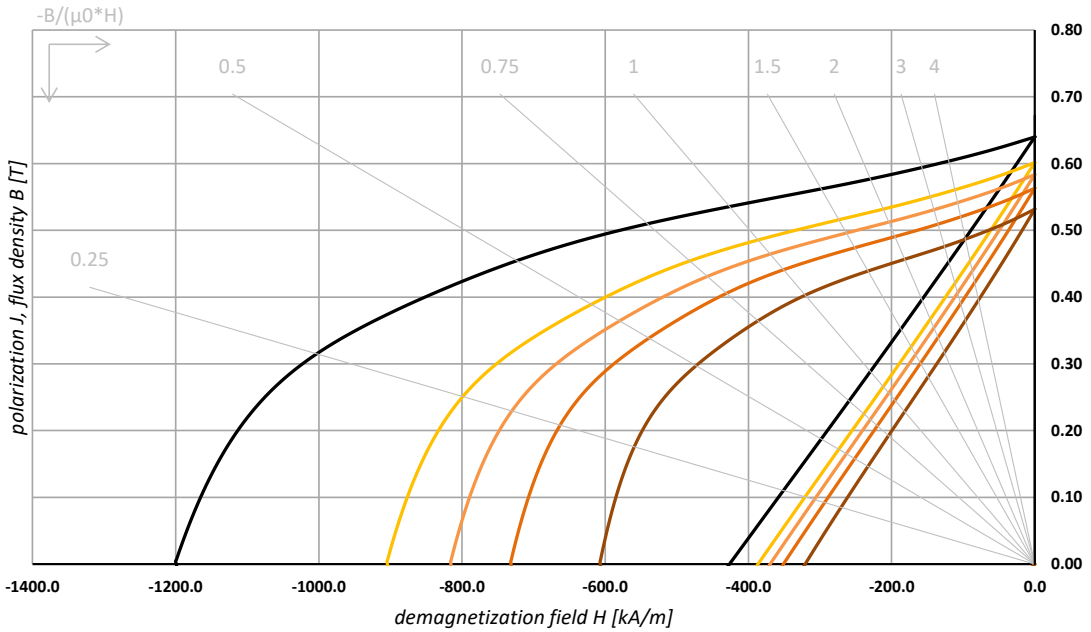
BOMATEC
MORE THAN JUST MAGNETS

BMNpi-55/104 **NdFeB bonded, isotropic (EP)**



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

magnetic properties					
Remanence 20°C	Br min	0.570	T	5.7	kG
	Br nom	0.640	T	6.4	kG
Coercitivity 20°C	HcB min	370	kA/m	4.6	kOe
	HcB nom	440	kA/m	5.5	kOe
Intrinsic Coercitivity 20°C	HcJ min	1040	kA/m	13.1	kOe
	HcJ nom	1200	kA/m	15.1	kOe
Maximum Energy Product 20°C	BH max, min	55	kJ/m^3	6.9	MGOe
	BH max, nom	68	kJ/m^3	8.5	MGOe
Reversible Temperature Coefficient [1]	α Br nom	-0.110 ~ -0.130	%/°C		
	β HcJ nom	-0.38 ~ -0.42	%/°C		
material properties (typical values)					
Max. Operating Temperature [2]	T max	160	°C		
Density	ρ	5.95	g/cm^3		
Permeability 20°C	μr	1.20 - 1.30			
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.

Bomatec |Hofstrasse 1 |Tel. +41 44 872 10 00 |Fax. +41 44 872 10 01 |contact@bomatec.ch | www.bomatec.com