

NdFeB Magnetic Properties - GBD Grades

钕铁硼磁特性 - 晶界扩散牌号

NO.	单位 Unit	SI Unit 国际单位				CGS Unit 物理单位				最高工作 温度 °C
		Br 剩磁 T	Hcb 矫顽力 kA/m	Hcj 内禀矫顽力 kA/m	(BH)max 最大磁能积 kJ/m³	Br 剩磁 kGs	Hcb 矫顽力 kOe	Hcj 内禀矫顽力 kOe	(BH)max 最大磁能积 MGOe	
	GBD	Remanence	Coercivity	Intrinsic Coercivity	Max Energy Product	Remanence	Coercivity	Intrinsic Coercivity	Max Energy Product	Maximum Working Temperature
	Grade	min - max	min	min	min - max	min - max	min	min	min - max	L/D=0.7 Typ
1	G60M	1.520-1.560	≥1146	≥1114	438-478	15.20-15.60	≥14.4	≥14.0	55-60	100
2	G54H	1.450-1.510	≥1091	≥1353	406-438	14.50-15.10	≥13.7	≥17.0	51-55	120
3	G56H	1.470-1.530	≥1106	≥1353	414-446	14.70-15.30	≥13.9	≥17.0	52-56	120
4	G58H	1.500-1.550	≥1130	≥1353	422-462	15.00-15.50	≥14.2	≥17.0	53-58	120
5	G60H	1.520-1.560	≥1146	≥1353	438-478	15.20-15.60	≥14.4	≥17.0	55-60	120
6	G40SH	1.260-1.290	≥939	≥1592	302-326	12.60-12.90	≥11.8	≥20.0	38-41	150
7	G42SH	1.290-1.330	≥971	≥1592	318-342	12.90-13.30	≥12.2	≥20.0	40-43	150
8	G45SH	1.330-1.380	≥1003	≥1592	342-366	13.30-13.80	≥12.6	≥20.0	43-46	150
9	G48SH	1.370-1.410	≥1027	≥1592	358-390	13.70-14.10	≥12.9	≥20.0	45-49	150
10	G50SH	1.390-1.450	≥1051	≥1592	374-406	13.90-14.50	≥13.2	≥20.0	47-51	150
11	G52SH	1.420-1.480	≥1067	≥1592	390-422	14.20-14.80	≥13.4	≥20.0	49-53	150
12	G54SH	1.450-1.510	≥1091	≥1592	406-438	14.50-15.10	≥13.7	≥20.0	51-55	150
13	G56SH	1.470-1.530	≥1106	≥1592	414-446	14.70-15.30	≥13.9	≥20.0	52-56	150
14	G58SH	1.500-1.550	≥1130	≥1592	422-462	15.00-15.50	≥14.2	≥20.0	53-58	150
15	G60SH	1.520-1.560	≥1146	≥1592	438-478	15.20-15.60	≥14.4	≥20.0	55-60	150
16	G35SHT	1.180-1.230	≥884	≥1831	263-287	11.80-12.30	≥11.1	≥23.0	33-36	165
17	G38SHT	1.230-1.260	≥923	≥1831	287-310	12.30-12.60	≥11.6	≥23.0	36-39	165
18	G40SHT	1.260-1.290	≥955	≥1831	302-326	12.60-12.90	≥12.0	≥23.0	38-41	165
