

COMMON MAGNETIC SYMBOLS

Φ	Magnetic flux
B	Magnetic induction (gauss)
H	Magnetic field strength (oersteds)
$B_d H_d$	Energy product (MG0e)
BH_{max}	Maximum energy product (MG0e)
B_r	Residual induction (flux density)
H_c	Coercive force
H_{ci}	Intrinsic coercive force

Materials Chart of Properties

MATERIAL	BHMAX(MG0E)	BR GAUSS	Hc OERSTEDS	Hci OERSTEDS	°C/°F
Standard Flexible	0.65	1,625	1,380	2,400	71/160
High Energy Flexible	1.4	2,480	2,040	3,050	79/175
Flexible Neo	8.0	6,300	4,500	8,500	116/240
Ceramic 1	1.0	2,300	1,860	3,000	399/750
Ceramic 5	3.4	3,950	2,400	2,450	399/750
Ceramic 8	3.5	3,900	2,950	3,050	399/750
Sintered Alnico 2	1.7	7,100	560	N/A	538/1000
Sintered Alnico 5	3.9	10,900	620	N/A	538/1000
Sintered Alnico 8	4.0	7,400	1,500	N/A	538/1000
Cast Alnico 5	5.5	12,800	640	N/A	538/1000
Cast Alnico 5-7	7.5	13,500	740	N/A	538/1000
Cast Alnico 8	5.3	8,200	1,650	N/A	538/1000
Cast Alnico 9	9.0	10,600	1,500	N/A	538/1000
SmCo 18 (1.5)	18.0	8,500	8,000	12,000-20,000	260/500
SmCo 20 (1.5)	20.0	9,000	8,000	12,000-20,000	260/500
SmCo 24 (2.17)	24.0	10,000	8,500	9,500-14,000	349/660
SmCo 26 (2.17)	26.0	10,500	9,200	10,000-14,000	349/660
SmCo 28 (2.17)	28.0	10,800	10,000	10,000-20,000	349/660
SmCo 30 (2.17)	30.0	11,000	9,000-10,000	10,000-16,000	349/660
SmCo 32 (2.17)	32.0	11,200	9,000-10,000	10,000-16,000	349/660

°C / °F = MAXIMUM OPERATING TEMPERATURE

MATERIAL	BH _{MAX} (MGOE)	BR GAUSS	H _C OERSTEDS	H _{CI} OERSTEDS	°C/°F
Neodymium 2825	26-29	10,200-10,800	9,600	25,000	180/356
Neodymium 2830	26-29	10,400-10,900	9,800	30,000	200/392
Neodymium 3012	28-31	10,800-11,300	10,000	12,000	80/176
Neodymium 3014	28-31	10,800-11,300	10,000	14,000	100/212
Neodymium 3017	28-31	10,800-11,300	10,000	17,000	120/248
Neodymium 3020	28-31	10,800-11,300	10,100	20,000	150/302
Neodymium 3025	28-31	10,800-11,300	10,200	25,000	180/356
Neodymium 3030	28-31	10,800-11,300	10,200	30,000	200/392
Neodymium 3314	31-33	11,300-11,700	10,500	14,000	100/212
Neodymium 3317	31-34	11,300-11,700	10,500	17,000	120/248
Neodymium 3320	31-34	11,300-11,700	10,600	20,000	150/302
Neodymium 3325	31-34	11,300-11,700	10,700	25,000	180/356
Neodymium 3330	31-34	11,300-11,700	10,500	30,000	200/392
Neodymium 3512	33-36	11,700-12,200	10,900	12,000	80/176
Neodymium 3514	33-36	11,700-12,200	10,900	14,000	100/212
Neodymium 3517	33-36	11,700-12,200	10,900	17,000	120/248
Neodymium 3520	33-36	11,700-12,200	11,000	20,000	150/302
Neodymium 3525	33-36	11,800-12,200	10,800	25,000	180/356
Neodymium 3530	33-36	11,700-12,100	11,000	30,000	200/392
Neodymium 3812	36-39	12,200-12,500	11,300	12,000	80/176
Neodymium 3814	36-39	12,200-12,500	11,300	14,000	100/212
Neodymium 3817	36-39	12,200-12,500	11,300	17,000	120/248
Neodymium 3820	36-39	12,200-12,500	11,400	20,000	150/302
Neodymium 3825	36-39	12,200-12,500	11,300	25,000	180/356
Neodymium 3830	36-39	12,200-12,500	11,300	30,000	200/392
Neodymium 4012	38-41	12,500-12,800	11,400	12,000	80/176
Neodymium 4014	38-41	12,500-12,800	11,600	14,000	100/212
Neodymium 4017	38-41	12,500-12,800	11,600	17,000	120/248
Neodymium 4020	38-41	12,500-12,800	11,800	20,000	150/302
Neodymium 4025	38-41	12,500-12,800	11,300	25,000	180/356
Neodymium 4212	40-43	12,800-13,200	11,500	12,000	80/176
Neodymium 4214	40-43	12,800-13,200	12,000	14,000	100/212
Neodymium 4217	40-43	12,800-13,200	12,000	17,000	120/248
Neodymium 4220	40-43	12,800-13,200	12,400	20,000	150/302
Neodymium 4512	43-46	13,200-13,800	11,600	12,000	80/176
Neodymium 4514	43-46	13,200-13,800	12,500	14,000	100/212
Neodymium 4517	43-47	13,200-13,800	12,000	17,000	120/248
Neodymium 4520	43-46	13,200-13,800	12,600	20,000	150/302
Neodymium 4812	46-49	13,800-14,200	11,600	12,000	80/176
Neodymium 4814	46-49	13,600-14,300	12,900	14,000	100/212
Neodymium 4817	46-49	13,700-14,300	12,500	17,000	120/248
Neodymium 5011	48-51	14,000-14,500	10,000	11,000	60/132
Neodymium 5014	48-51	14,000-14,500	13,000	14,000	100/212
Neodymium 5211	50-53	14,300-14,800	10,000	11,000	60/132