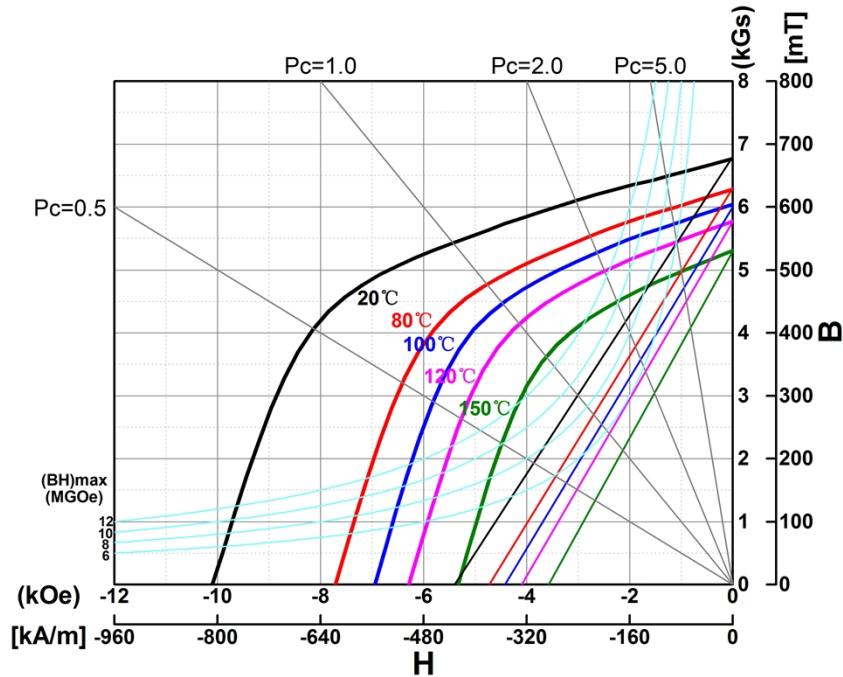


## Material Datasheet of BNP-10H

### Demagnetization Curve



### Magnetic Properties

<b>Residual Induction</b> $B_r$	[mT] (kG)	650~710 6.5~7.1	<b>Tem. Coeff. of <math>H_{cj}</math></b> $\alpha(H_{cj})$	[%/K]	-0.34
<b>Coercivity</b> $H_{cB}$	[kA/m] (kOe)	432~480 5.4~6.0	<b>Recoil Permeability</b> $\mu_{rec}$		1.20
<b>Intrinsic Coercivity</b> $H_{cJ}$	[kA/m] (kOe)	784~960 9.8~12.0	<b>Curie Tem.</b> $T_c$	°C	350
<b>Max. Energy Product</b> $(BH)_{max}$	[kJ/m <sup>3</sup> ] (MGOe)	74.0~82.0 9.3~10.3	<b>Max. Operating Tem.</b> $T_w$	°C	180
<b>Tem. Coeff. of <math>B_r</math></b> $\alpha(B_r)$	[%/K]	-0.10			

### Physical Properties

<b>Density (<math>\rho</math>)</b>	g/cm <sup>3</sup>	5.8~6.1
<b>Vickers Hardness</b>	HV	350~380
<b>Modulus of Elasticity</b>	kN/mm <sup>2</sup>	700~1000
<b>Compressive Strength</b>	N/mm <sup>2</sup>	80~120
<b>Expansion Coeff.</b>	10 <sup>-6</sup> /K	10~30
<b>Spec. Elec. Resistance</b>	10 <sup>-6</sup> $\Omega \cdot m$	1~3
<b>Thermal Conductivity</b>	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