



Temperature in [°C]: **20.0** **80.0** **100.0** **150.0** **200.0** **250.0**

magnetic properties

Remanence 20°C	Br min	0.790	T	7.9	kG
	Br nom	0.815	T	8.2	kG
Coercivity 20°C	HcB min	620	kA/m	7.8	kOe
	HcB nom	640	kA/m	8.0	kOe
Intrinsic Coercivity 20°C	HcJ min	1830	kA/m	23.0	kOe
	HcJ nom	1850	kA/m	23.2	kOe
Maximum Energy Product 20°C	BH max, min	118	kJ/m ³	14.8	MGOe
	BH max, nom	126.5	kJ/m ³	15.9	MGOe
Reversible Temperature Coefficient ¹⁾	α Br nom	-0.040	%/°C		
	β HcJ nom	-0.280	%/°C		

material properties (typical values)

Max. Operating Temperature ²⁾	T max	250	°C		
Density	ρ	8.3	g/cm ³		
Permeability 20°C	μr	1.05			
Vickers Hardness		475	HV		
Modulus of Elasticity	E	110	kN/mm ²		
Compressive Strength		1000	N/mm ²		
Flexural Strength		100	N/mm ²		
Expansion Coefficient		-	10 ⁻⁶ /K		
Expansion Coefficient in direction of anisotropy	⊥	10-14	10 ⁻⁶ /K		
	//	4-8	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	0.4-0.7	μΩ m		
Specific Heat Capacity	c	370	J/(kg K)		
Thermal Conductivity	λ	10.0 - 13.0	W/mK		

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.