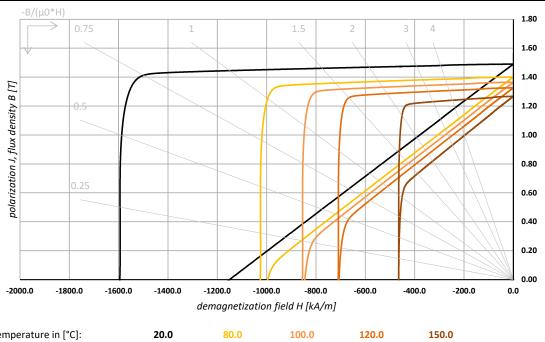




BMN-56SH/ST (GBD)

NdFeB sintered, corrosion & temperature stable



Temperature in [°C]:	20.0	80.0	100.0	120.0	150.0	
magnetic properties						
Remanence 20°C		Br min	1.460	T	14.6	kG
Nemanence 20 C		Br nom	1.490	T	14.9	kG
Coercitivity 20°C		HcB min	1112	kA/m	14.0	kOe
COCICIONITY 20 C		HcB nom	1130	kA/m	14.2	kOe
Intrinsic Coercitivity 20°C		HcJ min	1592	kA/m	20.0	kOe
intrinsic coercitivity 20 C		HcJ nom	1595	kA/m	20.0	kOe
Maximum Energy Product 20°C		BH max, min	418	kJ/m³	52.5	MGOe
		BH max, nom	435	kJ/m³	54.6	MGOe
Reversible Temperature Coefficient 1)		α Br nom	-0.095 ~ -0.115	%/°C		
		β HcJ nom	-0.52 ~ -0.64	%/°C		
material properties (typical va	lues)					
Max. Operating Temperature ²)	T max	150	°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 direct	ion of		-3 - 0	10 ⁻⁶ /K		
anisotropy		//	4 - 9	10 ⁻⁶ /K		
Specific Electric Resistance		pel	1.2 - 1.6	μΩ [·] m		
Specific Heat Capacity		С	440	J/(kg [·] 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:

Thermal Conductivity

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.

8.0 - 10.0

W/m⁻K

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

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