

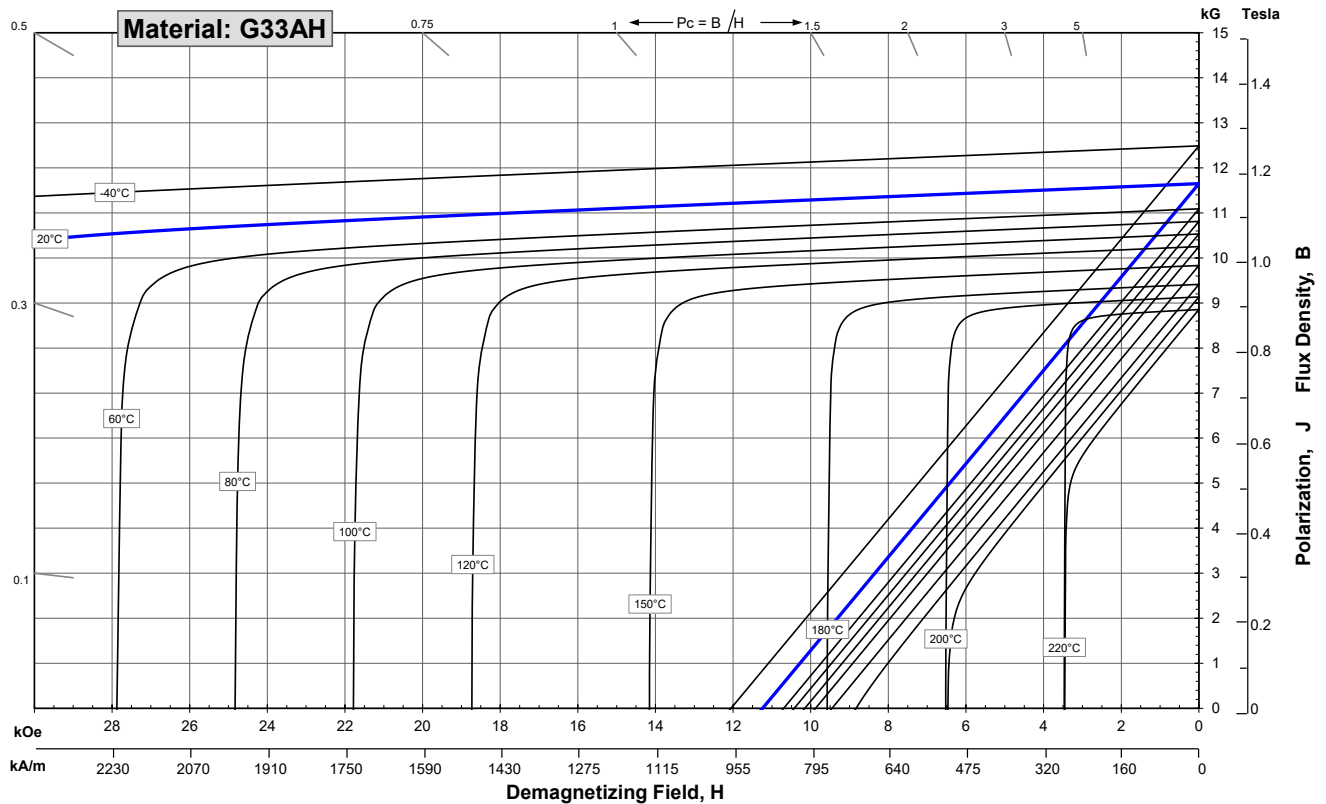
Sintered Neodymium-Iron-Boron Magnets

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	11,300	11,650	12,000
	mT	1130	1165	1200
H_{cB} , Coercivity	Oersteds	10,300	10,900	11,500
	kA/m	820	867	915
H_{cJ} , Intrinsic Coercivity	Oersteds	34,000		
	kA/m	2,706		
BH_{max} , Maximum Energy Product	MGOe	31	34	36
	kJ/m ³	247	267	287

Characteristic	Units	Thermal Properties	
		C //	C ⊥
Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(Br)	%/°C	-0.12
	of Coercivity, α(H _{cj})	%/°C	-0.45
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	
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 220 °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 H_{cj}.
 Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications.
 Additional grades are available. Please contact the factory for information.