

MAGNETIC MATERIALS

Magnetic properties of magnets

Various types of magnetic materials are available. Many kinds including anisotropic ferrites, rare earth magnets, rubber magnet sheets, colored magnet sheets, etc. are available in various sizes.

※Main characteristics are shown in the following tables for comparison.

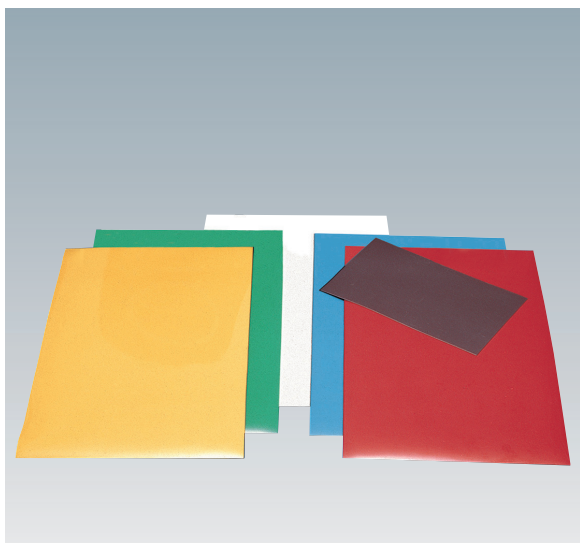
Kinds of Permanent Magnet	Residual Magnetic Flux Density (Br)	Holding Power (BHC)
	T (G)	kA/m (Oe)
Anisotropic ferrite	0.36-0.42 (3600-4200)	239-271 (3000-3400)
Rare earth magnet samarium-cobalt	0.98-1.06 (9800-10600)	477-637 (6000-8000)
Rare earth magnet neodymium	1.0-1.33 (10000-13300)	836-995 (10500-12500)
Alnico magnet	1.28-1.35 (12800-13500)	52-58 (650-726)

Rubber magnet sheet

Kinds of Permanent Magnet	Residual Magnetic Flux Density (Br)	Holding Power (BHC)
	T (G)	kA/m (Oe)
Anisotropic	0.22-0.23 (2250-2350)	159-174 (2000-2180)
Isotropic	0.14-0.15 (1400-1550)	100-111 (1250-1400)

No.1 RUBBER MAGNET SHEET

●Flexible rubber magnet sheets having excellent magnetic properties.

