

All Magnets

Property Table - CGS

English Version
For reference only

- Remanence (B_r), measure the strength of the magnetic field;
- Coercivity (H_{cb} / H_{cj}), the material's resistance to becoming demagnetized;
- Energy product (BH_{max}), the density of magnetic energy, which relates to the magnetic flux output per unit volume. Higher values indicate stronger magnets
- Curie temperature (T_c), the temperature at which the material loses its magnetism.

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Sintered NdFeB - Property Table - CGS unit

Grade	(range) Remanence (Br) kGs	(min.) Intrinsic Coercivity (Hcj) kOe	(min.) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C	Curie Temperature (Tc) °C
N33	11.30-11.70	12.0	10.8	31-34	80	310
N35	11.70-12.20	12.0	10.8	33-36	80	310
N38	12.20-12.50	12.0	10.8	36-39	80	310
N40	12.50-13.00	12.0	10.8	38-41	80	310
N42	12.80-13.30	12.0	10.8	40-43	80	310
N45	13.30-13.80	12.0	10.5	43-46	80	310
N48	13.70-14.30	12.0	10.5	46-49	80	310
N50	13.90-14.50	11.0	10.5	47-51	80	310
N52	14.20-14.70	11.0	10.5	49-53	80	310
N33M	11.30-11.70	14.0	11.0	28-32	100	310
N35M	11.70-12.20	14.0	11.5	31-34	100	310
N38M	12.20-12.50	14.0	11.8	33-36	100	310
N40M	12.50-13.00	14.0	12.0	36-39	100	310
N42M	12.80-13.30	14.0	12.2	38-41	100	310
N45M	13.30-13.80	14.0	12.5	40-43	100	310
N48M	13.70-14.30	14.0	12.5	43-46	100	310
N50M	13.90-14.50	13.0	12.5	46-49	100	310
N33H	11.30-11.70	17.0	11.0	47-51	120	310
N35H	11.70-1.20	17.0	11.5	28-32	120	310
N38H	12.20-12.50	17.0	11.8	31-34	120	310
N40H	12.50-13.00	17.0	12.1	33-36	120	310
N42H	12.80-13.30	17.0	12.5	36-39	120	310
N45H	13.30-13.80	17.0	12.7	38-41	120	310
N48H	13.70-14.30	16.0	12.9	40-43	120	310
N50H	13.90-14.50	16.0	13.0	43-46	120	310
N33SH	11.30-11.70	20.0	11.1	45-49	150	320
N35SH	11.70-12.20	20.0	11.6	47-51	150	320
N38SH	12.20-12.50	20.0	11.8	25-27	150	320
N40SH	12.50-13.00	20.0	12.0	28-32	150	320
N42SH	12.80-13.40	19.0	12.4	31-34	150	320
N45SH	13.20-13.80	19.0	12.7	33-36	150	320
N48SH	13.60-14.20	19.0	12.7	36-39	150	320
N28UH	10.20-10.80	25.0	10.5	38-41	180	330
N33UH	11.30-11.80	25.0	10.8	40-43	180	330
N35UH	11.70-12.20	25.0	11.2	43-46	180	330
N38UH	12.20-12.70	25.0	11.6	45-49	180	330
N28EH	10.40-10.90	30.0	10.3	26-29	200	330
N30EH	10.80-11.40	30.0	10.8	28-32	200	330
N33EH	11.30-11.80	30.0	11.1	31-34	200	330
N35EH	11.70-12.20	30.0	11.6	33-36	200	330
N28AH	10.20-10.90	35.0	10.0	36-39	220-240	330
N30AH	10.70-11.30	35.0	10.3	38-41	220-240	330
N33AH	11.10-11.70	35.0	10.8	39-43	220-240	330

