

Specifications

These disc magnets are 0.500 inch (12.7mm) diameter and 0.375 inch (9.5mm) thick. They are magnetized through the thickness. They are composed of grade 40 neodymium iron boron magnetic material and are plated in nickel-copper-nickel for a shiny corrosion resistant finish. Maximum working temperature is 176 F (80 C).



Part Number	NSN0642
Imperial Dimensions	0.5 inch diameter x 0.375 inch thick
Metric Dimensions	12.7mm diameter x 9.525mm thick
Material	Sintered Neodymium-Iron-Boron (NdFeB)
Shape	Disc
Plating	Ni-Cu-Ni (Nickel)
Magnetization Direction	Thickness
Grade	N40
Pull Force	16.03[7271]
Surface Field	4912
Packaging	Magpak Tube
UPC	875661000429
Magnet Quantity	6
Brand	Magcraft

Maximum Operating Temperature	80 Deg C (176 Deg F)
Maximum Energy Product Bhmax (MGOe (kJ/m ³))	38-41 [302-326]
Remanent Flux Density Br (kG (T))	12.5-12.8 [1.25-1.28]
Coercivity HcB (kOe (kA/m))	≥11.3 [≥923]
Intrinsic Coercivity HcJ (kOe (kA/m))	≥12.0 [≥995]
Dimensional Tolerance	+/-0.005"
Density ρ (g/cm ³)	≥7.45
Compression Strength (Mpa)	600-1200
Bending Strength (Mpa)	150-380
Vickers Hardness (HV)	460-660
Recoil Permeability (μrec)	1.05
Electrical Resistance (Ω·mm ² /m)	1.25-1.55
Curie Temperature Tc (°C)	310
Thermal Expansion Coefficient 100°C // (x10 ⁻⁶ /K)	6
Thermal Expansion Coefficient 100°C ⊥ (x10 ⁻⁶ /K)	-1

