Magnetic Properties of Bonded Nd-Fe-B Magnets

Characteristics		Residual Induction	Coercive Force		Maximum Energy Product	Saturation Magnetizing Field	Demagnetization Field for 90% Br	Recoil Permeability	Reversible Temperature Coefficient of Br	Temperature Coefficient of Hcj	Density
Unit		Br	Hcb	Hcj	BH Max	Hs	Hk	μrec	α(Br)	β(Hcj)	ρ
		mT kGs	kA/m kOe	kA/m kOe	KJ/m3 MGOe	kA/m kOe	kA/m kOe	μo	%/°C	%/°C	Mg/m3 g/cm3
Compaction Molding	P1	150~260 (1.5~2.6)	112~184 (1.4~2.3)	592~816 (7.4~10.2)	4~12 (0.5~1.5)	≥1600 ≥20	144~224 (1.8~2.8)	1.13	-0.12	-0.4	6.0~6.3
	P4	380~440 (3.8~4.4)	248~296 (3.1~3.7)	592~816 (7.4~10.2)	28~36 (3.5~4.5)	≥1600 (≥20)	160~256 (2.0~3.5)	1.18	-0.12	-0.4	5.9~6.2
	P6	510~560 (5.1~5.6)	328~368 (4.1~4.6)	592~816 (7.4~10.2)	44~52 (5.5~6.5)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.12	-0.4	5.8~6.1
	P8	550~630 (5.5~6.3)	336~432 (4.2~5.4)	592~816 (7.4~10.2)	53~70 (6.6~8.7)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.12	-0.4	5.8~6.2
	P8H	600~650 (6.0~6.5)	400~480 (5.0~6.0)	875~1115 (11.0~14.0)	60~68 (7.5~8.5)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.13	-0.4	5.8~6.1
	P10	620~700 (6.2~7.0)	360~456 (4.5~5.7)	640~800 (8.0~10.0)	64~80 (8.0~10.0)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.8~6.2
	P12	695~760 (6.95~7.6)	424~472 (5.3~5.9)	640~864 (8.0~10.5)	80~96 (10.0~12.0)	≥1600 (≥20)	176~256 (2.2~3.5)	1.2	-0.1	-0.4	5.9~6.3
	P12L	700~740 (7.0~7.4)	360~450 (4.5~5.6)	510~640 (6.4~8.0)	74~83 (9.4~10.4)	≥1280 (≥16)	120~200 (1.5~2.5)	1.2	-0.1	-0.4	5.9~6.3
Injection Molding	H14	380~440 (3.8~4.4)	248~296 (3.1~3.7)	640~800 (8.0~10.0)	28~36 (3.5~4.5)	≥1600 (≥20)	111~239 (1.4~3.0)	1.2	-0.1	-0.4	4.7~5.1
	H15	440~500 (4.4~5.0)	280~344 (3.5~4.3)	640~800 (8.0~10.0)	34~42 (4.2~5.2)	≥1600 (≥20)	111~239 (1.4~3.0)	1.2	-0.1	-0.4	5.0~5.3
	H16	520~620 (5.2~6.2)	300~370 (3.8~4.6)	640~800 (8.0~10.0)	40~56 (5.0~7.0)	≥1600 (≥20)	127~254 (1.6~3.2)	1.2	-0.1	-0.4	5.2~5.4
	H16R	520~620 (5.2~6.2)	300~370 (3.8~4.6)	640~800 (8.0~10.0)	40~56 (5.0~7.0)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.0~5.5
	H16HR	480~580 (4.8~5.8)	334~398 (4.2~5.0)	875~1035 (11.0~13.0)	40~56 (5.0~7.0)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.0~5.5
	H18	600~660 (6.0~6.6)	360~408 (4.5~5.1)	640~800 (8.0~10.0)	60~68 (7.5~8.5)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.6~5.8
Extrustion Molding	E5	440~500 (4.4~5.0)	280~344 (3.5~4.3)	640~800 (8.0~10.0)	34~42 (4.2~5.2)	≥1600 (≥20)	111~239 (1.4~3.0)	1.2	-0.1	-0.4	5.5~5.7
	E8	600~660 (6.0~6.6)	360~408 (4.5~5.1)	640~800 (8.0~10.0)	60~68 (7.5~8.5)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.6~5.8
	E10	620~700 (6.2~7.0)	360~456 (4.5~5.7)	640~800 (8.0~10.0)	64~80 (8.0~10.0)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.9~6.1
	E11	650~720 (6.5~7.2)	417~467 (5.2~5.9)	640~864 (8.0~10.5)	69~85 (8.6~10.6)	≥1600 (≥20)	160~256 (2.0~3.5)	1.2	-0.1	-0.4	5.9~6.1