*for reference only

Bonded NdFeB - Property Table - CGS unit

Grade	(range) Remanence (Br) kGs	(range) Intrinsic Coercivity (Hcj) kOe	(range) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C
BNM-5	5.7-6.2	7.0-9.0	3.6-4.0	5.0-6.0	120-140
BNM-6	5.8-6.3	8.0-10.0	4.0-4.7	6.0-7.0	120-140
BNM-7	5.9-6.4	8.0-10.0	4.5-5.2	7.0-8.0	120-140
BNM-8	6.2-6.7	8.5-10.0	5.0-5.8	8.0-9.0	120-140
BNM-8SR	6.2-6.7	11.0-14.0	5.0-5.8	8.0-9.0	140-160
BNM-9	6.4-6.9	8.5-10.0	5.2-5.6	8.5-9.5	120-140
BNM-10	6.7-7.2	8.5-10.0	5.2-6.0	9.0-10.0	120-140
BNM-11	6.9-7.4	9.0-10.5	5.0-5.8	10.0-11.0	120-140
BNM-12	7.4-7.6	9.0-10.5	5.7-6.4	11.0-12.0	120-140
BNM-11L	7.0-7.5	6.5-8.0	5.0-5.8	10.0-11.0	120-140
BNM-12L	7.5-8.0	6.5-8.0	5.4-6.2	10.5-11.5	120-140

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Cast AlNiCo - Property Table - CGS unit

Grade	(min.) Remanence (Br) kGs	(min.) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C	Curie Temperature (Tc) °C	Remarks
LN10	6.0	0.50	1.25	450	760	AlNiCo3
LNG10	6.0	0.55	1.25	450	760	AlNiCo3
LNG12	7.0	0.55	1.50	450	810	AlNiCo2
LNG13	6.8	0.60	1.63	450	810	AlNiCo2
LNG16	8.0	0.60	2.00	450	810	AlNiCo4
LNG18	9.0	0.60	2.25	450	810	AlNiCo4
LNGT18	5.8	1.00	2.25	525	850	AlNiCo8
LNG37	12.0	0.60	4.63	525	850	AlNiCo5
LNG40	12.3	0.60	5.00	525	850	AlNiCo5
LNG44	12.5	6.40	5.50	525	850	AlNiCo5
LNG48	12.8	7.00	6.00	525	850	AlNiCo5DG
LNG52	13.0	7.00	6.50	525	850	AlNiCo5DG
LNG56	13.0	7.20	7.00	525	850	AlNiCo5-7
LNG60	13.3	7.50	7.50	525	850	AlNiCo5-7
LNGT28	10.0	7.00	3.50	525	850	AlNiCo6
LNGT30	11.0	7.00	3.75	525	850	AlNiCo6
LNGT32	8.0	12.50	4.00	525	850	AlNiCo8
LNGT38	8.0	13.80	4.75	550	860	AlNiCo8
LNGT40	8.2	13.80	5.00	550	860	AlNiCo8
LNGT44	8.5	14.50	5.50	550	860	AlNiCo8
LNGT48	9.0	15.00	6.00	550	860	AlNiCoHE
LNGT60	9.5	13.80	7.50	550	860	AlNiCo9
LNGT72	10.5	14.00	9.00	550	860	AlNiCo9
LNGT80	10.8	15.00	10.00	550	860	AlNiCo9
LNGT88	11.0	14.50	11.00	550	860	AlNiCo9
LNGT96	11.5	14.80	12.00	550	860	AlNiCo9
LNGT36J	7.0	17.50	4.50	550	860	AlNiCo8HC
LNGT36J	8.0	17.50	6.00	550	860	AlNiCo8HC
LNGT52J	8.5	18.20	6.50	550	860	AlNiCo8HC

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Sintered AlNiCo - Property Table - CGS unit

