

## Specifications

These ring magnets are 0.500"(12.7mm) outside diameter x 0.250"(6.4mm) inside diameter x 0.125"(3.2mm) 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. Their individual pull force is approximately 2.6 lbs. Maximum working temperature is 176 F (80 C).



|                                                               |                                                                          |
|---------------------------------------------------------------|--------------------------------------------------------------------------|
| Part Number                                                   | NSN0814                                                                  |
| Imperial Dimensions                                           | 0.5 inch outside diameter x 0.25 inch inside diameter x 0.125 inch thick |
| Metric Dimensions                                             | 12.7mm outside diameter x 6.35mm inside diameter x 3.175mm thick         |
| Material                                                      | Sintered Neodymium-Iron-Boron (NdFeB)                                    |
| Shape                                                         | Ring                                                                     |
| Plating                                                       | Ni-Cu-Ni (Nickel)                                                        |
| Magnetization Direction                                       | Thickness                                                                |
| Grade                                                         | N40                                                                      |
| Pull Force                                                    | 2.67[1211]                                                               |
| Surface Field                                                 | 3323                                                                     |
| Packaging                                                     | Magpak Tube                                                              |
| UPC                                                           | 875661001143                                                             |
| Magnet Quantity                                               | 12                                                                       |
| Brand                                                         | Magcraft                                                                 |
| Maximum Operating Temperature                                 | 80 Deg C (176 Deg F)                                                     |
| Maximum Energy Product Bhmax (MGOe (kJ/m3))                   | 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/cm3)                                             | ≥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·mm2/m)                               | 1.25-1.55                                                                |
| Curie Temperature Tc (°C)                                     | 310                                                                      |
| Thermal Expansion Coefficient 100°C // (x10 <sup>-6</sup> /K) | 6                                                                        |
| Thermal Expansion Coefficient 100°C ⊥ (x10 <sup>-6</sup> /K)  | -1                                                                       |

