

Miscellaneous shielding products

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Metallized nylon fleece HNV80 (HF+LF)

Characteristics

HNV80 is a fine, **metallized nylon fleece** for the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

This professional product is typically used for ministries of defence, banking houses, laboratories, etc. Now available for private use! Typical application **interior** preferable **loosely laid** or for stapling in **drywall constructions**, etc.

Technical data

- **Width: 100 cm**
- **Length: By the meter / 20 m roll**
- **Attenuation: 87 dB**, two-layer 127 dB
- Weight: 85 g/m²
- Material thickness: 0.15 mm
- Color: Anthracite / Brown
- Tensile strength: Very good in both directions, 50 N/mm
- Materials: Nylon, copper, nickel, protection coating
- Surface conductivity: 0.008 ohm (square resistance R□)

Processing

Because of formation of wrinkles, bonding on walls with a glue is not recommended, use better HNG80 or HNG100 instead! Best usage for HNV80 is loosely laid under floor coverings, behind wall systems, etc. further for stapling in drywall constructions. Overlapp the single elements, whereby you connect the elements for grounding.

Grounding

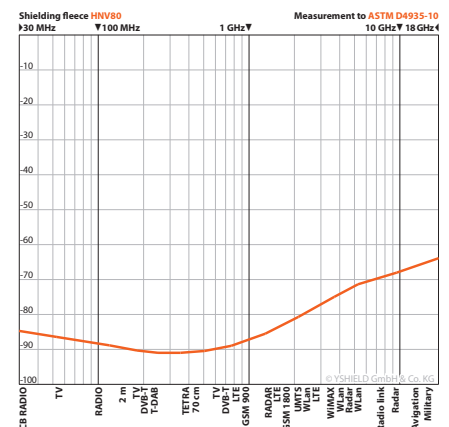
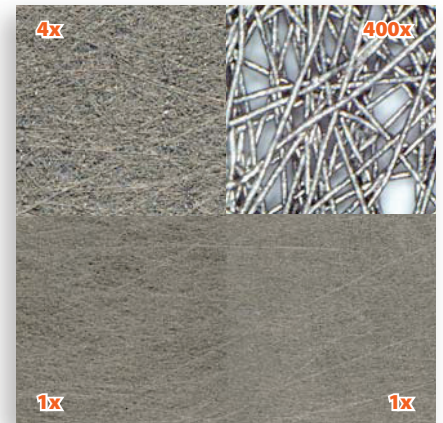
Due to the highly conductive surface this material can be **contacted and grounded easy to shield low frequency (LF) electric fields**. For professional grounding we recommend our **grounding plug EST** for self laying application, or our **grounding strap EB in combination with our grounding set ES** for adhesive bonding with our dispersion glue DKL90.

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, IEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Product recommendation

HNV80 is also available as **self-adhesive version EB3**, with an electrically conductive glue in a width of 10 cm ... please see "Grounding accessories".



Messprotokoll Schirmdämpfung

Measurement report screening attenuation

Material

Abschirmvlies / Shielding fleece **HNV80**

Konformität

Diese Messung der Schirmdämpfung elektromagnetischer Felder von **30 MHz bis 18 GHz** wurde in Übereinstimmung mit dem Standard **ASTM D4935-10** durchgeführt.

Ort der Messung

Schon seit Jahren lassen wir die Schirmdämpfung nicht mehr von externen Laboren durchführen. **Wir haben ein professionelles EMV-Labor nach gängigen etablierten Standards, wie z.B. ASTM D4935-10, IEEE Std 299-2006, IEEE Std 1128-1998, ASTM A698/A698M-07, etc. direkt bei uns im Haus.**

Das hat für uns viele Vorteile: Unsere Produkte werden nicht nur einmalig getestet, zur Qualitätssicherung vermessen wir jede Charge. Und selbstverständlich brauchen wir das Labor zur Entwicklung unserer eigenen Produkte.

Messaufbau

Als **Messgerät** verwenden wir den professionellen Vektor-Netzwerkanalysator **Rohde & Schwarz ZNB20** mit einer Messdynamik von 140 dB bis zu 20 GHz.

Als **Antenne** für ASTM D4935-10 verwenden wir **modifizierte TEM-Zellen**, die selbst kleine Muster bis hinunter zu 30 MHz im **Fernfeld** messen können. Die Muster werden mit radialer Polarisation gemessen (alle Richtungen, nicht nur horizontal oder vertikal), was der Realität am nächsten kommt. Alle **elektrisch leitfähigen und dünnen Muster** können mit diesen Zellen perfekt vermessen werden.

Conformity

This measurement of the screening attenuation of electromagnetic waves from **30 MHz to 18 GHz** was done in conformity with standard **ASTM D4935-10**.

Location of measurement

Already since many years, the confirmation of attenuation is no longer carried out through external consultants. **We have a professional EMC-laboratory for any established engineer standards, as ASTM D4935-10, IEEE Std 299-2006, IEEE Std 1128-1998, ASTM A698/A698M-07, etc. at our disposal in-house.**

We take many advantages of this: Our goods are not only tested by a survey once, as for the reason of quality management each charge is measured again. Of course, we do need our laboratory for the development of own products.

Measurement setup

The **instrument of measure** is a professional vector network analyzer **Rohde & Schwarz ZNB20** with 140 dB dynamic range up to 20 GHz.

The **antenna** for ASTM D4935-10 are **modified TEM-cells**, that can measure even small samples down to 30 MHz in the **far field**. The samples are measured with radial polarisation (all directions, not only horizontal or vertical only), what matches the reality most probably. All **electrically conductive and thin samples** can be measured perfectly with these cells.

