GBD NdFeB Magnetic Properties

Reference series 2026-10 • Grain-boundary diffusion process

Tabulated basis A is reproduced below. Maximum working temperatures are typical values for L/D=0.7. Geometry, dimensions, magnetic circuit and operating conditions affect the usable limit. Magnetic-property measurement temperature is not specified in this reference.

This series remains distinct from the archived 2026.09 catalogue. Identical or similar grade names do not establish equivalence. Confirm the selected specification and resolve the differences listed at the end before adopting a supply limit.

Grade	Br T	Hcb kA/m	Hcj kA/m	(BH)max kJ/m³	Br kGs	Hcb kOe	Hcj kOe	(BH)max MGOe	Tmax °C
G60M	1.520-1.560	≥1146	≥1114	438-478	15.20-15.60	≥14.4	≥14.0	55-60	100
G54H	1.450-1.510	≥1091	≥1353	406-438	14.50-15.10	≥13.7	≥17.0	51-55	120
G56H	1.470-1.530	≥1106	≥1353	414-446	14.70-15.30	≥13.9	≥17.0	52-56	120
G58H	1.500-1.550	≥1130	≥1353	422-462	15.00-15.50	≥14.2	≥17.0	53-58	120
G60H	1.520-1.560	≥1146	≥1353	438-478	15.20-15.60	≥14.4	≥17.0	55-60	120
G40SH	1.260-1.290	≥939	≥1592	302-326	12.60-12.90	≥11.8	≥20.0	38-41	150
G42SH	1.290-1.330	≥971	≥1592	318-342	12.90-13.30	≥12.2	≥20.0	40-43	150
G45SH	1.330-1.380	≥1003	≥1592	342-366	13.30-13.80	≥12.6	≥20.0	43-46	150
G48SH	1.370-1.410	≥1027	≥1592	358-390	13.70-14.10	≥12.9	≥20.0	45-49	150
G50SH	1.390-1.450	≥1051	≥1592	374-406	13.90-14.50	≥13.2	≥20.0	47-51	150
G52SH	1.420-1.480	≥1067	≥1592	390-422	14.20-14.80	≥13.4	≥20.0	49-53	150
G54SH	1.450-1.510	≥1091	≥1592	406-438	14.50-15.10	≥13.7	≥20.0	51-55	150
G56SH	1.470-1.530	≥1106	≥1592	414-446	14.70-15.30	≥13.9	≥20.0	52-56	150
G58SH	1.500-1.550	≥1130	≥1592	422-462	15.00-15.50	≥14.2	≥20.0	53-58	150
G60SH	1.520-1.560	≥1146	≥1592	438-478	15.20-15.60	≥14.4	≥20.0	55-60	150
G35SHT	1.180-1.230	≥884	≥1831	263-287	11.80-12.30	≥11.1	≥23.0	33-36	165
G38SHT	1.230-1.260	≥923	≥1831	287-310	12.30-12.60	≥11.6	≥23.0	36-39	165
G40SHT	1.260-1.290	≥955	≥1831	302-326	12.60-12.90	≥12.0	≥23.0	38-41	165
G42SHT	1.290-1.330	≥963	≥1831	318-342	12.90-13.30	≥12.1	≥23.0	40-43	165
G45SHT	1.330-1.370	≥995	≥1831	334-366	13.30-13.70	≥12.5	≥23.0	42-46	165
G48SHT	1.370-1.410	≥1027	≥1831	358-390	13.70-14.10	≥12.9	≥23.0	45-49	165
G50SHT	1.390-1.450	≥1051	≥1831	374-406	13.90-14.50	≥13.2	≥23.0	47-51	165

