

# SEFAR PresSense

SEFAR PresSense force-sensing resistor (FSR) or piezo-resistive fabric combines reliable pressure measurements with user comfort. The homogeneous, conductive fabric is especially suited for textile pressure sensing applications that require a durable, comfortable and breathable fabric.



#### **Product features**

# No compromize on sensitivity, design and comfort

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.





#### **DOWNLOADS**

Large scale textile pressure sensor (PDF 546 kb)

## Benefit from superior material performance



Accurate pressure detection
Homogeneous fabric



**High air permeability** Excellent gas and liquid flow (> 5,000 l/m²/s)





# **Broad pressure range** 3 fabric categories from 0.1 - 150 N/cm<sup>2</sup>



# **Customizable structure**

Any shape from small to large



# Robust and durable fabric

Pressure testing for 1

million cycles



# Ultra-thin and lightweight

Ultra-thin (< 135  $\mu$ m), lightweight (< 40 g/m<sup>2</sup>)



# Washable fabric



**Quality compliance** 

ISO 9001, RoHS, REACH



# Maintains its integrity when washed

## Combine quality, comfort, and versatility



### Reliable data reproducibility

Gathering reliable data with every measurement can be a challenge. Sefar PresSense fabric features consistent material quality and homogeneous fabric properties, validated by rigorous quality control procedures.

- Ensure consistent data accuracy and repeatability
- Minimize the need for calibration efforts

### Long-term durability

Conventional technologies can deteriorate quickly under pressure and when washed. The robust woven



structure of our fabric ensures continued performance under heavy and repeated pressure and withstands frequent washing.

- Extend the life of your product
- Benefit from accurate measurements over time



## Supreme comfort

Traditional products are often stiff, crackly and lack breathability. The lightness, flexibility, and air permeability of our fabric allow for effortless integration into your pressure sensor without compromising on comfort.

- Go beyond plastics and add comfort to your sensor
- Benefit from the softness and breathability of textiles

# Complete design freedom

Don't let technology limit your design aspirations. The broad pressure range of our fabric, combined with the flexibility of size and shape, open the door to full design flexibility and functionality for your product.



- Capture pressure and resistance data without
  - limits
- Shape your product according to your vision

#### Flexible production planning

As a leading supplier of industrial fabrics, Sefar has the production capacity and global infrastructure to





deliver PresSense fabric in the quantities you need, where you need it.

- Rely on our flexible and fast global delivery services
- Seamlessly scale up your production as the demand grows

## Overcome technology limitations

|                      | SEFAR® PresSense | Nonwoven      | Plastic film  |
|----------------------|------------------|---------------|---------------|
| Data reproducibility | <b>X</b>         | <b>*</b>      | $\rightarrow$ |
| Design flexibility   | <b>X</b>         | <b>→</b>      | *             |
| Breathability        | ×                | $\rightarrow$ | *             |
| Robustness           | ×                | *             | *             |
| Value for money      | <b>X</b>         | *             | $\rightarrow$ |

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

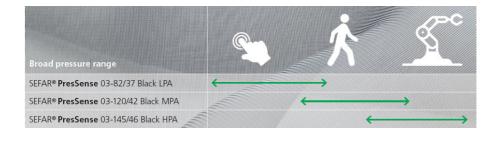




Example showing SEFAR PresSense Force Sensitive Resistor Fabric with heat printed electrodes.

## Suitable from low to high pressure applications

Choose from three fabric products covering a broad pressure range from touch sensitivity to heavy load. SEFAR PresSense is woven in-house up to a width of 3 meters and unlimited length, can be cut into any shape and folded to your specifications.



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Contact us to explore how SEFAR PresSense can elevate your pressure sensing application. Our experts are ready to work with you to create a customized solution - from prototype to final product.



# Locations





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