

Datasheet

Magnetic Tape



ECLIPSE
MAGNETICS



DISPLAY

At A Glance

- Flexible magnetic material
- Easily cut to length
- Adhesive backed for quick fixing
- Multiple poles on one face
- Up to 30m long reel lengths

Display Range



Our Magnetic Tape is a first choice for creating magnetic displays. Being a Strontium Ferrite magnetic material combined with a thermo-plastic binder the Magnetic Tape is flexible and very easy to cut to length to let you create the perfect magnetic solution for your application.

The Magnetic Tape can be cut to length simply using scissors or a craft knife. It is magnetised multiple poles on one side only; the other side has the adhesive layer.

The adhesive layer is a standard acrylic adhesive covered with a protective quick release liner. Once you have cut the Magnetic Tape to your required length, simply peel away the protective adhesive liner and firmly press the adhesive layer onto the part you want it to adhere to. The adhesive is a pressure adhesive - it needs a firm press to get the adhesive to work properly. The standard acrylic adhesive is ideal for applying to cardboard and paper.

Magnetic Performance is stated as a pull force per unit of surface area and is dependent on the magnetic material thickness. It is usually used against ferrous surfaces such as steel tape, fridge doors, etc. It can also be used against another Magnetic tape but bear in mind the polarities may not line up in attraction perfectly (the 10mm and 20mm versions line up well against themselves as they are 'Self-Mating'; the 12.5/12.7mm and 25.4mm may be 'A' or 'B' magnetic pattern - 'A' on 'B' gives better alignment). The more surface area used, the more the magnetic tape will hold onto the surface. For maximum performance, you need direct contact - as soon as you put anything in the way, the pull force starts to reduce. The higher rated materials work better through gaps such as sheet(s) of paper - 0.5mm thick is rated at 28g/cm² (0.398lb/in²), 0.75mm is rated at 44g/cm² (0.625lb/in²) and 1.5mm thick is rated at 55g/cm² (0.782lb/in²). Above 60 degrees C the magnetic pattern will soften and weaken; below -20 degrees C the magnetic material risks starting to demagnetise. The adhesive layer is 0.04-0.05mm thick (rough guide) - it is not included in the thickness values.

Benefits

- Flexible magnetic material
- Easily cut to length from reels up to 30 metres long
- Acrylic adhesive backing with quick release liner - press in place to bond
- Up to 60°C (140°F) maximum recommended operating temperature
- Magnetised as multiple poles on one side for improved direct contact hold

Materials

Magnetic Material	Strontium Ferrite (isotropic) in thermo-plastic binder
Other Parts	Acrylic adhesive, adhesive liner

Performance

Magnetic Performance	Up to 55g/cm ² (0.782lb/in ²) pull force rating
Magnet Type	Isotropic Strontium Ferrite in a binder
Temperature Range	-40°C to +60°C (-40°F to +140°F)

Maintenance

- There is no specific maintenance or cleaning requirements for this product
- Keep part warmer than -40°C (-40°F), ideally above -20°C (-4°F)
- Keep part cooler than +60°C (+140°F)

Suitability

Suitable Products	Ferrous materials (e.g. mild steel, fridge doors, etc)
Suitable Location	Packaging, Point of Sale, Arts & Craft, Retail, etc

