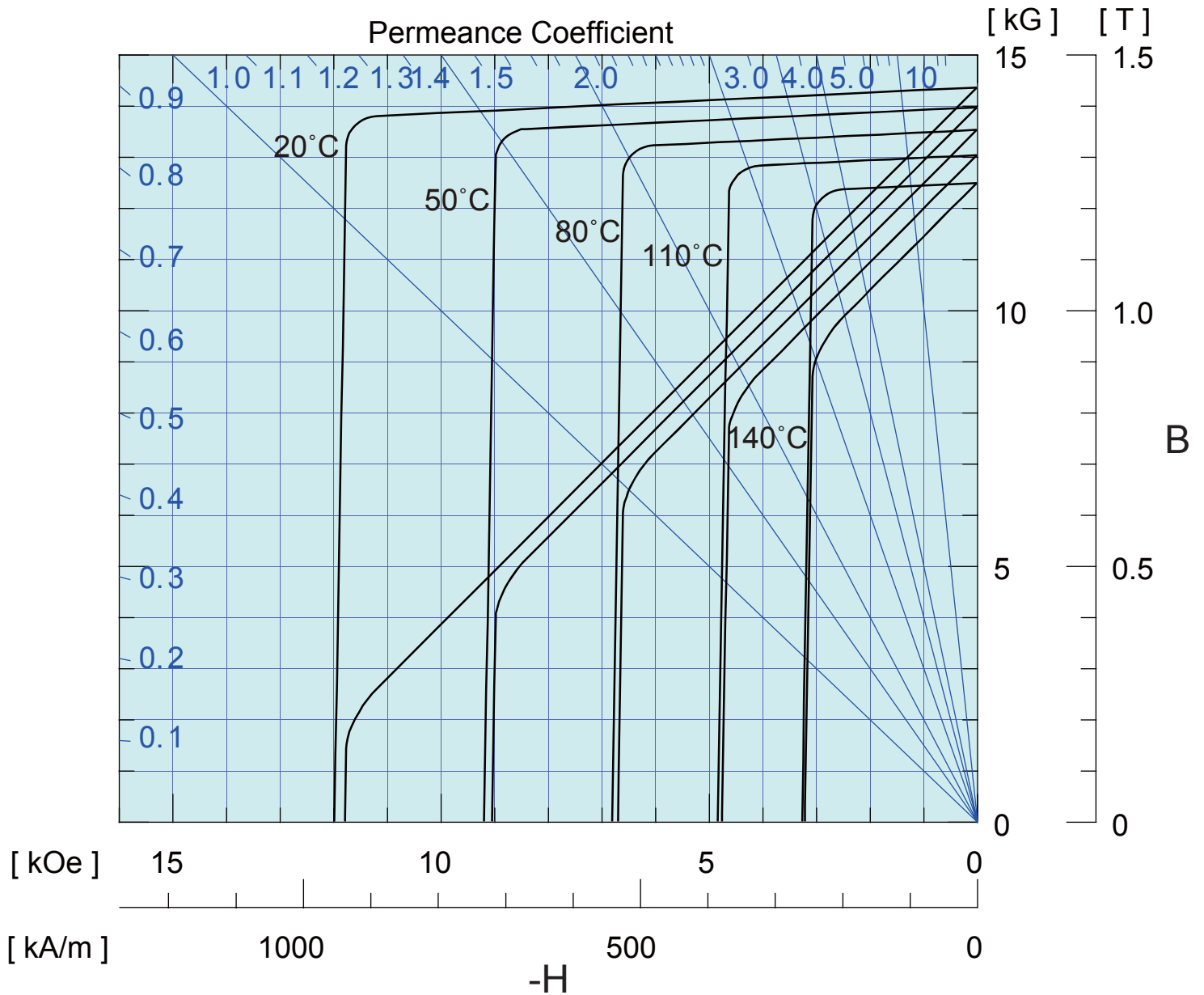


N52

Nd-Fe-B Magnet

Demagnetization Curves at Elevated Temperature



Described curves are typical ones.
 Please feel free to contact us if you'd like further information,
 including lower limit values.

Standard Characteristics

Items		Materials	N52		
			C//	(C⊥)	
Magnetic Properties	Remanence B_r	[T]	1.40 ~ 1.47		
		[G]	14000 ~ 14700		
	Coercivity	H_{cB}	[kA / m]	820 ~	
			[Oe]	10300 ~	
		H_{cJ}	[kA / m]	875 ~	
			[Oe]	11000 ~	
	Maximum Energy Product $(BH)_{max}$	[kJ / m ³]	378 ~ 422		
[MGOe]		47.5 ~ 53			
Recoil Permeability μ_r	[-]	1.05			
Temperature Properties	Thermal Coefficient of B_r * ¹	[% / K]	- 0.11		
	Thermal Coefficient of H_{cJ} * ²	[% / K]	- 0.61		
	Coefficient of Thermal Expansion * ³	[1 / K]	6.7x10 ⁻⁶ (-2.8x10 ⁻⁶)		
	Curie Point	[°C]	330		

*¹: $\Delta B_r / \Delta T \times 100 / B_r (20^\circ\text{C})$ ($\Delta T: 20 \sim 140^\circ\text{C}$)

*²: $\Delta H_{cJ} / \Delta T \times 100 / H_{cJ} (20^\circ\text{C})$ ($\Delta T: 20 \sim 140^\circ\text{C}$)

*³: 20~200°C

Other Properties

Density	[kg / m ³]	7.55x10 ³
Bending Strength	[MPa]	290
Compressive Strength	[MPa]	940
Young's Modulus	[GPa]	150
Rigidity	[GPa]	61
Vickers Hardness	[Hv]	600
Electrical Resistivity	[$\Omega \cdot \text{m}$]	1.4x10 ⁻⁶
Thermal Conductivity	[W / m · K]	7.6 (8.6)
Specific Heat * ⁴	[J / kg · K]	4.6x10 ²

*⁴: 20~120°C

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- The contents of this literature are subject to change without notice.
- Magnetic Properties may vary due to size and shape, and may not achieve the properties specified above.
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- The contents of this literature are effective as of April 2018.