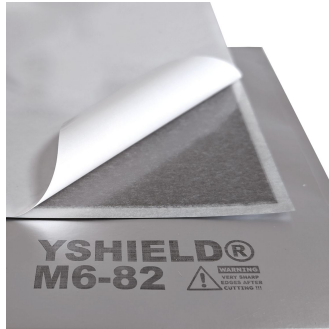


# YSHIELD® M6-82 | Magnetic field shielding plate | 80x21 cm

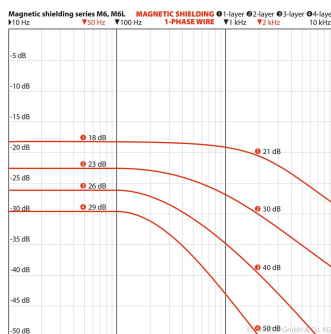
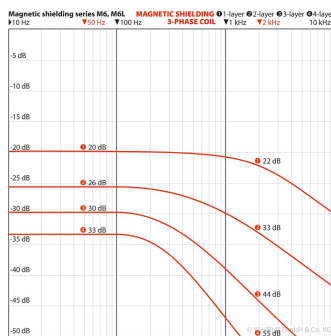
Self-adhesive with groundable aluminum surface. Universally applicable on small to very large surfaces. Very flat without overlap. 20-33 dB shielding at 50 Hz



YSHIELD® M6-82



YSHIELD® M6-82



**M6-82 is a flexible magnetic field shielding plate** for shielding low frequency magnetic fields, the **bottom is lined with a self adhesive layer, the upper side is lined with aluminium**. Thus, the M6-series is universally applicable. Narrow bending radii and right-angled bends can be realized without a loss in shielding attenuation. The self-adhesive layer is based on a high-quality permanent **low-VOC acrylic adhesive with minimal odour**. The aluminium surface offers a high frequency shielding of 120 dB if necessary (e.g. in MRI rooms). Single-layer processing has the best price/performance ratio, for higher magnetic flux densities, multi-layer processing is required. For this product, we have **connected 6 very thin shielding foils together**, because several thin layers provide better shielding than one thick sheet.

It is suited for **small surfaces in a domestic environment**, as well as for **large surfaces in construction, trade or industry**. Additionally there are various application possibilities in **cars, electric vehicles, vans, mobile homes, campers**.

## Technical data

- **Size: 80 x 21 cm (shielding surface); 82 x 23 cm (total product)**
- Thickness: 0.6 mm
- **Attenuation magnetic fields (Three-phase 50 Hz): Single-layer 20 dB (89.4 %), two-layer 26 dB (94.8 %), three-layer 30 dB (96.9 %), four-layer 33 dB (97.7 %)**
- Attenuation magnetic fields (Single-phase 50 Hz): Single-layer 18 dB (87 %), two-layer 23 dB (93.1 %), three-layer 27 dB (95.4 %), four-layer 29 dB (96.6 %)
- Attenuation magnetic fields (Static): DC consumers, earth magnetic field, permanent magnets are shielded in a range from 15 % (single-layer) to 58 % (four-layer)
- Corrosion resistance: Corresponds to that of aluminum
- Minimum bending radius: 20 cm
- 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 50 kHz**. In addition, static magnetic fields at 0 Hz are shielded, as are electromagnetic fields up to 40 GHz.

## Processing

**Attention:** The M6-series can be cut with high-quality scissors! The cutting edges are as sharp as knives and need to be protected (e.g. with fabric tape) immediately after cutting! Use cut-resistant gloves during processing! We recommend planning the installation of the plates in a way that you do not have to cut them! Pay attention with larger wall spaces that the plates are a water vapour barrier.

**Application:** This product has a permanent acrylic adhesive on the back side, which sticks to clean, grease-free and even surfaces. Pull off the protective film and glue the film with our scraper FVR10. Work carefully but do not press too hard to avoid damaging the aluminum surface. All plates of the shielding surface must overlap by at least 2 cm. **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 2 cm. **Multilayer installation:** Always install the plates in an offset position - the surface is to cover the overlapping underneath. **High-frequency shielding:** The electrically conductive aluminum surface has an HF shielding attenuation of 120 dB, transition points to other shielding components can be easily sealed with aluminum adhesive tape.

## Grounding

When shielding magnetic fields, also pay attention to the electric fields. Grounding must be carried out to prevent the spread of electric fields. This is particularly easy with the M6 series with aluminum surface: For contacting, stick our GSX10 or GSX50 earthing tape to the aluminum surfaces of all mounted panels. Further components can be found 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.**