

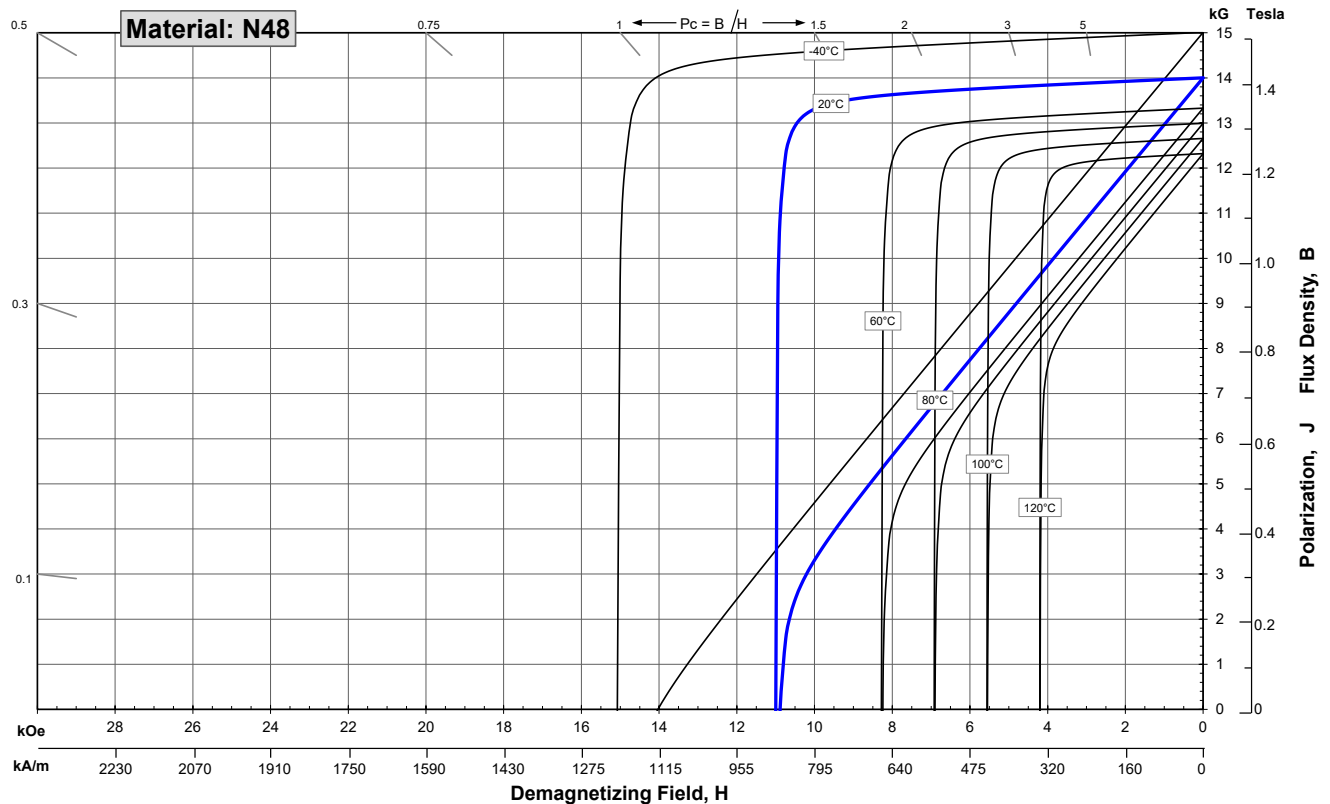
Sintered Neodymium-Iron-Boron Magnets

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	13,700	14,000	14,300
	mT	1370	1400	1430
H_{cB} , Coercivity	Oersteds	10,500	12,100	13,700
	kA/m	836	963	1090
H_{cJ} , Intrinsic Coercivity	Oersteds	11,000		
	kA/m	875		
BHmax , Maximum Energy Product	MGOe	45	47	49
	kJ/m ³	358	374	390

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 80 °C
 (2) Between 20 and 200 °C. Values are typical and can vary.
 (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. **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.