# MAG-4001

Diametrical Magnet

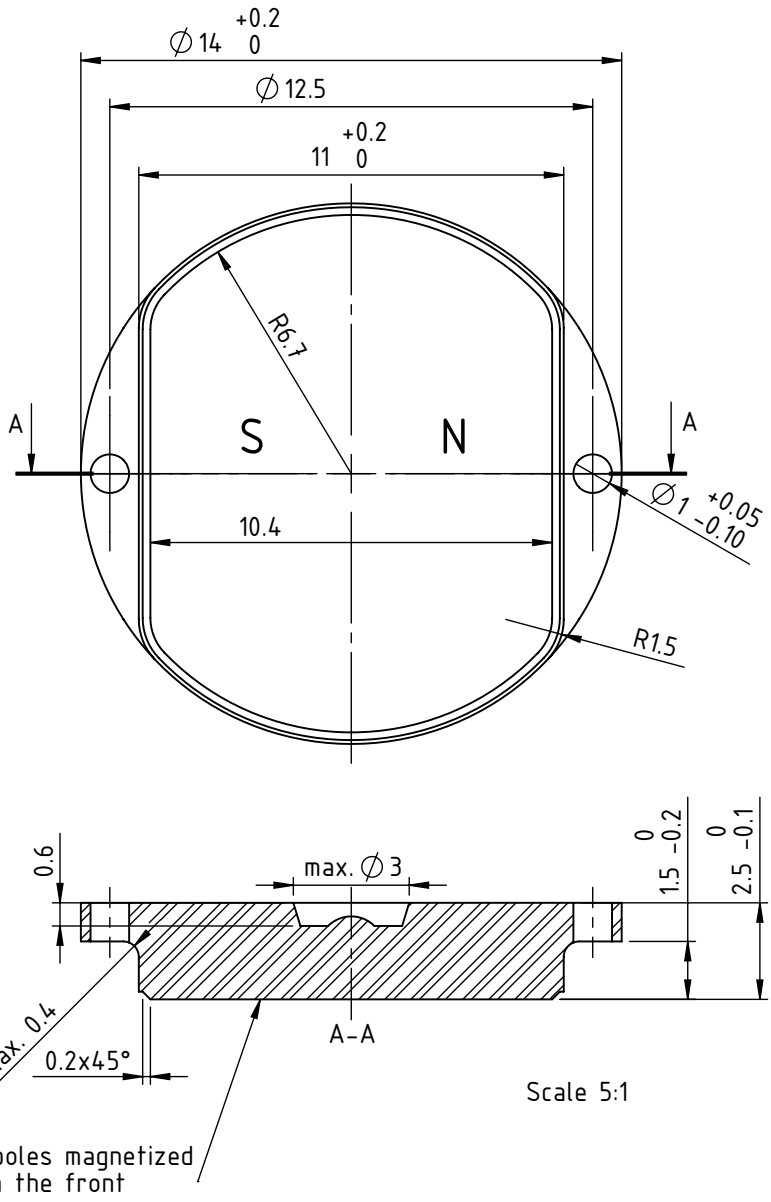
preliminary



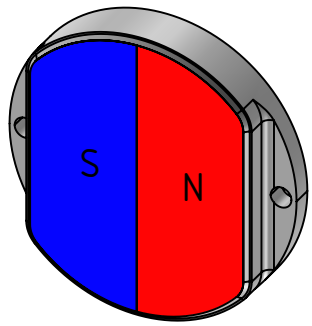
## ORDERING INFORMATION

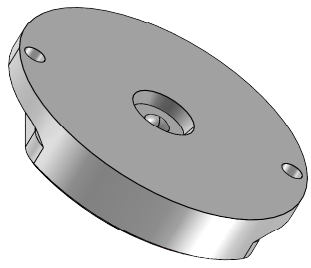
| Type | Order Designation | Description |
|---|---|---|
| Diametrical Magnet | MAG-4001 | Outer Diameter: 14 mm<br>Material: PA11 + NdFeB |

## DIAMETRICAL MAGNET DIMENSIONS




Scale 5:1



Scale 3:1

All dimensions in [mm]

External magnetic fields can change the magnetic properties of the diametrical magnet or damage the magnetization. This may result in reduced system accuracy or failure. Do not bring the part in contact with other permanent magnets. On delivery, the magnets typically stick together in pairs which does not affect the performance of the magnet. Always pull off attracting parts perpendicular to the surface, do not shear them off. The magnets must not be brought together against their repulsive forces, i.e. with the same poles.

## THERMAL DATA

| Item No. | Symbol | Parameter | Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| T01 | Ta | Operating Ambient Temperature Range | | -40 | | 125 | °C |

## CHARACTERISTICS

| Item No. | Symbol | Parameter | Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| C01 | $B_{min}$ | Magnetic Flux Density | Room temperature at 3 mm axial measurement distance | 55 | | | mT |
| C02 | $B_r$ | Remanence | | | 540 | | mT |
| C03 | TKB | Temperature coefficient of the remanence | Temperature range -40 °C...125 °C | | -0.12 | | %/K |
| C04 | HcB | Coercivity HcB | | | 330 | | kA/m |
| C05 | HcJ | Coercivity HcJ | | | 600 | | kA/m |
| C06 | Wt | Weight | | | 1.75 | | g |

## REVISION HISTORY

| Rel. | Rel. Date* | Chapter | Modification | Page |
|---|---|---|---|---|
| A1 | 2023-02-08 | | Initial release | |

| Rel. | Rel. Date* | Chapter | Modification | Page |
|---|---|---|---|---|
| A2 | 2023-02-10 | CHARACTERISTICS | Added item no. C06 (Weight) | 2 |



* Release Date format: *YYYY-MM-DD*