

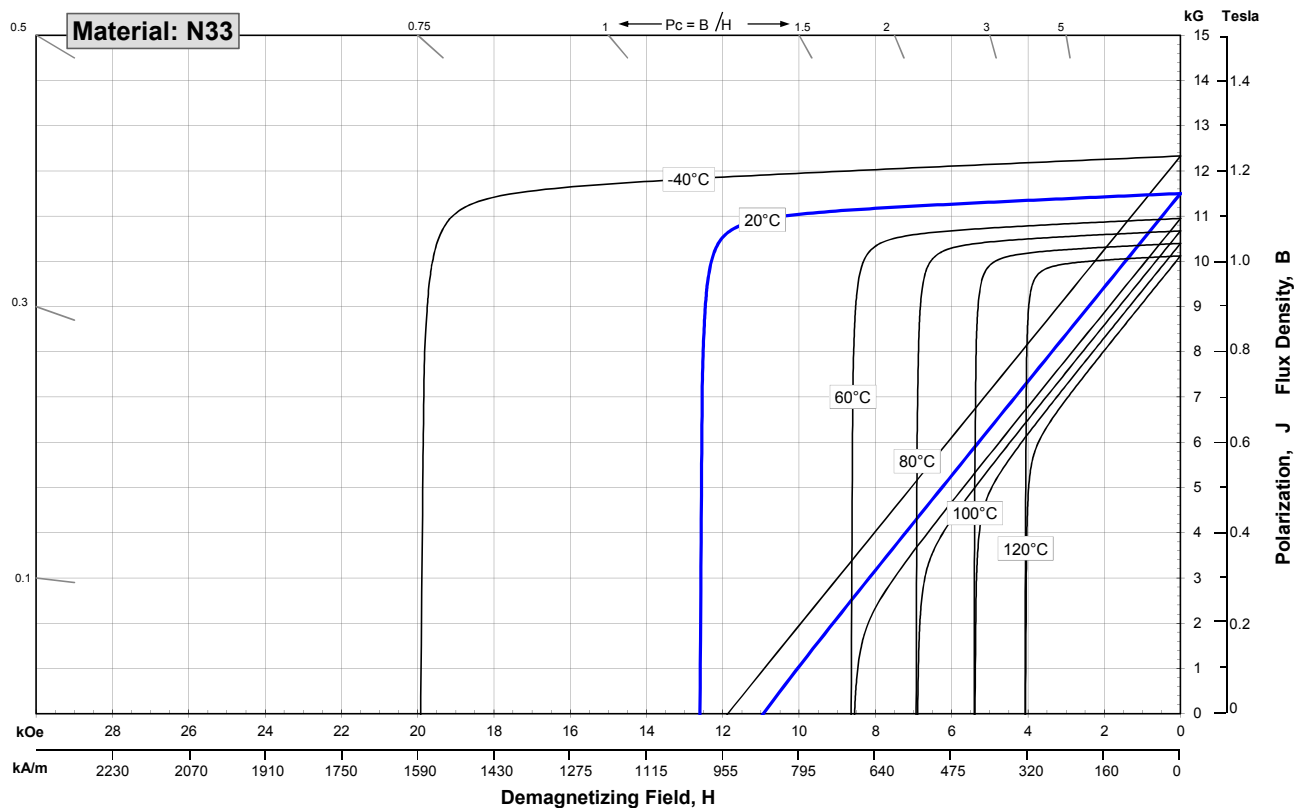
Sintered Neodymium-Iron-Boron Magnets

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	11,300	11,500	11,700
		mT	1130	1150	1170
	H_{cB} , Coercivity	Oersteds	10,500	10,850	11,200
		kA/m	836	863	891
	H_{cJ} , Intrinsic Coercivity	Oersteds	12,000		
		kA/m	955		
	BH_{max} , Maximum Energy Product	MGOe	31	33	34
		kJ/m ³	247	259	271

	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



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.