

# SEFAR® PresSense

Force-Sensing Resistor Fabric

No compromise on sensitivity, design and comfort

S E F A R  
■ ■ ■ ■



Used in mattresses to prevent pressure ulcers.



...in wheelchairs to optimize sitting posture.



...in therapy mats for balance training.

## No compromise on sensitivity, design and comfort

As global healthcare needs evolve with an aging population, data-driven insights become crucial for healthcare professionals to improve treatment efficacy. This is precisely where textile-based pressure sensors play an increasingly important role.

Used in mattresses to combat pressure ulcers, wheelchairs to refine sitting posture, and therapy mats to enhance balance, these sensors improve patient safety and comfort.

They also help to optimize athlete performance and monitor sleep quality.

While conventional technologies often constrain product engineers and designers, forcing trade-offs between form, function, and comfort, SEFAR® PresSense sensor fabrics open the door to unprecedented design and application freedom.

## Benefit from superior material performance



### Accurate pressure detection

Homogeneous fabric



### Broad pressure range

3 fabric categories from 0.1 - 150 N/cm<sup>2</sup>



### Robust and durable fabric

Pressure testing for 1 million cycles



### Washable fabric

Maintains its integrity when washed



### High air permeability

Excellent gas and liquid flow (> 5,000 l/m<sup>2</sup>/s)



### Ultra-thin and lightweight fabric

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



### Customizable structure

Any shape from small to large



### Quality compliance

ISO 9001, RoHS, REACH

| Overcome technology limitations | SEFAR® PresSense (woven fabric) | Nonwoven | Plastic film |
|---------------------------------|---------------------------------|----------|--------------|
| Data reproducibility            | ↗                               | ↘        | →            |
| Design flexibility              | ↗                               | →        | ↘            |
| Breathability                   | ↗                               | →        | ↘            |
| Robustness                      | ↗                               | ↘        | ↘            |
| Value for money                 | ↗                               | ↘        | →            |

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 air permeability. Additionally, product engineers and designers often grapple with size and customization limitations.

Break free from these constraints with SEFAR® PresSense force-sensing resistor fabric and combine highest quality, comfort, and adaptability in your pressure sensing solution.



**Reliable data reproducibility**

Achieve consistent data accuracy and reduce calibration needs. The homogeneous fabric properties and material quality of SEFAR® PresSense are validated by stringent quality control procedures.

**Long-term durability**

Extend your product's lifespan with accurate measurements over time. Our fabric's robust weave ensures performance under heavy use and frequent washing.



**Supreme comfort**

The lightweight, flexible, and breathable fabric ensures easy integration without sacrificing comfort. Go beyond plastics and benefit from the softness and breathability of textiles.

**Complete design freedom**

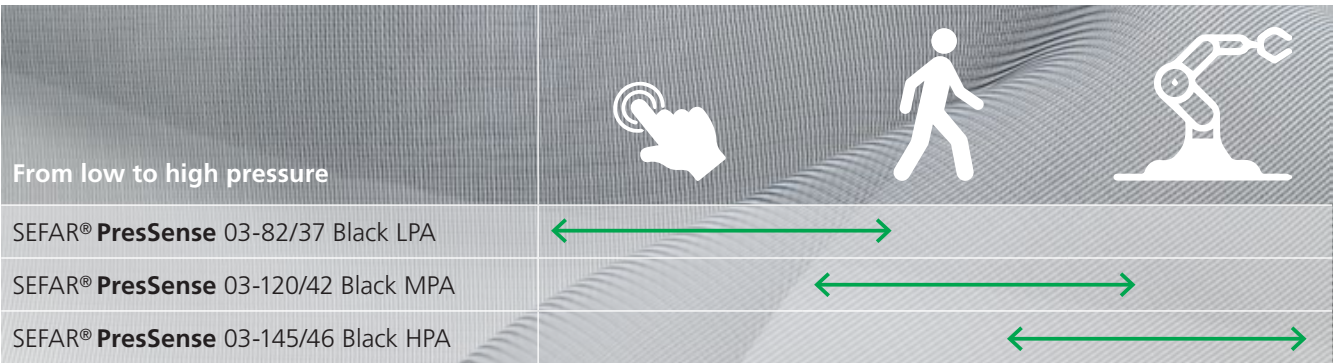
Don't let technology limit your design vision. Our fabric's broad pressure range and adaptable size and shape provide total design flexibility.

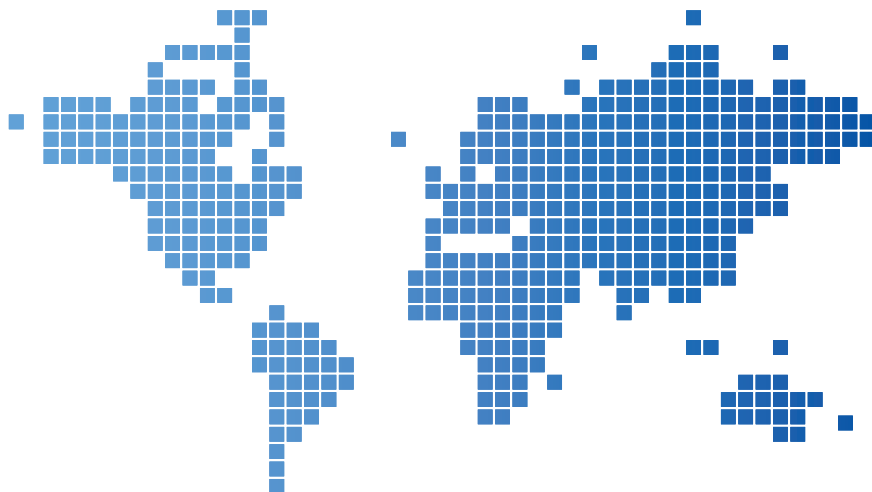


**Flexible production planning**

Order SEFAR® PresSense fabric in the quantities you need, where you need it. Trust our prompt global delivery and quickly scale production with rising demand.

Suitable for every pressure range





## Sefar Worldwide

Sefar is the leading manufacturer of precision fabrics from monofilaments for the screen printing and filtration market. Sefar products are used in a wide variety of industries, reaching from electronics, graphics, medical, automotive, food and pharmaceutical applications to aerospace, mining & refining and architecture. With its profound understanding of the applications, Sefar helps its customers to achieve optimum results in their industrial processes. With subsidiaries and representatives around the world, Sefar offers its customers the comprehensive, global support they need.

### Sefar AG

Hinterbissastrasse 12  
9410 Heiden  
Switzerland

Phone +41 71 898 57 00  
Fax +41 71 898 57 21

[powermatrix@sefar.com](mailto:powermatrix@sefar.com)

[www.sefar.com](http://www.sefar.com)



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.**

Our current general sales conditions shall apply.  
Please consult the current local product data sheet prior to any use.

**SWISS**  
Excellence  
in **Fabrics**  
since **1830**