



SS Stainless Steel

**Metric table**

Dimensions in: millimeters - inches

d <sub>1</sub>	Tolerances		h	Tolerances		d <sub>2</sub>	d <sub>3</sub>		d <sub>4</sub>	d <sub>5</sub>		t	Nominal magnetic forces		
	HF	SC		HF	SC		HF	HF		SC	HF		SC	HF	SC
16 0.63	-	±0.1	4.5 0.18	-	±0.1	-	-	3.5 0.14	-	-	6 0.24	-	3 0.12	-	41 N 9.22 lbf
20 0.79	±0.1	±0.1	6 0.24	+0.2/-0.1	±0.1	4.3 0.17	-	4.5 0.18	9.5 0.37	-	8 0.31	-	3.5 0.14	22 N 4.95 lbf	60 N 13.49 lbf
25 0.98	±0.1	±0.1	7 0.28	+0.3/-0.2	±0.2	5.5 0.22	-	4.5 0.18	11.5 0.45	-	8 0.31	-	4 0.16	29 N 6.52 lbf	80 N 17.98 lbf
32 1.26	±0.1	±0.1	7 0.28	+0.3/-0.2	±0.2	5.5 0.22	-	5.5 0.22	11.5 0.45	-	11 0.43	-	4 0.16	58 N 13.04 lbf	200 N 44.96 lbf
40 1.57	+0.2/-0.1	±0.1	8 0.31	+0.4/-0.2	±0.2	5.5 0.22	-	5.5 0.22	12.5 0.49	-	10.5 0.41	-	4 0.16	72 N 16.19 lbf	420 N 94.42 lbf
50 1.97	+0.2/-0.1	-	10 0.39	+0.5/-0.2	-	-	8.5 0.33	-	-	22 0.87	-	8.5 0.33	-	145 N 32.60 lbf	-
63 2.48	+0.3/-0.1	-	14 0.55	+0.5/-0.2	-	-	6.5 0.26	-	-	24 0.94	-	12 0.47	-	230 N 51.71 lbf	-

**Specification**

- Magnet materials
  - Hard ferrite **HF**  
Operating temperature up to 428 °F (220 °C)
  - SmCo **SC**  
Samarium, cobalt  
Operating temperature up to 662 °F (350 °C)
- Housing  
Stainless steel
- RoHS compliant

**Information**

Retaining magnets GN 50.45, in combination with the stainless steel housing and the plastic ring / isolation ring, form a system that shields and strengthens the magnet for optimal transmission of the magnetic flux onto the magnetic surface.

To ensure that the magnetic properties are not negatively impaired, the mounting screws should be made of a non-magnetic material, such as stainless steel, brass or plastic.

see also...

- More Information on Retaining Magnets → page 1990
- Retaining Magnets GN 50.25 (with Tapped Hole) → page 1998
- Retaining Magnets GN 52.5 (with Threaded Stud) → page 2023
- Retaining Magnets GN 51.4 (with Plain Hole) → page 2007

**Accessory**

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

How to order	
1	Magnet material
2	Diameter d <sub>1</sub>
3	Height h
4	Bore d <sub>3</sub> (Bore d <sub>2</sub> )

**GN 50.45-HF-50-10-8.5**

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9  
3.10