

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	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	14,000		
		kA/m	1,114		
BH_{max} Maximum Energy Product		MGOe	36	38	39
		kJ/m ³	287	299	311

Characteristic		Units	Nominal
Reversible Temperature Coefficients ⁽¹⁾			
of Induction, $\alpha(B_r)$		%/°C	-0.120
of Coercivity, $\alpha(H_{cJ})$		%/°C	-0.650
Curie Temperature, T_c		°C	310
Recommended Max use temperature ⁽²⁾		°C	100

Characteristic		Units	Nominal
Density		g/cm ³	7.5
Vickers Hardness		Hv	620
Coef Thermal Expansion		%/°Cx10 ⁻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 100 °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.

