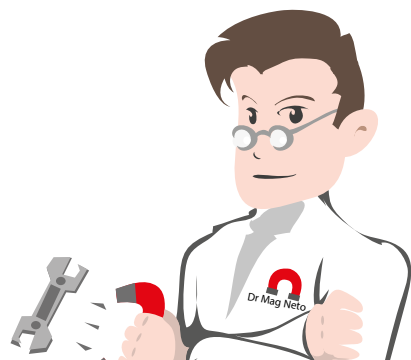




Plasto-Neodymium Magnets



Segments



Rings



Rotors and sensors

BONMAG is the new Bonded line characterised by rare earths and plastic or compressed materials.

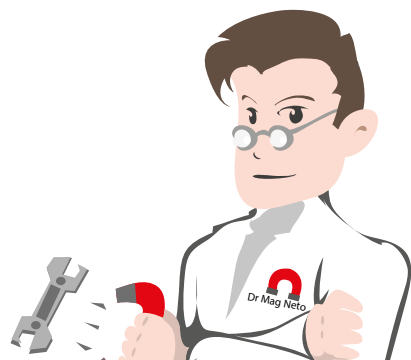
Compression of plastic materials and rare powders such as neodymium, iron and boron creates magnets with very low tolerances up to ± 0.015 meaning high component performance which do not require any further processing.

The quality of this product means it can be used in many applications with significant advantages.

BONMAG is a new high performance magnet made of Bonded Neodymium which improves the power of motors.

SPECIFICATIONS

- Magnet made of pulverised neodymium, iron and boron and plastic materials
- Coating: black or grey electro-deposited resin
- High efficiency and maximum energy up to 12 MGO and advanced applications
- High resistance ($\sim 10\text{-}\Omega\cdot\text{cm}$) of the magnets ensures no electric charge and is suitable for multiple magnetisation
- Highly precise dimensions: tolerance: ± 0.015 mm
- Suitable for mass production
- High mechanical force
- High density
- Higher output with reduced volume
- From 4 to 6 times stronger than ferrite magnets.



Plasto-Neodymium Magnets

APPLICATIONS

Automotive

- DC motors
- Brushless motors
- Pancake motors
- Sensors
- Engine cooling electric fans
- Electric fuel pumps
- Electrical steering
- Actuators
- Starter motors

Household appliances

- Fridge motors
- Cooling motors (HVAC)
- Battery powered tools
- Battery powered household appliances
- Motors for small household appliances

Industrial Automation

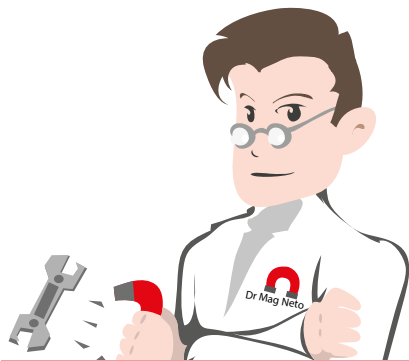
- Robotic arms
- Robot motors
- Magnetic couplings
- Bearings
- Generators
- Servo motors

Automation, Computers and Office

- Disk drive shaft
- Fax and printer step motors
- Printer hammers
- CD-ROM drive shafts
- Voice coil motors
- Pick-up motors

Electronic devices

- VCR
- Video cameras
- Surveillance cameras
- Speakers and headsets
- Video games
- Microphones
- DVD players



