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Specification of Magnets >> NdFeB Magnet

☑ NdFeB Standard Products

Round Type | Ring Type | Ring Type (Disk Type) | Bar Type (Square Type)

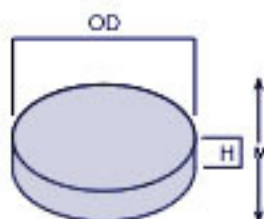
Bar Type (Round Type) | Square Type | Diametrically Magnetized Type | Flat Round Type

Rare earth magnets can be classified into a samarium-cobalt magnet and a neodymium magnet. A characteristic of a samarium-cobalt magnet is strong magnetic force. Its merit is that it is resistant to rust and high temperature, but it tends to be easily broken. It is popular as the most suitable material for a small and lightweight magnet, like neodymium. A neodymium magnet can produce the strongest magnetic field in the world among those sold in the current market.

The shape of a neodymium magnet can be round, square or ring according to what it is used for. Although it is mechanically strong, its surface is processed since it is easily rusted and therefore it must be used below 80°C.



Round Type



OD × H	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
1) 1.2Φ × 2	1.3	130	0.04
1.5Φ × 1.5	2.8	280	0.05
2Φ × 2	2.7	270	0.07
2Φ × 3	3.2	320	0.08
3Φ × 1.5	3.1	310	0.17
3Φ × 1.8	3.2	320	0.25
3Φ × 2.5	3.3	330	0.3
3Φ × 3	3.4	340	0.35
3Φ × 4	3.5	350	0.38
4Φ × 1.5	2.7	270	0.25
4Φ × 2	3.0	300	0.3
4Φ × 3	3.5	350	0.4
4Φ × 4	3.9	390	0.5
4Φ × 5	4.2	420	0.55
5Φ × 1	1.5	150	0.2
2) 5Φ ×	2.0	200	0.3

O × H	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
10Φ × 3	3.5	350	1.45
10Φ × 4	3.5	350	1.6
10Φ × 5	3.5	350	2.2
10Φ × 10	4.8	480	3.65
12Φ × 1.3	2.0	200	1.45
12.5Φ × 1.5	2.0	200	1.8
12.5Φ × 2	2.0	200	1.9
13Φ × 10	4.8	480	6.1
14Φ × 10	4.5	450	6.4
15Φ × 1.5	1.8	180	1.1
15Φ × 1.7	2.0	200	1.3
15Φ × 3	3.2	320	3.7
15Φ × 4	3.3	330	4
15Φ × 5	3.3	330	4.5
15Φ × 10	4.2	420	6.8
16Φ × 10	4.2	420	7.2

2) 5 Φ × 1.5	2.0	200	0.3
2) 5 Φ × 2	2.8	280	0.35
5 Φ × 3	3.5	350	0.44
5 Φ × 4	3.8	380	0.56
5 Φ × 5	4.0	400	0.65
5.5 Φ × 1.7	2.1	210	0.3
6 Φ × 2	2.2	220	0.4
6 Φ × 5	3.5	350	0.75
7 Φ × 2	3.0	300	0.7
7 Φ × 3	3.5	350	0.77
8 Φ × 2	2.2	220	0.65
8 Φ × 3	3.5	350	1.1
8 Φ × 4	3.6	360	1.25
8 Φ × 5	4.0	400	1.4
8 Φ × 8	4.2	420	1.8
9 Φ × 3	3.2	320	1.2
9.4 Φ × 0.8	1.5	150	0.4
10 Φ × 2	3.5	350	1.35

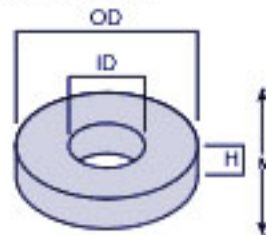
16 Φ × 10	4.2	420	7.2
17.9 Φ × 2.5	2.7	270	2.5
19 Φ × 10	4.0	400	9.8
20 Φ × 5	2.8	280	6.3
21 Φ × 4.6	3.2	320	7.0
22 Φ × 10	4.5	450	15.3
23.5 Φ × 3.4	2.0	200	4
23.5 Φ × 4.5	2.2	220	4.8
23.5 Φ × 5	2.4	240	5.6
25 Φ × 3.4	1.8	180	4.2
25 Φ × 5	2.5	250	7.5
25 Φ × 6	3.0	300	9
25 Φ × 9.8	3.5	350	20.0
30 Φ × 15	5.0	500	22.0
32 Φ × 10.5	4.0	400	26.0
40 Φ × 10	3.8	380	35.0
100 Φ × 15	3.7	370	75.0
180 Φ × 5-50	3.7	370	75.0

