



Specification

- Magnet materials
 - Hard ferrite **HF**
Temperature resistant up to 392 °F (200 °C)
 - SmCo **SC**
Samarium, cobalt
Temperature resistant up to 392 °F (200 °C)
 - NdFeB **ND**
Neodymium, iron, boron
Temperature resistant up to 176 °F (80 °C)
- Housing
Steel, zinc plated
- RoHS compliant

Accessory

- Magnet holding disks GN 70 → page 2029
- Self-adhesive disks GN 70.1 → page 2030
- Rubber caps GN 70.2 → page 2031

Information

GN 50.2 retaining magnets, in combination with the steel housing and the plastic ring, form a system that shields and strengthens the magnet for optimal transmission of the magnetic flux onto the magnetic surface.

see also...

- More Information on Retaining Magnets → page 1990

How to order

GN 50.2-HF-20-6-M3

- | | |
|---|-------------------------|
| 1 | Magnet material |
| 2 | Diameter d ₁ |
| 3 | Height h |
| 4 | Thread d ₂ |

Metric table

Dimensions in: millimeters - inches

d ₁	Tolerances		Material HF					Material SC / ND					Nominal magnetic forces		
	HF	SC / ND	h	d ₂ Thread	d ₃	Length l	t	h	d ₂ Thread	d ₃	Length l	t	HF	SC	ND
6 0.24	-	±0.1	-	-	-	-	-	4.5 ±0.1 0.18 ±0.004	M 3	6 ±0.1 0.24 ±0.004	7 0.28	6 0.24	-	5 N 1 lbf	5 N 1 lbf
8 0.31	-	±0.1	-	-	-	-	-	4.5 ±0.1 0.18 ±0.004	M 3	6 ±0.1 0.24 ±0.004	7 0.28	6 0.24	-	11 N 3 lbf	13 N 3 lbf
10 0.39	±0.1	±0.1	4.5 ^{+0.2} _{-0.1} 0.18 ^{-0.008} _{-0.004}	M 3	6 ±0.1 0.24 ±0.004	7 0.28	5 0.20	4.5 ±0.1 0.18 ±0.004	M 3	6 ±0.1 0.24 ±0.004	7 0.28	6 0.24	4 N 1 lbf	20 N 5 lbf	25 N 6 lbf
13 0.51	±0.1	±0.1	4.5 ^{+0.2} _{-0.1} 0.18 ^{-0.008} _{-0.004}	M 3	6 ±0.1 0.24 ±0.004	7 0.28	5 0.20	4.5 ±0.1 0.18 ±0.004	M 3	6 ±0.1 0.24 ±0.004	7 0.28	6 0.24	10 N 2 lbf	40 N 9 lbf	60 N 14 lbf
16 0.63	±0.1	±0.1	4.5 ^{+0.2} _{-0.1} 0.18 ^{-0.008} _{-0.004}	M 3	6 ±0.1 0.24 ±0.004	7 0.28	5 0.20	4.5 ±0.1 0.18 ±0.004	M 4	6 ±0.1 0.24 ±0.004	7 0.28	6 0.24	18 N 4 lbf	60 N 14 lbf	95 N 21 lbf
20 0.79	±0.1	±0.1	6 ^{+0.2} _{-0.1} 0.24 ^{-0.008} _{-0.004}	M 3	6 ±0.1 0.24 ±0.004	7 0.28	5 0.20	6 ±0.1 0.24 ±0.004	M 4	8 ±0.2 0.31 ±0.008	7 0.28	7 0.28	30 N 7 lbf	90 N 20 lbf	140 N 32 lbf
25 0.98	±0.1	±0.1	7 ^{+0.3} _{-0.2} 0.28 ^{+0.012} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8 0.31	7 0.28	7 ±0.2 0.28 ±0.008	M 4	8 ±0.2 0.31 ±0.008	7 0.28	7 0.28	40 N 9 lbf	150 N 34 lbf	200 N 45 lbf
32 1.26	±0.1	±0.1	7 ^{+0.3} _{-0.2} 0.28 ^{+0.012} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8 0.31	7 0.28	7 ±0.2 0.28 ±0.008	M 5	10 ±0.2 0.39 ±0.008	8.5 0.33	8 0.31	80 N 18 lbf	220 N 50 lbf	350 N 79 lbf
