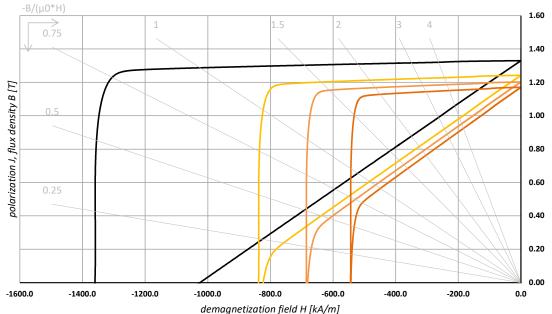




BMN-42H/S NdFeB sintered, corrosion stable



Temperature in [°C]: 20.0 80.0 100.0 120.0

magnetic properties					
Remanence 20°C	Br min	1.290	T	12.9	kG
	Br nom	1.330	Т	13.3	kG
Coercitivity 20°C	HcB min	955	kA/m	12.0	kOe
	HcB nom	1013	kA/m	12.7	kOe
Intrinsic Coercitivity 20°C	HcJ min	1353	kA/m	17.0	kOe
	HcJ nom	1360	kA/m	17.1	kOe
Maximum Energy Product 20°C	BH max, min	318	kJ/m³	39.9	MG0e
	BH max, nom	334	kJ/m³	42.0	MG0e
Reversible Temperature Coefficient 1)	α Br nom	-0.100 ~ -0.120	%/°C		
	β HcJ nom	-0.58~ -0.66	%/°C		
material properties (typical values)					
Max. Operating Temperature ²⁾	T max	120	°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		
Copressive Strength		1000 - 1100	N/mm ²		
Flexural Strength		250	N/mm ²		
Expansion Coefficient		-	10 ⁻⁶ /K		
Expansion Coefficient in direction of	1	-3 - 0	10 ⁻⁶ /K		
anisotropy	//	4 - 9	10 ⁻⁶ /K		
Specific Electric Resistance	ρel	1.2 - 1.6	μΩ [·] m		
Specific Heat Capacity	С	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.

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

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