

# Data sheet article FE-S-12-05

## Technical data and application safety

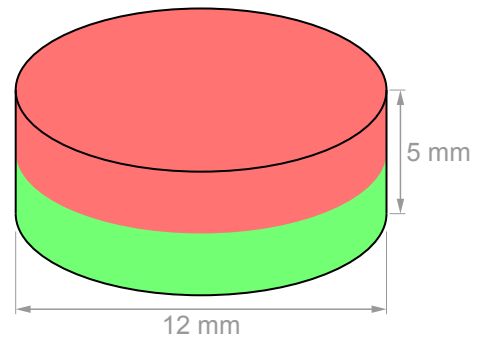
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### 1. Technical information

Article ID	FE-S-12-05
EAN	7640155432023
Material	Ferrite
Shape	Disc
Diameter	12 mm(+/- 0,1 mm)
Height	5 mm(+/- 0,1 mm)
Direction of magnetisation	axial (parallel to height)
Coating	no coating
Manufacturing method	sintered
Magnetisation	Y35
Strength	approx. 400 g (approx. 3,92 N)
Max. working temperature	250°C
Weight	2,7426 g
Curie temperature	450 °C
Residual magnetism Br	4000-4100 G, 0.40-0.41 T
Coercive field strength bHc	2.20-2.45 kOe, 175-195 kA/m
Coercive field strength iHc	2.26-2.51 kOe, 180-200 kA/m
Energy product (BxH)max	3.8-4.0 MGOe, 30.0-32.0 kJ/m <sup>3</sup>





Pollutant-free according to RoHS Directive 2011/65/EU.


### 2. Safety tips


	<b>Swallowing</b> Children could swallow small magnets. If several magnets are swallowed, they could get stuck in the intestine and cause perilous complications. Magnets are not toys! Make sure that children don't play with magnets.
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### 3. Handling and storing

	<b>Magnetic field</b> Magnets produce a far-reaching, strong magnetic field. They could damage TVs and laptops, computer hard drives, credit and ATM cards, data storage media, mechanical watches, hearing aids and speakers. <ul style="list-style-type: none"><li>• Keep magnets away from devices and objects that could be damaged by strong magnetic fields.</li><li>• Please refer to our table of recommended distances: <a href="http://www.supermagnete.de/eng/faq/distance">www.supermagnete.de/eng/faq/distance</a></li></ul>
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<b>Caution</b> 	<p><b>Nickel allergy</b></p> <p>Many of our magnets contain nickel, also those without nickel coating.</p> <ul style="list-style-type: none"> <li>• Some people have an allergic reaction when they come into contact with nickel.</li> <li>• Nickel allergies could develop from perpetual contact with nickel-plated objects.</li> </ul> <ul style="list-style-type: none"> <li>• Avoid perpetual skin contact with magnets.</li> <li>• Avoid contact with magnets if you already have a nickel allergy.</li> </ul>
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<b>Notice</b> 	<p><b>Influence on people</b></p> <p>According to the current level of knowledge, magnetic fields of permanent magnets do not have a measurable positive or negative influence on people. It is unlikely that permanent magnets constitute a health risk, but it cannot be ruled out entirely.</p> <ul style="list-style-type: none"> <li>• For your own safety, avoid constant contact with magnets.</li> <li>• Store large magnets at least one metre away from your body.</li> </ul>
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<b>Notice</b> 	<p><b>Temperature resistance</b></p> <p>Ferrite magnets can be used at temperatures between -40°C and 250°C. At lower and higher temperatures they lose part of their adhesive force permanently.</p> <p>Don't use ferrite magnets in places where they are exposed to temperatures below -40°C or above 250°C.</p>
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<b>Notice</b> 	<p><b>Mechanical treatment</b></p> <p>Ferrite magnets are brittle. When drilling or sawing a magnet with improper tools, the magnet may break.</p> <p>Stay away from mechanical treatment of magnets if you do not possess the necessary equipment and experience.</p>
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#### 4. Transportation tips

<b>Caution</b> 	<p><b>Airfreight</b></p> <p>Magnetic fields of improperly packaged magnets could influence airplane navigation devices. In the worst case it could lead to an accident.</p> <ul style="list-style-type: none"> <li>• Airfreight magnets only in packaging with sufficient magnetic shielding.</li> <li>• Please refer to the respective regulations: <a href="http://www.supermagnete.de/eng/faq/airfreight">www.supermagnete.de/eng/faq/airfreight</a></li> </ul>
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<b>Caution</b> 	<p><b>Postage</b></p> <p>Magnetic fields of improperly packaged magnets could cause disturbances in sorting machines and damage fragile goods in other packages.</p> <ul style="list-style-type: none"> <li>• Please refer to our shipping tips: <a href="http://www.supermagnete.de/eng/faq/shipping">www.supermagnete.de/eng/faq/shipping</a></li> <li>• Use a large box and place the magnet in the middle surrounded by lots of padding material.</li> <li>• Arrange magnets in a package in a way that the magnetic fields neutralise each other.</li> <li>• If necessary, use sheet iron to shield the magnetic field.</li> <li>• There are stricter rules for airfreight: Refer to the warning notice "Airfreight".</li> </ul>
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**TARIC-Code:** 8505 1100 99 0

**Origin:** China

For more information about magnets please review  
[www.supermagnete.de/faq.php](http://www.supermagnete.de/faq.php).

**Last update:** 29/06/2012