1) Gold plated, 2) Gold or Ni plated

■ Surface magnetic flux density and the magnetic absorption are values for reference.

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Ring Type



OD × ID × H	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
6Φ × 3Φ × 4	3.3	330	0.4
6.6Φ × 2Φ × 1.5	2.0	200	0.28
8Φ × 2Φ × 2.5	3.0	300	0.9

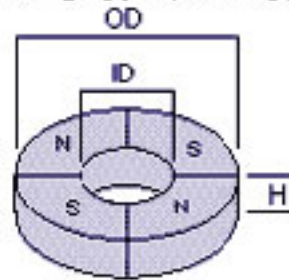
OD × ID × H	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
18Φ × 7Φ × 6	3.6	360	5.5
19Φ × 6.5Φ × 10	4.5	450	8.4
23Φ × 8Φ × 3.5	3.0	300	3.5

1.5			
$8\Phi \times 2\Phi \times 2.5$	3.0	300	0.9
$8\Phi \times 4\Phi \times 5$	3.7	370	1.2
$10\Phi \times 5\Phi \times 5$	3.6	360	1.8
$10\Phi \times 6\Phi \times 1$	1.7	170	0.7
$10\Phi \times 6\Phi \times 10$	3.3	330	2.5
$10.5\Phi \times 7.6\Phi \times 1$	1.6	160	0.7
$11\Phi \times 4\Phi \times 10$	3.2	320	3.2
$12\Phi \times 7\Phi \times 6$	3.6	360	2.2
$13.5\Phi \times 5\Phi \times 2$	2.2	220	1.0
$14\Phi \times 9\Phi \times 4$	3.0	300	3.0
$17\Phi \times 8.8\Phi \times 1.25$	1.8	180	1.0

10			
$23\Phi \times 8\Phi \times 3.5$	3.0	300	3.5
$23\Phi \times 8\Phi \times 14$	4.2	420	12.0
$23\Phi \times 13\Phi \times 1$	1.3	130	1.8
$25\Phi \times 7\Phi \times 6$	3.6	360	7.3
$26\Phi \times 20\Phi \times 6$	3.5	350	5.5
$31.2\Phi \times 18.2\Phi \times 1$	1.2	120	3.2
$39\Phi \times 19\Phi \times 7$	4.5	450	20.0
$59\Phi \times 19\Phi \times 10$	4.5	450	45.0
$70\Phi \times 32\Phi \times 15$	4.5	450	50.0
$76\Phi \times 42\Phi \times 6$	3.5	350	55.0
$98\Phi \times 58\Phi \times 10$	4.0	400	65.0
$180\Phi \times 160\Phi \times 5-50$	4.0	400	65.0

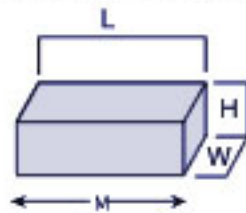
■ Surface magnetic flux density and the magnetic absorption are values for reference.

Ring Type (Disk Type)



OD × ID × H	Poles
$8\Phi \times 3\Phi \times 1.2$	4 poles
$10\Phi \times 4\Phi \times 1.2$	4 poles
$12\Phi \times 4\Phi \times 1.5$	4 poles
$15\Phi \times 4\Phi \times 2$	4 poles
$26\Phi \times 20\Phi \times 4.7$	4 poles
$48\Phi \times 25\Phi \times 3.5$	4 poles
$60\Phi \times 30\Phi \times 5$	8 poles

Bar Type (Square Type)

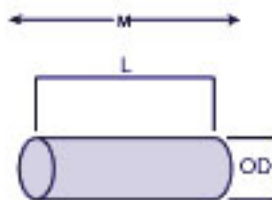


W × H × L	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
0.6 × 2 × 7	3.0	300	0.01
4 × 4 × 12	4.5	450	0.6

W × H × L	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
4 × 7.5 × 12	4.4	440	1.0
5 × 5 × 10	4.0	400	0.9

■ Surface magnetic flux density and the magnetic absorption are values for reference.

