

YSHIELD® WHITE-JERSEY | Shielding fabric | Width 145 cm | 1 meter

Strechable cotton jersey for sewing clothes. With 83% cotton content unbelievably soft on the skin. 40 dB. Width 145 cm.



Properties

WHITE-JERSEY is a **compact cotton fabric with high silver content** for HF+LF shielding. Typical application to sew **articles of clothing**. Due to the jersey-typical elasticity **perfect for close-fitting laundry**. **Actually our best and most stable apparel fabric.**

- **Very high screening attenuation for a fabric with such a high cotton content.**
- Textile characteristics: Easy to sew, wash and iron.
- Quality grade: Very high

Silver products

- Silver fabrics have a **limited durability**, depending on the frequency of movement.
- Our silver fabrics do **not contain any nano silver**, but a thick metallic silver coating.

Technical data

- **Width: 145 cm +/- 5 %**
- Length: Available by the meter
- **Extensibility: 40 % width, 15 % length**
- **Attenuation: 40 dB**
- Color: WHITE with a metallic shimmer
- Raw materials: 83 % cotton, 17 % silver thread
- Weight: 165 g/m²
- Surface conductivity: 3 ohm / inch (2.54 cm)

Care instructions

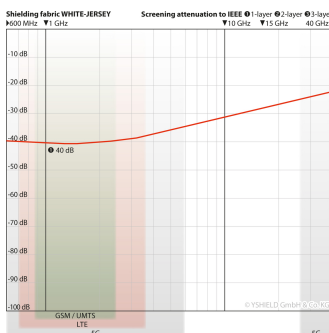
- **Gentle cycle at 30°C**
- **Iron without steam at degree 1**
- No drying in tumble dryers
- No bleaching
- No chemical dry-cleaning
- Wash only with our special washing detergent **TEXCARE**, without enzymes or bleaching agents

Shielding attenuation HF

This product **shields high frequency electromagnetic fields (HF)**. Unless otherwise stated, the indicated dB-values apply to 1 GHz. Measurement from 600 MHz to 40 GHz according to standards ASTM D4935-10 or IEEE Std 299-2006.

Laboratory & expert report of shielding attenuation up to 40 GHz

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.**



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Prüfbericht Schirmdämpfung

Laboratory report screening attenuation

Prüfobjekt

Abschirmstoff
WHITE-JERSEY

Prüfdatum

27.09.2023

Garantie

Mit diesem Prüfbericht garantieren wir verbindlich die Schirmdämpfung eines Produktes. Die Messkurven repräsentieren den Mittelwert aller geprüfter Chargen in einem Toleranzbereich von +/- 2 dB.

Prüfart

Eigenes professionelles EMV-Labor nach internationalen Standards, zur täglichen Qualitätssicherung und Produktentwicklung.

Konformität

Die Messung der Dämpfung elektromagnetischer Wellen von **600 MHz bis 40 GHz** wurde in enger Anlehnung an die Standards **IEEE Std 299™-2006** oder **ASTM D4935-10** durchgeführt.

Prüfaufbau

Messgeräte: Vektorielle Netzwerkanalysatoren Rohde & Schwarz **ZNB20** und **ZNB40** mit einer Messdynamik bis 140 dB.
 Antennen: Für IEEE Std 299™-2006 **Hornantennen** mit horizontaler/vertikaler Polarisation innerhalb und ausserhalb einer Prüfkammer. Für ASTM D4935-10 **TEM-Zellen** mit radialer Polarisation.

Prüfdurchführung

Bestrahlung mit der Leistungsflussdichte S_1 . Messung der durchdringenden Leistungsflussdichte S_2 . Die Schirmdämpfung ist eine dimensionslose Messgröße in Dezibel (dB):

$$\text{dB} = 10 \cdot \log_{10} \frac{S_1}{S_2}$$

dB	Dämpfung
10	90 %
20	99 %
30	99,9 %
40	99,99 %
50	99,999 %
60	99,9999 %
...	...

Test object

Shielding fabric
WHITE-JERSEY

Test date

2023/09/27

Guarantee

We bindingly guarantee the shielding attenuation of a product with this laboratory report. The measuring curves represent the mean value of all tested charges, within a tolerance range of +/- 2 dB.

Place of test

Own professional EMC-laboratory according to international standards, for daily quality control and product development.

Conformity

The measurement of the attenuation of electromagnetic waves from **600 MHz to 40 GHz** has been performed in close accordance with standards **IEEE Std 299™-2006** or **ASTM D4935-10**.

Test setup

Measuring devices: Vector Network Analyzers Rohde & Schwarz **ZNB20** and **ZNB40** with a measuring dynamics up to 140 dB.
 Antennas: For IEEE Std 299™-2006 **horn antennas** with horizontal/vertical polarisation inside and outside a test chamber. For ASTM D4935-10 **TEM cells** with radial polarisation.

Test implementation

Irradiation with the power flux density S_1 . Measuring the pervasive power flux density S_2 . The shielding attenuation is a non-dimensional measured variable in decibels (dB):

$$\text{dB} = 10 \cdot \log_{10} \frac{S_1}{S_2}$$

dB	Attenuation
10	90 %
20	99 %
30	99,9 %
40	99,99 %
50	99,999 %
60	99,9999 %
...	...

