

## Sintered Neodymium-Iron-Boron Magnets

Also available in other Energy Products from 30-55MGOe and Maximum Temperatures up to 230°C / 446°F. If you require DFAR Compliant material please contact our sales team directly with your requirements.

Characteristic		Units	min.	nominal	max.
<b><math>B_r</math></b> Residual Induction		Gauss	14,300	14,400	14,500
		mT	1430	1440	1450
<b><math>H_{cB}</math></b> Coercivity		Oersteds	14,300	14,100	13,900
		kA/m	1138	1122	1106
<b><math>H_{cJ}</math></b> Intrinsic Coercivity		Oersteds	14,000		
		kA/m	1,114		
<b><math>BH_{max}</math></b> Maximum Energy Product		MGOe	49	50	51
		$\text{kJ/m}^3$	390	398	406

Characteristic		Units	Nominal
Reversible Temperature Coefficients <sup>(1)</sup>			
of Induction, $\alpha(B_r)$		%/°C	-0.120
of Coercivity, $\alpha(H_{cJ})$		%/°C	-0.650
Curie Temperature, $T_c$		°C	310
Recommended Max use temperature <sup>(2)</sup>		°C	100

Characteristic		Units	Nominal
Density		$\text{g/cm}^3$	7.5
Vickers Hardness		Hv	620
Coef Thermal Expansion		$\% / ^\circ\text{C} \times 10^{-6}$	C // 7.5
		C $\perp$	-0.1
Electrical Resistivity		$\mu\Omega \cdot \text{cm}$	180
Specific Heat		$\text{cal/g} \cdot ^\circ\text{C}$	0.11
		$\text{J/kg} \cdot \text{K}$	460
Bending (flexural) Strength		MPa	285

Notes: (1) Coefficients measured between 20 and 100 °C  
(2) Recommended maximum use temperature based on a minimum  $P_c$  of 2.2.

These magnetic characteristics and demagnetization curves represent typical production magnet performance across the specified temperature spectrum. Empirical testing for your application is advised for suitability determination.

Dura Magnetics Inc also supplies Alnico, Samarium Cobalt, and Ceramic magnets and magnetic assemblies, please contact sales@duramag.com or visit www.duramag.com.

