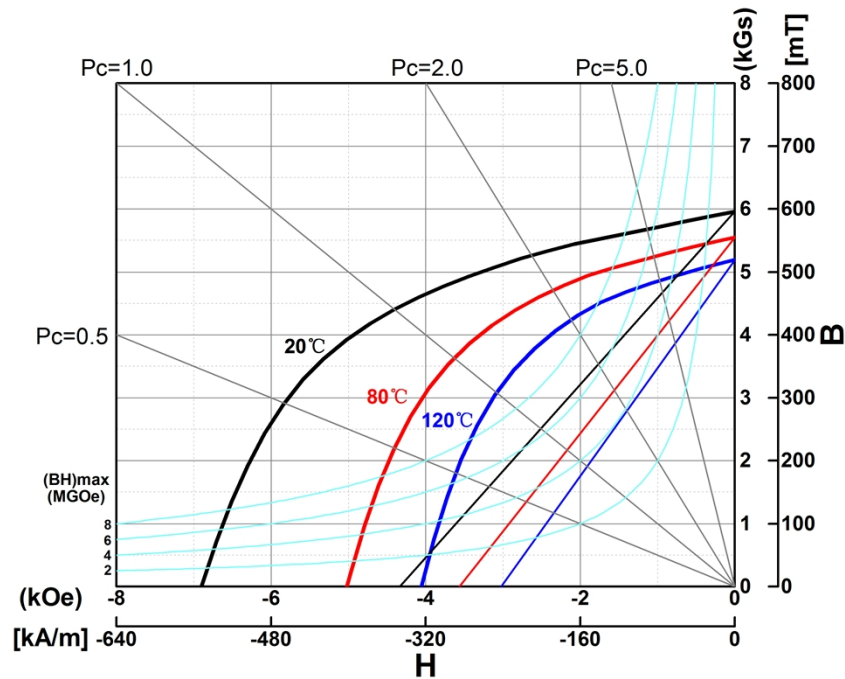


## Material Datasheet of BNI-7

### Demagnetization Curve



### Magnetic Properties

<b>Residual Induction</b> $B_r$	[mT] (kG)	550~650 5.5~6.5	<b>Tem. Coeff. of Br</b> $\alpha(B_r)$	[%/K]	-0.12
<b>Coercivity</b> $H_{cB}$	[kA/m] (kOe)	344~400 4.3~5.0	<b>Tem. Coeff. of Hcj</b> $\alpha(H_{cj})$	[%/K]	-0.35
<b>Intrinsic Coercivity</b> $H_{cJ}$	[kA/m] (kOe)	640~800 8.0~10.0	<b>Recoil Permeability</b> $\mu_{rec}$		1.20
<b>Max. Energy Product</b> $(BH)_{max}$	[kJ/m <sup>3</sup> ] (MGOe)	52.0~60.0 6.5~7.5	<b>Max. Operating Tem.</b> $T_w$	°C	120

### Physical Properties

<b>Density (<math>\rho</math>)</b>	g/cm <sup>3</sup>	4.7~5.3
<b>Bending Strength</b>	MPa	74
<b>Tensile Strength</b>	MPa	37
<b>Young's Modulus</b>	MPa	16000
<b>Expansion Coeff.</b>	10 <sup>-6</sup> /K	26
<b>Spec. Elec. Resistance</b>	$\mu \Omega \cdot m$	130

\*: [ ]: 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