

## Magnetic Properties of Sintered NdFeB Magnets



Grade	Remanence (Br)		Coercivity Force (Hcb)		Intrinsic Coercive Force (Hcj)		Max. Energy Product (BHmax)		Maximum Operating Temp.
	mT	kGs	kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>	MGOe	
N35	1170-1220	11.7-12.2	≥868	≥10.9	≥955	≥12	263-287	33-36	80 °C
N38	1220-1250	12.2-12.5	≥899	≥11.3	≥955	≥12	287-310	36-39	80 °C
N40	1250-1280	12.5-12.8	≥907	≥11.4	≥955	≥12	302-326	38-41	80 °C
N42	1280-1320	12.8-13.2	≥915	≥11.5	≥955	≥12	318-342	40-43	80 °C
N45	1320-1380	13.2-13.8	≥923	≥11.6	≥955	≥12	342-366	43-46	80 °C
N48	1380-1420	13.8-14.2	≥923	≥11.6	≥876	≥12	366-390	46-49	80 °C
N50	1400-1450	14.0-14.5	≥796	≥10.0	≥876	≥11	382-406	48-51	60 °C
N52	1430-1480	14.3-14.8	≥796	≥10.0	≥876	≥11	398-422	50-53	60 °C
35M	1170-1220	11.7-12.2	≥868	≥10.9	≥1114	≥14	263-287	33-36	100 °C
38M	1220-1250	12.2-12.5	≥899	≥11.3	≥1114	≥14	287-310	36-39	100 °C
40M	1250-1280	12.5-12.8	≥923	≥11.6	≥1114	≥14	302-326	38-41	100 °C
42M	1280-1320	12.8-13.2	≥955	≥12.0	≥1114	≥14	318-342	40-43	100 °C
45M	1320-1380	13.2-13.8	≥995	≥12.5	≥1114	≥14	342-366	43-46	100 °C
48M	1360-1430	13.6-14.3	≥1027	≥12.9	≥1114	≥14	366-390	46-49	100 °C
50M	1400-1450	14.0-14.5	≥1033	≥13.0	≥1114	≥14	382-406	48-51	100 °C
33H	1130-1170	11.3-11.7	≥836	≥10.5	≥1353	≥17	247-271	31-34	120 °C
35H	1170-1220	11.7-12.2	≥868	≥10.9	≥1353	≥17	263-287	33-36	120 °C
38H	1220-1250	12.2-12.5	≥899	≥11.3	≥1353	≥17	287-310	36-39	120 °C
40H	1250-1280	12.5-12.8	≥923	≥11.6	≥1353	≥17	302-326	38-41	120 °C
42H	1280-1320	12.8-13.2	≥955	≥12.0	≥1353	≥17	318-342	40-43	120 °C
45H	1300-1360	13-13.6	≥963	≥12.1	≥1353	≥17	326-358	43-46	120 °C
48H	1370-1430	13.7-14.3	≥995	≥12.5	≥1353	≥17	366-390	46-49	120 °C
30SH	1080-1130	10.8-11.3	≥804	≥10.1	≥1592	≥20	223-247	28-31	150 °C
33SH	1130-1170	11.3-11.7	≥844	≥10.6	≥1592	≥20	247-271	31-34	150 °C
35SH	1170-1220	11.7-12.2	≥876	≥11.0	≥1592	≥20	263-287	33-36	150 °C
38SH	1220-1250	12.2-12.5	≥907	≥11.4	≥1592	≥20	287-310	36-39	150 °C
40SH	1240-1280	12.5-12.8	≥939	≥11.8	≥1592	≥20	302-326	38-41	150 °C
42SH	1280-1320	12.8-13.2	≥987	≥12.4	≥1592	≥20	318-342	40-43	150 °C
45SH	1320-1380	13.2-13.8	≥1003	≥12.6	≥1592	≥20	342-366	43-46	150 °C
28UH	1020-1080	10.2-10.8	≥764	≥9.6	≥1990	≥25	207-231	26-29	180 °C
30UH	1080-1130	10.8-11.3	≥812	≥10.2	≥1990	≥25	223-247	28-31	180 °C
33UH	1130-1170	11.3-11.7	≥852	≥10.7	≥1990	≥25	247-271	31-34	180 °C
35UH	1180-1220	11.8-12.2	≥860	≥10.8	≥1990	≥25	263-287	33-36	180 °C
38UH	1220-1250	12.2-12.5	≥876	≥11.0	≥1990	≥25	287-310	36-39	180 °C
40UH	1240-1280	12.5-12.8	≥899	≥11.3	≥1990	≥25	302-326	38-41	180 °C
28EH	1040-1090	10.4-10.9	≥780	≥9.8	≥2388	≥30	207-231	26-29	200 °C
30EH	1080-1130	10.8-11.3	≥812	≥10.2	≥2388	≥30	223-247	28-31	200 °C
33EH	1130-1170	11.3-11.7	≥836	≥10.5	≥2388	≥30	247-271	31-34	200 °C
35EH	1170-1220	11.7-12.2	≥876	≥11.0	≥2388	≥30	263-287	33-36	200 °C
38EH	1220-1250	12.2-12.5	≥899	≥11.3	≥2388	≥30	287-310	36-39	200 °C

