

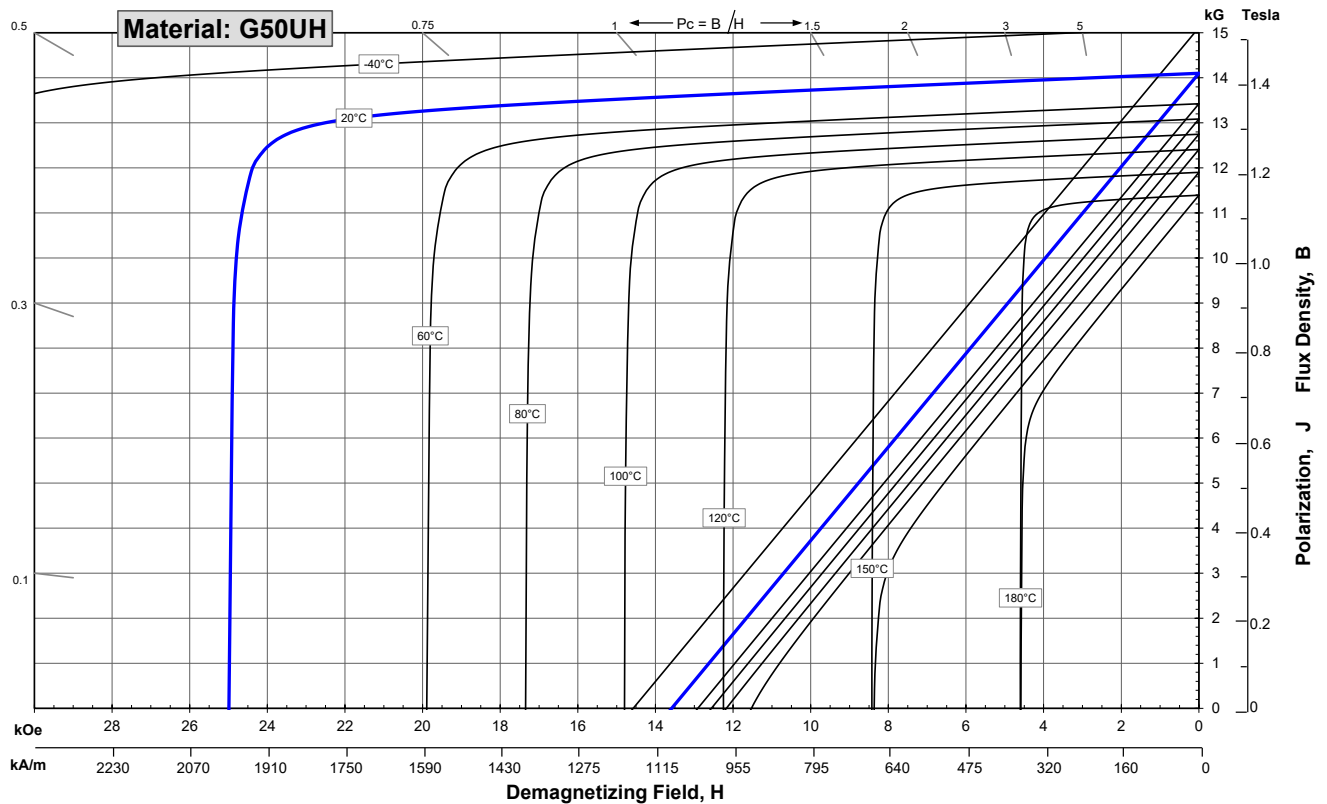
## Sintered Neodymium-Iron-Boron Magnets

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>Br</b> , Residual Induction	Gauss	13,900	14,100	14,400
	mT	1390	1410	1440
<b>H<sub>cB</sub></b> , Coercivity	Oersteds	13,200	13,500	13,800
	kA/m	1051	1074	1098
<b>H<sub>cJ</sub></b> , Intrinsic Coercivity	Oersteds	25,000		
	kA/m	1,990		
<b>BH<sub>max</sub></b> , Maximum Energy Product	MGOe	46	49	51
	kJ/m <sup>3</sup>	366	386	406

Characteristic	Units	Thermal Properties		
		C //	C ⊥	
Reversible Temperature Coefficients <sup>(1)</sup>				
	of Induction, α(Br)	%/°C	-0.12	
	of Coercivity, α(H <sub>cj</sub> )	%/°C	-0.51	
Coefficient of Thermal Expansion <sup>(2)</sup>	ΔL/L per °Cx10 <sup>-6</sup>	7	-1	
Thermal Conductivity	kcal/mhr°C	5.3	5.8	
Specific Heat <sup>(3)</sup>	cal/g°C	0.11		
Curie Temperature, T <sub>c</sub>	°C	310		
Other Properties	Flexural Strength	psi	41,300	
		MPa	285	
	Density	g/cm <sup>3</sup>	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<sub>cj</sub>.** Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.