

N35 Grade Sintered Neodymium-Iron-Boron Magnets

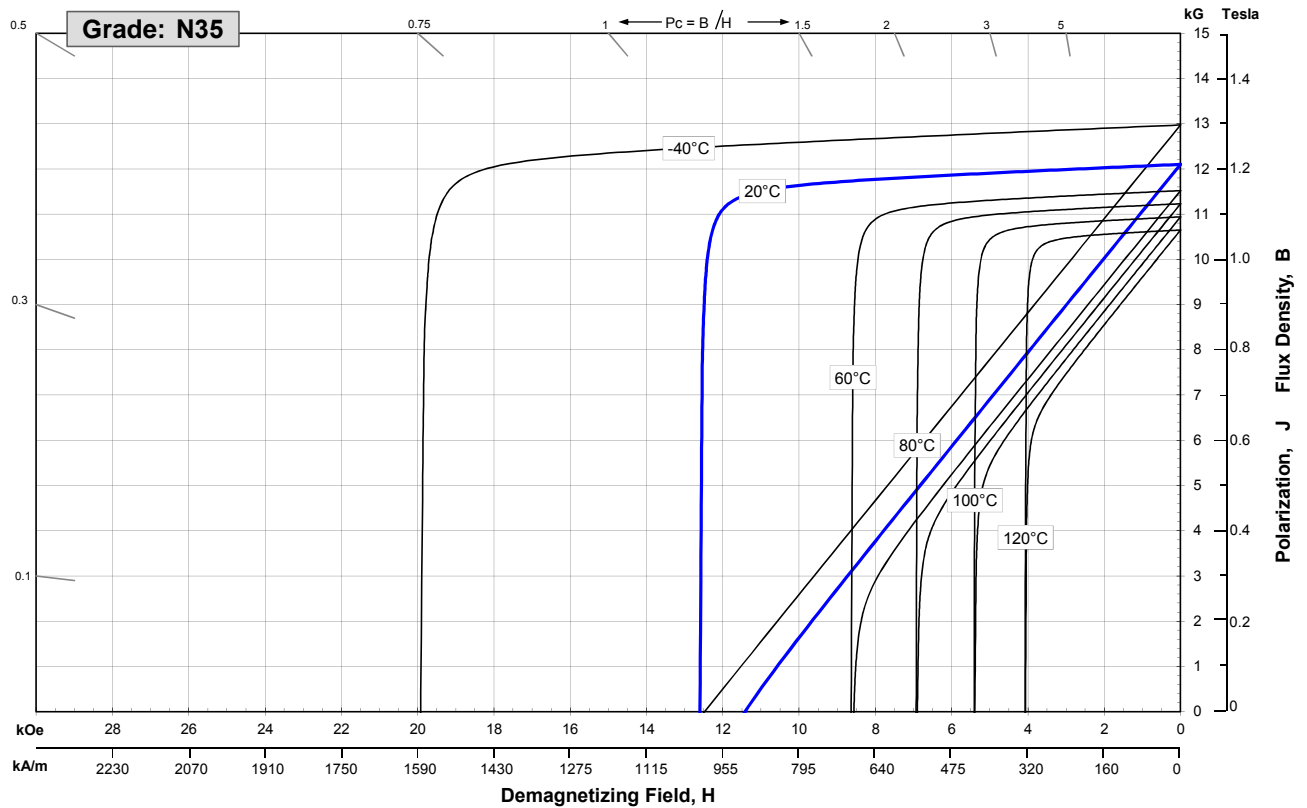
These are also referred to as "Neo" or NdFeB magnets. They offer a combination of high magnetic output at moderate cost. Please contact ALB for additional grade information and recommendations for protective coating. Assemblies using these magnets can also be provided.

Characteristic	Units	Magnetic Properties		
		min.	nominal	max.
Br , Residual Induction	Gauss	11,700	12,100	12,500
	mT	1170	1210	1250
H_{cB} , Coercivity	Oersteds	10,800	11,400	12,000
	kA/m	860	907	955
H_{cJ} , Intrinsic Coercivity	Oersteds	12,000		
	kA/m	955		
BH_{max} , Maximum Energy Product	MGOe	33	36	38
	kJ/m ³	263	283	302

Characteristic	Units	C // C ⊥		
		C //	C ⊥	
Thermal Properties	Reversible Temperature Coefficients ⁽¹⁾			
	of Induction, α(Br)	%/°C	-0.120	
	of Coercivity, α(H _{cj})	%/°C	-0.750	
	Coefficient of Thermal Expansion ⁽²⁾	ΔL/L per °C × 10 ⁻⁶	7.5	-0.1
	Thermal Conductivity	W / (m · K)	7.6	
Specific Heat ⁽³⁾	J / (kg · K)	460		
Curie Temperature, T _c	°C	310		
Other Properties	Flexural Strength	psi	41,300	
		MPa	285	
	Density	g/cm ³	7.5	
	Hardness, Vickers	Hv	620	
	Electrical Resistivity, ρ	μΩ · cm	180	

Notes: (1) Coefficients measured between 20 and 80 °C
(2) Between 20 and 200 °C
(3) Between 20 and 140 °C

Demagnetisation Curves



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.

