

Bonded NdFeB Magnets' Specifications



ADVANCED MAGNETS

For Greener & Smarter Future

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Table I Bonded NdFeB Magnets' Grades and Their Magnetic Properties

Grade	B_r		H_{cb}		H_{cj}		$(BH)_{max}$		T_w
	kGs	T	kOe	kA/m	kOe	kA/m	MGOe	kJ/m^3	$^{\circ}\text{C}$
HGT-12	7.0-7.6	0.70-0.76	5.7-6.2	454-493	8-11	637-875	10.0-11.5	80-92	≤ 150
HGT-11	6.8-7.3	0.68-0.73	5.6-6.0	446-477	8-11	637-875	9.5-10.5	76-84	≤ 150
HGT-10H	6.4-6.9	0.64-0.69	5.5-5.9	438-469	10-13	796-1035	9.0-10.0	72-80	≤ 180
HGT-10	6.6-7.2	0.66-0.72	5.4-6.0	430-477	8-10	637-796	9.5-10.5	76-84	≤ 160
HGT-9	6.3-6.9	0.63-0.69	5.2-5.8	414-462	8-10	637-796	8.5-9.5	68-76	≤ 160
HGT-8H	6.0-6.6	0.60-0.66	5.0-5.6	398-446	10-13	796-1035	8-9	64-72	≤ 180
HGT-8	5.8-6.4	0.58-0.64	4.8-5.4	382-430	8-10	637-796	7.5-8.5	60-68	≤ 160
HGT-7	5.3-5.9	0.53-0.59	4.6-5.2	366-414	8-10	637-796	6.5-7.5	52-60	≤ 160
HGT-6	4.8-5.4	0.48-0.54	4.4-5.0	350-398	8-10	637-796	5.5-6.5	44-52	≤ 160
HGT-5	4.3-4.9	0.43-0.49	4.0-4.6	318-366	7-9	557-716	4.5-5.5	36-44	≤ 150
HGT-4	3.8-4.4	0.38-0.44	3.5-4.2	279-334	7-9	557-716	3.5-4.5	28-36	≤ 150
HGT-3	3.4-4.0	0.34-0.40	3.2-3.8	255-302	7-9	557-716	2.5-3.5	20-28	≤ 150
HGT-2	3.0-3.6	0.30-0.36	2.8-3.6	223-286	7-9	557-716	2-3	16-24	≤ 150

Note:

- * The data in the above table were samples' results tested at the temperature of 20 $^{\circ}\text{C}$.
- * The temperature coefficients of B_r and H_{cj} are $\alpha(B_r)$: -0.10~-0.13 $\%/^{\circ}\text{C}$ and $\beta(H_{cj})$: -0.40~-0.60 $\%/^{\circ}\text{C}$, respectively.
- * The above data are only for reference, magnets can be tailored according to customers' personalized requirements.

Table II Bonded NdFeB Magnets' Shapes



Ring Magnets



Abnormal Shape Magnets



Magnetic Assemblies with Metal



Rotor Assemblies



Arc/Segment Magnets



Block/Rectangular Magnets

Note:

* Other shapes of bonded NdFeB magnets can also be tailored according to customers' specific requirements.

Table III Some Physical Properties of Bonded NdFeB Magnets

Parameter	Unit	Value
Density (ρ)	g/cm^3	4.0-6.5
Curie Temperature (T_c)	$^{\circ}\text{C}$	300-350
Recoil Permeability (μ_{rec})	-	1.20
Rockwell Hardness (HR)	MPa	35-45
Compressive Strength (σ_{bc})	MPa	800-1000
Tensile Strength (σ_b)	MPa	200
Thermal Expansivity (α)	$10^{-6}/^{\circ}\text{C}$	1-2

Note:

* The above data are only for reference, specific magnets maybe have different values.