

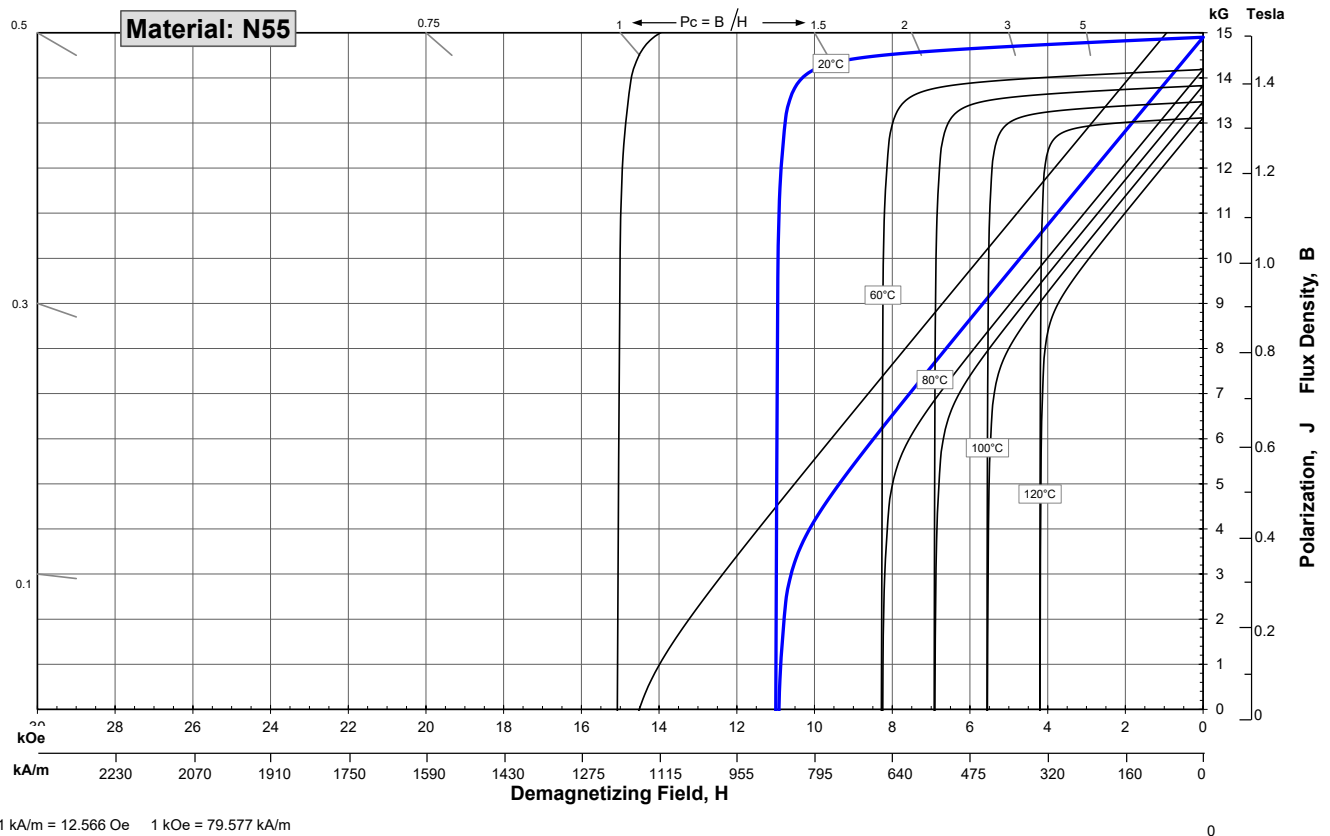
Sintered Neodymium-Iron-Boron Magnets

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	Magnetic Properties		
		min.	nominal	max.
Br , Residual Induction	Gauss	14,600	14,900	15,200
	mT	1460	1490	1520
H_{cB} , Coercivity	Oersteds	9,000	11,750	14,500
	kA/m	716	935	1154
H_{cJ} , Intrinsic Coercivity	Oersteds	11,000		
	kA/m	876		
BH_{max} , Maximum Energy Product	MGOe	52	53	54
	kJ/m ³	414	422	430

Characteristic	Units	Thermal Properties	
		C //	C ⊥
Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(Br)	%/°C	-0.12
	of Coercivity, α(H _{cj})	%/°C	-0.62
Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °Cx10 ⁻⁶	7	-1
Thermal Conductivity	kcal/mhr°C	5.3	5.8
Specific Heat ⁽³⁾	cal/g°C	0.11	
Curie Temperature, T _c	°C	310	
Other Properties	Flexural Strength	psi	41,300
		MPa	285
	Density	g/cm ³	7.6
	Hardness, Vickers	Hv	620
	Electrical Resistivity, ρ	μΩ • cm	150 // 130 ⊥

Notes: (1) Coefficients measured between 20 and 60 °C
 (2) Between 20 and 200 °C. Values are typical and can vary.
 (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. **Demagnetization curves show nominal Br and minimum Hci.** Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.