Plasto-Neodymium Magnets

Bon Mag										
	Residual induction (Br)	Coercive force (Hcb)	Intrinsic coercive force (Hcj)	Maximum energy product (BH)max	Temp. coefficient of Br at 100° C	Temp. coefficient of Hcj at 100° C	Density (without coating)	Max. working temperature	Curie temperature	Saturation magnetizing force
Code	T (KGs)	KA/m (KOe)	KA/m (KOe)	KJ/m³ (MGOe)	% / °C	% / °C	g/cm³	°C	°C	KA/m (KOe)
BM-02	300 - 400 (3.0 - 4.0)	160 - 240 (2.0 - 3.0)	480 - 640 (6.0 - 8.0)	16 - 24 (2.0 - 3.0)	- 0.11	- 0.40	4.5 - 5.0	160	350	≥1600 (≥20)
BM-04	400 - 500 (4.0 - 5.0)	240 - 320 (3.0 - 4.0)	560 - 720 (7.0 - 9.0)	32 - 44 (4.0 - 5.5)	- 0.11	- 0.40	5.2 - 5.7	160	350	≥1600 (≥20)
BM-06	500 - 600 (5.0 - 6.0)	320 - 400 (4.0 - 6.0)	560 - 720 (7.0 - 9.0)	48 - 60 (6.0 - 7.5)	- 0.11	- 0.40	5.5 - 6.0	160	350	≥1600 (≥20)
BM-08	600 - 680 (6.0 - 6.8)	360 - 440 (4.5 - 5.5)	640 - 800 (8.0 - 10.0)	60 - 72 (7.5 - 9.0)	- 0.11	- 0.40	5.8 - 6.1	160	350	≥1600 (≥20)
BM-08H	600 - 650 (6.0 - 6.5)	400 - 480 (5.0 - 6.0)	1040 - 1360 (13.0 - 17.0)	60 - 68 (7.5 - 8.5)	- 0.12	- 0.40	5.8 - 6.1	160	300	≥2400 (≥30)
BM-08L	600 - 680 (6.0 - 6.8)	400 - 480 (5.0 - 6.0)	640 - 800 (8.0 - 10.0)	64 - 72 (8.0 - 9.0)	- 0.12	- 0.40	5.8 - 6.1	160	300	≥1600 (≥20)
BM-08SR	600 - 650 (6.0 - 6.5)	400 - 480 (5.0 - 6.0)	800 - 1120 (10.0 - 14.0)	60 - 68 (7.5 - 8.5)	- 0.13	- 0.40	5.8 - 6.1	180	300	≥2000 (≥25)
BM-10	680 - 730 (6.8 - 7.3)	400 - 480 (5.0 - 6.0)	640 - 800 (8.0 - 10.0)	76 - 84 (9.5 - 10.5)	- 0.10	- 0.40	5.2 - 5.7	160	350	≥1600 (≥20)
BM-10H	700 - 750 (7.0 - 7.5)	400 - 480 (5.0 - 6.0)	640 - 800 (8.0 - 10.0)	80 - 88 (10.0 - 11.0)	- 0.10	- 0.40	6.0 - 6.3	160	350	≥1600 (≥20)
BM-12	720 - 770 (7.2 - 7.7)	440 - 520 (5.5 - 6.5)	720 - 880 (9.0 - 11.0)	88 - 96 (11.0 - 12.0)	- 0.10	- 0.40	6.0 - 6.3	160	350	≥1600 (≥20)
BM-12D	720 - 770 (7.2 - 7.7)	440 - 520 (5.5 - 6.5)	720 - 880 (9.0 - 11.0)	88 - 96 (11.0 - 12.0)	- 0.10	- 0.40	6.0 - 6.3	170	400	≥2000 (≥25)
BM-12L	760 - 810 (7.6 - 8.1)	400 - 480 (5.0 - 6.0)	480 - 640 (6.0 - 8.0)	88 - 96 (11.0 - 12.0)	- 0.11	- 0.40	6.0 - 6.3	150	320	≥1600 (≥20)
BM-13L	780 - 830 (7.8 - 8.3)	400 - 480 (5.0 - 6.0)	480 - 640 (6.0 - 8.0)	88 - 104 (11.0 - 13.0)	- 0.11	- 0.40	6.0 - 6.4	150	320	≥1600 (≥20)

Bon Mag - Top Quality												
Grade	Material	Br		Hcb		Hcj		(BH) max		r	Saturation Magnetizing force	
		kG	T	kOe	kA/m	kOe	kA/m	MGOe	kJ/m3		kA/m	g/cm3
BM-40T	Anisotropic rings	12,5-13,5	1,25-1,35	11,1-12,1	885-965	13,0-16,0	1040-1280	37,0-42,0	295-335	1,05	>= 1990	7,6
BM-43T		12,8-13,5	1,28-1,35	10,4-12,1	830-960	11,0-14,0	880-1120	40,0-44,0	320-350	1,05	>= 1990	7,6
BM-32T		11,2-12,1	1,12-1,21	10,2-11,1	815-885	14,0-18,0	1120-1440	30,0-34,0	240-270	1,05	>= 1990	7,6
BM-36T		12,0-12,8	1,20-1,28	10,8-11,8	860-940	14,0-18,0	1120-1140	34,0-38,0	270-300	1,05	>= 1990	7,6
BM-31T		10,6-11,8	1,06-1,18	10,2-11,1	815-885	20,0-24,0	1600-1920	29,0-32,0	230-255	1,05	>= 2390	7,7
BM-35T		12,0-12,8	1,20-1,28	11,1-11,9	880-950	18,0-22,0	1440-1760	29,0-32,0	265-295	1,05	>= 2390	7,7
BM-17T	Isotropic rings	8,5-9,1	0,85-0,91	7,2-7,8	575-620	14,0-18,0	1120-1440	16,0-18,0	125-145	1,05	>= 1990	7,6
BM-16T		8,2-8,8	0,82-0,88	7,0-7,6	560-610	16,0-20,0	1280-1600	15,0-17,0	120-135	1,05	>= 2390	7,6
BM-16TH		8,0-8,6	0,80-0,86	7,1-7,7	565-615	21,0-23,0	1680-1840	14,5-16,5	115-135	1,05	>= 2390	7,7