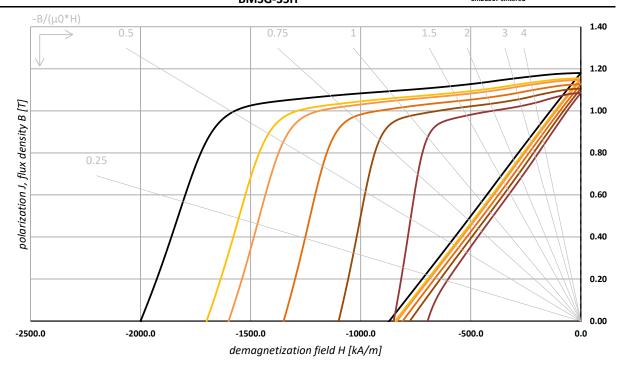


BMSG-35H Sm2Co17 sintered



Temperature in [°C]:	20.0	80.0	100.0	150.0	200.0	250.0
magnetic properties						
Remanence 20°C		Br min	1.160	Т	11.6	kG
Kemanence 20 C		Br nom	1.180	T	11.8	kG
Coercitivity 20°C		HcB min	860	kA/m	10.8	kOe
		HcB nom	885	kA/m	11.1	kOe
Intrinsic Coercitivity 20°C		HcJ min	1830	kA/m	23.0	kOe
		HcJ nom	2000	kA/m	25.1	kOe
Maximum Energy Product 20°C		BH max, min	255	kJ/m ³	32.0	MGOe
		BH max, nom	267	kJ/m³	33.5	MGOe
Reversible Temperature Coefficient 1)		α Br nom	-0.035	%/°C		
		β HcJ nom	-0.250	%/°C		
material properties (typical values)						
Max. Operating Temperature ²⁾		T max	300	°C		
Density		ρ	8.4	g/cm ³		
Permeability 20°C		μr	1.1			
Vickers Hardness			575	HV		
Modulus of Elasticity		E	150	kN/mm ²		
Compressive Strength			700	N/mm ²		
Flexural Strength			120	N/mm ²		
Expansion Coefficient			-	10 ⁻⁶ /K		
Expansion Coefficient in direction o	f	<u>L</u>	9-13	10 ⁻⁶ /K		
anisotropy		//	6-10	10 ⁻⁶ /K		
Specific Electric Resistance		ρel	0.7-1.1	μΩ˙m		
Specific Heat Capacity		С	370	J/(kg·K)		
Thermal Conductivity		λ	10.0 - 13.0	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.