

saba ~~FLEX~~



stretch it

~~e~~xclusive by AMANN



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**Extremely high** seam elongation

**saba**<sup>FLEX</sup>



## Flexibility in sewing!

More things are possible! The seam that moves with you: flexible and elastic. It has proved its worth countless times at project level. A revolution where it is especially important for clothing to follow your movements: sportswear, underwear, swimwear ...

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Amann & Söhne GmbH & Co. KG, Hauptstraße 1, D-74357 Bönningheim  
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## This unique sewing thread offers ...

- innovative sewing thread elasticity based on a revolutionary, modified polyester raw material
- more than double the seam elasticity on lock stitch seams, compared to standard sewing threads
- standard lock stitch applications despite its elasticity
- sophisticated, high quality applications

## Your advantages ...

- maximum seam elasticity in stretch fabrics
- reduced risk of seam breakage through overstretching
- decorative and top stitching seams in stretch fabrics can be sewn using lock stitch
- design optimisation as beginning and end of seam are secured by back tacks
- double chain stitch can be replaced with lock stitch, saving some 42% of thread consumption



## Information from AMANN technical sewing advisory service Processing advice

### Thread tension

- Adjustment of thread tension for sabaFLEX should follow the motto "As much as necessary - as little as possible" for all systems (needle and under thread).
- In general, the thread tensions can be reduced if the machine was run before using core spun- or spun polyester thread.
- This can also apply when winding the bobbin.

### Thread guides

- sabaFLEX reacts very sensitively to rough spots or small metal burrs on the thread guides. To prevent this causing thread breakage, we recommend that all thread guides (eyelets, thread take-ups, tension plates, hooks etc.) must be thoroughly cleaned and polished. Damaged loopers and hooks must be replaced.

- Sharp edges on the pressure foot or in the stitch hole area,
- or also poor quality needles (if the eyelet is not polished sufficiently), can lead to thread breakage. In this case, we recommend polishing the relevant areas (note: not possible for needles). Good results can be achieved using high quality NM 70/No. 10 ball-point needles.

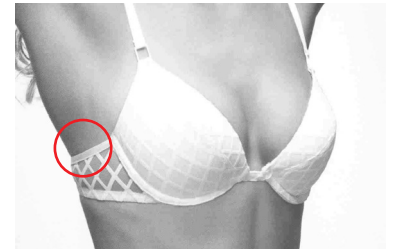
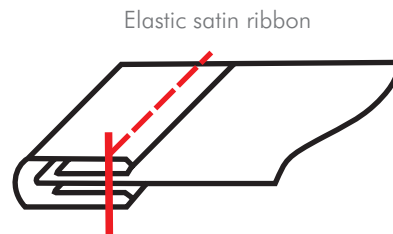
### Sewing speed

- When using sabaFLEX, it might be necessary to reduce
- the sewing speed for fast-running machines (over 5000 stitches / minute) on which long seams are sewn - also when critical fabrics are used.

**Please note: No rewinding onto other spools.  
Otherwise loss of elongation and thread breakage.**



## Underwear - Example 1

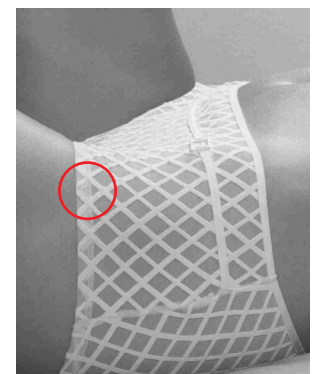
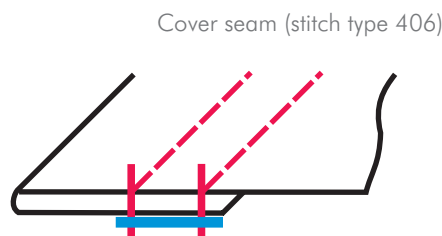


### **Sewing with sabaFLEX:**

The elastic satin ribbon is sewn on with a delicate lockstitch, using sabaflex 120 as needle and bobbin thread.

