (120 degree)

Rotational Detent Polymagnets are engineered to provide tactile feedback and alignment at specific rotational positions. These magnets are designed to be used in pairs and offer a centering feature to keep them aligned on axis, three detents separated by 120°, and smooth motion between the detents. These Polymagnets are designed to provide a high holding force when aligned and very little attractive force when out of alignment allowing the user to rotate the device easily between locking positions. As these magnets approach their detent positions they provide a positive force toward the detents.



Features and Benefits

- Rotational alignment
- Centering – no mechanical axial constraint is required
- 3 position detents (align every 120 degrees)

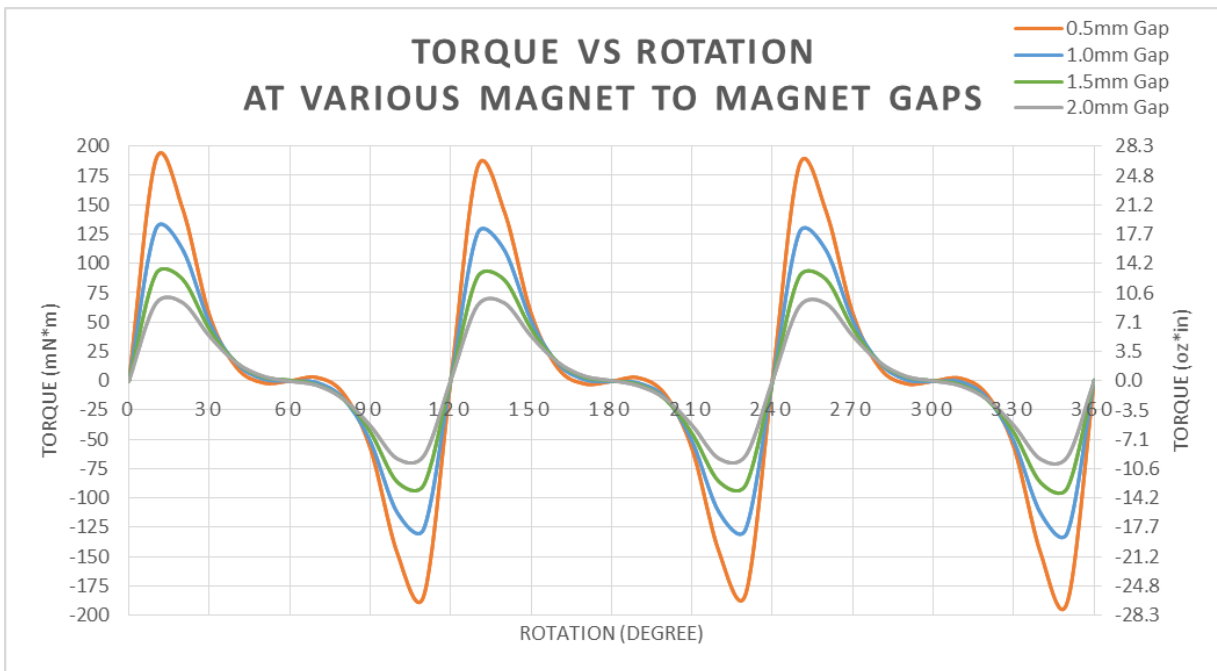
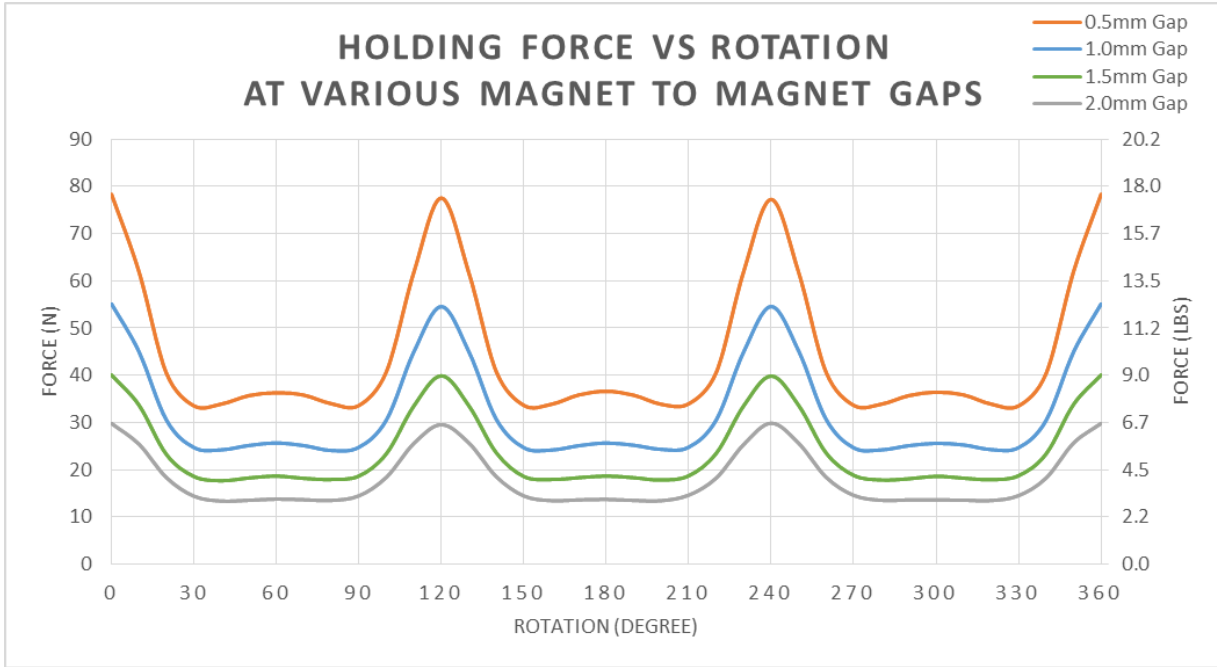
Technical Specifications:

