DURA MAGNETICS
PROVIDING PRECISION MAGNETIC SOLUTIONS SINCE 1961

N40H

Sintered Neodymium-Iron-Boron Magnets

Also available in other Energy Products from 30-55MGOe and Maximum Temperatures up to 230°C / 446°F. If you require DFAR Compliant material please contact our sales team directly with your requirements.

Magnetic Properties

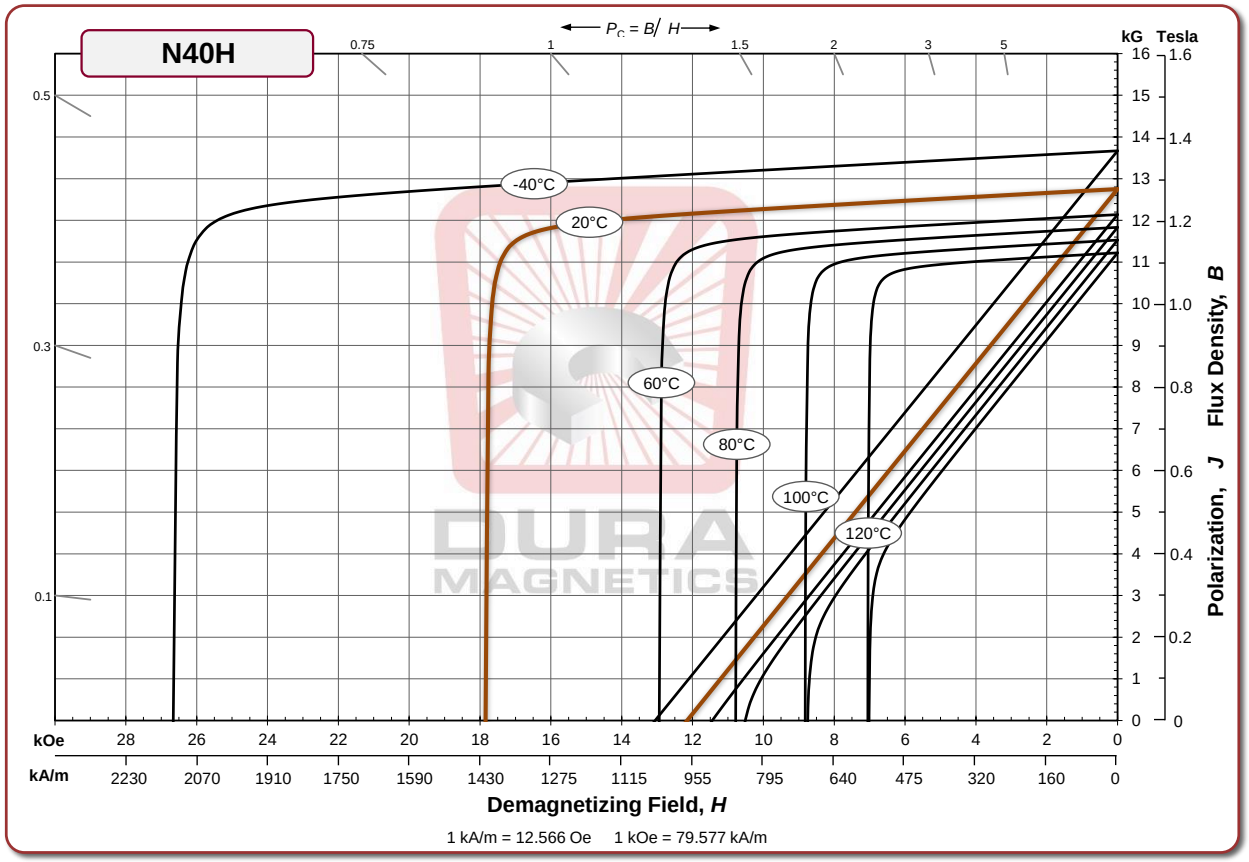
Characteristic	Units	min.	nominal	max.
B_r Residual Induction	Gauss	12,600	12,750	12,900
	mT	1260	1275	1290
H_{cB} Coercivity	Oersteds	11,600	11,950	12,300
	kA/m	923	951	979
H_{cJ} Intrinsic Coercivity	Oersteds	17,000		
	kA/m	1,353		
BH_{max} Maximum Energy Product	MGOe	38	40	41
	kJ/m^3	302	315	327

Thermal Properties

Characteristic	Units	Nominal
Reversible Temperature Coefficients (1)		
of Induction, $\alpha(B_r)$	%/ºC	-0.120
of Coercivity, $\alpha(H_{cJ})$	%/ºC	-0.605
Curie Temperature, T_C	ºC	310
Recommended Max use temperature (2)	ºC	120

Physical Properties

Characteristic	Units		Nominal
Density	g/cm^3		7.5
Vickers Hardness	Hv		620
Coef Thermal Expansion	%/ ºCx10^{-6}	C //	7.5
	C ⊥		-0.1
Electrical Resistivity	μΩ • cm		180
Specific Heat	cal/gºC		0.11
	J/kg • K		460
Bending (flexural) Strength	MPa		285



Notes: (1) Coefficients measured between 20 and 120 ºC

(2) Recommended maximum use temperature based on a minimum P_C of 2.2.

These magnetic characteristics and demagnetization curves represent typical production magnet performance across the specifie d temperature spectrum. Empirical testing for your application is advised for suitability determination.

Dura Magnetics Inc also supplies Alnico, Samarium Cobalt, and Ceramic magnets and magnetic assemblies, please contact sales@d uramag.com or visit www.duramag.com.

5500 Schultz Dr., Sylvania, OH 43560
sales@duramag.com | 1-800-773-6891 | www.duramag.com