

# Disc magnet Ø 20.0 x 10.0 mm N40 nickel - holds 12 kg

Product number: SM-20x10-N



## Technical specifications

<b>Diameter:</b>	20 mm	<b>Height H:</b>	10 mm
<b>Adhesive force:</b>	12 kg	<b>Material:</b>	Neodymium
<b>Magnetization quality:</b>	N40	<b>Maximum temperature:</b>	80 °C
<b>Coating:</b>	Nickel (Ni-Cu-Ni)	<b>Magnetization direction:</b>	axial (parallel to the height)
<b>Volume:</b>	3142 mm <sup>3</sup>	<b>Weight:</b>	23,88 g
<b>Tolerance:</b>	+/- 0,1 mm		

## Technical specifications for magnetization grade N40

Material	Remanence		Coercivity				Energy product		Maximum temperature
	Br		bHc		iHc		(BxH)max		
	Gauss (G)	Tesla (T) typ.	kOe	kA/m	kOe	kA/m	MGOe	kJ/m <sup>3</sup>	
<b>N40</b>	12600-12900	1.26-1.29	10.5-12.0	860-955	≥ 12	≥ 955	38-40	303-318	≤ 80

## Production information and safety instructions



### The product conforms to the European RoHS Community legislation

The product conforms to the European RoHS Community legislation ( [2002/95/EC - RoHS - Restriction of Hazardous Substances](#)) relating to the use and the employment of certain hazardous substances in electrical and electronic devices.



### Safety Notice

NdFeB magnets are hard and brittle. Especially with thinner dimensions / higher adhesive forces, these can easily break or splinter! An uncontrolled impact of two magnets as well as an external, mechanical shock or pressure load should therefore be avoided!



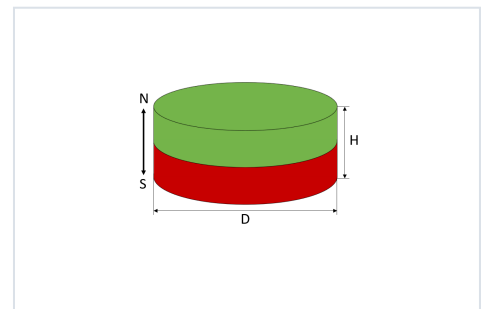
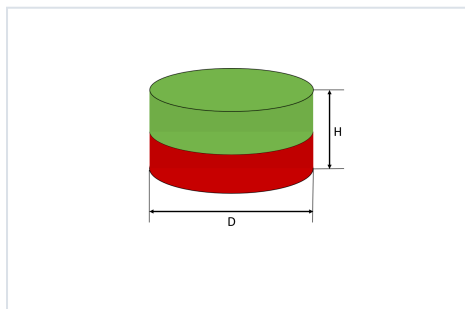
### Determination of the magnetic force

The adhesive force of our magnets is determined at room temperature on a polished plate made of steel S235JR (ST37) with a thickness of 10 mm by the vertical withdrawal of the magnet (1kg ~ 10 N). A different value down to -10% compared to the specified value is possible in exceptional cases. In general, the value is exceeded. Please note that for thinner, painted and not absolute plan undergrounds the adhesive force represents only one raction of the specified values.

⚠ Please observe our safety instructions for this product.

**Manufacturer:** magnets4you GmbH, Bgm.-Dr.-Nebel-Str. 15a, 97816 Lohr a. Main, Deutschland, [service@magnet-shop.net](mailto:service@magnet-shop.net)

## Product images





## Important safety instructions for handling our magnets!

Permanent magnets and magnetic materials require special precautions. Please read the instructions carefully before use. If you have any further questions, please feel free to contact us. The company „magnets4you GmbH“ rejects any liability arising from improper handling of the magnets.

### Handling



#### Increased caution with children:

Keep magnets away from children! Danger of swallowing and serious injuries!



When handling strong magnets, pay attention to appropriate safety measures and protective clothing. Before use, remove all magnetic objects and use protective gloves and glasses.



#### No mechanical processing and collisions!

Incorrect handling of the magnets leads to a loss of the magnetic effect and to the destruction of the magnet. In addition, highly flammable drilling dust and other significant health risks are caused by the following hazards.

### Danger from magnets



#### Injuries

Improper handling of magnets can lead to bruises, contusions, or even broken bones.



#### Splinters

Magnets are brittle. Collisions cause small parts to splinter, which leads to health hazards and damage to the magnet.



#### Magnetic fields

Strong magnets can endanger and destroy electronic and mechanical components (pacemakers, data carriers, credit cards, electronic devices, etc.).



**Persons with cardiac pacemakers must not expose themselves to magnetic fields.**



#### Other Risks

- Many magnets have coatings that some people are allergic to. You should therefore avoid excessive skin contact with raw magnets
- Health hazards when they encounter food and drinking water. Only use magnets that are specifically designed for this area!

### Transportation and shipping



When shipping magnets, applicable regulations for stray magnetic fields during air transport must be observed (IATA dangerous goods regulations). These provisions also apply to built-in magnets.