

# YSHIELD® M2A | Magnetic field shielding foil with aluminum surface | Width 21 cm | 1 Meter

Two-layer shielding foil 12-22 dB for magnetic fields. With aluminum top 125 dB high frequency shielding. Super thin and inexpensive.



YSHIELD® M2A



YSHIELD® M2A

M2A is a super-thin magnetic field shielding foil for shielding low-frequency magnetic fields. **For this product we have bonded 2 layers of high-tech magnetic field shielding foil. The underside is protected with laminating film and we use aluminum as the surface, which is why the film is also ideal for high-frequency shielding.**

Suitable for small areas in the domestic environment, in electronics, as well as for large areas in construction, trade or industry. The roll length of 100 meters is particularly advantageous on large surfaces for efficient laying. It can also be used in a wide range of applications in cars, electric cars, vans, motorhomes and caravans.

## Technical data

- **Width: 21 cm (Shielding surface);** 24 cm (total product)
- **Length: Available by the meter /** 100 meter rolls
- Thickness: 0.12 mm
- **Attenuation high frequency: 125 dB**
- **Attenuation magnetic fields (Three-phase 50 Hz): Single-layer 12.1 dB (75.1 %), two-layer 16.3 dB (84.7 %), three-layer 19.5 dB (89.4 %), four-layer 21.7 dB (91.8 %)**
- Attenuation magnetic fields (Single-phase 50 Hz): Single-layer 10.5 dB (70.1 %), two-layer 13.3 dB (78.3 %), three-layer 16.0 dB (84.1 %), four-layer 18.6 dB (88.2 %)
- Shielding magnetic field (static): DC consumers, earth's magnetic field, permanent magnets are only shielded in a relevant manner with very many layers.
- Minimum bending radius: 10 mm
- For reasons of innovation, we do not declare ingredients and magnetic key figures. **The high-tech material has a high initial permeability and high saturation induction from 5 Hz to 100 kHz.**

## Processing

**Attention:** You can cut M2A with high-quality scissors! The cut edges are very sharp and must be protected immediately after cutting, e.g. with adhesive tape! Use cut-resistant gloves when working! For larger wall surfaces, make sure that the material is a vapor barrier. **Application:** Choose an adhesive that can bond the PET (polyethylene terephthalate) laminating film. There are high-viscosity mounting adhesives for solid surfaces, for example, or flexible plastic adhesives for bonding under car carpets, for example. Follow the adhesive manufacturer's instructions. Non-absorbent substrates or multiple layers can be problematic because the solvent cannot dry out due to the vapor-tight film. For this reason, we recommend our own adhesive **YSHIELD® PSA**, which forms a self-adhesive layer after application and drying. **Application using a stapler or nailer:** If the substrate is suitable, we recommend using an electric stapler or nailer. For one layer including overlap, a medium-priced electric tacker is sufficient; for two or more layers, you will need a professional nailer. The shielding surface must overlap by at least 3 cm. **Multilayer installation:** Always install the plates in an offset position - the surface is to cover the overlapping underneath. **High-frequency shielding:** The aluminum top side provides excellent shielding against high-frequency fields. To do this, the sheets must overlap by 3 cm. As the laminating foil on the underside creates a thin gap despite the overlap, we recommend the use of our shielding tape **HNX50**.

## Grounding

This product with an electrically conductive surface **has to be integrated into the functional-equipotential bonding (FEB)**. Please find suitable grounding accessories under "Grounding".

## Laboratory & expert report

We have already invested in our **own professional EMV laboratory** years ago. We not only use it to create our laboratory screening reports but also to check each batch daily. Additionally, we have all our products checked by an **independent, well-respected expert**. Double checked for twice the safety. Please find the reports above at the downloads.

Magnetic shielding films M2L, M2A MAGNETIC SHIELDING 1 layer 2 layer 3 layer 4 layer 10 Hz 100 Hz 1 kHz 10 kHz



Magnetic shielding films M2L, M2A MAGNETIC SHIELDING 1 layer 2 layer 3 layer 4 layer 10 Hz 100 Hz 1 kHz 10 kHz



Magnetic field shielding foil M2A Screening attenuation to ASTM 1 layer 10 GHz 40 GHz