## Magnetic Properties of Compression Bonded NdFeB Magnets



Grade	Remanence (Br)		Coercivity Force (Hcb)		Intrinsic Coercive Force (Hcj)		Max. Energy Product (BHmax)		Maximum Operating Temp.
	mT	kGs	kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>	MGOe	
CN-4	400-500	4.0-5.0	200-280	2.5-3.5	520-600	6.5-7.5	28-36	3.5-4.5	150 °C
CN-6	550-600	5.5-6.0	280-400	3.5-5.0	560-680	7.0-8.5	44-52	5.5-6.5	160 °C
CN-7	600-650	6.0-6.5	320-400	4.0-5.0	640-720	8.0-9.0	52-60	6.5-7.5	160 °C
CN-8	600-650	6.0-6.5	360-440	4.5-5.5	640-720	8.0-9.0	60-68	7.5-8.5	160 °C
CN-8H	600-650	6.0-6.5	440-520	5.5-6.5	800-960	10.0-12.0	60-68	7.5-8.5	180 °C
CN-9	650-700	6.5-7.0	360-480	4.5-6.0	640-720	8.0-9.0	64-72	8.0-9.0	160 °C
CN-10	650-700	6.5-7.0	360-480	4.5-6.0	680-760	8.5-9.5	72-80	9.0-10.0	150 °C
CN-10H	650-700	6.5-7.0	400-480	5.0-6.0	880-1040	11.0-13.0	72-80	9.0-10.0	180 °C
CN-11	680-720	6.8-7.2	400-480	5.0-6.0	680-800	8.5-10.0	76-84	9.5-10.5	160 °C
CN-12	700-740	7.0-7.4	550-620	5.5-6.2	700-820	8.8-10.2	83-87	10.4-10.9	160 °C

## Magnetic Properties of Injection Bonded NdFeB Magnets



Grade	Remanence (Br)		Coercivity Force (Hcb)		Intrinsic Coercive Force (Hcj)		Max. Energy Product (BHmax)		Maximum Operating Temp.	Binder
	mT	kGs	kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>	MGOe		
NdPA12-2	200-400	2.0-4.0	120-240	1.5-3.0	560-720	7.0-9.0	6.4-24	0.8-3.0	120 °C	PA12
NdPA12-4	400-490	4.0-4.9	247-310	3.1-3.9	573-732	7.2-9.2	28-36	3.5-4.5	120 °C	PA12
NdPA12-6	490-570	4.9-5.7	312-382	3.9-4.8	637-796	8.0-10.0	42-56	5.2-7.0	120 °C	PA12
NdPA12-8	570-630	5.7-6.3	382-430	4.8-5.4	676-835	8.5-10.5	59-67	7.4-8.4	120 °C	PA12
NdPPS-4	452	4.52	300	3.77	671	8.43	35	4.4	180 °C	PPS