

Specifications

These rod magnets are 0.500 inch (12.7mm) diameter and 0.500 inch (12.7mm) long. They are magnetized through the length. They are composed of grade 40 neodymium iron boron magnetic material and are plated in nickel-copper-nickel for a shiny corrosion resistant finish. Their individual pull force is approximately 19 lbs. Maximum working temperature is 176 F (80 C).



Part Number	NSN0643
Imperial Dimensions	0.5 inch diameter x 0.5 inch long
Metric Dimensions	12.7mm diameter x 12.7mm long
Material	Sintered Neodymium-Iron-Boron (NdFeB)
Shape	Rod
Plating	Ni-Cu-Ni (Nickel)
Magnetization Direction	Length
Grade	N40
Pull Force	19.92[9036]
Surface Field	5218
Packaging	Magpak Tube
UPC	875661000436
Magnet Quantity	4
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

