

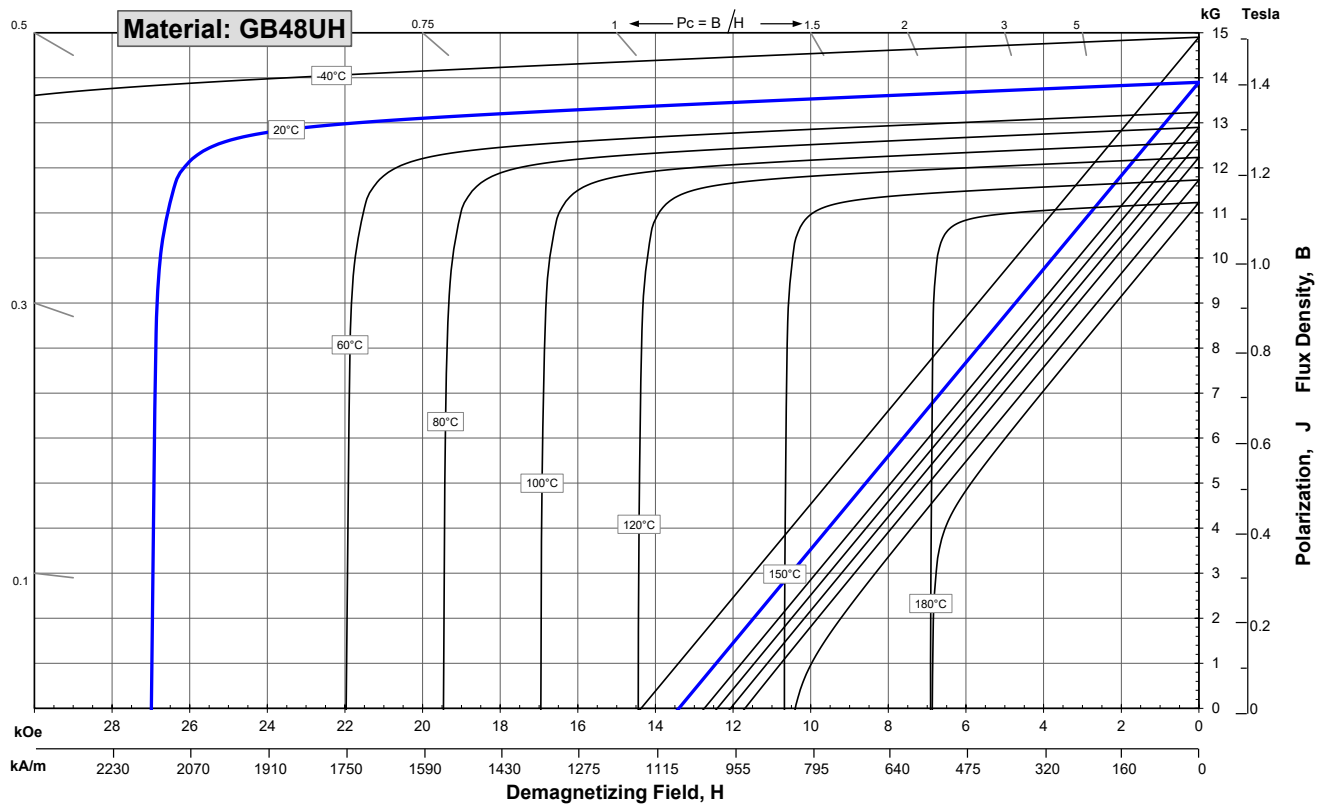
Sintered Neodymium-Iron-Boron Magnets

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.

Magnetic Properties	Characteristic	Units	min.	nominal	max.
	Br , Residual Induction		Gauss	13,600	13,900
		mT	1360	1390	1420
H_{cB} , Coercivity		Oersteds	12,700	13,150	13,600
		kA/m	1011	1046	1082
H_{cJ} , Intrinsic Coercivity		Oersteds	27,000		
		kA/m	2,419		
BHmax , Maximum Energy Product		MGOe	45	47	49
		kJ/m ³	358	374	390

Thermal Properties	Characteristic	Units	C //	C ⊥
	Reversible Temperature Coefficients ⁽¹⁾	of Induction, α(Br)	%/°C	
of Coercivity, α(H _{cj})		%/°C		-0.47
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 Hci.** Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.