Grade	(min.) Remanence (Br) kGs	(min.) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C	Curie Temperature (Tc) °C	Remarks
FLN8	5.0	0.50	1.13	450	760	Alnico 3
FLNG12	7.0	0.60	1.55	450	810	Alnico 2
FLNG14	5.0	0.75	1.80	450	850	-
FLNG28	10.5	0.58	3.50	450	850	-
FLNG34	12.0	0.60	4.25	450	890	Alnico 5
FLNG37	12.5	0.60	4.62	450	890	-
FLNGT18	6.0	1.13	2.20	450	860	Alnico 8
FLNGT28	10.5	0.60	3.50	450	850	Alnico 6
FLNGT31	7.8	1.30	3.90	550	850	Alnico 8
FLNGT38	8.0	1.50	4.75	450	850	Alnico 8
FLNGT42	8.8	1.50	5.25	450	820	Alnico 8
FLNGT33J	7.0	1.75	4.13	450	850	-
FLNGT38J	7.3	1.90	4.75	550	850	Alnico 8HC

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Ferrite - Property Table - CGS unit

Grade	(range) Remanence (Br) kGs	(range) Intrinsic Coercivity (Hcj) kOe	(range) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C	Curie Temperature (Tc) °C
Y20	3.2-3.8	1.76-2.45	1.70-2.38	2.30	250	450
Y25	3.6-4.0	1.76-2.51	1.70-2.14	2.80	250	450
Y30	3.8-3.85	2.5-2.51	2.4-2.64	3.40	250	450
Y30BH	3.8-3.9	2.90-3.08	2.80-2.95	3.40	250	450
Y30H-1	3.8-4.0	2.95-3.65	2.89-3.46	3.40	250	450
Y30H-2	3.95-4.15	3.9-4.21	3.46-3.77	3.50	250	450
Y32	4.0-4.2	2.07-2.45	2.01-2.38	3.80	250	450
Y33	4.1-4.3	2.83-3.20	2.77-3.14	4.00	250	450
Y35	4.3-4.5	2.73-3.03	2.70-3.00	4.20	250	450
Y40	4.4-4.6	4.27-4.52	4.15-4.45	4.40	250	450

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Sintered SmCo - Property Table - CGS unit

Grade	(min.) Remanence (Br) kGs	(min.) Intrinsic Coercivity (Hcj) kOe	(min.) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Max Working Temperature (Tw) °C	Curie Temperature (Tc) °C
SmCo16	8.3	18.0	8.0	16	250	750
SmCo18	8.8	18.0	8.5	18	250	750
SmCo20	9.2	18.0	8.7	20	250	750
SmCo22	9.4	18.0	9.1	22	250	750
SmCo24	9.8	18.0	9.1	24	300	750-820
SmCo26	10.3	18.0	9.5	26	300	750-820
SmCo28	10.5	18.5	9.7	28	300	750-820
SmCo30	11.0	18.5	10.1	30	300	750-820
SmCo26M	10.3	15.0	9.5	26	300	750-820
SmCo28M	10.5	15.0	9.7	28	300	750-820
SmCo30M	11.0	15.0	10.1	30	300	750-820
SmCo28L	10.5	8.0	6.9	28	250	750-820
SmCo30L	11.0	8.0	6.9	30	250	750-820
SmCo24H	10.0	25.0	9.0	24	350	750-820
SmCo26H	10.3	25.0	9.5	26	350	750-820
SmCo28H	10.5	25.0	9.6	28	350	750-820
SmCo30H	10.8	25.0	10.1	30	350	750-820

*SmCo 16-22, Sm:Co=1:5; the rest grades Sm:Co=2:17

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Flexible Rubber Magnets - Property Table - CGS unit

Grade	(range) Remanence (Br) kGs	(range) Intrinsic Coercivity (Hcj) kOe	(range) Coercivity (Hcb) kOe	Max Energy Product (BH)max MGOe	Remark
FRM-5	1.650 ±100	1.650 ±100	1.350 ±100	0.65 ±0.05	Isotropic
FRM-6	1.700 ±100	1.700 ±100	1.400 ±100	0.70 ±0.05	Isotropic
FRM-8	2.200 ±50	2.000 ±100	1.700 ±100	1.00 ±0.05	Semi-aniso
FRM-11	2.450 ±50	1.850 ±100	1.750 ±100	1.40 ±0.05	Anisotropic
FRM-12	2.475 ±25	2.800 ±100	2.100 ±100	1.50 ±0.05	Anisotropic

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