19	G42SHT	1.290-1.330	≥963	≥1831	318-342	12.90-13.30	≥12.1	≥23.0	40-43	165
20	G45SHT	1.330-1.370	≥995	≥1831	334-366	13.30-13.70	≥12.5	≥23.0	42-46	165
21	G48SHT	1.370-1.410	≥1027	≥1831	358-390	13.70-14.10	≥12.9	≥23.0	45-49	165
22	G50SHT	1.390-1.450	≥1051	≥1831	374-406	13.90-14.50	≥13.2	≥23.0	47-51	165
23	G52SHT	1.420-1.480	≥1067	≥1831	390-422	14.20-14.80	≥13.4	≥23.0	49-53	165
24	G54SHT	1.450-1.510	≥1091	≥1831	406-438	14.50-15.10	≥13.7	≥23.0	51-55	165
25	G56SHT	1.470-1.530	≥1106	≥1831	414-446	14.70-15.30	≥13.9	≥23.0	52-56	165
26	G30UH	1.090-1.150	≥812	≥1990	223-247	10.90-11.50	≥10.2	≥25.0	28-31	180
27	G33UH	1.140-1.180	≥860	≥1990	247-271	11.40-11.80	≥10.8	≥25.0	31-34	180
28	G35UH	1.180-1.230	≥892	≥1990	263-287	11.80-12.30	≥11.2	≥25.0	33-36	180
29	G38UH	1.230-1.260	≥923	≥1990	287-310	12.30-12.60	≥11.6	≥25.0	36-39	180
30	G40UH	1.260-1.290	≥955	≥1990	302-326	12.60-12.90	≥12.0	≥25.0	38-41	180
31	G42UH	1.290-1.330	≥971	≥1990	318-342	12.90-13.30	≥12.2	≥25.0	40-43	180
32	G45UH	1.330-1.380	≥1003	≥1990	342-366	13.30-13.80	≥12.6	≥25.0	43-46	180
33	G48UH	1.360-1.420	≥1027	≥1990	358-390	13.60-14.20	≥12.9	≥25.0	45-49	180
34	G50UH	1.390-1.450	≥1051	≥1990	374-406	13.90-14.50	≥13.2	≥25.0	47-51	180
35	G52UH	1.420-1.480	≥1067	≥1990	390-422	14.20-14.80	≥13.4	≥25.0	49-53	180
36	G54UH	1.450-1.510	≥1091	≥1990	406-438	14.50-15.10	≥13.7	≥25.0	51-55	180
37	G56UH	1.470-1.530	≥1106	≥1990	414-446	14.70-15.30	≥13.9	≥25.0	52-56	180
38	G58UH	1.490-1.540	≥1122	≥1990	414-446	14.90-15.40	≥14.1	≥25.0	53-57	180
39	G30UHT	1.090-1.140	≥812	≥2149	223-247	10.90-11.40	≥10.2	≥27.0	28-31	190
40	G33UHT	1.140-1.180	≥860	≥2149	247-271	11.40-11.80	≥10.8	≥27.0	31-34	190
41	G35UHT	1.180-1.230	≥892	≥2149	263-287	11.80-12.30	≥11.2	≥27.0	33-36	190
42	G38UHT	1.230-1.260	≥923	≥2149	287-310	12.30-12.60	≥11.6	≥27.0	36-39	190

