



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

magnetic properties

Remanence 20°C	Br min	1.080	T	10.8	kG
	Br nom	1.115	T	11.2	kG
Coercivity 20°C	HcB min	540	kA/m	6.8	kOe
	HcB nom	670	kA/m	8.4	kOe
Intrinsic Coercivity 20°C	HcJ min	635	kA/m	8.0	kOe
	HcJ nom	795	kA/m	10.0	kOe
Maximum Energy Product 20°C	BH max, min	220	kJ/m ³	27.6	MGOe
	BH max, nom	230	kJ/m ³	28.9	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	250	°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.

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