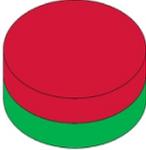




# DATA SHEET

## Supermagnet 12x3 mm - MAGZ-259-P

Diameter D:	12 mm	
Height H:	3 mm	
Strength (approx.):	2,500 g	
Weight (approx.):	2.6 g.	
Magnetisation:	N45	
Coating:	Nickel coating (Ni-Cu-Ni)	
Material:	NdFeB	
Tolerance:	+/- 0,1 mm.	
Working temperature:	80°C	

- Pollutant-free according to RoHS Directive 2011/65/EU.
- TARIC code: 85051100 650
- Origin: China

## RESTRICTIONS

Magnets made of neodymium purchased from us are not intended for sale/export to USA, Canada or Japan. You are strictly prohibited from directly or indirectly exporting the neodymium magnets that you received from us. You are also strictly prohibited from using our magnets in productions and end products sold to the countries mentioned above.

## DISPOSAL / RECYCLING

Small amounts of neodymium magnets can be thrown out as regular trash. Larger amounts need to be recycled as scrap metal. Please recycle when possible.

## SWALLOWING

Children could swallow small magnets. If several magnets are swallowed, they could get stuck in the intestinal system and cause great danger. Magnets are not toys! Make sure that children don't play with magnets.

## ELECTRIC SHOCK

Magnets are made of metal and conduct electricity. Children might try to put magnets into a power outlet and thereby suffer an electric shock. Magnets are not toys! Make sure that children don't play with magnets.

## INJURY

Big magnets have a very strong attractive force. Unsafe handling could cause fingers or skin to get caught between magnets. This could lead to bruises or other injuries. Very large power

magnets could cause bone fractures. Wear heavy protective gloves when handling larger magnets.

## PACEMAKER

Magnets could affect the functioning of pacemakers and implanted heart defibrillators. A pacemaker could switch into test mode and cause illness. A heart defibrillator may stop working. Therefore, if you have a pacemaker or heart defibrillator, keep a safe distance to magnets. In addition, warn others with these devices against getting too close to magnets.

## HEAVY OBJECTS

A magnet or magnetic hook may loosen from the surface it was attached to if you hang objects that are too heavy on it, or if the magnet is defective for some reason. Falling objects could lead to serious injuries. The indicated strength applies only to ideal conditions. Allow for a high safety cushion. Don't use magnets in places where people could get injured in case the magnet fails to work for some reason.

## METAL SPLINTERS

Magnets are brittle and could crack when they hit each other. Sharp splinters could injure your eyes. Wear safety glasses when handling larger magnets. Make sure that people around you are also protected.

## MAGNETIC FIELD

Magnets produce a far-reaching, strong magnetic field. They could damage TVs, laptops, tablets (iPads etc.), computer hard drives, credit and ATM cards, data storage media, mechanical watches, hearing aids and speakers. Keep magnets away from devices and objects that could be damaged by strong magnetic fields.

## FIRE

When machining magnets, the drilling dust could easily ignite. Stay away from machining magnets or use appropriate tools and sufficient cooling water.

## NICKEL ALLERGY

Many of our magnets have coatings that contain nickel. Some people have an allergic reaction when they come into contact with nickel. Nickel allergies could develop from constant contact with nickel-plated objects. Avoid constant skin contact with nickel-plated magnets. Avoid contact with magnets if you already have a nickel allergy.

## AIRFREIGHT

Magnetic fields of magnets that are not packaged correctly for airfreight could affect airplane navigation devices. In the worst-case scenario, it could lead to an accident. Magnets should only be transported by airfreight if they are packaged securely. Please refer to relevant rules and regulations.

## POSTAGE

Magnetic fields of magnets that are not packaged correctly could cause disturbances in sorting machines and damage fragile goods in other packages. Use a large box and place the magnet in the middle surrounded by lots of padding material. Arrange magnets in a package in a way that

the magnetic fields neutralize each other. If necessary, use sheet iron to shield the magnetic field. There are stricter rules for airfreight: Refer to the warning notice "Airfreight".

## AFFECT ON PEOPLE

According to current scientific knowledge, magnetic fields of permanent magnets don't have a measurable positive or negative affect on people. It is unlikely that permanent magnets constitute a health risk, but it cannot be ruled out entirely. For your own safety, avoid constant contact with magnets. Store large magnets at least one meter away from your body.

## COATING

Most of our magnets have a thin nickel-copper-nickel coating to strengthen them. This coating could splinter or crack due to collision or strong pressure. This makes them vulnerable to moisture and other substances. Separate big magnets, especially spheres, with a piece of cardboard. Avoid collisions of magnets as well as repeated mechanical exposure (e.g. blows, bashes).

## OXIDATION, CORROSION, RUST

Untreated magnets oxidize quickly and disintegrate. Most of our magnets have a nickel-copper-nickel coating to protect them from corrosion. This coating provides some protection against corrosion, but it is not robust enough for continuous outdoor use. Only use power magnets indoors or protect them against rain, etc. Avoid damaging the coating.

## TEMPERATURE STABILITY

Magnets can withstand temperatures of between 80 and 200°C, depending on the particular type of magnet material. Most of our magnets lose part of their strength permanently at a temperature of 80 °C. Don't use magnets in places where they are exposed to extreme heat. If you use a glue, don't harden it with hot air.

## MECHANICAL TREATMENT

Magnets are brittle, heat-sensitive and oxidize easily. When sawing or drilling into a magnet with the wrong tools, the magnet may break. The emerging heat may demagnetize the magnet. The magnet will oxidize and disintegrate due to the damaged coating. Avoid machining magnets if you do not have the necessary machines and experience.