



**Metric table**

Dimensions in: millimeters - inches

d <sub>1</sub> h6	d <sub>2</sub>	h	k*	t	Nominal magnetic forces	
					SC	ND
6 0.2362	M 3	20 ±0.2 0.787 ±0.008	1.5 0.06	5 0.20	8 N 1.80 lbf	10 N 2.25 lbf
8 0.3150	M 3	20 ±0.2 0.787 ±0.008	1.5 0.06	5 0.20	22 N 4.95 lbf	25 N 5.62 lbf
10 0.3937	M 4	20 ±0.2 0.787 ±0.008	2 0.08	7 0.28	40 N 8.99 lbf	45 N 10.12 lbf
13 0.5118	M 4	20 ±0.2 0.787 ±0.008	2.5 0.10	7 0.28	60 N 13.49 lbf	70 N 15.74 lbf
16 0.6299	M 4	25 ±0.2 0.984 ±0.008	3 0.12	8 0.31	125 N 28.10 lbf	150 N 33.72 lbf
20 0.7874	M 6	25 ±0.2 0.984 ±0.008	4 0.16	6 0.24	250 N 56.20 lbf	280 N 62.95 lbf
25 0.9843	M 6	35 ±0.3 1.378 ±0.012	5 0.20	8 0.31	400 N 89.92 lbf	450 N 101 lbf
32 1.2598	M 6	40 ±0.3 1.575 ±0.012	6 0.24	6 0.24	600 N 135 lbf	700 N 157 lbf

**Specification**

- Magnet materials
  - SmCo  
Samarium, cobalt  
Temperature resistant up to 392 °F (200 °C)
  - NdFeB  
Neodymium, iron, boron  
Temperature resistant up to 176 °F (80 °C)
- Housing  
Brass
- Identification for ND  
Magnetic area colored blue
- ISO Fundamental Tolerances → page 2129
- 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

**On request**

- Housing in stainless steel
- Poles in stainless steel
- Higher magnetic forces
- Temperature resistance up to 536 °F (280 °C)



**Information**

**SC**

GN 54.2 retaining magnets, in combination with the brass housing, the iron poles, and the plastic insulation, form a system that shields and strengthens the magnet for optimal transmission of the magnetic flux onto the magnetic surface.

This special assembly is also known as a "sandwich magnet".

**ND**

\*Mounting this retaining magnet directly in steel components will create a magnetic short circuit, which reduces the magnetic force by up to 15 %. To avoid this, the distance k between the brass housing and the steel component or installation hole should be maintained.

see also...

- More Information on Retaining Magnets → page 1990
- Retaining Magnets GN 52.2 (with Tapped Blind Hole) → page 2020
- Retaining Magnets GN 52.3 (with Tapped Blind Hole) → page 2021
- Retaining Magnets GN 52.5 (Stainless Steel, with Threaded Stud) → page 2023

How to order

**GN 54.2-ND-20-M6**

1	Magnet material
2	Diameter d <sub>1</sub>
3	Thread d <sub>2</sub>