

3 Polarity

- N** North
- S** South

4 Type

- A** Flat magnetic surface

Metric table

1 d ₁	2 d ₂	d ₃	d ₄	h	t	Nominal magnetic forces Combination with holding disk	Combination of magnet polarity N with polarity S
28 <i>1.10</i>	M 4	26 <i>1.02</i>	24 <i>0.94</i>	10 <i>0.39</i>	4 <i>0.16</i>	45 N <i>10.12 lbf</i>	60 N <i>13.49 lbf</i>
42 <i>1.65</i>	M 5	40 <i>1.57</i>	38 <i>1.50</i>	11 <i>0.43</i>	5 <i>0.20</i>	80 N <i>17.99 lbf</i>	105 N <i>23.61 lbf</i>

Dimensions in: millimeters - *inches*

Specification

- Magnet material
NdFeB
Neodymium, iron, boron
Temperature resistant up to 356 °F (180 °C)
- Housing
Stainless steel AISI 316L
Matte finish (Ra < 0.8 µm) **MT**
- Sealing ring
 - H-NBR **H**
Temperature resistant
-13 °F to +302 °F (-25 °C to +150 °C)
 - EPDM **E**
Temperature resistant
-40 °F to +248 °F (-40 °C to +120 °C)
 - Blue
 - Hardness 85 ±5 Shore A
 - FDA compliant
- [Plastic Characteristics](#) → page QVX
- [Stainless Steel Characteristics](#) → page QVX
- [RoHS](#)

Accessory

- Sealing Rings GN 7600 → page QVX
- Holding Disks GN 7080 → page QVX
- Holding Disks GN 7090 → page QVX
- Hex Head Screws GN 1581 → page QVX

On request

- With FKM sealing ring (fluorine rubber) **F**

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 or GN 7090. If an increased holding force is required, a second magnet with opposite polarity can be used 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.

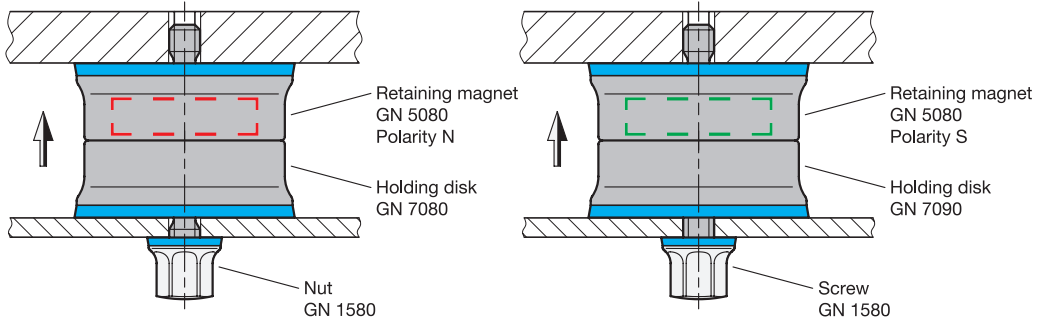
see also...

- [Product Family Hygienic Design](#) → page QVX
- [More Information on Retaining Magnets](#) → page QVX
- [Assembly Instructions for GN 5080 / GN 5090 / GN 7080 / GN 7090](#) → page QVX
- [Retaining Magnets GN 50.4](#) → page QVX
- [Retaining Magnets GN 51.5](#) → page QVX

How to order	
1	Diameter d ₁
2	Thread d ₂
3	Polarity
4	Type
5	Finish
6	Sealing ring material

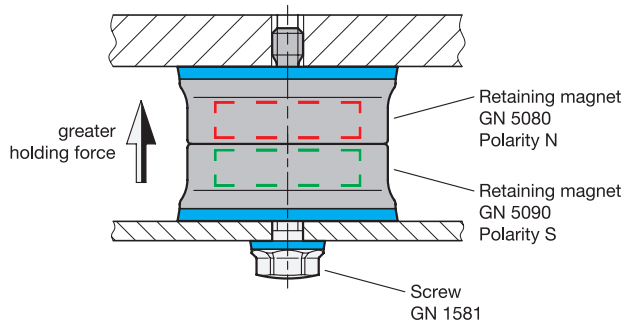
GN 5090-28-M4-N-A-MT-H

Retaining magnet with holding disks



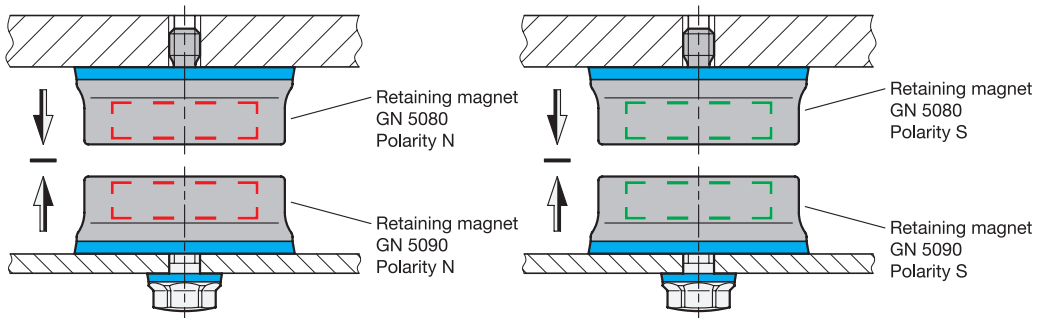
A normal holding force is achieved by combining retaining magnets with holding disks. Retaining magnets with north or south poles on the holding surface can be used equally.

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.