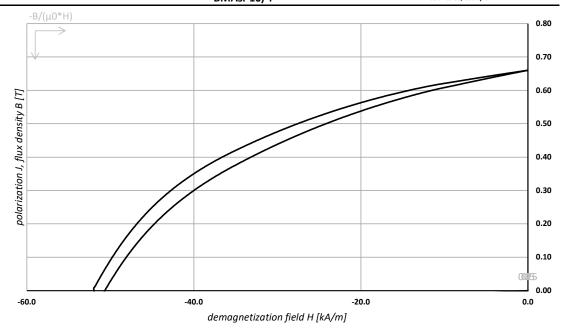


BMAsi-10/4

AlNiCo sintered, isotropic



Temperature in [°C]: 20.0

magnetic properties					
Remanence 20°C	Br min	0.630	Т	6.3	kG
	Br nom	0.660	T	6.6	kG
Coercitivity 20°C	HcB min	40	kA/m	0.5	kOe
	HcB nom	50	kA/m	0.6	kOe
Intrinsic Coercitivity 20°C	HcJ min	42	kA/m	0.5	kOe
	HcJ nom	52	kA/m	0.7	kOe
Maximum Energy Product 20°C	BH max, min	9.5	kJ/m³	1.2	MGOe
	BH max, nom		kJ/m³		MG0e
Reversible Temperature Coefficient 1)	α Br nom	-0.010 ~ -0.035	%/°C		
	β HcJ nom	-0.03 ~ 0.03	%/°C		
material properties (typical values)					
Max. Operating Temperature 2)	T max	450	°C		
Density	ρ	6.8	g/cm ³		
Permeability 20°C	μr	7.5			
Vickers Hardness		300 - 400	HV		
Modulus of Elasticity	E	100 - 200	kN/mm ²		
Copressive Strength		300 - 400	N/mm ²		
Flexural Strength		-	N/mm ²		
Expansion Coefficient		11.0 - 12.0	10 ⁻⁶ /K		
Expansion Coefficient in direction of	L	-	10 ⁻⁶ /K		
anisotropy	//	-	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	0.45 - 0.55	μΩ [·] m		
Specific Heat Capacity	С	-	J/(kg [·] K)		
Thermal Conductivity	λ	10.0 - 50.0	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.

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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 $²⁾ The \ maximum \ operating \ temperature \ is \ depending \ on \ the \ magnet \ shape, \ size \ and \ on \ the \ specific \ application.$