

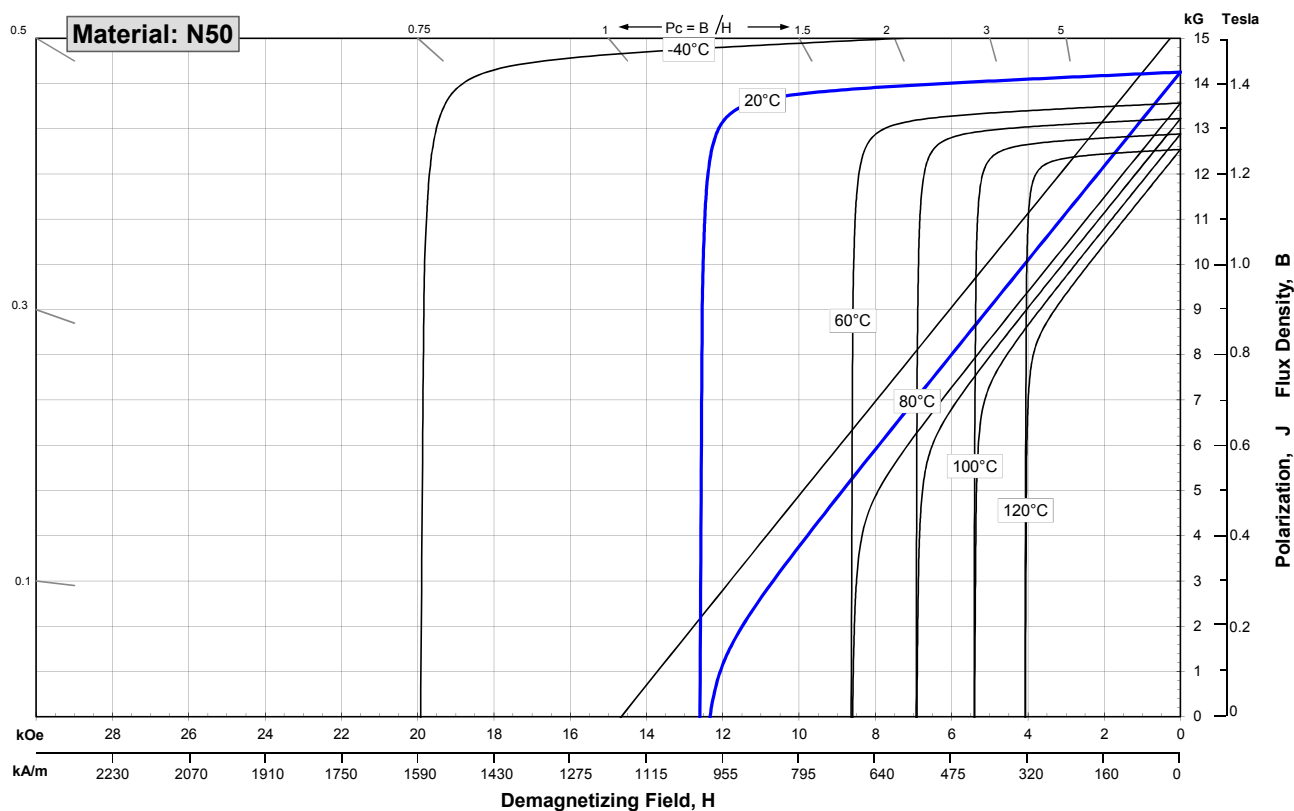
Sintered Neodymium-Iron-Boron Magnets

These are also referred to as "Neo" or NdFeB magnets. They offer a combination of high magnetic output at moderate cost. Please contact Arnold for additional grade information and recommendations for protective coating. Assemblies using these magnets can also be provided.

	Characteristic	Units	min.	nominal	max.
Magnetic Properties	B_r , Residual Induction	Gauss	13,900	14,250	14,600
		mT	1390	1425	1460
	H_{cB} , Coercivity	Oersteds	10,500	12,250	14,000
		kA/m	836	975	1114
	H_{cJ} , Intrinsic Coercivity	Oersteds	12,000		
		kA/m	955		
	BH_{max} , Maximum Energy Product	MGOe	47	49	51
		kJ/m ³	374	390	406

	Characteristic	Units	C //	C ⊥
Thermal Properties	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(B _r)	%/°C		-0.120
	of Coercivity, α(H _{cj})	%/°C		-0.750
	Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °C×10 ⁻⁶	7.5	-0.1
	Thermal Conductivity	W / (m • K)		7.6
Other Properties	Specific Heat ⁽³⁾	J / (kg • K)		460
	Curie Temperature, T _c	°C		310
	Flexural Strength	psi		41,300
		MPa		285
	Density	g/cm ³		7.5
	Hardness, Vickers	Hv		620
	Electrical Resistivity, ρ	μΩ • cm		180

Notes: (1) Coefficients measured between 20 and 80 °C
(2) Between 20 and 200 °C
(3) Between 20 and 140 °C



1 kA/m = 12.566 Oe 1 kOe = 79.577 kA/m

Notes The material data and demagnetization curves shown above represent typical properties that may vary due to product shape and size. Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.