

Stretch conductive fabric

4900 - Technical datasheet

Description

High ionic silver release plated nylon elastic knit double direction.

Stretch conductive fabric

This conductive fabric is coated with a medical silver coating and has a broad range of applications, since it's possible to stretch the fabric in both sides, and in length even up to 100% it's size.

The fabric can be used as an antibacterial wound or burn dressing (note: our material is not sterile) but it also makes a great material for electrode contacts, clothing or other shielded garments. It is also suitable as a very flexible cable shield.

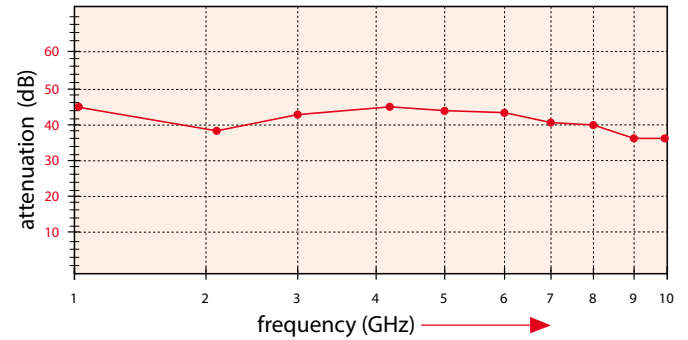
Highly conductive, and conductivity increases up to 25% as it stretches, which is handy for smart textile applications. The silver coating is 99,9% pure.

Specification

Property	Test value
Silver-gray color	Very unique
Surface resistivity	<0,5 Ohm-sq. (unstretched)
Shielding Effect	35+dB: 1 - 10 GHz (See graph)
Temperature range	-30 to 90°C
Thickness	0.40mm
Weight	4.3 oz/yd ² 145 Gr./0.84m ²
Stretch	~100% x length; ~65% x width direction
Standard width	135 cm (52 inch) wide, but varies by lot.

Attenuation

Frequency in GHz	Attenuation in dB
1 GHz	45 dB
2 GHz	38 dB
3 GHz	43 dB
4 GHz	45 dB
5 GHz	44 dB
6 GHz	43 dB
7 GHz	41 dB
8 GHz	40 dB
9 GHz	36 dB
10 GHz	36 dB



Benefits

- The width of the fabric influences the percentage of conductivity
- The material is very consistent in quality
- When you stretch the material in length the conductivity increases, when you stretch it in the width it decreases
- You get around 60% elongation in the width, and almost 100% in the length

Applications

- "intelligent" or EMI shielding garments
- Stretchable cable shielding wrap
- Hobbies or Technology where changing conductivity with stretch is important

Care instructions

Hand wash in warm water, mild soap. Rinse thoroughly. No bleach! Hang dry. Do not apply heat. Do not iron. Washing will eventually degrade silver coating.



Part number	Width (mm)	Length (mm)
4900	250	250
	Please specify the width in mm	Please specify the length in mm

