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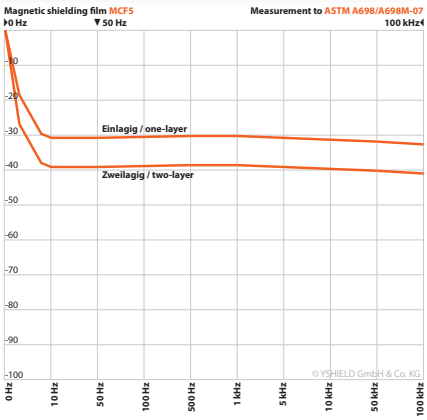
Magnetic shielding film MCL5 (magnetic field LF)

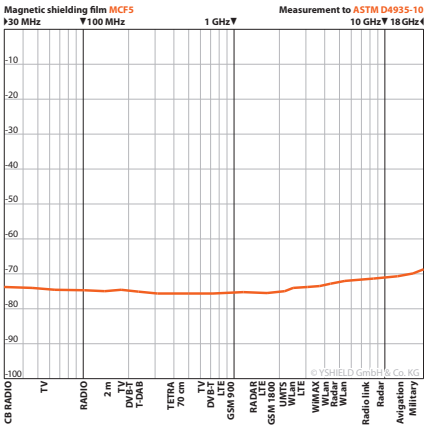
Characteristics

MCL5 is a **magnetic shielding film made from an amorphous cobalt alloy** for the shielding of low-frequency **magnetic alternating fields**. Also shields low-frequency electric alternating fields (LF) and high-frequency fields (HF).

Because MCF5 has a width of only 5 cm, its recommended for **shielding smaller areas, e.g. in electronic applications or for cables**.

In comparison with MUMETALL® our MCF5 has many advantages: MUMETALL® is soft and sensitive, on bending, to shocks and on processing it looses the attenuation very fast. MCF5 stays **flexible but hard** even at small bending radii. The attenuation remains constant even at **high mechanical stress**. MCF5 can easily be cut with scissors.





Technical data

- **Width: 5 cm**
- **Length: Rolls** with 1 m (0.05 m^2), 20 m (1 m^2), 100 m (5 m^2)
- **Attenuation LF magnetic field: 30 dB (97 %);**
  The attenuation depends on the number of phases, cable twisting, the size of the area, etc.; Work in large areas: Shield cables with 1-2 sheets, fuse-boxes with 2-4 sheets;
- **Attenuation HF: 75 dB**
- Weight: 180 g/m^2; Material thickness: 0.02 mm; Color: Silver
- Permeability: μ 4 = 25,000; μ max. = 100,000;
  Saturation polarization: 0.55 T
- Composition: Co69, Fe4, Mo4, Nb1, Si16, B7

Processing

Warning: The cutting edges are sharp as a knife! Best use our plastic scraper FVR10 to press it on the adhesive tapes or into the glue, this is the safe way to keep your fingers! There is no self adhesive version available. However, bonding is easily possible: Please use a double sided adhesive tape e.g. Carpet adhesive tape with 50 mm width or a wider double-sided adhesive tape. Otherwise a commercial surface contact adhesive can be used (e.g. UHU, PATTEX).

Grounding

Due to the conductive surface this material **can be contacted and grounded** easy to shield low frequency (LF) electric fields.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.