

## 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.

Magnetic Properties	Characteristic	Units	min.	nominal	max.
	$B_r$ Residual Induction	Gauss	12,300	12,450	12,600
	mT	1230	1245	1260	
$H_{CB}$ Coercivity	Oersteds	11,300	11,650	12,000	
	kA/m	899	927	955	
$H_{cJ}$ Intrinsic Coercivity	Oersteds	17,000			
	kA/m	1,353			
$BH_{max}$ Maximum Energy Product	MGOe	36	38	39	
	kJ/m <sup>3</sup>	287	299	311	

Thermal Properties	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, $T_c$	°C		310
Recommended Max use temperature <sup>(2)</sup>	°C		120

Physical Properties	Characteristic	Units	Nominal
	Density	g/cm <sup>3</sup>	
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 120 °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.