Bar Type (Round Type)

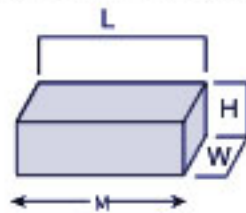


OD × L	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
0.5Φ × 5	1.5	150	0.01
1Φ × 5	1.5	150	0.05
1.4Φ × 5	1.5	150	0.08
1.5Φ × 8	2.0	200	0.09
2Φ × 5.5	3.5	350	0.12
2Φ × 7	3.8	380	0.2
2.3Φ × 4.5	3.3	330	0.15
2.5Φ × 6	3.6	360	0.23
3Φ × 5	3.4	340	0.4
3Φ × 6	3.6	360	0.42
3Φ × 10	4.0	400	0.5
4Φ × 8	4.0	400	0.7
5Φ × 8	3.7	370	0.8

OD × L	Surface magnetic flux density		magnetic absorption kg
	kG	mT	
5Φ × 10	4.0	400	0.9
6Φ × 10	4.0	400	1.1
6Φ × 23	5.0	500	2.5
9Φ × 10	4.2	420	2.2
16Φ × 30	5.0	500	15.0
17.5Φ × 20	4.7	470	17.0
19Φ × 40	5.2	520	19.0
22.5Φ × 25	5.0	500	24.0
23.5Φ × 25	5.0	500	27.0

■ Surface magnetic flux density and the magnetic absorption is a value for reference.

Bar Type (Square Type)

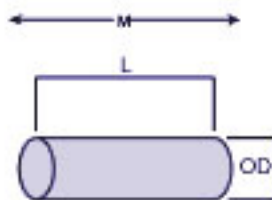


W × H × L	Surface magnetic flux density		magnetic absorption
	kG	mT	
0.6 × 2 × 7	3.0	300	0.01
4 × 4 × 12	4.5	450	0.6

W × H × L	Surface magnetic flux density		magnetic absorption
	kG	mT	
4 × 7.5 × 12	4.4	440	1.0
5 × 5 × 10	4.0	400	0.9

■ Surface magnetic flux density and the magnetic absorption are values for reference.

Bar Type (Round Type)

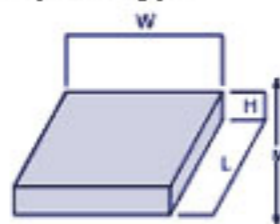


OD × L	Surface magnetic flux density		magnetic absorption
	kG	mT	
0.5Φ × 5	1.5	150	0.01
1Φ × 5	1.5	150	0.05
1.4Φ × 5	1.5	150	0.08
1.5Φ × 8	2.0	200	0.09
2Φ × 5.5	3.5	350	0.12
2Φ × 7	3.8	380	0.2
2.3Φ × 4.5	3.3	330	0.15
2.5Φ × 6	3.6	360	0.23
3Φ × 5	3.4	340	0.4
3Φ × 6	3.6	360	0.42
3Φ × 10	4.0	400	0.5
4Φ × 8	4.0	400	0.7
5Φ × 8	3.7	370	0.8

OD × L	Surface magnetic flux density		magnetic absorption
	kG	mT	
5Φ × 10	4.0	400	0.9
6Φ × 10	4.0	400	1.1
6Φ × 23	5.0	500	2.5
9Φ × 10	4.2	420	2.2
16Φ × 30	5.0	500	15.0
17.5Φ × 20	4.7	470	17.0
19Φ × 40	5.2	520	19.0
22.5Φ × 25	5.0	500	24.0
23.5Φ × 25	5.0	500	27.0

■ Surface magnetic flux density and the magnetic absorption is a value for reference.

