

Datasheet

Magnetic Extrusion



ECLIPSE
MAGNETICS



DISPLAY

At A Glance

- ✓ Extruded Flexible magnetic material
- ✓ Easily cut to length
- ✓ Higher pull force rating than Tape
- ✓ Magnetic Poles on one side only
- ✓ Up to 10m long reel lengths

Display Range



Our Magnetic Extrusion is a thicker version of Flexible Magnetic Tape allowing for a higher pull force rating.

It forms a strong magnetic bond when paired against itself making it ideal for use in applications such as shower door and other enclosures. It is magnetic on one side only.

The Magnetic Tape can be cut to length using a craft knife, secateurs or other powerful cutting tool.

The Magnetic Extrusion is thicker than Magnetic Tape but uses the same composition of a Ferrite Magnet powder in a binder which is magnetised on one side with a pole pattern. Being thicker it has an increase pull force rating of $65\text{g}/\text{cm}^2$ ($0.923\text{lb}/\text{in}^2$). Each version is designed to attract to itself to form a strong magnetic attraction bond. This makes it ideal for use in enclosures such as shower doors.

Only the EM888-R (Pairs) version has an adhesive backing. All the other versions are plain finish (no adhesive backing) - in most applications the end user uses an adhesive to bond the Magnetic Extrusion in place. Being thicker than Magnetic Tape, the Magnetic Extrusion will not cut so easily with scissors so we recommend cutting to length with a Craft Knife or with Secateurs (or other good cutting tool). The Magnetic Extrusion retains good flexibility but is less flexible the thicker it gets.

For maximum performance, you need direct contact - as soon as you put anything in the way, the pull force starts to reduce. Above 60°C the magnetic pattern will soften and weaken; below -20°C the magnetic material risks starting to demagnetise. The adhesive layer is $0.04\text{--}0.05\text{mm}$ thick (rough guide) - it is not included in the thickness values.

Benefits

- Flexible magnetic extrusion material
- Easily cut to length from reels up to 10 metres long
- Higher pull force of up to $65\text{g}/\text{cm}^2$ ($0.923\text{lb}/\text{in}^2$)
- Up to 60°C (140°F) maximum recommended operating temperature
- Magnetised multiple pole on one side for improved direct contact hold

Materials

Magnetic Material	Strontium Ferrite (isotropic) in thermo-plastic binder
Other Parts	Acrylic adhesive & adhesive liner - EM888-R (pairs) only

Performance

Magnetic Performance	Up to $65\text{g}/\text{cm}^2$ ($0.923\text{lb}/\text{in}^2$) pull force rating
Magnet Type	Isotropic Strontium Ferrite in a binder
Temperature Range	-40°C to $+60^\circ\text{C}$ (-40°F to $+140^\circ\text{F}$)

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 $+60^\circ\text{C}$ ($+140^\circ\text{F}$)

Suitability

Suitable Products	Ferrous materials (e.g. mild steel, fridge doors, etc)
Suitable Location	Shower Doors, 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 tape (thinner)
- Magnetic Sheet (wider but thinner)

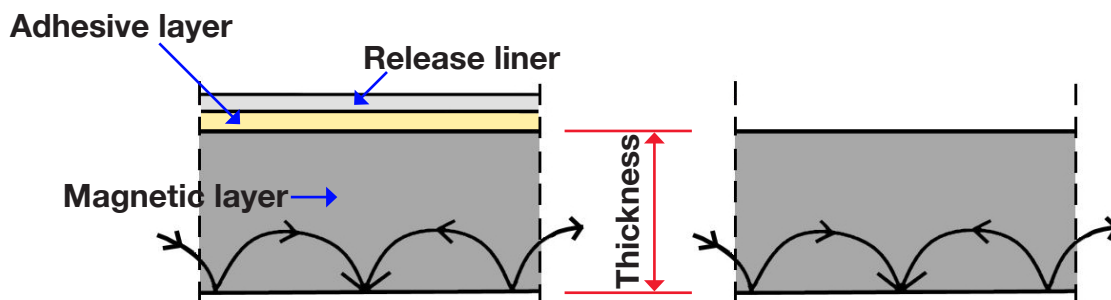
Eclipse Magnetics Work Smart with Magnets

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Back (not a magnetic face)



Front (magnetic face) - multiple magnetic poles

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)						
EM888-R (Pairs)	9.5	3.6	0.15	0.021	Acrylic adhesive backed	Across width	N/A	65	1 Pair
EM880-R	9.5	3.6	2	0.026	None - Plain	Across width	N/A	65	1
FM670	9.5	3.6	10	1.44	None - Plain	Across width	N/A	65	1
FM671	11	4.6	10	2.07	None - Plain	Across width	N/A	65	1
FM672	15	6.4	10	3.64	None - Plain	Across width	N/A	65	1

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

**Products listed above as N/A have magnetic patterns which are specific to the profile and are meant for attraction to either the same Product or to a ferrous surface - they may attract to another Product Number version but there may not be perfect alignment of one part over another when doing so (as they may not have the same magnetic polarity arrangement as other Product Number versions).

If any Magnetic Extrusion 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)



FM 31278

EMS 616377