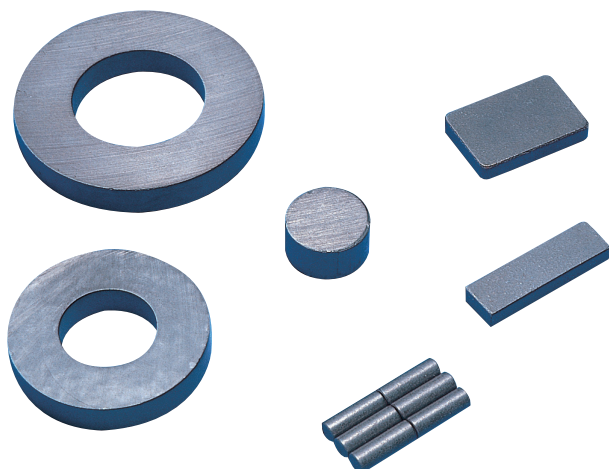


[mm (in.)]				[mm (in.)]			
Type	Thickness	Width	Length	Type	Thickness	Width	Length
Plain				Plain			
Anisotropic	① 0.8 (0.031)	100 (3.93)	1000 (39.4)	Isotropic	② 0.8 (0.031)	1000 (39.4)	1000 (39.4)
	① 1.0 (0.039)	100 (3.93)	1000 (39.4)		② 1.0 (0.039)	1000 (39.4)	1000 (39.4)
	① 1.0 (0.039)	200 (7.87)	1000 (39.4)		③ 2.0 (0.078)	10 (0.39)	1000 (39.4)
	① 1.2 (0.047)	200 (7.87)	1000 (39.4)		③ 3.0 (0.118)	15 (0.59)	1000 (39.4)
	① 1.5 (0.059)	200 (7.87)	1000 (39.4)		③ 4.0 (0.157)	8 (0.31)	1000 (39.4)
	① 1.6 (0.063)	100 (3.93)	1000 (39.4)		③ 5.0 (0.197)	15 (0.59)	1000 (39.4)
	① 2.0 (0.078)	100 (3.93)	1000 (39.4)	Colored sheets (white, red, yellow, green, blue)			
	① 2.0 (0.078)	200 (7.87)	1000 (39.4)	Isotropic	② 0.8 (0.031)	300 (11.8)	400S (15.7)
	① 3.0 (0.118)	100 (3.93)	1000 (39.4)	Colored sheets (white, red, yellow, green, blue, orange)			
	① 3.0 (0.118)	200 (7.87)	1000 (39.4)	Isotropic	② 0.8 (0.031)	100 (3.93)	300S (11.8)
① 2.5 (0.098)	200 (7.87)	1000 (39.4)	② 0.8 (0.031)		200 (7.87)	300S (11.8)	
① 3.5 (0.137)	200 (7.87)	1000 (39.4)	② 0.8 (0.031)		300 (11.8)	300S (11.8)	
① 4.0 (0.157)	200 (7.87)	1000 (39.4)	② 0.8 (0.031)		1000 (39.4)	1000S (39.4)	
① 3.0 (0.118)	20 (0.78)	1000 (39.4)	Colored sheets (white only)				
④ 5.0 (0.197)	61 (2.40)	950 (37.4)	Isotropic	② 0.8 (0.031)	100 (3.93)	300D (11.8)	
④ 10.0 (0.393)	30 (1.18)	1000 (39.4)		② 0.8 (0.031)	200 (7.87)	300D (11.8)	
				② 0.8 (0.031)	1000 (39.4)	1000D (39.4)	

- ※①: Anisotropic one face multi poles (a lot of N · S on one face only by anisotropic)
- ※②: Isotropic one face multi poles (a lot of N · S on one face only by isotropic)
- ※③: Isotropic one face 2 poles (N · S on one face only by isotropic)
- ※④: Anisotropic magnetized on both faces (magnetized in the direction of thickness by anisotropic)
- ※"S" refers to non-lustrous sheets and "D" refers to lustrous sheets.
- ※Colored sheets have been cut to specific sizes.
- ※For sheets longer than 1000 mm, a fee for cutting is required additionally.

No.2 FERRITE MAGNET (ROUND/RECTANGULAR)

●Ferrite magnets having significantly higher magnetic properties than isotropic magnets. In addition to dry types, a wet anisotropic magnet having a particularly high magnetic flux density is available (made to order).



Anisotropic

[mm (in.)]					
Shape	Diameter	Thickness	Shape	Size	Thickness
Round (incl. ring)	φ 15 (0.59)	4.0 (0.15)	Rectangular	20 (0.78) × 15 (0.59)	4.0 (0.15)
	φ 20 (0.78)	4.0 (0.15)		20 (0.78) × 15 (0.59)	7.0 (0.27)
	φ 27 (1.06) × φ 17 (0.66)	3.0 (0.11)		40 (1.57) × 25 (0.98)	10.0 (0.39)
	φ 30 (1.18)	5.0 (0.19)		40 (1.57) × 10 (0.39)	7.0 (0.27)
	φ 30 (1.18)	8.0 (0.31)		40 (1.57) × 40 (1.57)	10.0 (0.39)
	φ 100 (3.93) × φ 60 (2.36)	15.0 (0.59)		100 (3.93) × 100 (3.93)	10.0 (0.39)

※ Even if a magnet of a size listed above is to be ordered, a certain quantity of such magnets may in some cases need to be ordered at a time.