

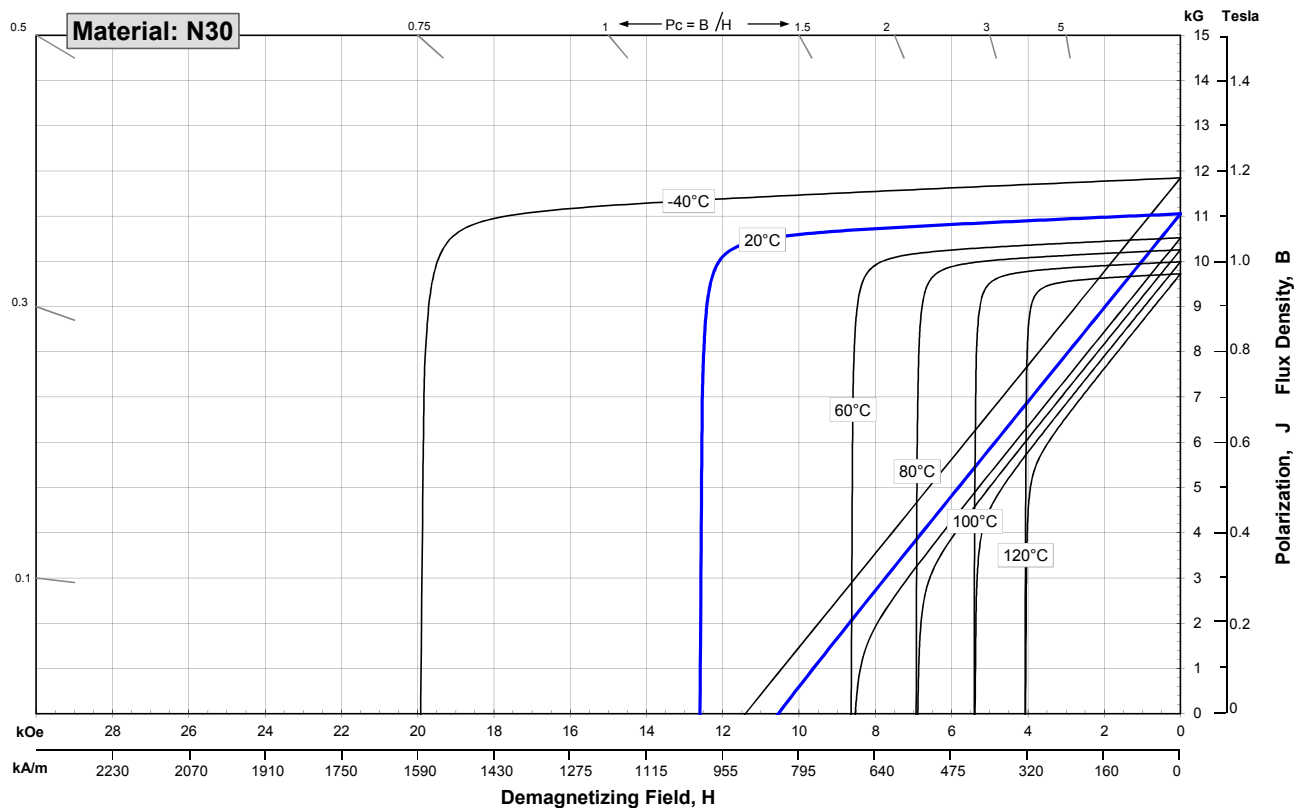
Sintered Neodymium-Iron-Boron Magnets

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	Br , Residual Induction	Gauss	10,800	11,050	11,300
		mT	1080	1105	1130
	H_{cB} , Coercivity	Oersteds	10,000	10,400	10,800
		kA/m	796	828	859
	H_{cJ} , Intrinsic Coercivity	Oersteds	12,000		
		kA/m	955		
	BH_{max} , Maximum Energy Product	MGOe	28	30	31
		kJ/m ³	223	235	247

	Characteristic	Units	C //	C ⊥
Thermal Properties	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(Br)	%/°C		-0.120
	of Coercivity, α(H _{cj})	%/°C		-0.750
	Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °C x 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.