

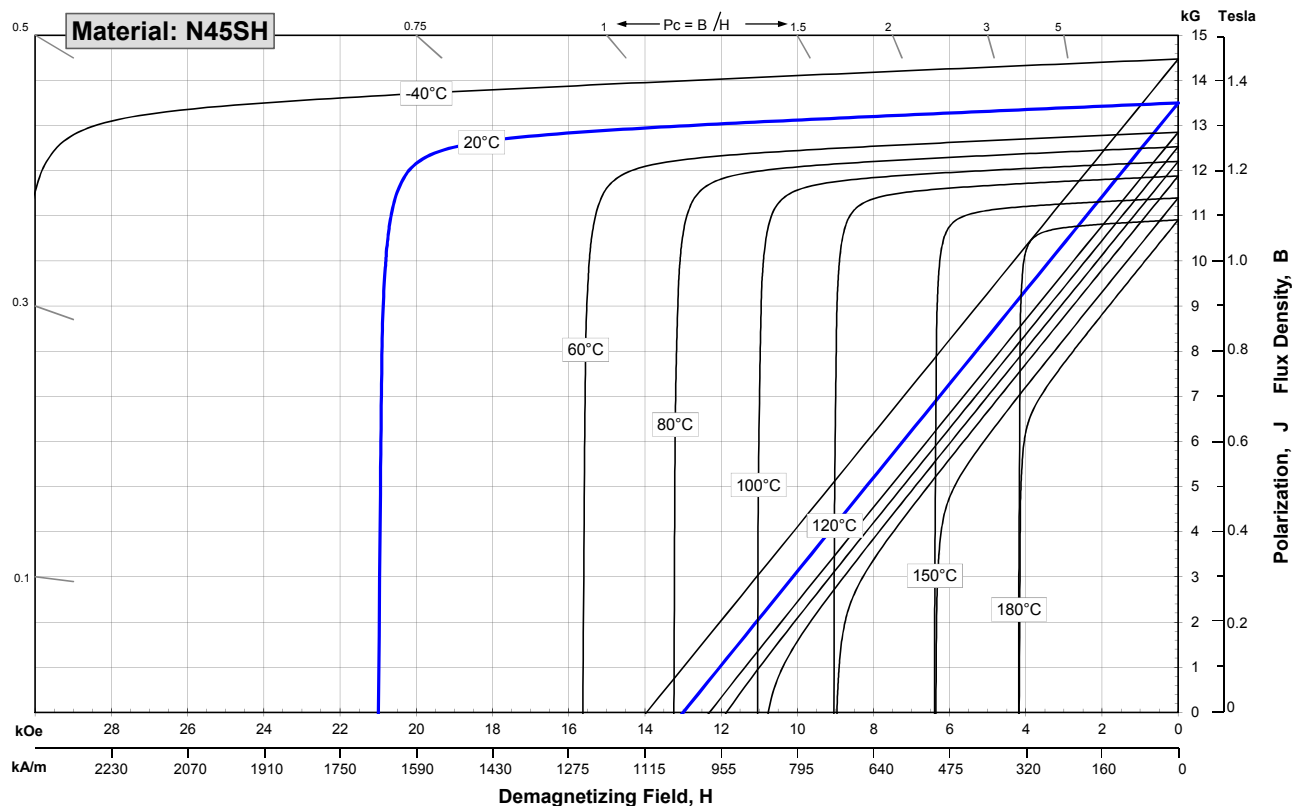
## Sintered Neodymium-Iron-Boron Magnets

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>B<sub>r</sub></b> , Residual Induction	Gauss	13,200	13,500	13,800
	mT	1320	1350	1380
<b>H<sub>cB</sub></b> , Coercivity	Oersteds	12,300	12,750	13,200
	kA/m	979	1015	1050
<b>H<sub>cJ</sub></b> , Intrinsic Coercivity	Oersteds	20,000		
	kA/m	1,592		
<b>BH<sub>max</sub></b> , Maximum Energy Product	MGOe	43	45	46
	kJ/m <sup>3</sup>	342	354	366

Characteristic	Units	Thermal Properties	
		C //	C ⊥
Reversible Temperature Coefficients <sup>(1)</sup>			
of Induction, α(B <sub>r</sub> )	%/°C		-0.120
of Coercivity, α(H <sub>cj</sub> )	%/°C		-0.535
Coefficient of Thermal Expansion <sup>(2)</sup>	ΔL/L per °C×10 <sup>-6</sup>	7.5	-0.1
Thermal Conductivity	W / (m · K)	7.6	
Specific Heat <sup>(3)</sup>	J / (kg · K)	460	
Curie Temperature, T <sub>c</sub>	°C	310	
Other Properties			
Flexural Strength	psi	41,300	
	MPa	285	
Density	g/cm <sup>3</sup>	7.5	
Hardness, Vickers	Hv	620	
Electrical Resistivity, ρ	μΩ · cm	180	

Notes: (1) Coefficients measured between 20 and 150 °C  
 (2) Between 20 and 200 °C  
 (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. Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.