

## 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>B<sub>r</sub></b> Residual Induction		Gauss	12,900	13,100	13,300
		mT	1290	1310	1330
<b>H<sub>CB</sub></b> Coercivity		Oersteds	12,000	12,350	12,700
		kA/m	955	983	1011
<b>H<sub>cJ</sub></b> Intrinsic Coercivity		Oersteds	17,000		
		kA/m	1,353		
<b>BH<sub>max</sub></b> Maximum Energy Product		MGOe	40	42	43
		kJ/m <sup>3</sup>	318	330	342

Characteristic		Units	Nominal
Reversible Temperature Coefficients <sup>(1)</sup>			
of Induction, $\alpha(B_r)$		%/°C	-0.120
of Coercivity, $\alpha(H_{cJ})$		%/°C	-0.605
Curie Temperature, <b>T<sub>c</sub></b>		°C	310
Recommended Max use temperature <sup>(2)</sup>		°C	120

Characteristic		Units	Nominal
Density		g/cm <sup>3</sup>	7.5
Vickers Hardness		Hv	620
Coef Thermal Expansion		%/°Cx10 <sup>-6</sup>	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 120 °C

(2) Recommended maximum use temperature based on a minimum P<sub>c</sub> 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.

