

# Sefar Screen Printing Accessories

Stretching clamps, pneumatic control units and measuring devices



swiss  
mesh  
technology

**S E F A R**  
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# Enhanced process quality SEFAR® 3A – Stretching clamps



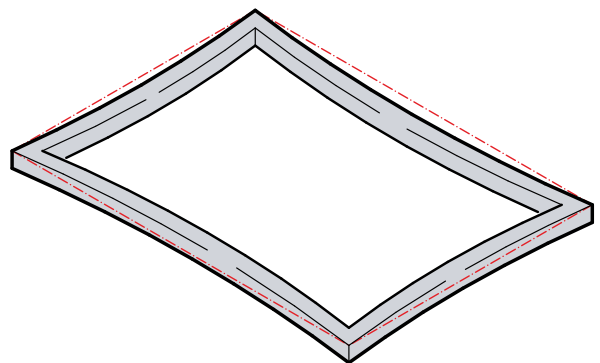
The progressive build-up of the clamping pressure and the lifting function of the SEFAR® 3A stretching system enhances its performance by reducing the reject rate. Why? The mesh can't slip out the jaws and eliminates friction between fabric and frame. This means you are able to work with faultless, evenly-stretched screens. Day after day. Another plus point: The SEFAR® 3A clamps are suitable for all screen printing mesh – regardless of screen size, materials or thread count. All of this with ease of handling and quick adjustments to the next frame size.



