

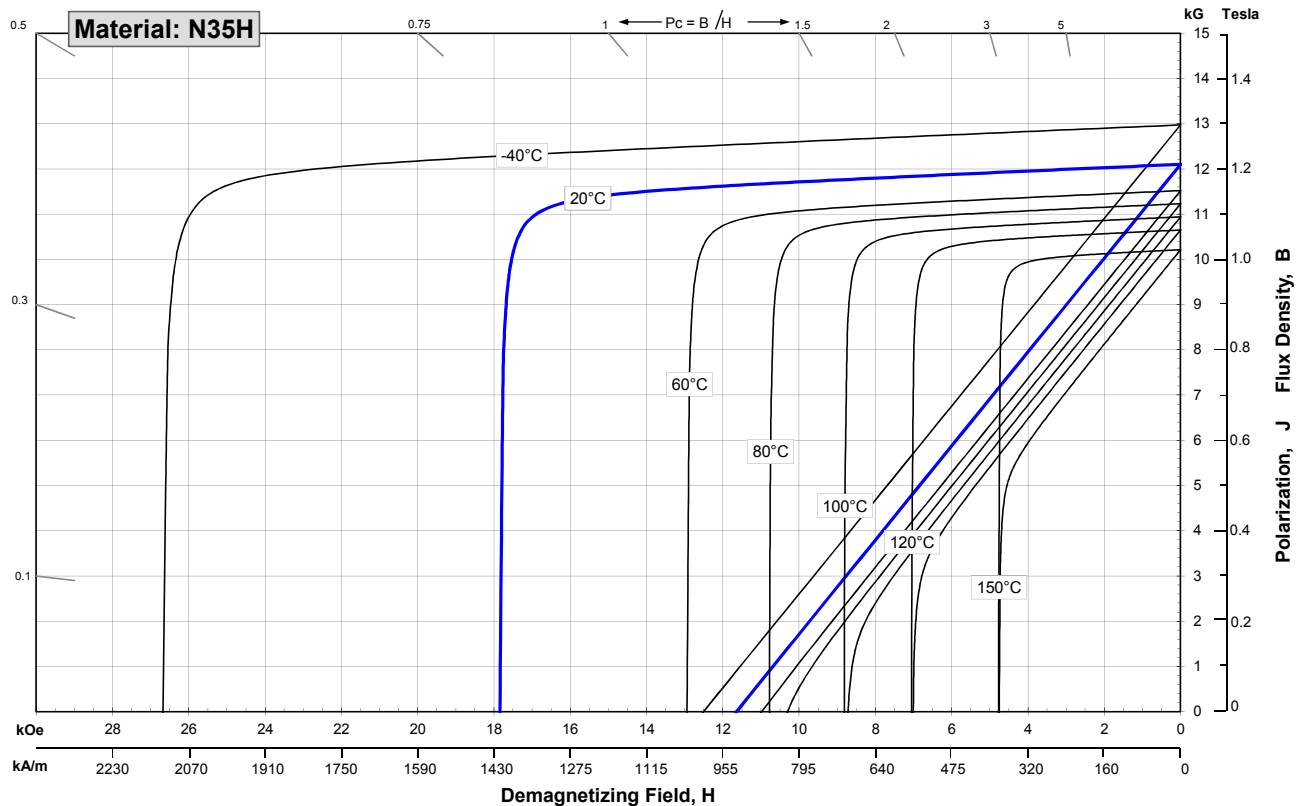
Sintered Neodymium-Iron-Boron Magnets

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.
Magnetic Properties	B_r , Residual Induction	Gauss	11,700	12,100	12,500
		mT	1170	1210	1250
	H_{cB} , Coercivity	Oersteds	10,900	11,450	12,000
		kA/m	868	911	955
	H_{cJ} , Intrinsic Coercivity	Oersteds	17,000		
		kA/m	1,353		
	BH_{max} , Maximum Energy Product	MGOe	33	36	38
		kJ/m ³	263	283	302

	Characteristic	Units	C //	C ⊥
Thermal Properties	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(B _r)	%/°C		-0.120
	of Coercivity, α(H _{cj})	%/°C		-0.605
	Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °C x 10 ⁻⁶	7.5	-0.1
	Thermal Conductivity	W / (m • K)		7.6
Other Properties	Specific Heat ⁽³⁾	J / (kg • K)		460
	Curie Temperature, T _c	°C		310
	Flexural Strength	psi		41,300
	Density	g/cm ³		7.5
	Hardness, Vickers	Hv		620
	Electrical Resistivity, ρ	μΩ • cm		180

Notes: (1) Coefficients measured between 20 and 120 °C
(2) Between 20 and 200 °C
(3) Between 20 and 140 °C



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.