

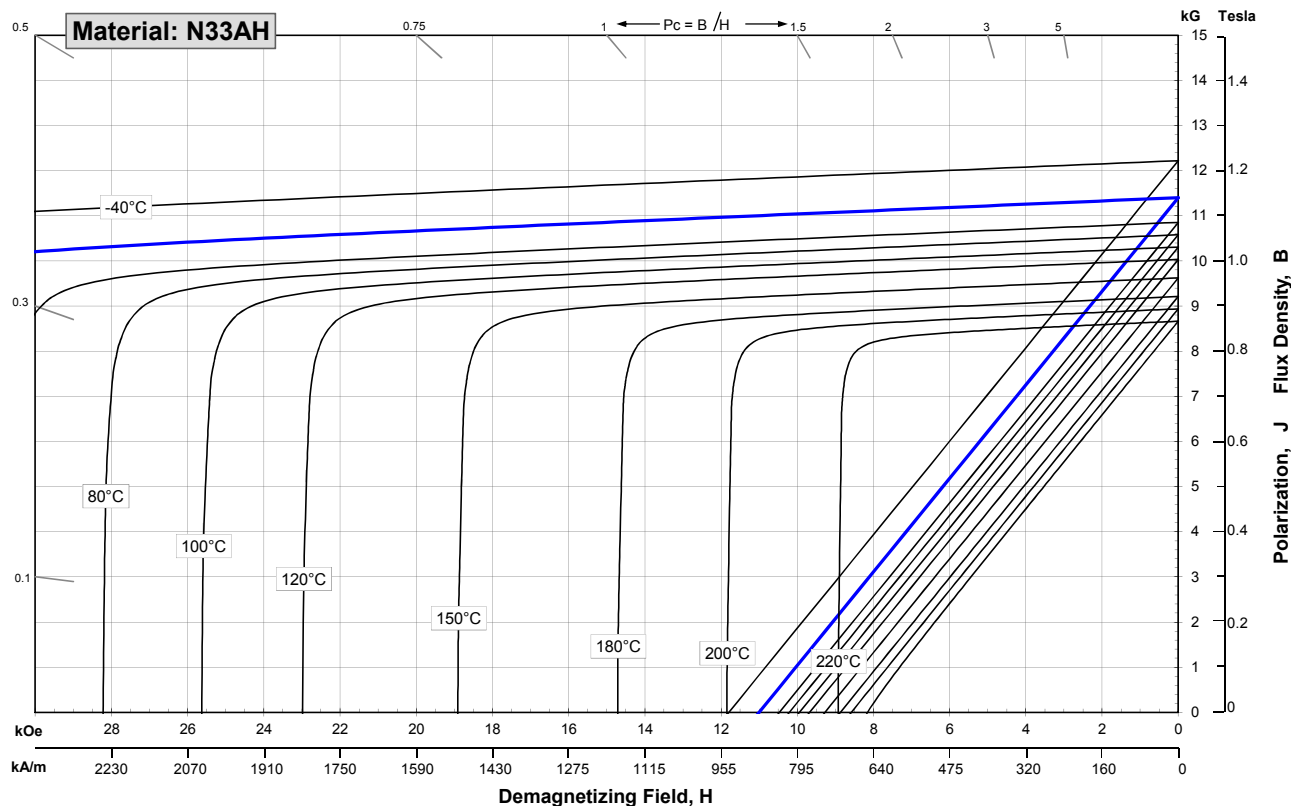
Sintered Neodymium-Iron-Boron Magnets

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.
B_r , Residual Induction	Gauss	11,100	11,400	11,700
	mT	1110	1140	1170
H_{cB} , Coercivity	Oersteds	10,200	10,700	11,200
	kA/m	812	852	891
H_{cJ} , Intrinsic Coercivity	Oersteds	34,000		
	kA/m	2,706		
BH_{max} , Maximum Energy Product	MGOe	27	29	31
	kJ/m ³	215	231	247

Characteristic	Units	C // C ⊥		
		C //	C ⊥	
Thermal Properties	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(B _r)	%/°C	-0.120	
	of Coercivity, α(H _{cj})	%/°C	-0.375	
	Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °C×10 ⁻⁶	7.5	-0.1
	Thermal Conductivity	W / (m · K)	7.6	
Specific Heat ⁽³⁾	J / (kg · K)	460		
Curie Temperature, T _c	°C	310		
Other Properties	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 220 °C
 (2) Between 20 and 200 °C
 (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. Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.