

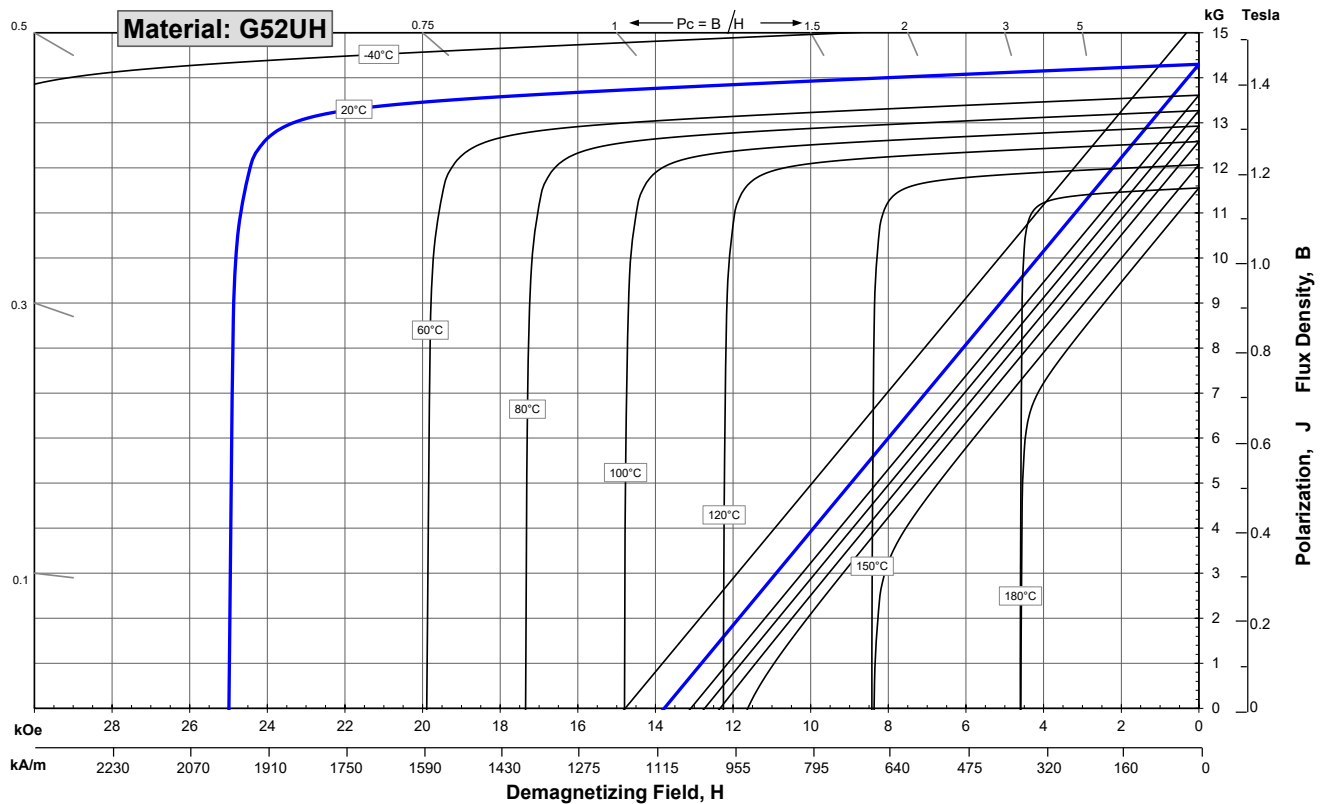
Sintered Neodymium-Iron-Boron Magnets

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	14,100	14,300	14,500
	mT	1410	1430	1450
H_{cB} , Coercivity	Oersteds	13,400	13,650	13,900
	kA/m	1067	1086	1106
H_{cJ} , Intrinsic Coercivity	Oersteds	25,000		
	kA/m	1,990		
BH_{max} , Maximum Energy Product	MGOe	47	50	52
	kJ/m ³	374	394	414

Characteristic	Units	Thermal Properties		
		C //	C ⊥	
Reversible Temperature Coefficients ⁽¹⁾				
	of Induction, α(Br)	%/°C	-0.12	
	of Coercivity, α(H _{cj})	%/°C	-0.51	
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 180 °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.