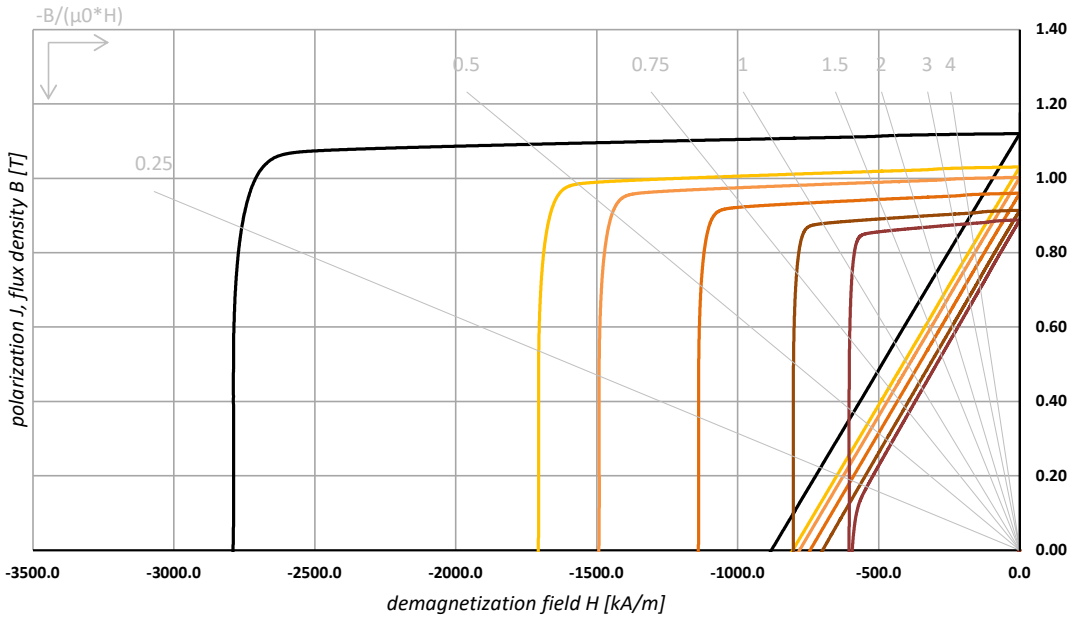
BOMATEC
MORE THAN JUST MAGNETS

BMN-30AH/ST (GBD)

NdFeB sintered, corrosion & temperature stable



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

magnetic properties					
Remanence 20°C	Br min	1.080	T	10.8	kG
	Br nom	1.120	T	11.2	kG
Coercitivity 20°C	HcB min	804	kA/m	10.1	kOe
	HcB nom	862	kA/m	10.8	kOe
Intrinsic Coercitivity 20°C	HcJ min	2785	kA/m	35.0	kOe
	HcJ nom	2790	kA/m	35.1	kOe
Maximum Energy Product 20°C	BH max, min	223	kJ/m^3	28.0	MGOe
	BH max, nom	239	kJ/m^3	30.0	MGOe
Reversible Temperature Coefficient [1)]	α Br nom	-0.095 ~ -0.115	%/°C		
	β HcJ nom	-0.42 ~ -0.59	%/°C		

material properties (typical values)					
Max. Operating Temperature [2)]	T max	220	°C		
Density	ρ	7.55	g/cm^3		
Permeability 20°C	μr	1.05			
Vickers Hardness		500 - 600	HV		
Modulus of Elasticity	E	150 - 200	kN/mm^2		
Compressive Strength		1000 - 1100	N/mm^2		
Flexural Strength		250	N/mm^2		
Expansion Coefficient		-	$10^{-6}/K$		
Expansion Coefficient in direction of anisotropy	⊥	-3 - 0	$10^{-6}/K$		
	//	4 - 9	$10^{-6}/K$		
Specific Electric Resistance	ρel	1.2 - 1.6	μΩ·m		
Specific Heat Capacity	c	440	J/(kg·K)		
Thermal Conductivity	λ	8.0 - 10.0	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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