

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_r Residual Induction		Gauss	13,300	13,500	13,700
		mT	1330	1350	1370
H_{cB} Coercivity		Oersteds	12,500	12,800	13,100
		kA/m	995	1019	1042
H_{cJ} Intrinsic Coercivity		Oersteds	17,000		
		kA/m	1,353		
BH_{max} Maximum Energy Product		MGOe	43	45	46
		kJ/m ³	342	354	366

Characteristic		Units	Nominal
Reversible Temperature Coefficients ⁽¹⁾			
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 ⁽²⁾		°C	120

Characteristic		Units	Nominal
Density		g/cm ³	7.5
Vickers Hardness		Hv	620
Coef Thermal Expansion		%/°C x 10 ⁻⁶	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.

