

## 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	11,800	12,050	12,300
		mT	1180	1205	1230
<b><math>H_{cB}</math></b> Coercivity		Oersteds	10,800	11,300	11,800
		kA/m	860	899	939
<b><math>H_{cJ}</math></b> Intrinsic Coercivity		Oersteds	25,000		
		kA/m	1,989		
<b><math>BH_{max}</math></b> Maximum Energy Product		MGOe	33	35	36
		kJ/m <sup>3</sup>	263	275	287

Characteristic		Units	Nominal
Reversible Temperature Coefficients <sup>(1)</sup>			
of Induction, $\alpha(B_r)$		%/°C	-0.120
of Coercivity, $\alpha(H_{cJ})$		%/°C	-0.465
Curie Temperature, $T_c$		°C	310
Recommended Max use temperature <sup>(2)</sup>		°C	180

Characteristic		Units	Nominal
Density		g/cm <sup>3</sup>	7.5
Vickers Hardness		Hv	620
Coef Thermal Expansion		%/°C x 10 <sup>-6</sup>	C // 7.5
		C ⊥	-0.1
Electrical Resistivity		μΩ • cm	180
Specific Heat		cal/g • °C	0.11
		J/kg • K	460
Bending (flexural) Strength		MPa	285

Notes: (1) Coefficients measured between 20 and 180 °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.

