

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	12,600	12,750	12,900
		mT	1260	1275	1290
H_{cB} Coercivity		Oersteds	11,800	12,050	12,300
		kA/m	939	959	979
H_{cJ} Intrinsic Coercivity		Oersteds	20,000		
		kA/m	1,592		
BH_{max} Maximum Energy Product		MGOe	38	40	41
		kJ/m ³	302	314	326

Characteristic		Units	Nominal
Reversible Temperature Coefficients ⁽¹⁾			
of Induction, $\alpha(B_r)$		%/°C	-0.120
of Coercivity, $\alpha(H_{cJ})$		%/°C	-0.535
Curie Temperature, T_c		°C	310
Recommended Max use temperature ⁽²⁾		°C	150

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 150 °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.

