

## 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	12,900	13,100	13,300
	mT	1290	1310	1330	
$H_{cB}$ Coercivity	Oersteds	11,600	12,150	12,700	
	kA/m	923	967	1011	
$H_{cJ}$ Intrinsic Coercivity	Oersteds	25,000			
	kA/m	1,989			
$BH_{max}$ Maximum Energy Product	MGOe	41	42	43	
	kJ/m <sup>3</sup>	326	334	342	

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		-0.465
Curie Temperature, $T_c$	°C		310
Recommended Max use temperature <sup>(2)</sup>	°C		180

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 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.