Lifting function of SEFAR® 3A







Frame profile height adjusting screw of SEFAR® 3A

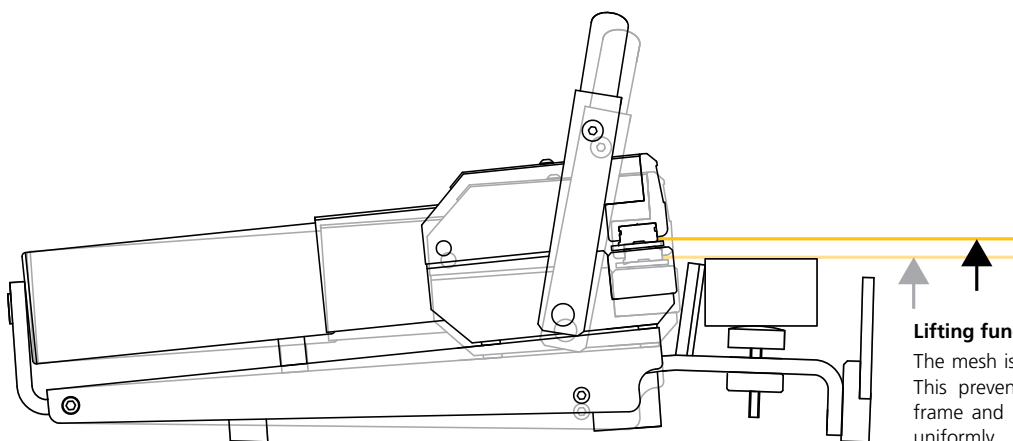


Frame pre-tensioning with SEFAR® 3A

Integrated lifting function – ease of use, no worries

## SEFAR® 3A – Stretching clamps

<p>SEFAR® 3A / 150</p> 	<p>Jaw width 150 mm Stroke length 75 mm Total length 465 mm Height (Overall) 225 mm Weight 7.2 kg</p>	<p><b>Product features</b></p> <ul style="list-style-type: none"> <li>▪ Modular single or dual-circuit pneumatic system</li> <li>▪ Progressive build-up of the jaw pressure</li> <li>▪ Raising and lowering function of the jaws</li> <li>▪ Jaws having widths of 150 and 250 mm</li> <li>▪ Stroke length of 75 or 145 mm</li> <li>▪ Max. screen tension of 45 N/cm</li> <li>▪ Easy opening and closing of the clamping jaws</li> <li>▪ Robust construction</li> </ul> <p><b>Customer benefits</b></p> <ul style="list-style-type: none"> <li>▪ Rapid conversion to different frame formats and no restriction on frame sizes</li> <li>▪ No slippage of the mesh from the clamps</li> <li>▪ Precise and kind-to-the-mesh stretching process</li> <li>▪ Simple and practical operation without excessive force</li> <li>▪ Consistent reproduction of high tension values obtainable</li> <li>▪ Pre-tensioning of the frame guarantees uniform tension values</li> <li>▪ Suitable for synthetic and wire mesh</li> <li>▪ Minimum maintenance necessary</li> </ul>
<p>SEFAR® 3A / 250</p> 	<p>Jaw width 250 mm Stroke length 75 mm Total length 465 mm Height (Overall) 225 mm Weight 8.0 kg</p>	
<p>SEFAR® 3A L / 150</p> 	<p>Jaw width 150 mm Stroke length 145 mm Total length 615 mm Height (Overall) 225 mm Weight 8.4 kg</p>	
<p>SEFAR® 3A L / 250</p> 	<p>Jaw width 250 mm Stroke length 145 mm Total length 615 mm Height (Overall) 225 mm Weight 9.6 kg</p>	



### Lifting function





The mesh is raised during the stretching process. This prevents undesirable friction between the frame and mesh, and the mesh is stretched out uniformly.



Economic solutions for all frame sizes

## SEFAR® 2 – Stretching clamps

We provide with SEFAR® 2 a strong and economic stretching system. SEFAR® 2 makes its mark as a user-oriented, lightweight and rugged clamp for stretching synthetic mesh on all frame sizes.

SEFAR® 2 / 150		Jaw width 150 mm Stroke length 70 mm Total length 475 mm Height (Overall) 175 mm Weight 5.2 kg	SEFAR® 2 clamps has a surprisingly good price/performance ratio. With this light and sturdy clamps synthetic mesh can be stretched on all frame sizes.  <b>Product features</b> <ul style="list-style-type: none"> <li>▪ Modular single or dual-circuit pneumatic system</li> <li>▪ Progressive build-up of the jaw pressure</li> <li>▪ Quickly adaptable to different frame sizes</li> <li>▪ Clamping jaws having widths of 150 and 250 mm</li> <li>▪ Stroke length of 70 or 140 mm</li> <li>▪ Max. mesh tension of 40 N/cm</li> <li>▪ Easy opening and closing of the clamping jaws</li> <li>▪ Robust construction</li> </ul> <b>Customer benefits</b> <ul style="list-style-type: none"> <li>▪ Economic</li> <li>▪ Time saving adaption to different frame sizes</li> <li>▪ No slippage of the mesh from the clamps</li> <li>▪ Simple and practical operation</li> <li>▪ No restriction on frame sizes</li> <li>▪ Constant tension values obtainable</li> <li>▪ Pre-tensioning of the frame guarantees uniform tension values</li> <li>▪ Minimum maintenance</li> </ul>
SEFAR® 2 / 250		Jaw width 250 mm Stroke length 70 mm Total length 475 mm Height (Overall) 175 mm Weight 5.7 kg	
SEFAR® 2 L / 150		Jaw width 150 mm Stroke length 140 mm Total length 615 mm Height (Overall) 175 mm Weight 6.3 kg	
SEFAR® 2 L / 250		Jaw width 250 mm Stroke length 140 mm Total length 615 mm Height (Overall) 175 mm Weight 7.2 kg	



Progressive build up of jaw pressure of SEFAR® 2



Frame profile height adjusting screw of SEFAR® 2

# Single and dual-circuit Sefar pneumatic systems

For pneumatic stretching systems there are two possibilities to allocate the air supply: Single or dual-circuit systems – complementary alternatives for optimal, balanced tension for all types of mesh and frame sizes. Single-circuit systems are recommended for frames having side lengths up to 150 cm. For frames having sides longer than 150 cm dual-circuit systems are recommended.

