



# Spacemagnets Europe GmbH

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**N-35UH**

## Sintered NdFeB-Magnets

A neodymium magnet (also known as NdFeB, NIB or Neo magnet), the most widely used type of rare-earth magnet, is a permanent magnet made from an alloy of neodymium, iron and boron to form the Nd<sub>2</sub>Fe<sub>14</sub>B tetragonal crystalline structure. NdFeB-magnets are the strongest type of permanent magnet commercially available.

Magnetic Properties	Characteristic	Unit	Min	Nominal	Max
<b>Br</b> Residual Induction	Gauss	11700	11950	12200	
	mT	1170	1195	1220	
<b>Hcb</b> Coercivity	Oersteds	10800			
	KA/M	860			
<b>Hcj</b> Intrinsic Coercivity	Oersteds	25000			
	KA/M	1990			
<b>BHmax</b> Maximum Energy Product	MGOe	33	34.5	36	
	KJ/M <sup>3</sup>	263	275	287	

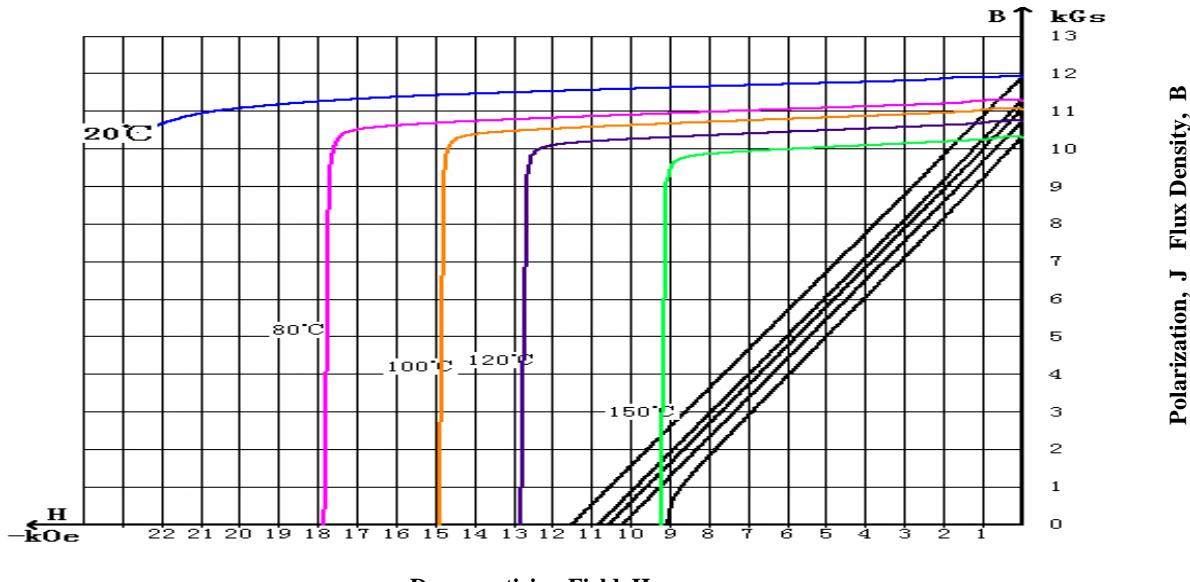
	Characteristic	Unit	C//	C $\perp$
Reversible Temperature Coefficients <sup>(1)</sup>				
Of Induction, $\alpha$ (Br)	%/ $^{\circ}$ C	-0.12		
Of Coercivity, $\beta$ (Hcj)	%/ $^{\circ}$ C	-0.465		
Coefficient of Thermal Expansion <sup>(2)</sup>	$\Delta L/L$ per $^{\circ}$ Cx10 <sup>-6</sup>	7.5	-0.1	
Thermal Conductivity	kcal/mhr $^{\circ}$ C	5.3	5.8	
Specific Heat <sup>(3)</sup>	cal/g $^{\circ}$ C	0.11		
Curie Temperature, Tc	$^{\circ}$ C	310		
Flexural Strength	psi	41300		
	Mpa	285		
Density	g/cm <sup>3</sup>	7.6		
Hardness, Vickers	Hv	620		
Electrical Resistivity	$\mu\Omega.cm$	180		

Notes: (1) Coefficients measured between 20 and 200  $^{\circ}$ C

(2) Between 20 and 200  $^{\circ}$ C

(3) Between 20 and 140  $^{\circ}$ C

## Material: N-35UH



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 Hcj.

Magnets can be supplied thermal stabilized or magnetically calibrated to customer specifications.

Additional grades are available, Please contact the factory for information.