

Data sheet article FE-R-100-60-20

Technical data and application safety

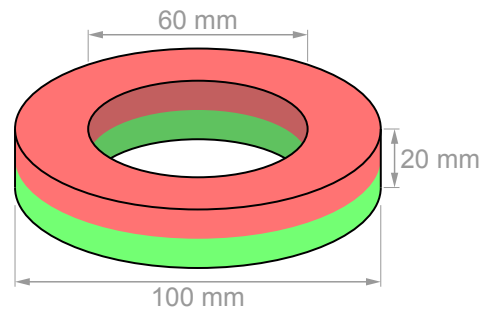
Webcraft GmbH
Industriepark 206
78244 Gottmadingen, Germany

Phone: +49 7731 939 839 2

www.supermagnete.de
support@supermagnete.de



1. Technical information


Article ID	FE-R-100-60-20
EAN	7640155431910
Material	Ferrite
Shape	Ring
Outer diameter	100 mm(+/- 2,0 mm)
Inner diameter	60 mm(+/- 1,2 mm)
Height	20 mm(+/- 0,1 mm)
Direction of magnetisation	axial (parallel to height)
Coating	no coating
Manufacturing method	sintered
Magnetisation	Y35
Strength	approx. 16 kg (approx. 157 N)
Displacement force	approx. 3,2 kg (approx. 31,4 N)
Max. working temperature	250°C
Weight	487,5748 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 ³




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


2. Safety tips


Warning 	Contusions Big magnets have a very strong attractive force. Unsafe handling could cause jamming of fingers or skin in between magnets. This may lead to contusions and bruises. Wear heavy protective gloves when handling larger magnets.
Warning 	Pacemaker Magnets could affect the functioning of pacemakers and implanted heart defibrillators. <ul style="list-style-type: none">• A pacemaker could switch into test mode and cause illness.• A heart defibrillator may stop working.• If you wear these devices keep sufficient distance to magnets: www.supermagnete.de/eng/faq/distance• Warn others who wear these devices from getting too close to magnets.


Warning 	Heavy objects <p>Too heavy loads, symptoms of fatigue as well as material defect could cause a magnet or magnetic hook to loosen from the surface that it was attached to. Falling objects could lead to serious injuries.</p> <ul style="list-style-type: none"> • The indicated adhesive force applies only to ideal conditions. Allow for a high safety cushion. • Don't use magnets in places where people could sustain injuries in case of material failure.
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3. Handling and storing

Caution 	Magnetic field <p>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.</p> <ul style="list-style-type: none"> • Keep magnets away from devices and objects that could be damaged by strong magnetic fields. • Please refer to our table of recommended distances: www.supermagnete.de/eng/faq/distance
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Caution 	Nickel allergy <p>Many of our magnets contain nickel, also those without nickel coating.</p> <ul style="list-style-type: none"> • Some people have an allergic reaction when they come into contact with nickel. • Nickel allergies could develop from perpetual contact with nickel-plated objects. • Avoid perpetual skin contact with magnets. • Avoid contact with magnets if you already have a nickel allergy.
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Notice 	Influence on people <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"> • For your own safety, avoid constant contact with magnets. • Store large magnets at least one metre away from your body.
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Notice 	Temperature resistance <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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Notice 	Mechanical treatment <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

Caution 	Airfreight <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"> • Airfreight magnets only in packaging with sufficient magnetic shielding. • Please refer to the respective regulations: www.supermagnete.de/eng/faq/airfreight
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<p>Caution</p> 	<p>Postage</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">• Please refer to our shipping tips: www.supermagnete.de/eng/faq/shipping• 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 neutralise each other.• If necessary, use sheet iron to shield the magnetic field.• There are stricter rules for airfreight: Refer to the warning notice "Airfreight".
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TARIC-Code: 8505 1100 99 0

Origin: China

For more information about magnets please review
www.supermagnete.de/faq.php.

Last update: 29/06/2012