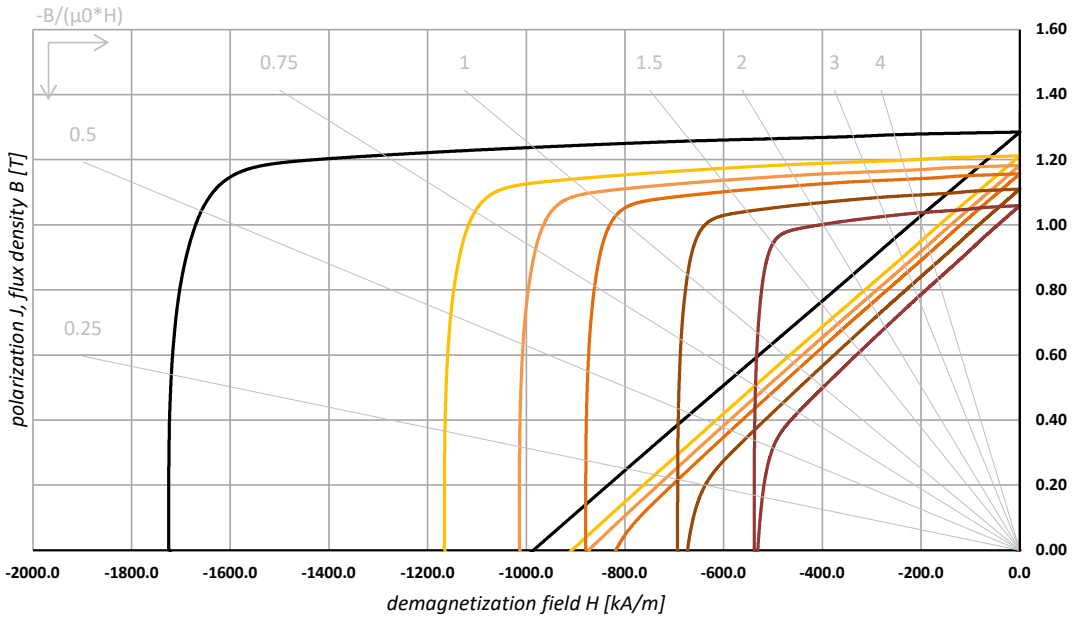
BOMATEC
MORE THAN JUST MAGNETS

BMNHPa-39UH(R)

NdFeB hot pressed, radial anisotropy



Temperature in [°C]:	**20.0**	80.0	100.0	120.0	150.0	180.0

magnetic properties					
Remanence 20°C	Br min	1.250	T	12.5	kG
	Br nom	1.285	T	12.9	kG
Coercitivity 20°C	HcB min	950	kA/m	11.9	kOe
	HcB nom	990	kA/m	12.4	kOe
Intrinsic Coercitivity 20°C	HcJ min	1680	kA/m	21.1	kOe
	HcJ nom	1725	kA/m	21.7	kOe
Maximum Energy Product 20°C	BH max, min	295	kJ/m^3	37.1	MGOe
	BH max, nom	310	kJ/m^3	38.9	MGOe
Reversible Temperature Coefficient [1)]	α Br nom	-0.085 ~ -0.120	%/°C		
	β HcJ nom	-0.41 ~ -0.56	%/°C		

material properties (typical values)					
Max. Operating Temperature [2)]	T max	200	°C		
Density	ρ	7.6	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/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.

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