### **Sewing process so far:**

Sewing on with a double chain stitch: Chain is relatively thick on the inside. The not very elegant look of the zigzag seam matches the fine character of the satin ribbon.



sabaFLEX benefits:

- fewer broken seams (especially with big sizes)
- much more comfortable in wear (especially with bigger thighs)  
- the seam is more elastic and adjusts better

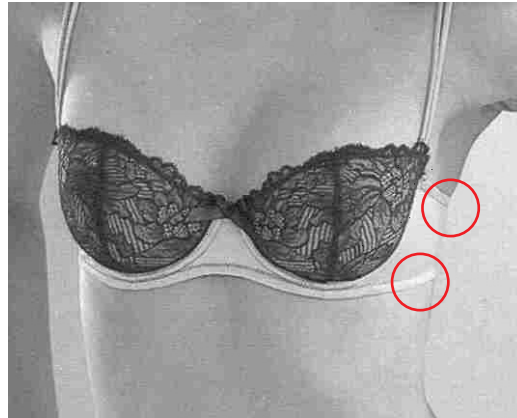
Processing advantage over traditional sewing threads using elastic stitch types: The required elasticity is provided by an increased thread reserve in the seam. This means big loops of needle thread on the bottom side of the material - the consequence is a thick visible seam!

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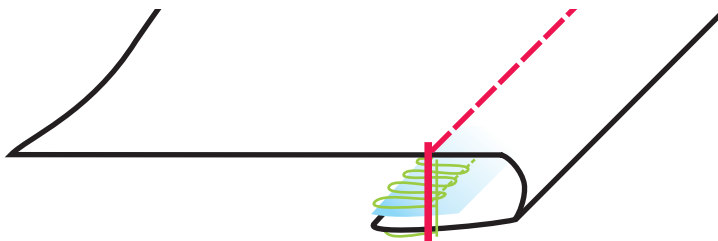


**Underwear - Example 2**



**First processing step:**

Sew rubber band to the back part with a 3-thread overedge stitch (stitch type 504/needle thread: saba/Rasant, bobbin thread = sabaTEX 120)



**Second processing step:**

Fold the edge and topstitch with sabaFLEX 120 (stitch type 301/needle and bobbin thread, seam distance approx. 5 mm)

sabaFLEX benefits:

- Through the use of lockstitch, there is no thick and visible chain on the bottom side (towards the skin).
- The fine seam character matches the extremely fine look of the fabric.

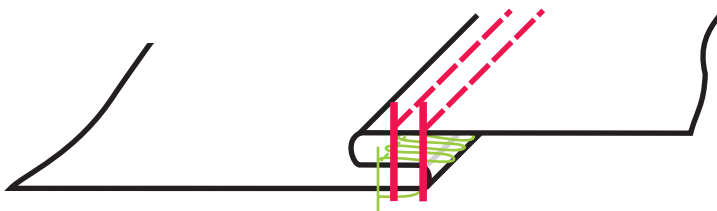


### Underwear - Example 3



#### **First processing step:**

Close the darts with overedge stitches (needle thread: sabaFLEX, bobbin thread: sabaTEX120)



#### **Second processing step:**

Topstitching the dart with sabaFLEX 120 (needle and bobbin thread). Depending on the required look, the models can be topstitched with a single or double seam

#### **sabaFLEX** benefits:

- the sabaFLEX seam is elastic, it shows no thick, visible chain on the side towards the skin
- sabaFLEX allows the use of the lockstitch - this helps protecting the seam ends
- the look and volume of the lockstitch seam matches the fine look of the material
- The otherwise inelastic lock stitch becomes elastic through the use of sabaFLEX. Especially for this sewing operation, a certain elasticity allows for an increased comfort in wear (traditional seams often cause uncomfortable spots)

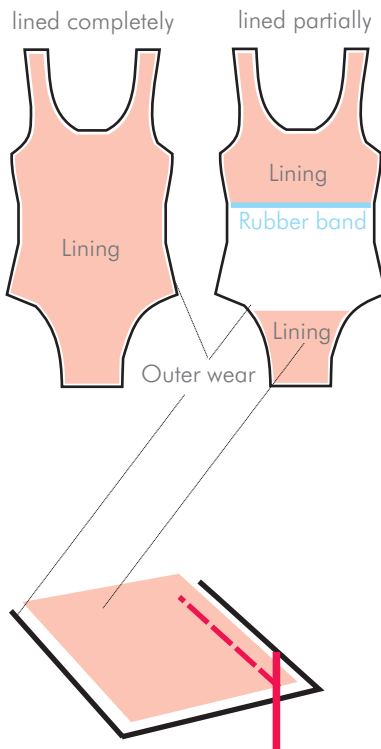
#### **Thread requirement for sabaFLEX:**