Square Type



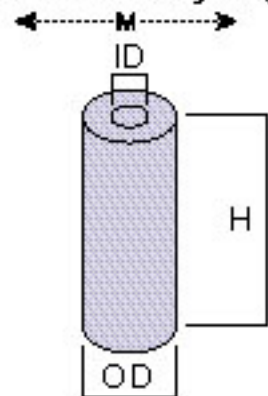
L × W × H	Surface magnetic flux density		magnetic absorption
	kG	mT	kg
2.4 × 2.4 × 1.8	2.0	200	0.04
4 × 4 × 2	2.0	200	0.3
6 × 6 × 4.5	3.2	320	0.85
6.8 × 4 × 2	2.8	280	0.45
9 × 7 × 3	3.1	310	1.1
10 × 3 × 3	3.3	330	0.65
10 × 5 × 1	1.4	140	0.35
10 × 10 × 2	2.0	200	1.5
10 × 10 × 4	3.1	310	2.2
10 × 10 × 8	3.6	360	2.8
10 × 10 × 10	4.2	420	3.6
12 × 7 × 4	3.5	350	1.8
12 × 10 × 4	3.3	330	2.9
15 × 5 × 3	3.2	320	1.5
15 × 6 × 2.8	3.0	300	1.6
15 × 10 × 5	3.5	350	3.3
18 × 3.25 × 4.1	3.5	350	1.0
20 × 4.15 × 2.15	2.6	260	1.9
20 × 10 × 4	2.8	280	4.8
20 × 10 × 10	3.2	320	7.1
20 × 12 × 5	3.0	300	6.0
20 × 15 × 5	3.0	300	6.3
22 × 21 × 5	2.9	290	7.2
23 × 23 × 10	3.3	330	8.5

1) Ni Plated or Epoxy coated, 2) M3 Counter sunk, 3) M5 Counter sunk

■ Surface magnetic flux density and the magnetic absorption is a value for reference.

L × W × H	Surface magnetic flux density		magnetic absorption
	kG	mT	kg
1) 24 × 24 × 12.5	4.2	420	23.0
25.4 × 9.6 × 9.6	4.0	400	12.0
25.4 × 25.4 × 12.7	4.0	400	23.5
26 × 20 × 6	3.3	330	9.5
29.5 × 4.15 × 2.15	2.5	250	2.2
30 × 30 × 5	3.0	300	12.0
30 × 30 × 10	4.0	400	23.0
3) 30 × 30 × 10	4.0	400	23.0
40 × 11 × 6	3.5	350	8.4
40 × 15 × 5	3.0	300	9
40 × 40 × 10	4.0	400	38.0
46 × 30 × 10	4.0	400	35.0
50 × 10 × 2	2.0	200	4.5
50.8 × 50.8 × 12.7	4.0	400	65.0
4) 50.8 × 50.8 × 12.7	4.0	400	65.0
50.8 × 50.8 × 25.4	4.8	480	80.0
51 × 4.15 × 2.15	2.2	220	3.5
58 × 14 × 3	2.4	240	5.5
60 × 30 × 10	3.8	380	45.0
68 × 4 × 8	3.2	320	7.5
79.5 × 4.5 × 1.5	1.8	180	4.5
2) 150 × 102 × 10	3.5	350	over 100
2) 150 × 102 × 25	4.0	400	
2) 150 × 150 × 5-50	4.0	400	

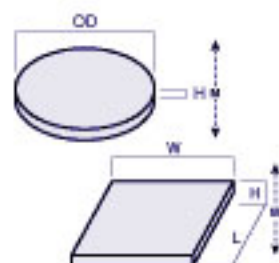
Diametrically Magnetized Type



OD × H (ID)	Surface magnetic flux density	
	kg	mT
3.4Φ × 7.6 (1.1Φ)	3.5	350
4Φ × 10	4.1	410
13Φ × 20	5.0	500

- Surface magnetic flux density is a value for reference.

Flat Round Type



Size	Surface magnetic flux density	
	kg	kg
0.5 × 0.5 × 0.5	1.0	100
1Φ × 0.5	1.5	150
1.46Φ × 0.98	2.4	240
2Φ × 0.5	1.5	150

- Surface magnetic flux density is a value for reference.