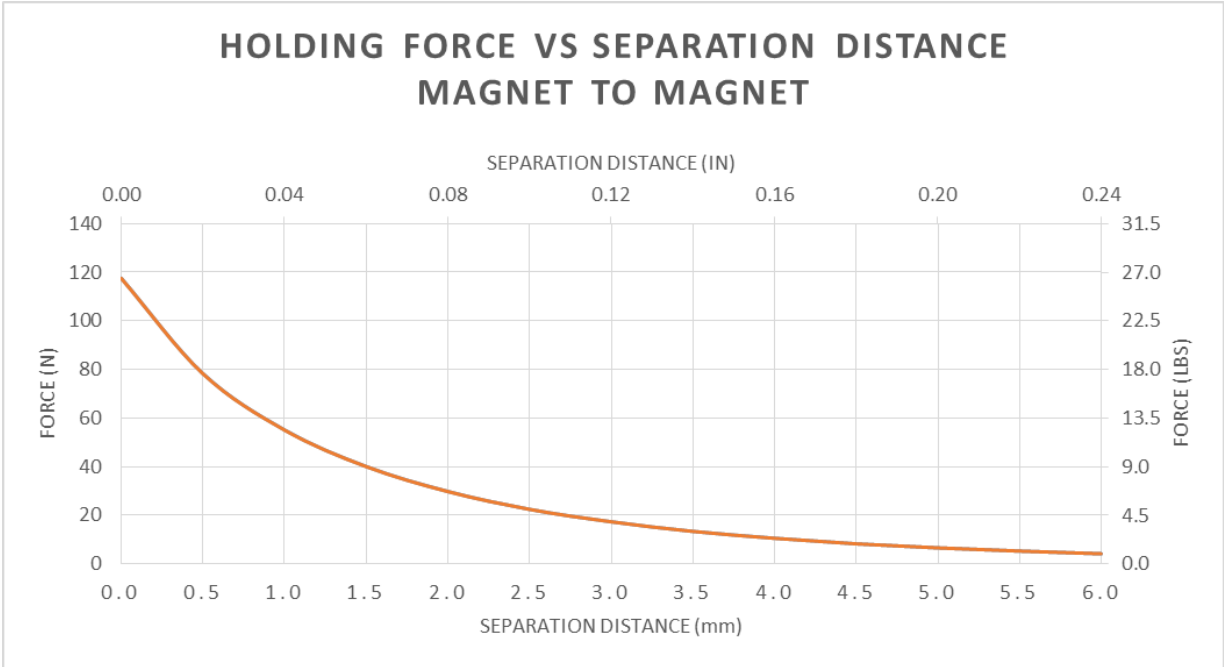
Dimensions:	1 OD x 0.45 CD x 0.125 in (25.4 OD x 11.43 CD x 3.175 mm)
Weight:	0.4 oz (11.8 g)
Material:	NdFeB
Magnet Grade:	N50
Coating:	Ni-Cu-Ni
Temperature Rating:	176 ° F (80 ° C)



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These magnets exhibit a high holding force while having rotational detent positions every 120 degrees. When the Polymagnets are close to their detent positions, they exert a torque toward the detent. Between the detent positions there is lower attraction force and minimal torque for smooth operation.





Target	Separation Distance						
	Contact	0.5mm (0.02in)	1.0mm (0.04in)	1.5mm (0.06in)	2.0mm (0.08in)	2.5mm (0.10in)	3.0mm (0.12in)
Magnet To Magnet SELF	117.6N (26.4LB)	78.3N (17.6LB)	55.1N (12.4LB)	40.1N (9.0LB)	29.8N (6.7LB)	22.5N (5.0LB)	17.3N (3.9LB)

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.

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