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		Br 剩磁 T	Hcb 矫顽力 kA/m	Hcj 内禀矫顽力 kA/m	(BH)max 最大磁能积 kJ/m³	Br 剩磁 kGs	Hcb 矫顽力 kOe	Hcj 内禀矫顽力 kOe	(BH)max 最大磁能积 MGOe	
	GBD	Remanence	Coercivity	Intrinsic Coercivity	Max Energy Product	Remanence	Coercivity	Intrinsic Coercivity	Max Energy Product	Maximum Working Temperature
	Grade	min - max	min	min	min - max	min - max	min	min	min - max	L/D=0.7 Typ
43	G40UHT	1.260-1.290	≥955	≥2149	302-326	12.60-12.90	≥12.0	≥27.0	38-41	190
44	G42UHT	1.290-1.330	≥971	≥2149	318-342	12.90-13.30	≥12.2	≥27.0	40-43	190
45	G45UHT	1.330-1.380	≥1003	≥2149	342-366	13.30-13.80	≥12.6	≥27.0	43-46	190
46	G48UHT	1.360-1.420	≥1027	≥2149	358-390	13.60-14.20	≥12.9	≥27.0	45-49	190
47	G50UHT	1.390-1.450	≥1051	≥2149	374-406	13.90-14.50	≥13.2	≥27.0	47-51	190
48	G52UHT	1.420-1.480	≥1067	≥2149	390-422	14.20-14.80	≥13.4	≥27.0	49-53	190
49	G54UHT	1.450-1.510	≥1091	≥2149	406-438	14.50-15.10	≥13.7	≥27.0	51-55	190
50	G30EH	1.090-1.150	≥820	≥2388	223-247	10.90-11.50	≥10.3	≥30.0	28-31	200
51	G33EH	1.140-1.180	≥860	≥2388	247-271	11.40-11.80	≥10.8	≥30.0	31-34	200
52	G35EH	1.180-1.220	≥892	≥2388	263-287	11.80-12.20	≥11.2	≥30.0	33-36	200
53	G38EH	1.220-1.270	≥915	≥2388	287-310	12.20-12.70	≥11.5	≥30.0	36-39	200
54	G40EH	1.250-1.300	≥939	≥2388	302-326	12.50-13.00	≥11.8	≥30.0	38-41	200
55	G42EH	1.280-1.330	≥971	≥2388	310-342	12.80-13.30	≥12.2	≥30.0	39-43	200
56	G45EH	1.330-1.380	≥995	≥2388	334-366	13.30-13.80	≥12.5	≥30.0	42-46	200
57	G48EH	1.360-1.420	≥1027	≥2388	358-390	13.60-14.20	≥12.9	≥30.0	45-49	200
58	G50EH	1.390-1.450	≥1051	≥2388	374-406	13.90-14.50	≥13.2	≥30.0	47-51	200
59	G52EH	1.420-1.480	≥1067	≥2388	390-422	14.20-14.80	≥13.4	≥30.0	49-53	200
60	G54EH	1.450-1.510	≥1091	≥2388	406-438	14.50-15.10	≥13.7	≥30.0	51-55	200
61	G28TH	1.050-1.100	≥780	≥2786	207-231	10.50-11.00	≥9.8	≥35.0	26-29	230
62	G30TH	1.080-1.140	≥804	≥2786	223-247	10.80-11.40	≥10.1	≥35.0	28-31	230
63	G33TH	1.130-1.180	≥852	≥2786	247-271	11.30-11.80	≥10.7	≥35.0	31-34	230
64	G35TH	1.170-1.220	≥876	≥2786	263-287	11.70-12.20	≥11.0	≥35.0	33-36	230
65	G38TH	1.220-1.270	≥915	≥2786	287-310	12.20-12.70	≥11.5	≥35.0	36-39	230
66	G40TH	1.250-1.290	≥955	≥2786	295-326	12.50-12.90	≥12.0	≥35.0	37-41	230
67	G42TH	1.280-1.330	≥971	≥2786	310-342	12.80-13.30	≥12.2	≥35.0	39-43	230
68	G45TH	1.320-1.380	≥995	≥2786	334-366	13.20-13.80	≥12.5	≥35.0	42-46	230
69	G48TH	1.360-1.420	≥1027	≥2786	358-390	13.60-14.20	≥12.9	≥35.0	45-49	230
70	G50TH	1.390-1.450	≥1051	≥2786	374-406	13.90-14.50	≥13.2	≥35.0	47-51	230
71	G28YH	1.040-1.100	≥780	≥3184	207-231	10.40-11.00	≥9.8	≥40.0	26-29	250
72	G30YH	1.080-1.140	≥804	≥3184	223-247	10.80-11.40	≥10.1	≥40.0	28-31	250
73	G33YH	1.130-1.180	≥852	≥3184	247-271	11.30-11.80	≥10.7	≥40.0	31-34	250
74	G35YH	1.170-1.220	≥876	≥3184	263-287	11.70-12.20	≥11.0	≥40.0	33-36	250
75	G38YH	1.220-1.270	≥915	≥3184	287-310	12.20-12.70	≥11.5	≥40.0	36-39	250
76	G40YH	1.250-1.290	≥946	≥3184	295-326	12.50-12.90	≥11.9	≥40.0	37-41	250
77	G42YH	1.280-1.330	≥969	≥3184	310-342	12.80-13.30	≥12.2	≥40.0	39-43	250
78	G45YH	1.310-1.360	≥987	≥3184	326-366	13.10-13.60	≥12.4	≥40.0	41-46	250

备注：最高工作温度取决于磁铁的形状、尺寸以及具体的工作条件。

Note: Maximum working temperature may vary depending on magnet geometry, dimensions, magnetic circuit and operating conditions.