1. Processing step (needle thread), seam length approx. 2 x 6 cm: approx. 20 cm
  2. Processing step (needle thread and bobbin thread), dual stitch, seam length approx. 2 x 6 cm: approx. 70 cm
- Total requirement per part: approx. 90 cm



## Swimwear - Example

Different factors - such as see-through-protection or stabilisation - make it necessary to line swimwear.



Lining, cut slightly smaller than the outer wear

### Processing step:

The lining is stitched to the outer wear along the cut edges with sabaFLEX before the front and back parts are sewn together. This facilitates the further processing steps, because often more than two parts must be held and sewn together. This allows a better control during the sewing operations.

The sabaFLEX seam runs about 5 mm inside the edge (the lining is cut slightly smaller than the outer wear) and cannot be seen at the finished part. It is covered by the overedge stitch (finishing seam).

### sabaFLEX benefits:

- Traditional, inelastic stitching seams make it necessary to manually tear out the stitching seam after production, prior to shipping (if this step is omitted, that is if stitching seams are left in, the consumer will tear it while trying on the piece and a bad impression of its quality will be the consequence). The tear proof sabaFLEX seam makes this processing step totally redundant.

#### Thread requirement for sabaFLEX:

No information available (depends on model!).

Thread requirement per meter of sewn seam

(Stitch type 301 / approx. 4 stitches / cm): approx. 2.80 m





**Stretch** - Example  
back seams  
(sabaFLEX 80)



To reach a sufficient seam strength it has always been necessary to use a double chain stitch for the back seams of elastic trousers. However, because many production sites - especially the ones in the field of women's wear - do not have the required machinery, they must use time-consuming emergency solutions. That means that a lockstitch is sewn twice. This is not only time-consuming, it also causes inferior quality, because both seams must be aligned exactly. Now, when sewing the first seam on top of the second, there is always the danger of damaging the first. If the seams are not exactly on top of each other, it strongly impairs the tensile strength and the ironing out takes long and is problematic.

**sabaFLEX** benefits:

- a higher seam elasticity and a good cross-resistance when using lockstitches (stitch type 301)
- one can produce sufficiently elastic back seams with custom lockstitch machines - two-thread chain stitch machines are not necessary

**Thread requirement for sabaFLEX:** (for 5 stitches / cm) per meter of seam:

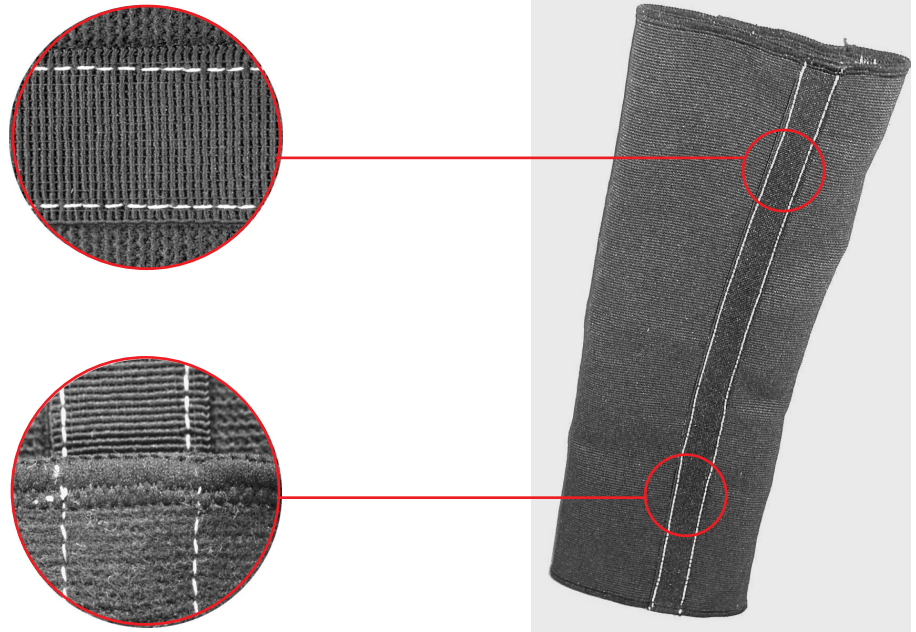
sabaC: two lockstitch seams (stitch type 301):  $2 \times 2.80 \text{ m} = 5.60 \text{ m}$

