

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

Temperature resistant up to 180 °C

Housing

Stainless steel AISI 316L

Matte finish ($R_a < 0,8 \mu\text{m}$) **MT**

Sealing ring

- H-NBR **H**

Temperature resistant -25 °C to +150 °C

- EPDM **E**

Temperature resistant -40 °C to +120 °C

- Blue

- Hardness 85 ±5 Shore A

- FDA compliant



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

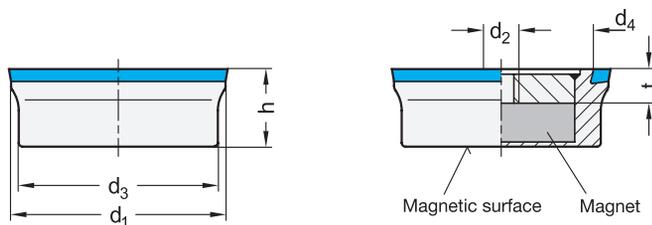
- Sealing Rings GN 7600 (see page)
- Holding Disks GN 7080 (see page)
- Holding Disks GN 7090 (see page)
- Screws GN 1581 (see page)

ON REQUEST

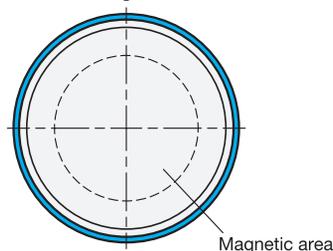
- With FKM sealing ring (fluoro-elastomer) **F**

TECHNICAL INFORMATION

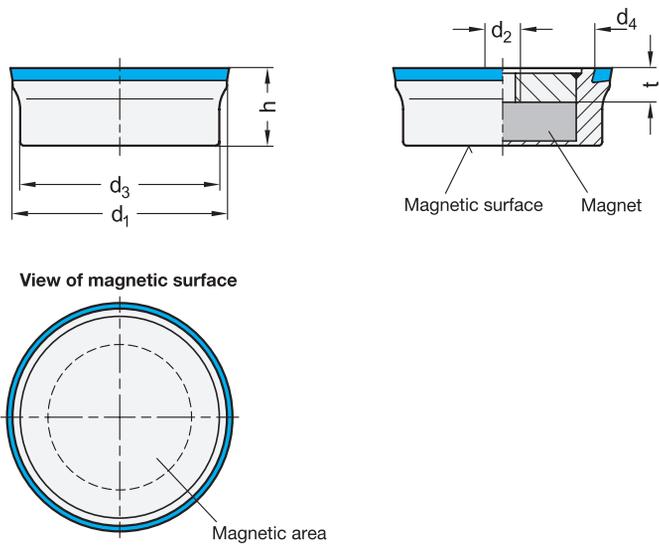
- Plastic Characteristics (see page A2)
- Stainless Steel Characteristics (see page A26)



View of magnetic surface



Magnetic area



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-H	28	M 4	26	24	10	4	45	60	40
GN 5090-28-M4-N-A-MT-E	28	M 4	26	24	10	4	45	60	40
GN 5090-42-M5-N-A-MT-H	42	M 5	40	38	11	5	80	105	104
GN 5090-42-M5-N-A-MT-E	42	M 5	40	38	11	5	80	105	104

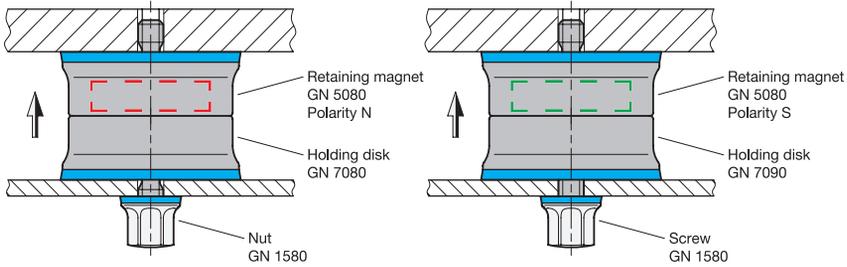
GN 5090-S

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-H	28	M 4	26	24	10	4	45	60	40
GN 5090-28-M4-S-A-MT-E	28	M 4	26	24	10	4	45	60	40
GN 5090-42-M5-S-A-MT-H	42	M 5	40	38	11	5	80	105	104
GN 5090-42-M5-S-A-MT-E	42	M 5	40	38	11	5	80	105	104



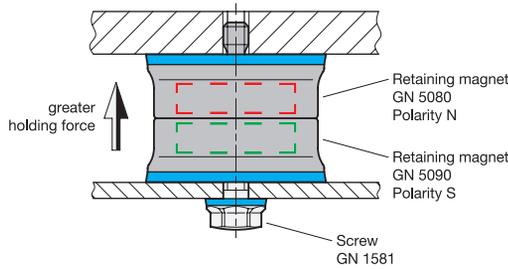
Assembly Instructions GN 5080 / GN 5090 / GN 7080 / GN 7090

Retaining magnet with holding disks



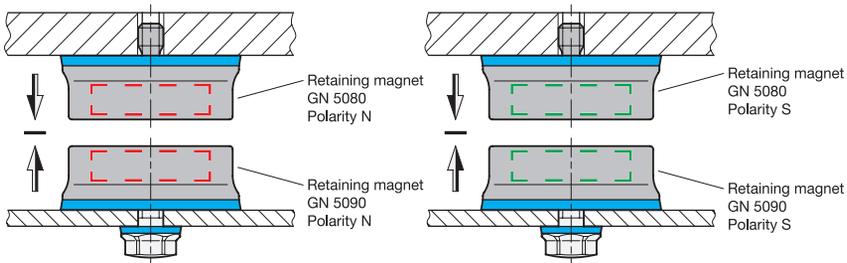
A normal holding force is achieved by combining retaining magnets with holding disks. Retaining magnets with north or south poles on the holding surface can be used equally.

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.