Liko SilhouetteSling is a pliable sling which adapts to the body and requires minimal space in the wheelchair. It provides for a slightly reclined sitting posture and excellent support for the entire body, which is good for patients with reduced head and torso stability. The patient can hold the arms either outside or inside the sling. The head support is adjustable.

Design and material make SilhouetteSling particularly suitable for lifting to moulded seats, since the sling is usually left in the wheelchair after the lifting operation is completed. This makes it very popular in care and rehabilitation situations, where sitting shells and moulded seats are commonly used.

SilhouetteSling can also be used in bathing and showering situations.

A properly fitted and carefully applied sling will give the patient an excellent sense of security, as well as a high degree of comfort.

Sizes
The SilhouetteSling is available in different sizes. It is important to choose the correct size in order to achieve the highest level of comfort and safety. A sling which is too large increases the risk of the patient sliding out of it, while one which is too small can cut into the groin and cause discomfort.

Fabrics
SilhouetteSling is made of a comfortable, pliable net polyester fabric which allows body heat and moisture to pass through. The sling’s lift straps are always made of durable polyester and are very secure.

⚠️ is a warning triangle used for situations which require extra care and attention.

In this document, the person being lifted is referred to as the patient and the person helping is referred to as the caregiver.

Read the instruction guide for both the sling and the lift being used.
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Safety Instructions

⚠️ Before lifting, keep the following points in mind:

- A responsible person within your organization should decide on a case-by-case basis whether one or more caregivers are needed.
- Ensure that the sling selected meets the patient’s needs with reference to model, size, fabric and design.
- For safety and hygiene reasons, use individual slings.
- Before lifting, plan the lifting operation so that it can be done as safely and smoothly as possible.
- Before lifting, check that the lifting accessory hangs vertically and can move freely.
- Although Liko’s sling bars are equipped with latches, special caution must be exercised: Before the patient is lifted from the underlying surface, but after the straps have been fully extended, make sure the straps are properly connected to the sling bar.
- Make sure the patient is sitting securely in the sling before transferring to another location.
- Never lift a patient higher off the underlying surface than is needed to complete the lifting and transfer procedure.
- Never leave a patient unattended during a lifting situation.
- Make sure that the wheels on the wheelchair, bed, gurney, etc., are locked during the lifting/transfer operation.
- Always work ergonomically.

Medical Device Class I

Liko SilhouetteSling complies with the harmonized standard ISO10535:2006.

The management system for both manufacturing and development of the product is certified in accordance with ISO9001 and its equivalent for the medical device industry, ISO13485. The management system is also certified in accordance with the environmental standard ISO14001.

PATENT www.hill-rom.com/patents
May be covered by one or more patents. See above Internet address.
The Hill-Rom companies are the proprietors of European, US, and other patents and pending patent applications.

Design and Quality by Liko in Sweden

Liko’s products undergo continuous development, which is why we reserve the right to make product changes without prior notice. Contact your Hill-Rom representative for advice and information about product upgrades.

⚠️ IMPORTANT!
Lifting and transferring a patient always involves a certain risk. Read the instruction guide for both the lift and lifting accessories before use. It is important to completely understand the contents of the instruction guide. The equipment should be used only by trained personnel. Ensure that the lifting accessories are suitable for the lift being used. Exercise care and caution during use. As a caregiver, you are always responsible for the patient’s safety. You must be aware of the patient’s ability to handle the lifting situation.
Care and Maintenance
Check the sling before each use. Check the following points with regard to wear and damage:

- Fabric
- Straps
- Seams
- Suspension loops

⚠️ Do not use damaged lifting accessories. If anything is unclear, please contact the manufacturer or supplier.

Washing instructions: Please see the sling’s product label and the attached appendix “Care and Maintenance of Liko Slings”.

Expected Life Time
The product has an expected life time of 1-3 years with normal use. Expected life time varies depending on the fabric, use frequency, washing procedure, and weight carried.

Periodic Inspection
The product must be inspected at least once every 6 months. More frequent inspections might be required if the product is used or washed more often than normal. See Liko’s protocol “Periodic Inspection Liko Textile Products”.

Definitions
1. Size marking
2. Product label
3. Serial number
4. Label: Periodic Inspection
5. Label: Individual marking (Belongs to)
6. Upper strap loop
7. Head support
8. Torso loop
9. Lower edge
10. Leg support
11. Shortening position
12. Leg support loop
### How to Attach a Sling to Different Sling Bars

<table>
<thead>
<tr>
<th>Sling bar</th>
<th>Sling loops to sling bar hooks</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>SlingGuard™</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SlingGuard™ Twin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universal Twin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-bar</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wrong!**

![Images of incorrect sling attachment techniques]
How to Attach a SilhouetteSling to a Sling Bar with 4 Hooks
(Twin Bars and Cross Bars)

1. 
   ![Diagram](image1)

   - Upper strap loop (A)
   - Leg support loop (B)
   - Torso loop (C)

2. 
   ![Diagram](image2)

3. 
   ![Diagram](image3)

   The illustrations 1, 2, and 3 shows a twin bar but this also applies to a Cross-bar.
Lifting from a Sitting Position

The patient is usually tilted forward during the application, and it is then important that a caregiver stand in front of the patient to prevent him/her from falling forwards.