<p><b>SEFAR® 20</b> The basic control unit in combination with SEFAR® 2</p> 	<p><b>Specifications</b></p> <p>Dimensions 240 x 135 x 135 (mm) Weight 1.2 kg Air pressure 1 to 10 bar</p>	<p><b>Product features</b></p> <ul style="list-style-type: none"> <li>▪ Dust and moisture filter</li> <li>▪ Dual circuit system (Requires two control units)</li> </ul> <p><b>Customer benefits</b></p> <ul style="list-style-type: none"> <li>▪ Economic</li> </ul>
<p><b>SEFAR® 30</b> The simple control unit in combination with SEFAR® 3A</p> 	<p><b>Specifications</b></p> <p>Dimensions 280 x 135 x 185 (mm) Weight 1.8 kg Air pressure 1 to 10 bar</p>	<p><b>Product features</b></p> <ul style="list-style-type: none"> <li>▪ Dust and moisture filter</li> <li>▪ Lift function</li> <li>▪ Dual circuit system (Requires two control units)</li> </ul> <p><b>Customer benefits</b></p> <ul style="list-style-type: none"> <li>▪ Economic</li> <li>▪ Secure stretching</li> </ul>
<p><b>SEFAR® 31</b> Universal, ergonomic and compact control unit in combination with SEFAR® 3A</p> 	<p><b>Specifications</b></p> <p>Dimensions 350 x 180 x 330 (mm) Weight 6.7 kg Air pressure 1 to 10 bar</p>	<p><b>Product features</b></p> <ul style="list-style-type: none"> <li>▪ Dust and moisture filter</li> <li>▪ Single or dual circuit in 2 stages</li> <li>▪ Lift function</li> </ul> <p><b>Customer benefits</b></p> <ul style="list-style-type: none"> <li>▪ Flexible adjustment</li> <li>▪ Easy handling</li> <li>▪ Secure stretching</li> </ul>
<p><b>SEFAR® 51</b> The programmable single or dual circuit electronic control unit in combination with SEFAR® 3A</p> 	<p><b>Specifications</b></p> <p>Dimensions 530 x 520 x 300 (mm) Weight 12.4 kg Air pressure 1 to 9 bar</p>	<p><b>Product features</b></p> <ul style="list-style-type: none"> <li>▪ Available as single or dual circuit system</li> <li>▪ Fully automatic tensioning process</li> <li>▪ Programmable for up to 50 different multilevel tensioning processes</li> <li>▪ Serial interface to SEFAR® Tensocheck 100</li> </ul> <p><b>Customer benefits</b></p> <ul style="list-style-type: none"> <li>▪ Tensioning to precise levels</li> <li>▪ Increased productivity and process reliability</li> </ul>

Everything perfectly prepared

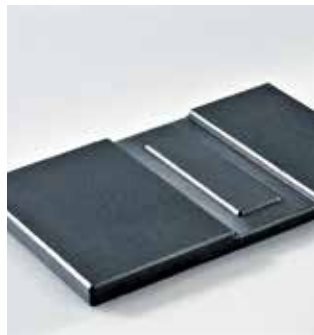
## SEFAR® Tensochek 100



SEFAR® Tensochek 100 is an electronic gauge for monitoring screen tension. Its outstanding advantages: Its excellent value for money and ease of use without requiring previous experience. SEFAR® Tensochek 100 is also available having a serial port for connection to SEFAR® 51i. Your advantage: Fully automatic, precise tensioning at preselected values in N/cm (Existing devices not having an interface are not able to be converted).



Serial interface RS 232 of SEFAR® Tensochek 100i



Calibration control plate for SEFAR® Tensochek 100

Calibration control plate for SEFAR® Tensochek 100 with certificate (Optional): Ensure a maximum process control by regular in-house checking of the accuracy. The SEFAR® Tensochek 100 only needs to be sent to the Sefar technology center for readjustment if the check should result in a measured value outside the tolerance limits – and that is rare.

Good to know: The specifications of the ISO 9001 quality system require a periodic certification of the calibration control plate at an accredited measurement institute. The user must have these recalibrations carried out locally. There are appropriate institutions in your area worldwide.

