

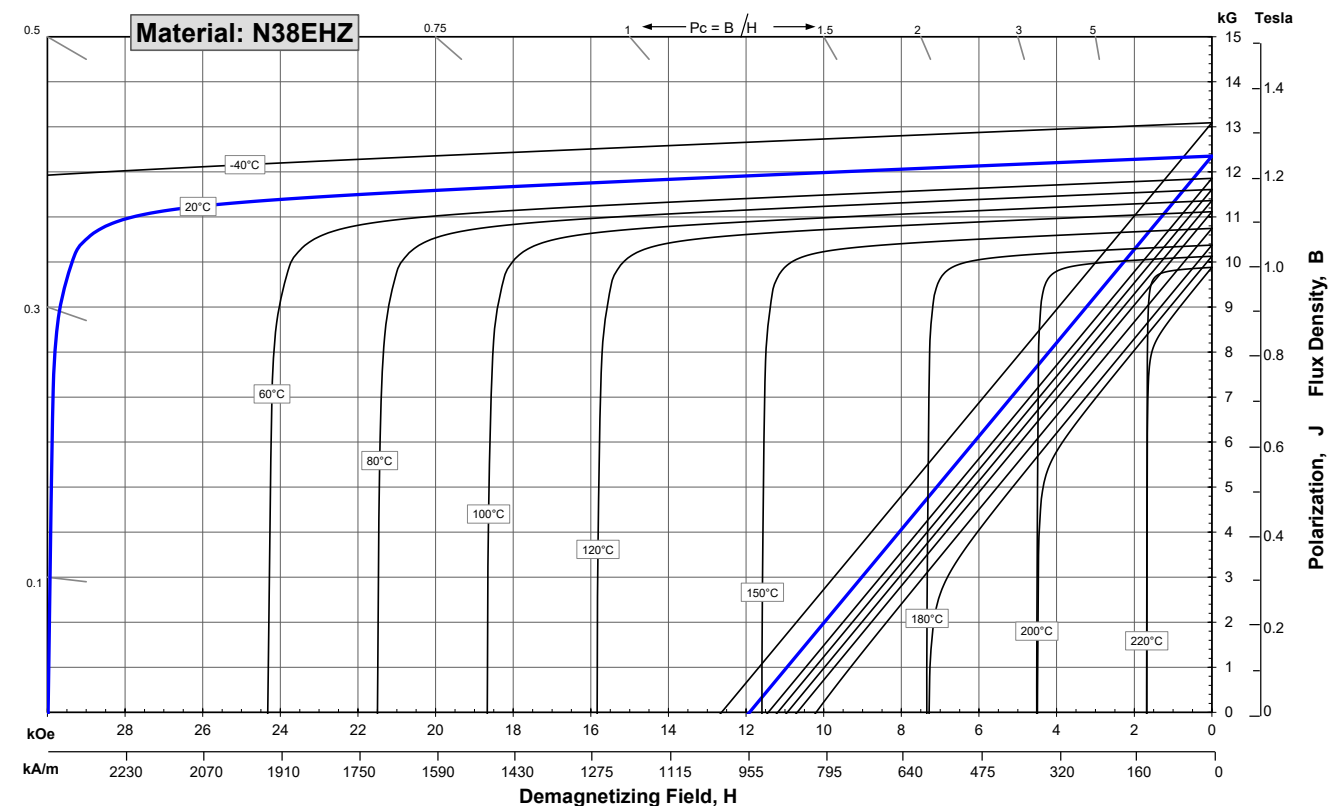
Sintered Neodymium-Iron-Boron Magnets

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	min.	nominal	max.
Br , Residual Induction	Gauss	12,000	12,350	12,800
	mT	1200	1235	1280
H_{cB} , Coercivity	Oersteds	11,300	11,750	12,200
	kA/m	899	935	971
H_{cJ} , Intrinsic Coercivity	Oersteds	30,000		
	kA/m	2,388		
BH_{max} , Maximum Energy Product	MGOe	36	38	40
	kJ/m ³	287	303	318

Thermal Properties	Characteristic	Units	C // C ⊥	
	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(Br)	%/°C	-0.1	
	of Coercivity, α(Hcj)	%/°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, Tc	°C	350	
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 200 °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_{cj}.
Magnets can be supplied thermally stabilized or magnetically calibrated to customer specifications.
Additional grades are available. Please contact the factory for information.