36 1.42	+0.2/-0.1	-	7.7 ^{+0.3} _{-0.2} 0.30 ^{+0.012} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8.3 0.33	7 0.28	-	-	-	-	-	100 N 23 lbf	-	-
40 1.57	+0.2/-0.1	-	8 ^{+0.3} _{-0.2} 0.31 ^{+0.012} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8.5 0.33	7 0.28	-	-	-	-	-	125 N 28 lbf	-	-
40 1.57	+0.2/-0.1	±0.1	8 ^{+0.3} _{-0.2} 0.31 ^{+0.012} _{-0.008}	M 5	10 ±0.2 0.39 ±0.008	10 0.39	8 0.31	8 ±0.2 0.31 ±0.008	M 6	10 ±0.2 0.39 ±0.008	10 0.39	8 0.31	125 N 28 lbf	-	670 N 151 lbf
47 1.85	+0.2/-0.1	-	9 ^{+0.4} _{-0.2} 0.35 ^{+0.016} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8 0.31	7 0.28	-	-	-	-	-	180 N 41 lbf	-	-
47 1.85	+0.2/-0.1	±0.2	9 ^{+0.4} _{-0.2} 0.35 ^{+0.016} _{-0.008}	M 6	12 ±0.2 0.47 ±0.008	11.5 0.45	10 0.39	9.2 ±0.2 0.36 ±0.008	M 6	12 ±0.2 0.47 ±0.008	11.3 0.44	10 0.39	180 N 41 lbf	-	790 N 178 lbf
50 1.97	+0.2/-0.1	-	10 ^{+0.4} _{-0.2} 0.39 ^{+0.016} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8.5 0.33	7 0.28	-	-	-	-	-	220 N 50 lbf	-	-
50 1.97	+0.2/-0.1	±0.1	10 ^{+0.4} _{-0.2} 0.39 ^{+0.016} _{-0.008}	M 6	12 ±0.2 0.47 ±0.008	12 0.47	10 0.39	10 ±0.2 0.39 ±0.008	M 8	15 ±0.2 0.59 ±0.008	12 0.47	10 0.39	220 N 50 lbf	-	1000 N 225 lbf
57 2.24	+0.2/-0.1	-	10.5 ^{+0.5} _{-0.2} 0.41 ^{+0.02} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8 0.31	7 0.28	-	-	-	-	-	280 N 63 lbf	-	-
57 2.24	+0.2/-0.1	-	10.5 ^{+0.5} _{-0.2} 0.41 ^{+0.02} _{-0.008}	M 6	12 ±0.2 0.47 ±0.008	12 0.47	10 0.39	-	-	-	-	-	280 N 63 lbf	-	-
63 2.48	+0.3/-0.1	-	14 ^{+0.5} _{-0.2} 0.55 ^{+0.02} _{-0.008}	M 4	8 ±0.2 0.31 ±0.008	8 0.31	7 0.28	-	-	-	-	-	350 N 79 lbf	-	-
63 2.48	+0.3/-0.1	-	14 ^{+0.5} _{-0.2} 0.55 ^{+0.02} _{-0.008}	M 8	15 ±0.2 0.59 ±0.008	16 0.63	10 0.39	-	-	-	-	-	350 N 79 lbf	-	-
80 3.15	+0.3/-0.1	-	10 ^{+0.5} _{-0.2} 0.39 ^{+0.02} _{-0.008}	M 6	12 ±0.2 0.47 ±0.008	11.5 0.45	10 0.39	-	-	-	-	-	500 N 112 lbf	-	-
80 3.15	+0.3/-0.1	-	18 ^{+0.5} _{-0.2} 0.71 ^{+0.02} _{-0.008}	M 6	12 ±0.2 0.47 ±0.008	10.5 0.41	10 0.39	-	-	-	-	-	600 N 135 lbf	-	-
80 3.15	+0.3/-0.1	-	18 ^{+0.5} _{-0.2} 0.71 ^{+0.02} _{-0.008}	M 10	20 ±0.2 0.79 ±0.008	16 0.63	15 0.59	-	-	-	-	-	600 N 135 lbf	-	-
100 3.94	+0.5/-0.1	-	22 ^{+0.5} _{-0.2} 0.87 ^{+0.02} _{-0.008}	M 12	22 ±0.2 0.87 ±0.008	21 0.83	18 0.71	-	-	-	-	-	900 N 202 lbf	-	-
125 4.92	+0.5/-0.1	-	26 ^{+0.5} _{-0.2} 1.02 ^{+0.02} _{-0.008}	M 14	25 ±0.2 0.98 ±0.008	24 0.94	20 0.79	-	-	-	-	-	1300 N 292 lbf	-	-

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