

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/cm²



Customizable structureAny shape from small to



Robust and durable fabric

Pressure testing for 1

million cycles

when washed



Ultra-thin and lightweight

large

lightweight
Ultra-thin (< 135 μm),
lightweight (< 40 g/m²)



Washable fabric Maintains its integrity



Quality complianceISO 9001, RoHS, REACH

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 | × | * | → |
| Design flexibility | × | → | * |
| Breathability | × | \rightarrow | ** |
| Robustness | × | * | * |
| Value for money | × | * | → |

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.

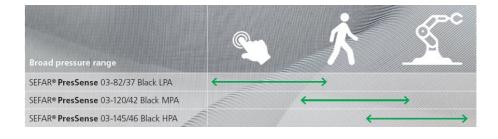


Example showing SEFAR PresSense Force Sensitive Resistor Fabric with heat printed electrodes.

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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





Sefar Pty Ltd Filtration and Metal Mesh

19-21 Huntingwood Drive Huntingwood NSW 2148 Australia

Phone: +61 2 8822 1700 Fax: +61 2 8822 1744

E-Mail

Sefar Pty Ltd Filtration and Metal Mesh

Unit 4, 68 Callaway Street Wangara WA 6065 Australia

Phone: +61 8 9303 2600 Fax: +61 8 6305 0930

E-Mail