



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

magnetic properties

Remanence 20°C	Br min	0.950	T	9.5	kG
	Br nom	0.985	T	9.9	kG
Coercivity 20°C	HcB min	690	kA/m	8.7	kOe
	HcB nom	725	kA/m	9.1	kOe
Intrinsic Coercivity 20°C	HcJ min	1430	kA/m	18.0	kOe
	HcJ nom	1450	kA/m	18.2	kOe
Maximum Energy Product 20°C	BH max, min	175	kJ/m ³	22.0	MGOe
	BH max, nom	183	kJ/m ³	23.0	MGOe
Reversible Temperature Coefficient ¹⁾	α Br nom	-0.035	%/°C		
	β HcJ nom	-0.200	%/°C		

material properties (typical values)

Max. Operating Temperature ²⁾	T max	300	°C		
Density	ρ	8.4	g/cm ³		
Permeability 20°C	μr	1.1			
Vickers Hardness		575	HV		
Modulus of Elasticity	E	150	kN/mm ²		
Compressive Strength		700	N/mm ²		
Flexural Strength		120	N/mm ²		
Expansion Coefficient		-	10 ⁻⁶ /K		
Expansion Coefficient in direction of anisotropy	⊥	9-13	10 ⁻⁶ /K		
	//	6-10	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	0.7-1.1	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.