

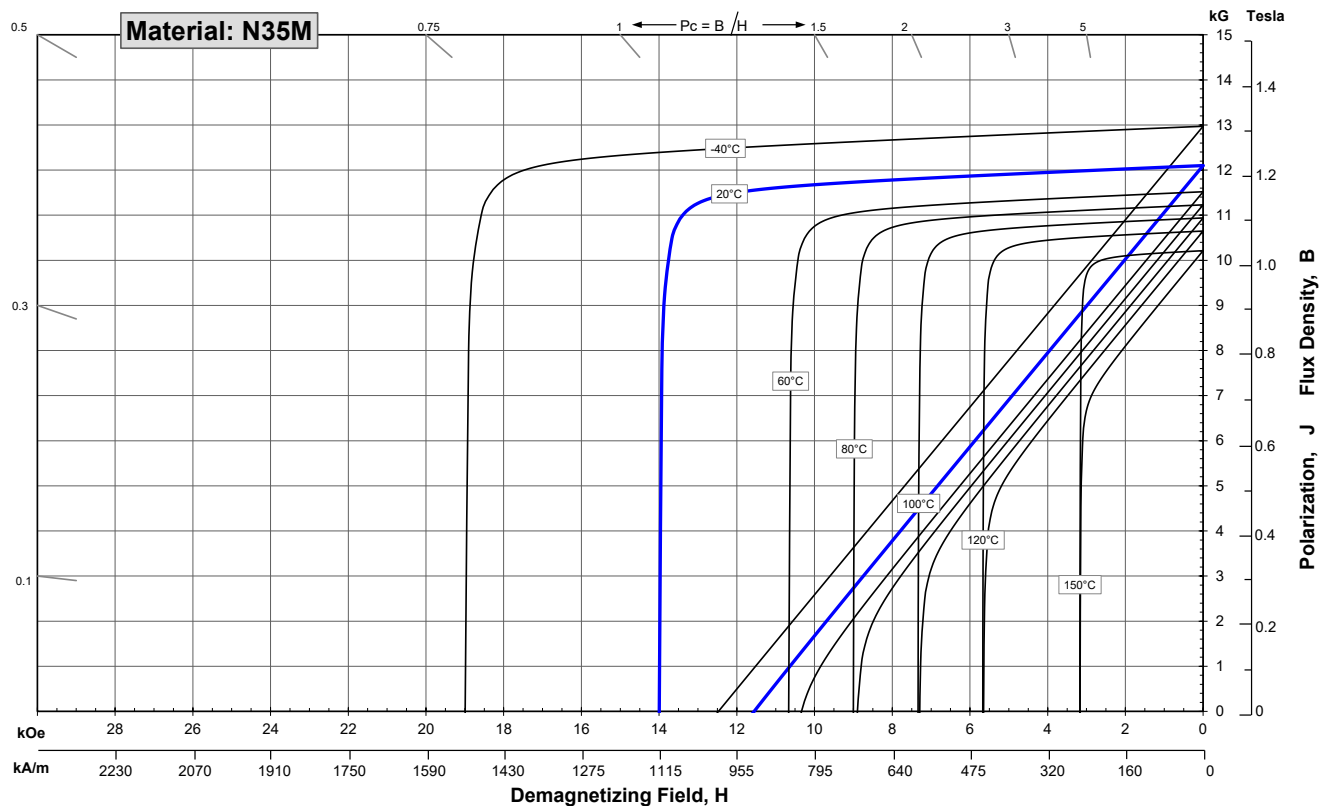
Sintered Neodymium-Iron-Boron Magnets

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.

Magnetic Properties	Characteristic	Units	min.	nominal	max.
	Br , Residual Induction		Gauss	11,700	12,100
		mT	1170	1210	1250
H_{cB} , Coercivity		Oersteds	10,900	11,450	12,000
		kA/m	868	911	955
H_{cJ} , Intrinsic Coercivity		Oersteds	14,000		
		kA/m	1,114		
BH_{max} , Maximum Energy Product		MGOe	33	36	38
		kJ/m ³	263	283	302

Thermal Properties	Characteristic	Units	C //	C ⊥
	Reversible Temperature Coefficients ⁽¹⁾	of Induction, α(Br)	%/°C	
of Coercivity, α(H _{cj})		%/°C		-0.60
Coefficient of Thermal Expansion ⁽²⁾		ΔL/L per °Cx10 ⁻⁶	7	-1
Other Properties	Thermal Conductivity	kcal/mhr°C	5.3	5.8
	Specific Heat ⁽³⁾	cal/g°C		0.11
	Curie Temperature, T _c	°C		310
	Flexural Strength		psi	
		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 100 °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.