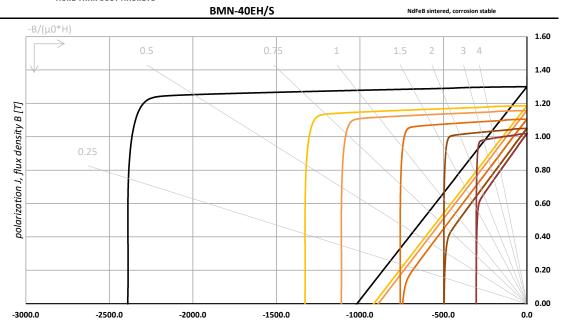
magnetic properties





20.0 100.0 180.0 200.0 Temperature in [°C]: 120.0 150.0

demagnetization field H [kA/m]

Remanence 20°C	Br min	1.250	Т	12.5	kG
	Br nom	1.300	Т	13.0	kG
Coercitivity 20°C	HcB min	950	kA/m	11.9	kOe
	HcB nom	1000	kA/m	12.6	kOe
Intrinsic Coercitivity 20°C	HcJ min	2387	kA/m	30.0	kOe
	HcJ nom	2390	kA/m	30.0	kOe
Maximum Energy Product 20°C	BH max, min	302	kJ/m³	37.9	MGOe
	BH max, nom	318	kJ/m³	39.9	MGOe
Reversible Temperature Coefficient 1)	α Br nom	-0.100 ~ -0.120	%/°C		
	β HcJ nom	-0.47 ~ -0.62	%/°C		
material properties (typical values)					
Max. Operating Temperature 2)	T max	200	°C		
Density	ρ	7.55	g/cm <sup>3</sup>		
Permeability 20°C	μr	1.05			
Vickers Hardness		500 - 600	HV		
Modulus of Elasticity	E	150 - 200	kN/mm <sup>2</sup>		
Copressive Strength		1000 - 1100	N/mm <sup>2</sup>		
Flexural Strength		250	N/mm <sup>2</sup>		
Expansion Coefficient		-	10 <sup>-6</sup> /K		
Expansion Coefficient in direction of	1	-3 - 0	10 <sup>-6</sup> /K		
anisotropy	//	4 - 9	10 <sup>-6</sup> /K		
Specific Electric Resistance	ρel	1.2 - 1.6	μΩ <sup>·</sup> m		
Specific Heat Capacity	С	440	J/(kg <sup>-</sup> K)		
Thermal Conductivity	λ	8.0 - 10.0	W/m <sup>-</sup> K		

<sup>1)</sup> The shown temperature coefficients are nominal reference values only . They can vary for different temperatures and don't need to be linear.

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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<sup>2)</sup> The maximum operating temperature is depending on the magnet shape, size and on the specific application.