Grade	Br T	Hcb kA/m	Hcj kA/m	(BH)max kJ/m³	Br kGs	Hcb kOe	Hcj kOe	(BH)max MGOe	Tmax °C
G52SHT	1.420-1.480	≥1067	≥1831	390-422	14.20-14.80	≥13.4	≥23.0	49-53	165
G54SHT	1.450-1.510	≥1091	≥1831	406-438	14.50-15.10	≥13.7	≥23.0	51-55	165
G56SHT	1.470-1.530	≥1106	≥1831	414-446	14.70-15.30	≥13.9	≥23.0	52-56	165
G30UH	1.090-1.150	≥812	≥1990	223-247	10.90-11.50	≥10.2	≥25.0	28-31	180
G33UH	1.140-1.180	≥860	≥1990	247-271	11.40-11.80	≥10.8	≥25.0	31-34	180
G35UH	1.180-1.230	≥892	≥1990	263-287	11.80-12.30	≥11.2	≥25.0	33-36	180
G38UH	1.230-1.260	≥923	≥1990	287-310	12.30-12.60	≥11.6	≥25.0	36-39	180
G40UH	1.260-1.290	≥955	≥1990	302-326	12.60-12.90	≥12.0	≥25.0	38-41	180
G42UH	1.290-1.330	≥971	≥1990	318-342	12.90-13.30	≥12.2	≥25.0	40-43	180
G45UH	1.330-1.380	≥1003	≥1990	342-366	13.30-13.80	≥12.6	≥25.0	43-46	180
G48UH	1.360-1.420	≥1027	≥1990	358-390	13.60-14.20	≥12.9	≥25.0	45-49	180
G50UH	1.390-1.450	≥1051	≥1990	374-406	13.90-14.50	≥13.2	≥25.0	47-51	180
G52UH	1.420-1.480	≥1067	≥1990	390-422	14.20-14.80	≥13.4	≥25.0	49-53	180
G54UH	1.450-1.510	≥1091	≥1990	406-438	14.50-15.10	≥13.7	≥25.0	51-55	180
G56UH	1.470-1.530	≥1106	≥1990	414-446	14.70-15.30	≥13.9	≥25.0	52-56	180
G58UH	1.490-1.540	≥1122	≥1990	414-446	14.90-15.40	≥14.1	≥25.0	53-57	180
G30UHT	1.090-1.140	≥812	≥2149	223-247	10.90-11.40	≥10.2	≥27.0	28-31	190
G33UHT	1.140-1.180	≥860	≥2149	247-271	11.40-11.80	≥10.8	≥27.0	31-34	190
G35UHT	1.180-1.230	≥892	≥2149	263-287	11.80-12.30	≥11.2	≥27.0	33-36	190
G38UHT	1.230-1.260	≥923	≥2149	287-310	12.30-12.60	≥11.6	≥27.0	36-39	190
G40UHT	1.260-1.290	≥955	≥2149	302-326	12.60-12.90	≥12.0	≥27.0	38-41	190
G42UHT	1.290-1.330	≥971	≥2149	318-342	12.90-13.30	≥12.2	≥27.0	40-43	190
G45UHT	1.330-1.380	≥1003	≥2149	342-366	13.30-13.80	≥12.6	≥27.0	43-46	190
G48UHT	1.360-1.420	≥1027	≥2149	358-390	13.60-14.20	≥12.9	≥27.0	45-49	190
G50UHT	1.390-1.450	≥1051	≥2149	374-406	13.90-14.50	≥13.2	≥27.0	47-51	190
G52UHT	1.420-1.480	≥1067	≥2149	390-422	14.20-14.80	≥13.4	≥27.0	49-53	190
G54UHT	1.450-1.510	≥1091	≥2149	406-438	14.50-15.10	≥13.7	≥27.0	51-55	190
G30EH	1.090-1.150	≥820	≥2388	223-247	10.90-11.50	≥10.3	≥30.0	28-31	200
G33EH	1.140-1.180	≥860	≥2388	247-271	11.40-11.80	≥10.8	≥30.0	31-34	200

