



Universal table

Dimensions in: millimeters - inches

d h6	h	k ₁ *	k ₂ **	Nominal magnetic forces	
				SC	ND
6 0.24	20 ±0.2 0.79 ±0.008	10 0.39	1.5 0.06	8 N 1.80 lbf	10 N 2.25 lbf
8 0.31	20 ±0.2 0.79 ±0.008	10 0.39	1.5 0.06	22 N 4.95 lbf	25 N 5.62 lbf
10 0.39	20 ±0.2 0.79 ±0.008	8 0.31	2 0.08	40 N 8.99 lbf	45 N 10.12 lbf
13 0.51	20 ±0.2 0.79 ±0.008	6 0.24	2.5 0.10	60 N 13.49 lbf	70 N 15.74 lbf
16 0.63	20 ±0.2 0.79 ±0.008	2 0.08	3 0.12	125 N 28.10 lbf	150 N 33.72 lbf
20 0.79	25 ±0.2 0.98 ±0.008	5 0.20	4 0.16	250 N 56.20 lbf	280 N 62.95 lbf
25 0.98	35 ±0.3 1.38 ±0.012	7 0.28	5 0.20	400 N 89.92 lbf	450 N 101 lbf
32 1.26	40 ±0.3 1.57 ±0.012	4.5 0.18	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



Information

GN 54.1 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 “sandwich magnet”.

The retaining magnets can be mounted easily and securely by press-fitting, shrinking or with adhesive.

*k₁ is the max. dimension by which the retaining magnet can be shortened without losing its properties.

**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 k₂ between the brass housing and the steel component or installation hole should be maintained. The distance is to be maintained also if the retaining magnet is shortened.

see also...

- More Information on Retaining Magnets → page 1990
- Retaining Magnets GN 52.1 (without Hole) → page 2019

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)

How to order	1	Magnet material
	2	Diameter d

GN54.1-SC-13