



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

magnetic properties					
Remanence 20°C	Br min	0.690	T	6.9	kG
	Br nom	0.740	T	7.4	kG
Coercivity 20°C	HcB min	430	kA/m	5.4	kOe
	HcB nom	480	kA/m	6.0	kOe
Intrinsic Coercivity 20°C	HcJ min	680	kA/m	8.5	kOe
	HcJ nom	760	kA/m	9.6	kOe
Maximum Energy Product 20°C	BH max, min	76	kJ/m <sup>3</sup>	9.5	MGOe
	BH max, nom	88	kJ/m <sup>3</sup>	11.1	MGOe
Reversible Temperature Coefficient <sup>1)</sup>	α Br nom	-0.100 ~ -0.130	%/°C		
	β HcJ nom	-0.35 ~ -0.40	%/°C		

material properties (typical values)					
Max. Operating Temperature <sup>2)</sup>	T max	160	°C		
Density	ρ	6.15	g/cm <sup>3</sup>		
Permeability 20°C	μr	1.25 - 1.35			
Vickers Hardness		35 - 45	HV		
Modulus of Elasticity	E	8 - 16	kN/mm <sup>2</sup>		
Copressive Strength		-	N/mm <sup>2</sup>		
Flexural Strength		50-100	N/mm <sup>2</sup>		
Expansion Coefficient		10.0 - 30.0	10 <sup>-6</sup> /K		
Expansion Coefficient in direction of anisotropy	⊥	-	10 <sup>-6</sup> /K		
	//	-	10 <sup>-6</sup> /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.