

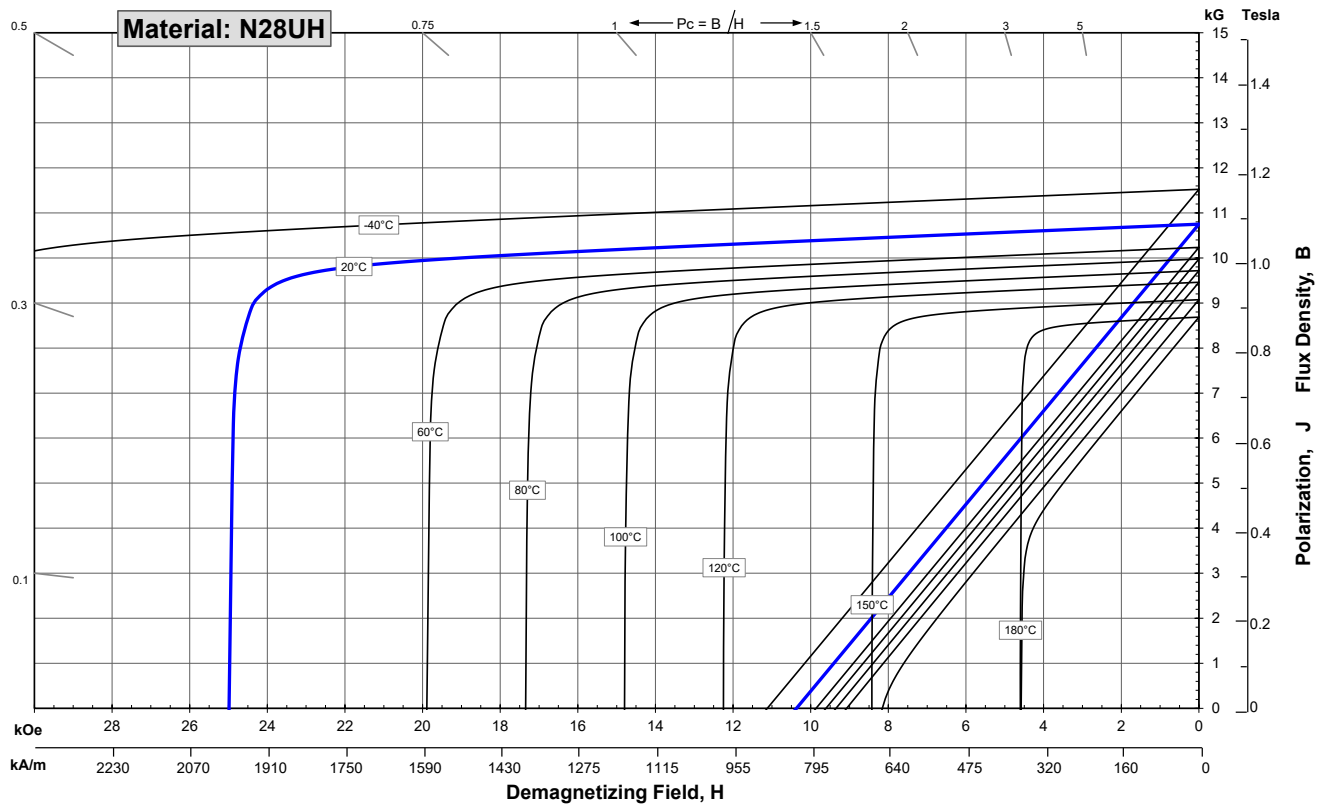
Sintered Neodymium-Iron-Boron Magnets

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	10,200	10,750	11,300
	mT	1020	1075	1130
H_{cB} , Coercivity	Oersteds	9,600	10,200	10,800
	kA/m	764	812	859
H_{cJ} , Intrinsic Coercivity	Oersteds	25,000		
	kA/m	1,990		
BH_{max} , Maximum Energy Product	MGOe	26	29	31
	kJ/m ³	207	227	247

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 Hci.** Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications. Additional grades are available. Please contact the factory for information.