

# **Pressure Sensing Fabrics**

Combine reliable pressure measurements with design flexibility and user comfort. Our force-sensing resistor (FSR) or piezo-resistive fabrics are especially suited for pressure sensing applications that require a durable, comfortable and breathable textile.



#### **Product features**

# No compromize on sensitivity, design and comfort

The demand for data-driven insights is becoming crucial in many industries for improving process efficiency, fostering innovation, ensuring safety, and promoting wellbeing. Textile-based pressure sensors are playing an increasingly important role in this trend.

- Healthcare and therapy: enhancing patient treatment outcomes
- Production environments: ensuring safe collaboration between employees and robots
- Sports and fitness: monitoring performance and preventing injuries
- Wellbeing: improving sleep quality in the bedroom.











#### **DOWNLOADS**

Large scale textile pressure sensor (PDF 546 kb)





While conventional technologies often constrain product engineers and designers, forcing trade-offs between form, function, and comfort, Sefar's force sensitive resistor fabrics open the door to unprecedented design and application freedom.

# Well suited for textile applications

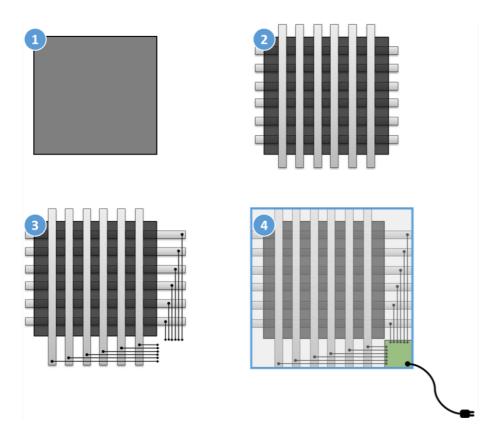
The electrical resistance of the piezo-resistive fabric varies with the intensity of the applied pressure which can be measured by connecting electrodes to the fabric.

#### Customize your textile pressure sensor

Simply integrate the Sefar FSR-fabric as the functional layer into your pressure sensor and add the electrodes and electronic components depending on your use case.

Combine the fabric with any type of electrodes including heat printed, embroidered, sewn or stitched, laminated, sandwiched and many more.





- 1. Sefar force-sensing resistor fabric (FSR) as central building block.
- 2. Electrodes are applied to generate an FSR matrix.
- 3. Electrodes are contacted to connect them to the electronics.
- 4. Electronics are connected to complete the full package sensor system

#### **Build your pressure sensor with Sefar PreSense FSR fabric**

Conventional pressure sensing technologies often don't live up to the standards of equipment manufacturers and their customers:

- Maintaining measurement precision over time is a challenge
- Current solutions lack comfort and breathability
- Size and customization limitations restrict design freedom

Break free from these constraints with SEFAR PresSense force-sensing resistor fabric and combine unmatched quality, comfort, and versatility in your



pressure sensing solution.

# Locations



# Sefar AG

Töberstrasse 4 9425 Thal – Switzerland Phone: +41 71 898 5700 Fax: +41 71 886 3504

E-Mail



# Sefar AG

Hinterbissaustrasse 12 9410 Heiden Switzerland Phone: +41 71 898 5700

Fax: +41 71 898 5721

E-Mail