## Retaining magnets

## Rod-Shaped, without Bore, with Fitting Tolerance

## SPECIFICATION

Housing
Brass
Materials of the magnet:
SmCo SC
Samarium, cobalt
Temperature resistant up to $200^{\circ} \mathrm{C}$
NdFeB ND
Neodymium, iron, boron
Temperature resistant up to $80^{\circ} \mathrm{C}$
Identification of ND:
Magnetic area colored blue

## INFORMATION

Retaining magnets GN 54.1 are combined with a brass housing, the iron poles and the plastic insulation into a system that shields and considerably strengthens the magnet for optimal transmission of the magnetic flux onto the magnetic surface. This special design is also known by the name "sandwich magnet" or "pole shoe magnet". The retaining magnets are easy to fasten securely by pressing, shrinking or gluing.

* $k_{1}$ is the maximum dimension by which the retaining magnet can be shortened without losing its properties.
** Mounting these retaining magnets directly in steel components will create a magnetic shortcircuit which reduces the retaining power by as much as $15 \%$. To avoid this, the distance k2 should be maintained between the brass housing and steel part or installation hole. These spacings should also be maintained if the retaining magnet is shortened.
- More information to retaining magnets (see page 2022)


## ACCESSORY

- Holding Disks GN 70 (see page 2051)

Adhesive Disks GN 70.1 (see page 2051)
Rubber Caps GN 70.2 (see page )

## ON REQUEST

- Housing in stainless steel
- Pols in stainless steel
- Higher magnetic forces

Temperature resistance up to $280^{\circ} \mathrm{C}$

View of magnetic surface

 installation hole

GN 54.1

| Description | d h6 | h | k1* | k2** | Nominal magnetic forces in N | $\Delta \Delta$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GN 54.1-SC-6 | 6 | $20 \pm 0.2$ | 10 | 1.5 | 8 | 5 |
| GN 54.1-SC-8 | 8 | $20 \pm 0.2$ | 10 | 1.5 | 22 | 8 |
| GN 54.1-SC-10 | 10 | $20 \pm 0.2$ | 8 | 2 | 40 | 12 |
| GN 54.1-SC-13 | 13 | $20 \pm 0.2$ | 6 | 2.5 | 60 | 20 |
| GN 54.1-SC-16 | 16 | $20 \pm 0.2$ | 2 | 3 | 125 | 30 |
| GN 54.1-SC-20 | 20 | $25 \pm 0.2$ | 5 | 4 | 250 | 60 |
| GN 54.1-SC-25 | 25 | $35 \pm 0.3$ | 7 | 5 | 400 | 134 |
| GN 54.1-SC-32 | 32 | $40 \pm 0.3$ | 4.5 | 6 | 600 | 251 |
| GN 54.1-ND-6 | 6 | $20 \pm 0.2$ | 10 | 1.5 | 10 | 5 |
| GN 54.1-ND-8 | 8 | $20 \pm 0.2$ | 10 | 1.5 | 25 | 8 |
| GN 54.1-ND-10 | 10 | $20 \pm 0.2$ | 8 | 2 | 45 | 12 |
| GN 54.1-ND-13 | 13 | $20 \pm 0.2$ | 6 | 2.5 | 70 | 20 |
| GN 54.1-ND-16 | 16 | $20 \pm 0.2$ | 2 | 3 | 150 | 30 |
| GN 54.1-ND-20 | 20 | $25 \pm 0.2$ | 5 | 4 | 280 | 59 |
| GN 54.1-ND-25 | 25 | $35 \pm 0.3$ | 7 | 5 | 450 | 132 |
| GN 54.1-ND-32 | 32 | $40 \pm 0.3$ | 4.5 | 6 | 700 | 246 |