sabaC: double chain stitch seam (stitch type 401):  $1 \times 4.90 \text{ m} = 4.90 \text{ m}$

sabaFLEX 80: lockstitch seam (stitch type 301):  $1 \times 2.80 \text{ m} = 2.80 \text{ m}$



**Bandages** - Example  
(sabaFLEX 80)



**sabaFLEX** benefits:

- reinforcing and rubber bands can be stitched to the bandage with a lockstitch (stitch type 301) - the required seam elasticity is still achieved (fig. 1)
- one cannot feel a thick chain on the inside (towards the skin). This prevents skin abrasions, skin irritations, and provides comfortable wear (fig. 2)

**Thread requirement for sabaFLEX** (for 5 stitches / cm) per meter of seam:

double chain stitch seam (stitch type 401): = 4.90 m

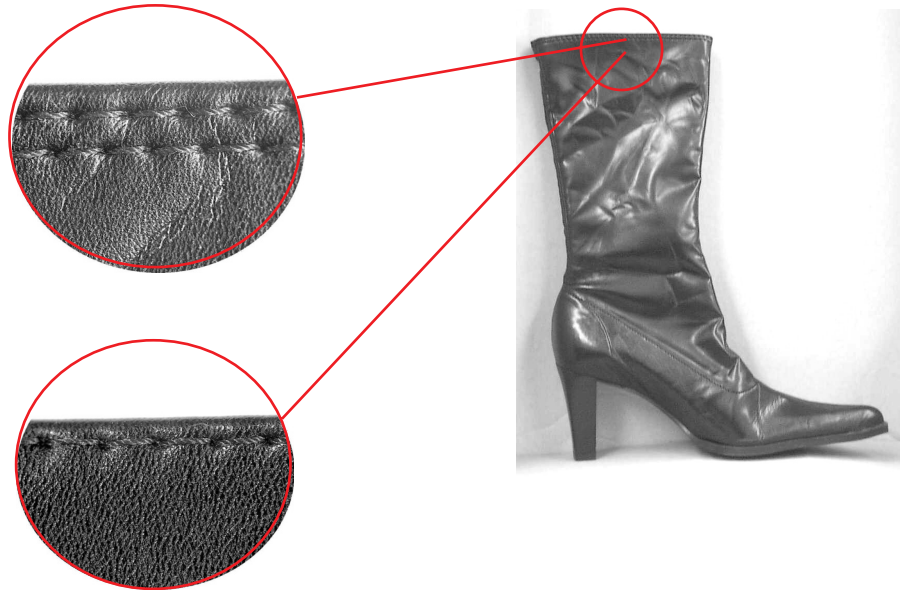
Lockstitch, zigzag stitch (stitch type 304): = 5.40 m

Lockstitch seam (stitch type 301): = 2.80 m

sabaFLEX



**Shoees/Boots -**  
Example (sabaFLEX 80)



sabaFLEX benefits:

- when making boots without zippers, one often uses elastic materials for the bootleg. With a single or dual sabaFLEX 80 stitching on the upper edge of the bootleg, one can often do without the not very elegant zigzag seam
- with sabaFLEX it is possible to use an elegant, fine-looking lockstitch seam that matches the leather's and model's characteristics - despite the use of this otherwise inelastic stitch type, one will achieve a satisfactory seam elasticity

**Thread requirement for sabaFLEX** (for 5 stitches / cm) per meter of seam:

Lockstitch, zigzag stitch (stitch type 304): = 5.40 m

Lockstitch seam (stitch type 301): = 2.80 m

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