Grade	Br T	Hcb kA/m	Hcj kA/m	(BH)max kJ/m³	Br kGs	Hcb kOe	Hcj kOe	(BH)max MGOe	Tmax °C
G35EH	1.180-1.220	≥892	≥2388	263-287	11.80-12.20	≥11.2	≥30.0	33-36	200
G38EH	1.220-1.270	≥915	≥2388	287-310	12.20-12.70	≥11.5	≥30.0	36-39	200
G40EH	1.250-1.300	≥939	≥2388	302-326	12.50-13.00	≥11.8	≥30.0	38-41	200
G42EH	1.280-1.330	≥971	≥2388	310-342	12.80-13.30	≥12.2	≥30.0	39-43	200
G45EH	1.330-1.380	≥995	≥2388	334-366	13.30-13.80	≥12.5	≥30.0	42-46	200
G48EH	1.360-1.420	≥1027	≥2388	358-390	13.60-14.20	≥12.9	≥30.0	45-49	200
G50EH	1.390-1.450	≥1051	≥2388	374-406	13.90-14.50	≥13.2	≥30.0	47-51	200
G52EH	1.420-1.480	≥1067	≥2388	390-422	14.20-14.80	≥13.4	≥30.0	49-53	200
G54EH	1.450-1.510	≥1091	≥2388	406-438	14.50-15.10	≥13.7	≥30.0	51-55	200
G28TH	1.050-1.100	≥780	≥2786	207-231	10.50-11.00	≥9.8	≥35.0	26-29	230
G30TH	1.080-1.140	≥804	≥2786	223-247	10.80-11.40	≥10.1	≥35.0	28-31	230
G33TH	1.130-1.180	≥852	≥2786	247-271	11.30-11.80	≥10.7	≥35.0	31-34	230
G35TH	1.170-1.220	≥876	≥2786	263-287	11.70-12.20	≥11.0	≥35.0	33-36	230
G38TH	1.220-1.270	≥915	≥2786	287-310	12.20-12.70	≥11.5	≥35.0	36-39	230
G40TH	1.250-1.290	≥955	≥2786	295-326	12.50-12.90	≥12.0	≥35.0	37-41	230
G42TH	1.280-1.330	≥971	≥2786	310-342	12.80-13.30	≥12.2	≥35.0	39-43	230
G45TH	1.320-1.380	≥995	≥2786	334-366	13.20-13.80	≥12.5	≥35.0	42-46	230
G48TH	1.360-1.420	≥1027	≥2786	358-390	13.60-14.20	≥12.9	≥35.0	45-49	230
G50TH	1.390-1.450	≥1051	≥2786	374-406	13.90-14.50	≥13.2	≥35.0	47-51	230
G28YH	1.040-1.100	≥780	≥3184	207-231	10.40-11.00	≥9.8	≥40.0	26-29	250
G30YH	1.080-1.140	≥804	≥3184	223-247	10.80-11.40	≥10.1	≥40.0	28-31	250
G33YH	1.130-1.180	≥852	≥3184	247-271	11.30-11.80	≥10.7	≥40.0	31-34	250
G35YH	1.170-1.220	≥876	≥3184	263-287	11.70-12.20	≥11.0	≥40.0	33-36	250
G38YH	1.220-1.270	≥915	≥3184	287-310	12.20-12.70	≥11.5	≥40.0	36-39	250
G40YH	1.250-1.290	≥946	≥3184	295-326	12.50-12.90	≥11.9	≥40.0	37-41	250
G42YH	1.280-1.330	≥969	≥3184	310-342	12.80-13.30	≥12.2	≥40.0	39-43	250
G45YH	1.310-1.360	≥987	≥3184	326-366	13.10-13.60	≥12.4	≥40.0	41-46	250

Conditions and version differences

Version definitions

Basis A: tabulated technical data reproduced in this 2026-10 reference. Basis B: parallel reference-table snapshot reviewed on 20 October 2026. The distinctions below remain unresolved; they are not silently averaged or merged into a single guarantee.

Temperature and measurement conditions

L/D=0.7 Typ applies to the tabulated maximum working temperature. The actual limit depends on magnet geometry, dimensions, magnetic circuit, duty and operating conditions. Br, Hcb, Hcj and (BH)max are not assigned an unstated measurement temperature. Do not infer a temperature limit solely from a grade suffix.

Process, composition and availability

Conventional and GBD are process routes. HRE-free is a separate composition description and means heavy-rare-earth-free; it does not mean medium-and-heavy-rare-earth-free. A listed property value does not by itself confirm production availability.

Composition-matrix options marked as development: N60, 60M, 60H, 60SH, 58SH, 60UH, 56UH, 54EH, 50TH and 45YH. Matrix option labels and conventional/GBD process-grade names must be matched explicitly before selection.

SI / CGS pair checks requiring confirmation

G58UH — (BH)max minimum: printed 414 kJ/m³ and 53 MGOe. The latter converts to approximately 421.76 kJ/m³. Both printed fields are retained; the converted value is a discrepancy check, not a replacement specification.

G58UH — (BH)max maximum: printed 446 kJ/m³ and 57 MGOe. The latter converts to approximately 453.59 kJ/m³. Both printed fields are retained; the converted value is a discrepancy check, not a replacement specification.

Confirm the selected grade, process, composition, geometry, coating, magnetization and agreed acceptance conditions before purchase. Technical reference only; not a certificate, batch report or unconditional supply guarantee.