Highest process safety

# Sefar measurement devices

## SEFAR® Tensotest 100

Universal, ergonomic and compact



### Specifications

Dimensions 80 x 95 x 115 (mm)  
 Weight 1.01 kg (With battery)  
 9V battery (6LR61)  
 Display range 4 – 60 N/cm

### Resolution

Range <30 N/cm, ±0.2 N/cm  
 Range >30 N/cm, ±0.5 N/cm

### Tolerance measurement range

10–19.8 N/cm, ± 0.4 N/cm  
 20–29.8 N/cm, ± 0.6 N/cm  
 30–39.5 N/cm, ± 1.0 N/cm  
 40–50.0 N/cm, ± 1.5 N/cm

### Glass reference plate

In order to achieve reproducible results in the stretching process, a periodic review of the zero point of the device is recommended. By using the glass reference plate this monitoring can be carried out independently.

### Product features

- The clear digital display having 10mm-high lettering is easy to read even from a distance
- High accuracy: Up 29.8 N/cm the resolution is 0.2 N/cm, over that, about 0.5 N/cm
- The highest process reliability and reproducible results

### Customer benefits

- Because of the large display area, overall usability
- User-friendly operation
- Independent monitoring of the zero position using the glass control plate
- Measurement unit selectable by (N/cm or mm)
- Automatic shutdown increases battery life
- More accurate values obtainable via the interface to the SEFAR® 51 control unit
- Optional with interface to SEFAR® 51 control unit

## SEFAR® Humicheck



### Specifications

Dimensions 78 x 117 x 23 (mm)  
 Weight 150 g  
 Batteries 2 x 1.5 V LR6

### Product features

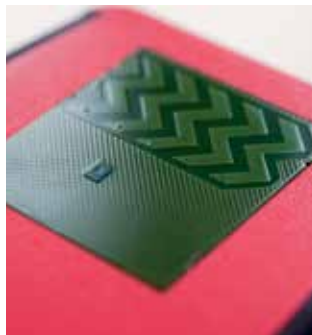
- LED indicator light – divided in three color sections (Strip light reading)
- Capacitive sensor on the rear panel
- Automatic shut-down after 2 minutes
- Battery alert

### Customer benefits

- Increased process reliability, less downtime due to too-early stencil exposure
- Control is carried out without damage to the coated screen surface
- Easy to use

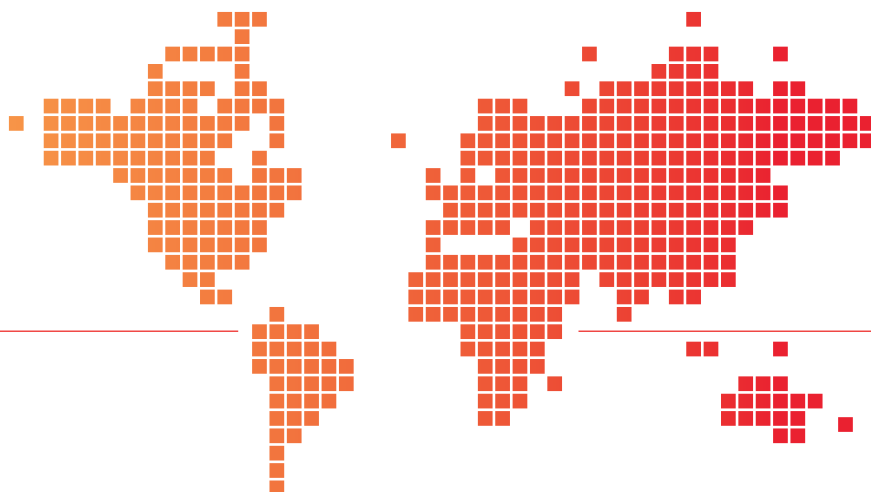


SEFAR® Humicheck – 3-color LED indicator light



SEFAR® Humicheck – Capacitive sensor on the back side

Eliminate bad stencil copies: With SEFAR® Humicheck you can check the residual moisture in coated screens. Due to its capacitive measurement system you will know in “real time” if excessive moisture remains in the emulsion and obtain the information on the dryness of the coating. SEFAR® Humicheck is suitable for all polyester and polyamide screen printing meshes in combination with all commercially available emulsions and capillary films. Not suitable for wire mesh.



## 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. Subsidiaries and fabrications centers in 25 countries on 5 continents provide local technical service for the broad range of solutions offered by Sefar.

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

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