Place the sling behind the patient’s back with the product label outwards. Fold up the lower edge of the sling around your finger tips to facilitate guiding the sling into place. Using the palm of your hand, push the lower edge of the sling down to the level of the patient’s coccyx - this is very important. Tip: Correct positioning is facilitated if the patient leans/is leaned forward slightly.

Pull the leg supports forward to smooth out any creases in the back. Tip: A gentle hold under the knee-cap makes it easier to pull the leg supports forward. Check that both leg supports protrude the same distance.

Insert the leg supports under each thigh. Tip: The application of the leg supports is facilitated if the patient’s legs are slightly raised from the seat. This can be achieved by placing the patient’s feet on the foot-rests or on your own leg, as illustrated.

Make sure the fabric lies flat and that it reaches properly around the leg. Prepare the connection of the leg supports. The most common way of applying the sling is with crossed leg supports. For alternative methods, see page 10.

First, connect the torso loops to the sling bar. The patient’s arms can be placed either inside or outside the sling. Then connect the upper strap loops to the sling bar. Choose loops according to the patient’s needs, see Adjustment of head support, page 11. Finally, connect the leg support loops to the sling bar. See page 5-6 for instructions on how to attach the sling loops to different sling bars. Lift the patient.
Lifting to a Sitting Position

When placing a patient in a wheelchair, it is important that the patient gets far enough back in the chair to sit well. This can be accomplished in several ways.

When placing a patient in a wheelchair: Lean the chair backwards during the lowering of the patient. Let the buttocks slide down the backrest during the last part. Control the angle of the wheelchair with your foot on the tipping support.

Alternative: Apply slight pressure under the patient’s knees during the lowering sequence, so that the buttocks are guided towards the backrest of the chair.

Most often the SilhouetteSling is left in the chair after completed lift and then the strap loops and also the leg supports can be folded away and stashed in the chair.

Removing the Sling in a Chair/Wheelchair

Carefully remove the leg support. The gentlest way of doing this is by pulling out the leg support loops under the fabric part of the leg support.

Remove the sling by carefully pulling it up.
Lifting from the Bed

We recommend applying the sling when the patient is lying horizontally, as this is the easiest procedure. In some cases, e.g., if the patient cannot lie horizontally, the sling can be applied with the patient sitting up in bed (see Alternative method of applying the sling below).

Think about your own work posture as well as the comfort of the patient. Use the bed’s raising and lowering functions.

⚠️ If the bed is not equipped with a head end that can be raised/lowered, special attention must be paid during the first part of the lift, in order for the patient’s neck not to be strained. The caregiver should then support the neck manually.

Turn the patient towards you to prevent him or her from falling out of the bed. Insert the sling’s edge under the patient with the lower edge level with the coccyx. The upper edge of the head support should then not be lower than the head in order to give enough head support during the lift. Fold the sling so that its centre corresponds to the patient’s spine when the patient is turned back again gently. Carefully pull the sling out from the other side.

Insert the leg supports under the legs. This is best done by pressing the leg support down against the mattress while inserting it under the thigh. Make sure the fabric lies flat and that it reaches properly around the leg. The leg supports can be connected in different ways, see page 10.

Raise the head end of the bed. First, connect the torso loops to the sling bar and then the upper strap loops. Choose loops according to the patient’s needs, see Adjustment of head support, page 11. Finally, connect the leg support loops to the sling bar. See page 5-6 for instructions on how to attach the sling loops to different sling bars. Lift the patient.

Alternative method of applying the sling: Raise the head end of the bed behind the patient. Lay the sling on the bed with the product label facing down towards the mattress. Slide the sling down behind the patient’s back so that the lower edge is in level with the coccyx. Tip! The application is facilitated if the patient leans/is leaned forward.

Lifting to the Bed

Think about your own work posture as well as the comfort of the patient. Use the bed’s raising and lowering functions.

⚠️ If the bed is not equipped with a head end that can be raised/lowered, special attention must be paid during the last part of the lowering, in order for the patient’s neck not to be strained. The caregiver should then support the neck manually.

Removing the Sling when the Patient is Sitting in Bed

Position the patient above the bed. Raise the head end of the bed. Lower the patient onto the bed. Remove the leg supports by pulling out the leg support loops under the fabric part of the leg support. Tip: This is facilitated if the patient’s legs are bent. Remove the sling by carefully pulling it up.
Removing the Sling when the Patient is Lying in Bed

Position the patient above the bed. Raise the head end of the bed. Lower the patient onto the bed. Lower the head end of the bed.

Place the leg support loops under the leg supports between the patient’s legs.

Place the leg support loops under the leg supports between the patient’s legs. Lower the head end of the bed.

Lower the head end of the bed.

Grasp the edge of the sling. Push in the sling under itself. Press the sling against the mattress and in under the patient.

Carefully turn the patient onto the side. Grasp the sling from below and remove it carefully.

