GN 5090

Retaining Magnets

**NdFeB, Housing Stainless Steel,
with Internal Thread, Hygienic Design**

SPECIFICATION

Polarity
- **N**: North
- **S**: South

Type
- Type **A**: Flat magnetic surface

Magnet material
NdFeB
Neodymium iron boron
Operating temperature up to 180 °C

Housing
Stainless steel AISI 316L
Matte finish (Ra < 0.8 µm) **MT**
Sealing ring
- H-NBR **H**
  Operating temperature -25 °C to +150 °C
- EPDM **E**
  Operating temperature -40 °C to +120 °C
- FKM **F**
  Operating temperature -5 °C to +200 °C
- FDA compliant material
- Blue
- Hardness 85 ±5 Shore A

INFORMATION

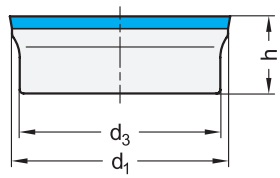
Retaining magnets GN 5090 are designed for use in hygienic areas. The sealed screw-on surface enables mounting without dead spaces; the impervious geometry in combination with the high quality finish prevents dirt from accumulating and facilitates cleaning.
Since non-magnetic stainless steels are generally used in hygienic areas, a holding force is only achieved in combination with holding disks GN 7080 (see page) or GN 7090 (see page). If an increased holding force is required, a second magnet with opposite polarity serves as a counterpart.
To prevent the magnetic properties from being impaired, the mounting screw should also be made of non-magnetic stainless steel.
Thanks to the material used and the enclosed design, the retaining magnets can also be used in particularly aggressive environments.

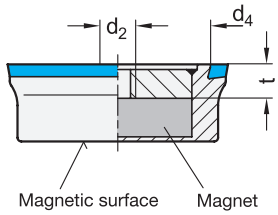
ACCESSORY

- GN 7600 Sealing Rings (see page)
- GN 7080 Holding Disks (see page)
- GN 7090 Holding Disks (see page)
- GN 1580 Nuts (see page)

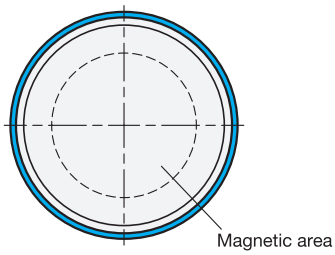
TECHNICAL INFORMATION

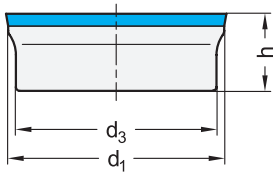
- Assembly Instructions (see page)
- More Information on Retaining Magnets (see page 2022)
- Plastic Characteristics (see page A2)
- Stainless Steel Characteristics (see page A26)

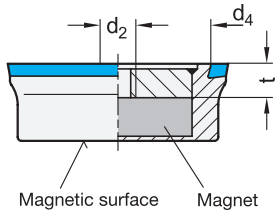




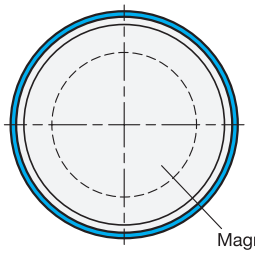
View of magnetic surface







View of magnetic surface



* Complete with

H E F

GN 5090-N

Description	d_1	d_2	d_3	d_4	h	t	Nominal magnetic forces in N Combination with holding disk	Nominal magnetic forces in N Combination of magnet polarity N with polarity S	⚖
GN 5090-28-M4-N-A-MT-*	28	M 4	26	24	10	4	45	60	40
GN 5090-42-M5-N-A-MT-*	42	M 5	40	38	11	5	80	105	104

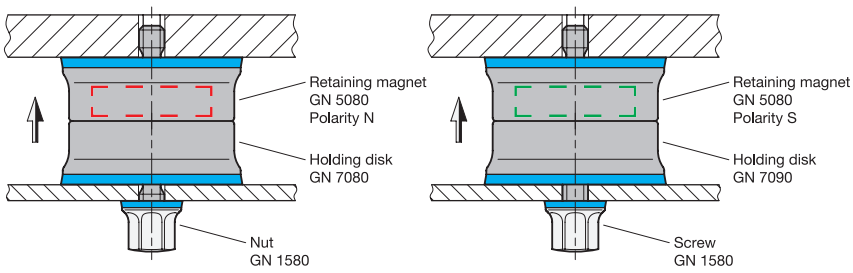
GN 5090-S

Description	d_1	d_2	d_3	d_4	h	t	Nominal magnetic forces in N Combination with holding disk	Nominal magnetic forces in N Combination of magnet polarity N with polarity S	⚖
GN 5090-28-M4-S-A-MT-*	28	M 4	26	24	10	4	45	60	40
GN 5090-42-M5-S-A-MT-*	42	M 5	40	38	11	5	80	105	104

Weight Material H

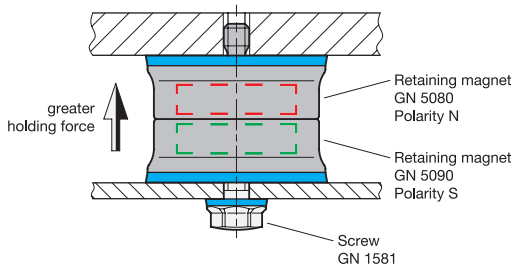
Assembly Instructions GN 5080 / GN 5090 / GN 7080 / GN 7090

Retaining magnet with holding disks



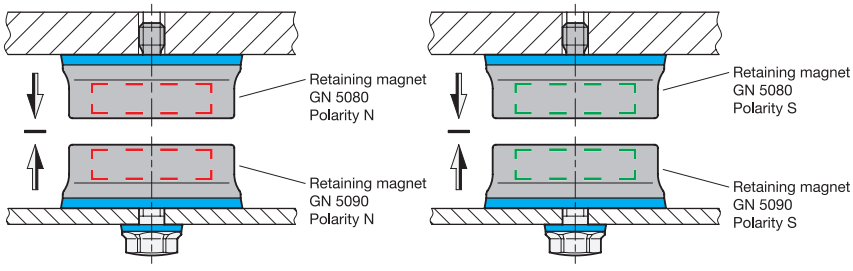
A normal holding force is achieved by combining retaining magnets with holding disks. Retaining magnets with north or south poles on the holding surface can be used equally.

Two retaining magnets with opposite polarity



If two retaining magnets with opposite polarity are combined, an increased holding force is achieved.

Two retaining magnets with the same polarity



Combining two retaining magnets with the same polarity creates a repelling force.