

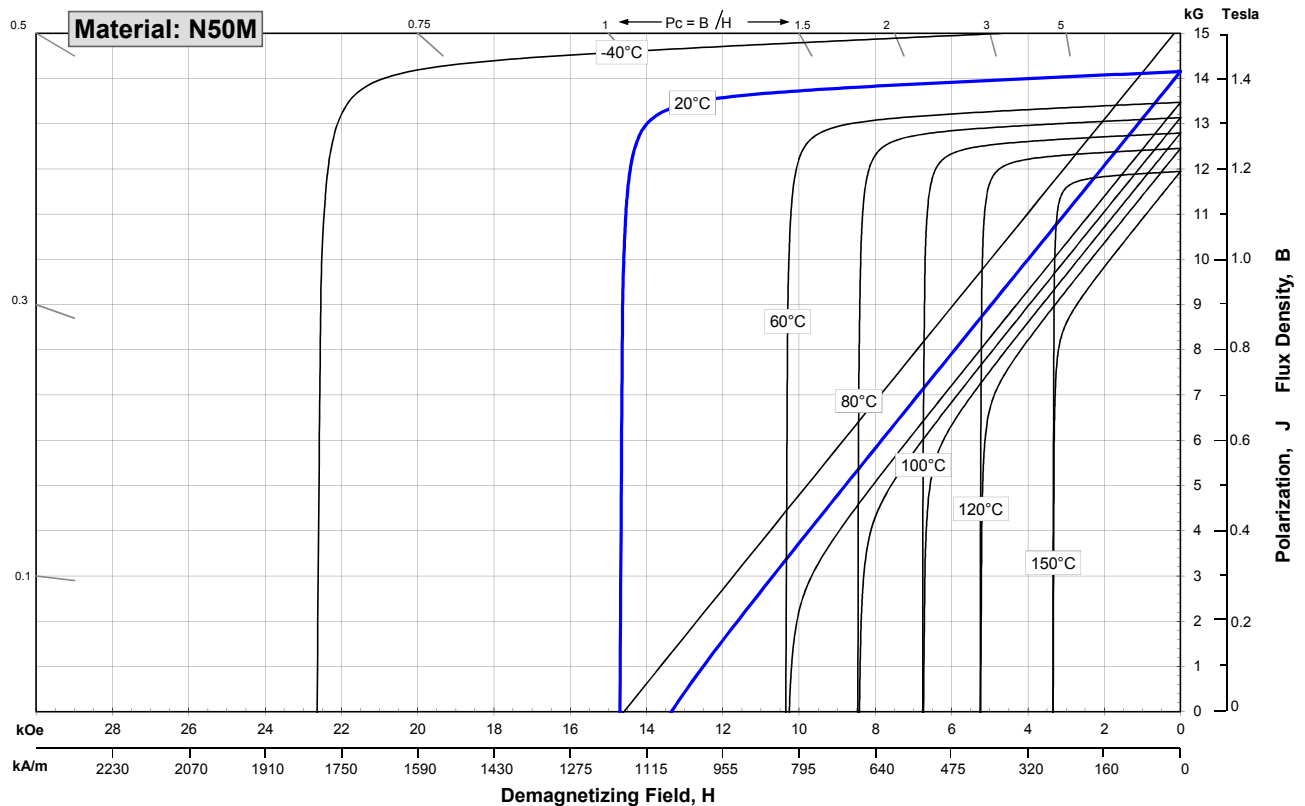
Sintered Neodymium-Iron-Boron Magnets

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	14,150	14,400
		mT	1390	1415	1440
	H_{cB} , Coercivity	Oersteds	13,000	13,400	13,800
		kA/m	1035	1066	1098
	H_{cJ} , Intrinsic Coercivity	Oersteds	14,000		
		kA/m	1,114		
	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		-0.675
	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 100 °C
(2) Between 20 and 200 °C
(3) Between 20 and 140 °C



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.