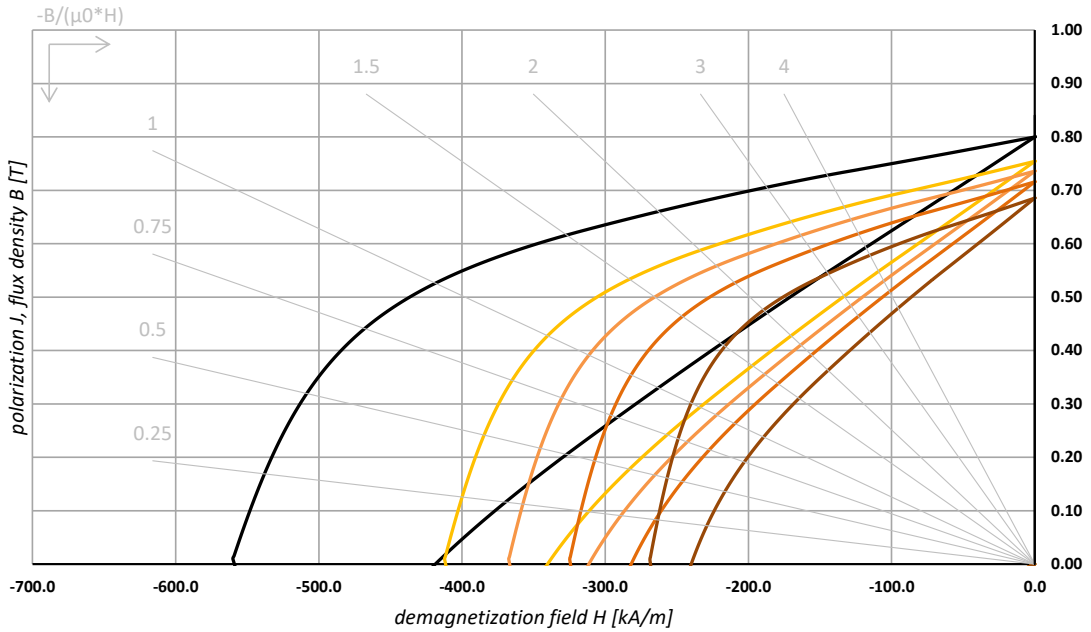
BOMATEC
MORE THAN JUST MAGNETS

BMNpi-80/48 **NdFeB bonded, isotropic (EP)**



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

magnetic properties					
Remanence 20°C	Br min	0.740	T	7.4	kG
	Br nom	0.800	T	8.0	kG
Coercitivity 20°C	HcB min	350	kA/m	4.4	kOe
	HcB nom	440	kA/m	5.5	kOe
Intrinsic Coercitivity 20°C	HcJ min	480	kA/m	6.0	kOe
	HcJ nom	560	kA/m	7.0	kOe
Maximum Energy Product 20°C	BH max, min	75	kJ/m^3	9.4	MGOe
	BH max, nom	95	kJ/m^3	11.9	MGOe
Reversible Temperature Coefficient [1]	α Br nom	-0.090 ~ -0.110	%/°C		
	β HcJ nom	-0.38 ~ -0.45	%/°C		

material properties (typical values)					
Max. Operating Temperature [2]	T max	150	°C		
Density	ρ	6.25	g/cm^3		
Permeability 20°C	μr	1.50 - 1.60			
Vickers Hardness		35 - 45	HV		
Modulus of Elasticity	E	8 - 16	kN/mm^2		
Copressive Strength		-	N/mm^2		
Flexural Strength		50-100	N/mm^2		
Expansion Coefficient		10.0 - 30.0	$10^{-6}/K$		
Expansion Coefficient in direction of anisotropy	⊥	-	$10^{-6}/K$		
	//	-	$10^{-6}/K$		
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.

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