Fitting Advice

Different Ways of Connecting Leg Supports

Before a connection alternative is chosen, an individual assessment should be performed to anticipate possible risks. The following are general advice since the same principles are valid for several sling models.

Crossed-over leg supports.
The most common way of applying the sling. One leg support loop is passed through the other before the loops are connected to the sling bar.

Overlapped under both thighs.
This can be appropriate, for example when lifting a patient with amputated legs. Tip: In order to avoid the patient’s sitting posture being too reclined, Extension Loops can be attached to the leg support loops.

Each leg support connected separately to the sling bar.
This can be appropriate when lifting patients with particularly sensitive genitals.

Increased risk of sliding out.
**Adjustment of Head Support**

The head support of the SilhouetteSling can be adjusted for two different positions.

*Alternative 1:* The outer loop of the upper strap loop is connected to the sling bar. The patient’s head will then be in a slightly reclined posture.

*Alternative 2:* The inner loop of the upper strap loop is connected to the sling bar. The patient’s head will then be in a more upright posture.

**Different Sitting Positions Depending on Choice of Sling Bar**

<table>
<thead>
<tr>
<th>SilhouetteSling in combination with Liko Universal SlingBar 350/450 or SlingGuard 450 provides a slightly reclined sitting posture.</th>
<th>SilhouetteSling in combination with Liko Sling Cross-bar 450/670 provides a more reclined sitting posture. Universal SlingBar 350/450 in combination with SideBars provides the same degree of reclined sitting posture.</th>
</tr>
</thead>
</table>

**The Patient does not Sit Well in the Sling – Why is This?**

The following are general advice since the same principles are valid for several sling models.

*WRONG!*

A. **Risk of sliding out.** The buttocks hang down. The sling may be too large. It can also be due to the fact that the sling has not been pulled down the patient’s back sufficiently.

   Before lifting, check that the lower edge is stretched and that the fabric reaches properly around the legs.

B. **A sling that is too small** can cause the leg supports to cut into the groin, causing discomfort and the sling bar to be too close to the face and/or the head to get sufficient support.

*RIGHT!*

The lower edge of the sling is at the same level as the coccyx. The leg supports are properly positioned under the legs.

**Shortening Position**

In certain cases, it can be advantageous to shorten the leg support loop in order for the patient to sit well in the sling. The shortening position can be used temporarily in order to test for the right length, but extended use may damage the bartacks. If you want to shorten the leg support loop for long-term use, however, we recommend that you tie a knot in the loop to shorten it about 10 cm (4 in). In this case, it is the outer leg support loop which should be connected to the sling bar.
Overview Liko™ SilhouetteSling, Mod. 22

<table>
<thead>
<tr>
<th>Product</th>
<th>Prod. No.</th>
<th>Size</th>
<th>Patient’s Weight¹</th>
<th>Max. Load²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liko SilhouetteSling</td>
<td>3522603</td>
<td>XS</td>
<td>Extra Small</td>
<td>20-28 kg (44-62 lbs)</td>
</tr>
<tr>
<td>Liko SilhouetteSling</td>
<td>3522604</td>
<td>S</td>
<td>Small</td>
<td>25-50 kg (55-110 lbs)</td>
</tr>
<tr>
<td>Liko SilhouetteSling</td>
<td>3522605</td>
<td>M</td>
<td>Medium</td>
<td>45-75 kg (99-165 lbs)</td>
</tr>
<tr>
<td>Liko SilhouetteSling</td>
<td>3522306</td>
<td>L</td>
<td>Large</td>
<td>65-100 kg (143-220 lbs)</td>
</tr>
</tbody>
</table>

¹The indicated patient weight is only a guideline – there may be deviations.
²For retained maximum load, lift/accessories intended for the same load or more are required.

Recommended Combinations

| Recommended combinations of the Liko SilhouetteSling and Liko’s sling bars: |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SilhouetteSling, XS            | 1 | 1 | 2 | 4 | 3 | 3 | 1 | 3 | 1 | 1 | 1 |
| SilhouetteSling, S             | 2 | 1 | 1 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 |
| SilhouetteSling, M             | 2 |
| SilhouetteSling, L             | 2 |

¹Arms outside the sling
²Sling bar 450 relates to Universal SlingBar 450 Prod. No. 3156075, 3156085, and 3156095, SlingBar Standard 450 Prod. No. 3156001, 3156003, 3156007, and 3156016, and also SlingGuard 450 Prod. No. 3308020 and 3308520.
³Twin bar 670 relates to Universal TwinBar 670 Prod. No 3156077, and 3156087, and also SlingGuard 670 Twin Prod. No. 3308040 and 3308540.
⁴Sling bar 350 relates to Universal SlingBar 350 Prod. No. 3156074, 3156084, and 3156094, and also SlingGuard 350 Prod. No. 3308010 and 3308510.
⁵Sling bar 600 relates to Universal SlingBar 600 Prod. No. 3156076 and 3156086, and also SlingGuard 600 Prod. No. 3308030 and 3308530.

Explanation: 1 = Recommended, 2 = May work, 3 = Not advised, 4 = Inappropriate

Other Combinations

Combinations of accessories/products other than those recommended by Liko can result in risks for the safety of the patient.