Conventional NdFeB Magnetic Properties

Reference series 2026-10 • Conventional 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
N35	1.18-1.23	≥876	≥955	263-287	11.8-12.3	≥11.0	≥12.0	33-36	80
N38	1.23-1.26	≥876	≥955	287-310	12.3-12.6	≥11.0	≥12.0	36-39	80
N40	1.26-1.29	≥876	≥955	302-326	12.6-12.9	≥11.0	≥12.0	38-41	80
N42	1.29-1.33	≥876	≥955	318-342	12.9-13.3	≥11.0	≥12.0	40-43	80
N45	1.33-1.37	≥876	≥955	342-366	13.3-13.7	≥11.0	≥12.0	43-46	80
N48	1.37-1.41	≥876	≥955	358-390	13.7-14.1	≥11.0	≥12.0	45-49	80
N50	1.40-1.44	≥876	≥955	374-406	14.0-14.4	≥11.0	≥12.0	47-51	80
N52	1.42-1.46	≥876	≥955	390-422	14.2-14.6	≥11.0	≥12.0	49-53	80
N54	1.45-1.50	≥876	≥955	406-438	14.5-15.0	≥11.0	≥12.0	51-55	80
N56	1.47-1.52	≥876	≥955	414-446	14.7-15.2	≥11.0	≥12.0	52-56	80
N58	1.51-1.56	≥836	≥876	422-462	15.1-15.6	≥10.5	≥11.0	53-58	70
N60	1.53-1.58	≥836	≥876	438-478	15.3-15.8	≥10.5	≥11.0	55-60	70
N35M	1.18-1.23	≥892	≥1114	263-287	11.8-12.3	≥11.2	≥14.0	33-36	100
N38M	1.23-1.26	≥915	≥1114	287-310	12.3-12.6	≥11.5	≥14.0	36-39	100
N40M	1.26-1.29	≥939	≥1114	302-326	12.6-12.9	≥11.8	≥14.0	38-41	100
N42M	1.29-1.33	≥955	≥1114	318-342	12.9-13.3	≥12.0	≥14.0	40-43	100
N45M	1.33-1.37	≥971	≥1114	342-366	13.3-13.7	≥12.2	≥14.0	43-46	100
N48M	1.37-1.41	≥1011	≥1114	358-390	13.7-14.1	≥12.7	≥14.0	45-49	100
N50M	1.40-1.44	≥1035	≥1114	374-406	14.0-14.4	≥13.0	≥14.0	47-51	100
N52M	1.42-1.46	≥1051	≥1114	390-422	14.2-14.6	≥13.2	≥14.0	49-53	100
N54M	1.45-1.50	≥1075	≥1114	406-438	14.5-15.0	≥13.5	≥14.0	51-55	100
N56M	1.47-1.52	≥995	≥1035	414-446	14.7-15.2	≥12.5	≥13.0	52-56	90

Grade	Br T	Hcb kA/m	Hcj kA/m	(BH)max kJ/m³	Br kGs	Hcb kOe	Hcj kOe	(BH)max MGOe	Tmax °C
N58M	1.50-1.55	≥995	≥1035	422-462	15.0-15.5	≥12.5	≥13.0	53-58	90
N33H	1.14-1.18	≥860	≥1353	247-271	11.4-11.8	≥10.8	≥17.0	31-34	120
N35H	1.18-1.23	≥876	≥1353	263-287	11.8-12.3	≥11.0	≥17.0	33-36	120
N38H	1.23-1.26	≥915	≥1353	287-310	12.3-12.6	≥11.5	≥17.0	36-39	120
N40H	1.26-1.29	≥939	≥1353	302-326	12.6-12.9	≥11.8	≥17.0	38-41	120
N42H	1.29-1.33	≥971	≥1353	318-342	12.9-13.3	≥12.2	≥17.0	40-43	120
N45H	1.33-1.37	≥1003	≥1353	342-366	13.3-13.7	≥12.6	≥17.0	43-46	120
N48H	1.37-1.41	≥1019	≥1353	358-390	13.7-14.1	≥12.8	≥17.0	45-49	120
N50H	1.40-1.44	≥1035	≥1353	374-406	14.0-14.4	≥13.0	≥17.0	47-51	120
N52H	1.42-1.46	≥1051	≥1353	390-422	14.2-14.6	≥13.2	≥17.0	49-53	120
N54H	1.44-1.50	≥1067	≥1353	406-438	14.4-15.0	≥13.4	≥17.0	51-55	120
N56H	1.46-1.51	≥1098	≥1274	414-446	14.6-15.1	≥13.6	≥16.0	52-56	110
N30SH	1.09-1.15	≥820	≥1592	223-247	10.9-11.5	≥10.3	≥20.0	28-31	150
N33SH	1.14-1.18	≥852	≥1592	247-271	11.4-11.8	≥10.7	≥20.0	31-34	150
N35SH	1.18-1.23	≥884	≥1592	263-287	11.8-12.3	≥11.1	≥20.0	33-36	150
N38SH	1.23-1.26	≥923	≥1592	287-310	12.3-12.6	≥11.6	≥20.0	36-39	150
N40SH	1.26-1.29	≥939	≥1592	302-326	12.6-12.9	≥11.8	≥20.0	38-41	150
N42SH	1.29-1.33	≥971	≥1592	318-342	12.9-13.3	≥12.2	≥20.0	40-43	150
N45SH	1.33-1.37	≥1003	≥1592	342-366	13.3-13.7	≥12.6	≥20.0	43-46	150
N48SH	1.37-1.41	≥1019	≥1592	358-390	13.7-14.1	≥12.8	≥20.0	45-49	150
N50SH	1.39-1.43	≥1035	≥1592	374-406	13.9-14.3	≥13.0	≥20.0	47-51	150
N52SH	1.42-1.46	≥1051	≥1512	390-422	14.2-14.6	≥13.2	≥19.0	49-53	140
N35SHT	1.18-1.23	≥884	≥1831	263-287	11.8-12.3	≥11.1	≥23.0	33-36	165
N38SHT	1.23-1.26	≥923	≥1831	287-310	12.3-12.6	≥11.6	≥23.0	36-39	165
N40SHT	1.26-1.29	≥955	≥1831	302-326	12.6-12.9	≥12.0	≥23.0	38-41	165
N42SHT	1.29-1.33	≥955	≥1831	318-342	12.9-13.3	≥12.0	≥23.0	40-43	165
N45SHT	1.33-1.37	≥987	≥1831	334-366	13.3-13.7	≥12.4	≥23.0	42-46	165
N48SHT	1.37-1.41	≥1019	≥1831	358-390	13.7-14.1	≥12.8	≥23.0	45-49	165
N30UH	1.09-1.15	≥812	≥1990	223-247	10.9-11.5	≥10.2	≥25.0	28-31	180

