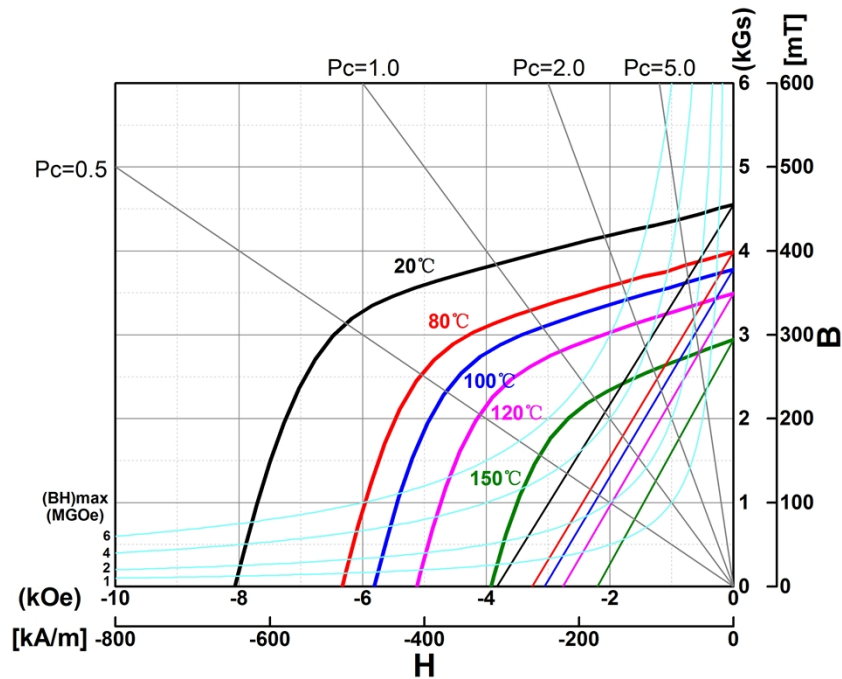


Material Datasheet of BNP-4

Demagnetization Curve



Magnetic Properties

Residual Induction B_r	[mT] (kG)	460~520 4.6~5.2	Tem. Coeff. of H_{cj} $\alpha(H_{cj})$	[%/K]	-0.35
Coercivity H_{cB}	[kA/m] (kOe)	224~288 2.8~3.6	Recoil Permeability μ_{rec}		1.20
Intrinsic Coercivity H_{cJ}	[kA/m] (kOe)	504~680 6.3~8.5	Curie Tem. T_c	°C	300
Max. Energy Product $(BH)_{max}$	[kJ/m ³] (MGOe)	30.4~35.2 3.8~4.4	Max. Operating Tem. T_w	°C	160
Tem. Coeff. of Br $\alpha(B_r)$	[%/K]	-0.11			

Physical Properties

Density (ρ)	g/cm ³	5.6~6.0
Vickers hardness	HV	400~450
Modulus of Elasticity	kN/mm ²	700~1000
Compressive Strength	N/mm ²	80~120
Expansion Coeff.	10 ⁻⁶ /K	10~30
Spec. Elec. Resistance	10 ⁻⁶ $\Omega \cdot m$	1~3
Thermal Conductivity	W/m-K	2

*: []: in the unit of SI

(): in the unit of CGS

The specification of the test sample is $\phi 10 \times 10$ column.

These values may vary depending on the magnet's shape and dimensions. It is recommended that the figures be verified in actual products