



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

magnetic properties

Remanence 20°C	Br min	1.250	T	12.5	kG
	Br nom	1.295	T	13.0	kG
Coercivity 20°C	HcB min	885	kA/m	11.1	kOe
	HcB nom	965	kA/m	12.1	kOe
Intrinsic Coercivity 20°C	HcJ min	1120	kA/m	14.1	kOe
	HcJ nom	1175	kA/m	14.8	kOe
Maximum Energy Product 20°C	BH max, min	295	kJ/m ³	37.1	MGOe
	BH max, nom	318	kJ/m ³	39.9	MGOe
Reversible Temperature Coefficient ¹⁾	α Br nom	-0.090 ~ -0.120	%/°C		
	β HcJ nom	-0.50 ~ -0.65	%/°C		

material properties (typical values)

Max. Operating Temperature ²⁾	T max	150	°C		
Density	ρ	7.55	g/cm ³		
Permeability 20°C	μr	1.05			
Vickers Hardness		750	HV		
Modulus of Elasticity	E	150	kN/mm ²		
Compressive Strength		750	N/mm ²		
Flexural Strength		200	N/mm ²		
Expansion Coefficient		-	10 ⁻⁶ /K		
Expansion Coefficient in direction of anisotropy	⊥	-1 ~ 0	10 ⁻⁶ /K		
	//	1 ~ 2	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	1.35	μΩ m		
Specific Heat Capacity	c	550	J/(kg K)		
Thermal Conductivity	λ	5	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.

Bomatec | Hofstrasse 1 | Tel. +41 44 872 10 00 | Fax. +41 44 872 10 01 | contact@bomatec.ch | www.bomatec.com