Grade	Br T	Hcb kA/m	Hcj kA/m	(BH)max kJ/m³	Br kGs	Hcb kOe	Hcj kOe	(BH)max MGOe	Tmax °C
N33UH	1.14-1.18	≥860	≥1990	247-271	11.4-11.8	≥10.8	≥25.0	31-34	180
N35UH	1.18-1.23	≥892	≥1990	263-287	11.8-12.3	≥11.2	≥25.0	33-36	180
N38UH	1.23-1.26	≥923	≥1990	287-310	12.3-12.6	≥11.6	≥25.0	36-39	180
N40UH	1.26-1.29	≥955	≥1990	302-326	12.6-12.9	≥12.0	≥25.0	38-41	180
N42UH	1.29-1.33	≥971	≥1990	318-342	12.9-13.3	≥12.2	≥25.0	40-43	180
N45UH	1.33-1.36	≥987	≥1990	342-366	13.3-13.6	≥12.4	≥25.0	43-46	180
N48UH	1.36-1.41	≥1019	≥1990	358-390	13.6-14.1	≥12.8	≥25.0	45-49	180
N30UHT	1.09-1.14	≥812	≥2149	223-247	10.9-11.4	≥10.2	≥27.0	28-31	190
N33UHT	1.14-1.18	≥860	≥2149	247-271	11.4-11.8	≥10.8	≥27.0	31-34	190
N35UHT	1.18-1.23	≥892	≥2149	263-287	11.8-12.3	≥11.2	≥27.0	33-36	190
N38UHT	1.23-1.26	≥923	≥2149	287-310	12.3-12.6	≥11.6	≥27.0	36-39	190
N40UHT	1.26-1.29	≥955	≥2149	302-326	12.6-12.9	≥12.0	≥27.0	38-41	190
N42UHT	1.29-1.33	≥971	≥2149	318-342	12.9-13.3	≥12.2	≥27.0	40-43	190
N30EH	1.09-1.15	≥820	≥2388	223-247	10.9-11.5	≥10.3	≥30.0	28-31	200
N33EH	1.14-1.18	≥860	≥2388	247-271	11.4-11.8	≥10.8	≥30.0	31-34	200
N35EH	1.18-1.22	≥892	≥2388	263-287	11.8-12.2	≥11.2	≥30.0	33-36	200
N38EH	1.22-1.26	≥923	≥2388	287-310	12.2-12.6	≥11.6	≥30.0	36-39	200
N40EH	1.25-1.29	≥955	≥2388	302-326	12.5-12.9	≥12.0	≥30.0	38-41	200
N42EH	1.28-1.33	≥971	≥2388	310-342	12.8-13.3	≥12.2	≥30.0	39-43	200

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.

Unresolved differences between basis A and B

Grade	Property	Basis A	Basis B
N54H	Br (T)	1.44-1.50	1.45-1.50
N54H	Br (kGs)	14.4-15.0	14.5-15.0
N56H	Br (T)	1.46-1.51	1.47-1.52
N56H	Br (kGs)	14.6-15.1	14.7-15.2
N48UH	Br (T)	1.36-1.41	1.37-1.41

SI / CGS pair checks requiring confirmation

N56H — Hcb minimum: printed 1098 kA/m and 13.6 kOe. The latter converts to approximately 1082.25 kA/m. 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.