

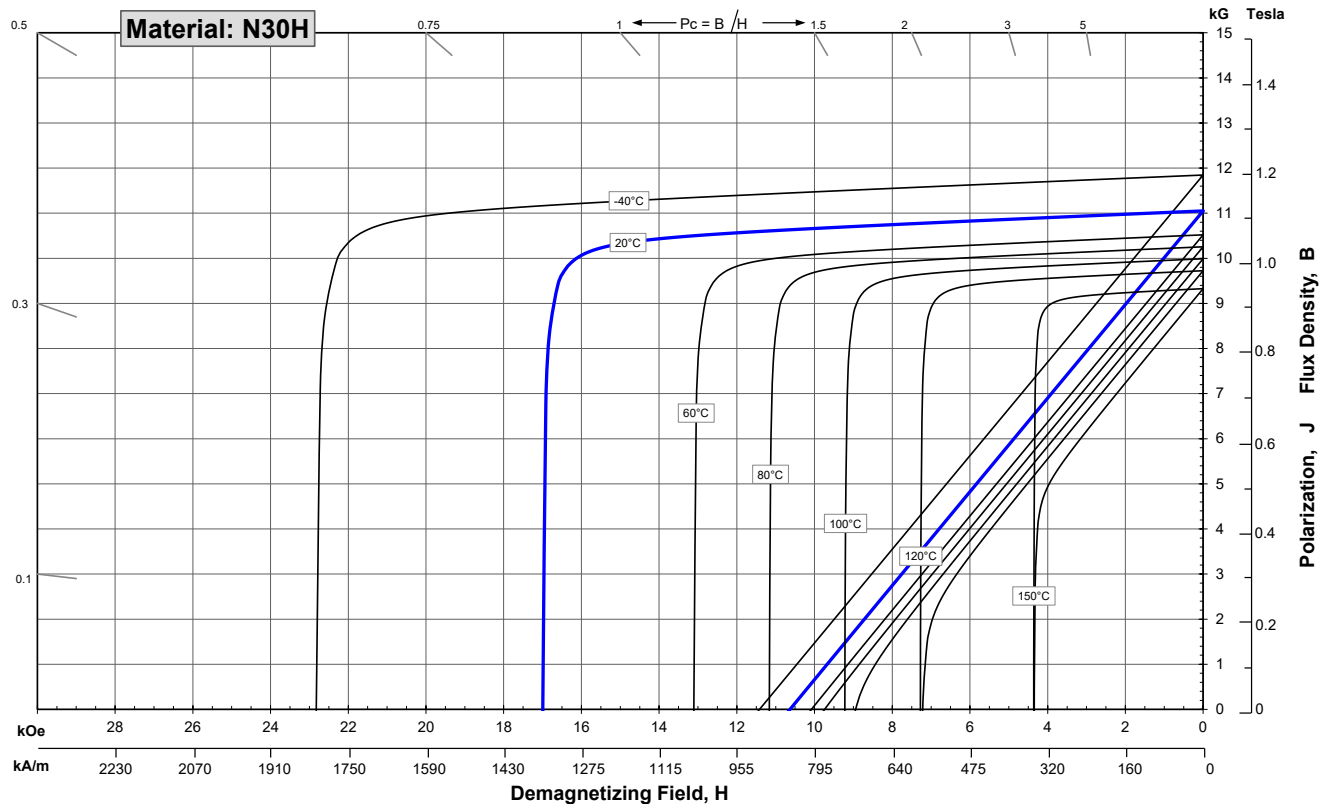
## Sintered Neodymium-Iron-Boron Magnets

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	10,800	11,050	11,300
	mT	1080	1105	1130
<b>H<sub>cB</sub></b> , Coercivity	Oersteds	10,000	10,400	10,800
	kA/m	796	828	859
<b>H<sub>cJ</sub></b> , Intrinsic Coercivity	Oersteds	17,000		
	kA/m	1,353		
<b>BHmax</b> , Maximum Energy Product	MGOe	28	30	31
	kJ/m <sup>3</sup>	223	235	247

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	-0.57
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	
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 120 °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.