Alternatives

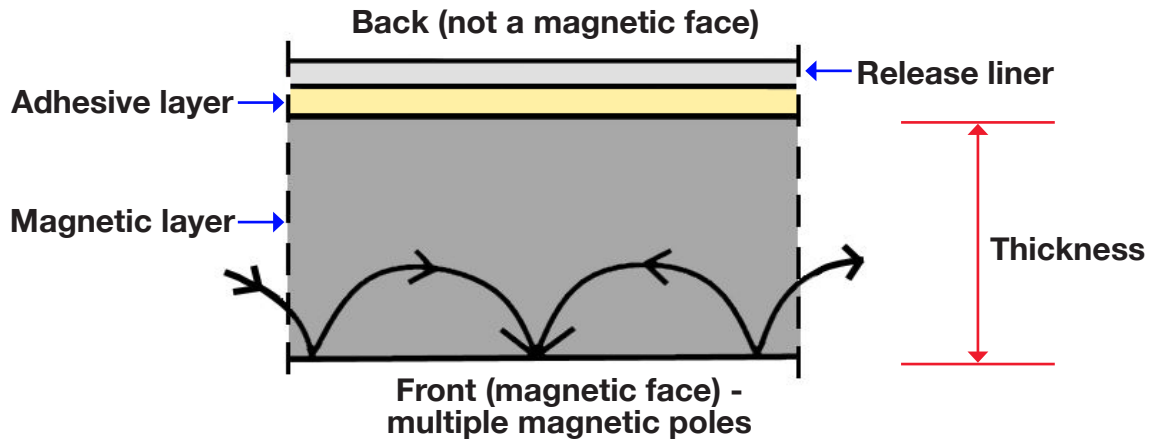
- Premium acrylic Magnetic Tape (better for adhesion to metals and plastics)
- Foam-backed acrylic Magnetic Tape (better for adhesion to uneven surfaces)
- Magnetic Extrusion (more pull); Magnetic Sheet (wider plain, vinyl, adhesive)

Eclipse Magnetics Work Smart with Magnets

Atlas Way, Atlas North, Sheffield, S4 7QQ, England ☎ +44 (0)114 225 0600 📠 +44 (0)114 225 0610 ✉ info@eclipsemagnetics.com 🌐 www.eclipsemagnetics.com



A Spear & Jackson Company



Product Number	Dimensions			Weight (kg)	Backing Material	Multiple Poles Layout	Specific Polarity Type**	Pull Force* g/cm ²	Units per Pack
	Width (mm)	Thickness (mm)	Length (m)						
EM884-R	13	0.5	1	0.027	Acrylic adhesive backed	Along length	N/A	28	1
FM660	7.5	0.75	10	0.240	Acrylic adhesive backed	Across width	N/A	44	1
FM661	12.5	0.75	10	0.390	Acrylic adhesive backed	Across width	'A'	44	1
FM662	20	0.75	10	0.630	Acrylic adhesive backed	Across width	'Self-Mating'	44	1
FM652	10	1.5	30	1.7	Acrylic adhesive backed	Across width	'Self-Mating'	55	1
FM663	12.7	1.5	30	2.1	Acrylic adhesive backed	Across width	'A'	55	1
FM664	20	1.5	30	3.3	Acrylic adhesive backed	Across width	'Self-Mating'	55	1
FM665	25.4	1.5	30	4.2	Acrylic adhesive backed	Across width	'B'	55	1

* The pull force is based on the Magnetic Tape pulling in direct contact (no air gap) against a thick mild steel surface.

**The Magnetic Tape is magnetised multiple parallel pole across its surface. 'Self-Mating' materials can magnetically overlay in attraction to each other in near perfect alignment. 'A' material will magnetically overlap near perfectly against 'B' material. It is possible to overlap 'A' against 'A' or 'B' against 'B' but there may be a slight offset in overlap (sometimes reduced if you turn the ends of one of the tapes around (offset due to magnetic poles needing to align in an attractive layout of North pulling a South on the other part). Products listed above as N/A are actually cut (slit) from much wider rolls so they have the same magnetic pole pattern type as the 'A' and 'B' but the start position of a pole relative to the edge of the width may vary, so it will attract to itself or the 'A' and/or 'B' types but alignment position may vary between rolls.

The EM884-R is magnetised multiple pole along the length - it only attracts to itself or a ferrous surface.

If any Magnetic Tape is put against a mild Steel Tape (or any other ferrous surface e.g. fridge door, metal filing cabinet), it will attract and magnetically hold in place. It can then be slid into optimum place as needed.

For further assistance, please contact sales@eclipsemagnetics.com

Although we have made every attempt to provide accurate information, we do reserve the right to change any of the information in this document without notice.

We cannot accept any responsibility or liability for any errors or problems caused by using any of the information provided.

Conversions Guide:-

28g/cm² ≈ 0.398lb/in²

44g/cm² ≈ 0.625lb/in²

55g/cm² ≈ 0.782lb/in²

(the above conversion values are rounded down)

