



Temperature in [°C]: **20.0** **80.0** **100.0** **120.0** **150.0**

magnetic properties

Remanence 20°C	Br min	0.520	T	5.2	kG
	Br nom	0.570	T	5.7	kG
Coercivity 20°C	HcB min	310	kA/m	3.9	kOe
	HcB nom	390	kA/m	4.9	kOe
Intrinsic Coercivity 20°C	HcJ min	520	kA/m	6.5	kOe
	HcJ nom	600	kA/m	7.5	kOe
Maximum Energy Product 20°C	BH max, min	42	kJ/m ³	5.3	MGOe
	BH max, nom	52	kJ/m ³	6.5	MGOe
Reversible Temperature Coefficient ¹⁾	α Br nom	-0.160 ~ -0.230	%/°C		
	β HcJ nom	-0.32 ~ -0.36	%/°C		

material properties (typical values)

Max. Operating Temperature ²⁾	T max	150	°C		
Density	ρ	5.95	g/cm ³		
Permeability 20°C	μr	1.30 - 1.40			
Vickers Hardness		35 - 45	HV		
Modulus of Elasticity	E	8 - 16	kN/mm ²		
Copressive Strength		-	N/mm ²		
Flexural Strength		50-100	N/mm ²		
Expansion Coefficient		10.0 - 30.0	10 ⁻⁶ /K		
Expansion Coefficient in direction of anisotropy	⊥	-	10 ⁻⁶ /K		
	//	-	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	15 - 50	μΩ m		
Specific Heat Capacity	c	-	J/(kg K)		
Thermal Conductivity	λ	2	W/m K		

1) The shown temperature coefficients are nominal reference values only . They can vary for different temperatures and don't need to be linear.

2) The maximum operating temperature is depending on the magnet shape, size and on the specific application.

Note: The above plotted graphs are idealized and represent theoretical values of the material. Shown are curves according nominal values based on uncoated material samples according to IEC 60404-5. Material and magnetic data represent typical data that may vary due to product shape, size and coating. Please contact Bomatec regarding specific requirements for your application.