Liko™ OriginalSling Mod. 10, 11
TeddySling Original Mod. 10

Instruction Guide

Product Description

Liko OriginalSling is a basic model which is designed to adapt to the patient without individual adjustments. A properly fitted and carefully applied sling will give the patient an excellent sense of security, as well as a high degree of comfort. On the adult sizes MS-XL, patients can hold their arms either outside or inside the sling. The choice often depends on the capacity of the patient and their ability to participate in the lifting operation. The choice of sling bar also affects how the arms are placed. Child sizes XS-S are designed so that the child’s arms are always placed inside the sling.

Sizes
The OriginalSling 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. For larger sizes, a combination with Liko Universal TwinBar 670 can be a good choice.

Fabrics
The OriginalSling is available in different fabrics. Since the OriginalSling is not usually left under the patient after the transfer, we recommend the polyester design. TeddySling Original is made in a teddy bear patterned warp-knitted polyester. These fabrics are durable and have low friction, making the sling easy to apply and easy to remove. The OriginalSling is also available in net polyester. This fabric is recommended when the sling is left in place after the transfer or when an airier alternative is desired. For bathing and showering, a plastic-coated polyester net design is available, which is water permeable and can easily be wiped. This material dries quickly and does not chill the patient in the same way as a damp, absorbent fabric would. The sling’s lift straps are always made of durable polyester and are very secure.

Leg Supports
The OriginalSling is available with leg supports in different designs. Most common are reinforced leg supports. The reinforcement provides high comfort, distribute the pressure and prevent the sling from creasing under the thighs. One design has simple fabric without reinforcement in the leg supports, making the sling more pliable and easy to care for. Another type has reinforcement in both the leg supports and the back, which provides extra back support and can facilitate the application of the sling. Finally there is also one design with soft-padded leg supports (synthetic sheepskin). This is suitable for especially pressure-sensitive patients.

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

This instruction guide applies to the Liko OriginalSling and the TeddySling Original, yet in this text we refer only to the OriginalSling. In this document, the person being lifted is referred to as the patient, and the person helping is referred to as the caregiver.
Table of Contents

- Safety Instructions ............................................................................................................................... 3-4
- Care and Maintenance ............................................................................................................................ 4
- Definitions ............................................................................................................................................ 4
- How to Attach a Sling to Different Sling Bars ...................................................................................... 5
- How to Attach an Original Sling to a Sling Bar with 4 Hooks (Twin Bars and Cross Bars) ................... 6
- Lifting from a Sitting Position .............................................................................................................. 7-8
- Lifting to a Sitting Position .................................................................................................................... 8
- Removing the Sling in a Chair/Wheelchair .......................................................................................... 8
- Lifting from the Bed .............................................................................................................................. 9
- Lifting from the Floor ............................................................................................................................ 9
- Lifting to the bed .................................................................................................................................. 10
- Removing the Sling when the Patient is Sitting in Bed ......................................................................... 10
- Removing the Sling when the Patient is Lying in Bed ......................................................................... 10
- Fitting Advice ...................................................................................................................................... 11
- Different Ways of Connecting Leg Supports ....................................................................................... 11
- The Patient does not Sit Well in the Sling – Why is This? .................................................................. 11
- Shortening Position ............................................................................................................................. 11
- Overview, Liko Original Sling, Mod. 10, 11 ....................................................................................... 12
- Symbol Description .............................................................................................................................. 12
- Recommended Combinations ............................................................................................................... 12
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. Use the patient’s ability to actively participate in the operations.
- When the sling is not being used, do not place in direct sun light.

Medical Device Class I

Liko OriginalSling 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 1-5 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

![Diagram]

1. Product label
2. Label: Manufacturing year and month, Serial number
3. Label: Individual marking (Belongs to)
4. Label: Periodic Inspection
5. Upper strap loop
6. Handle
7. Belt (where applicable)
8. Center back strap / Size marking
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><img src="image1" alt="SlingGuard™ illustration" /></td>
<td><img src="image2" alt="Correct image" /></td>
</tr>
<tr>
<td>Universal</td>
<td><img src="image3" alt="Universal illustration" /></td>
<td><img src="image4" alt="Correct image" /></td>
</tr>
<tr>
<td>SlingGuard™ Twin</td>
<td><img src="image5" alt="SlingGuard™ Twin illustration" /></td>
<td><img src="image6" alt="Correct image" /></td>
</tr>
<tr>
<td>Universal Twin</td>
<td><img src="image7" alt="Universal Twin illustration" /></td>
<td><img src="image8" alt="Correct image" /></td>
</tr>
<tr>
<td>Cross-bar</td>
<td><img src="image9" alt="Cross-bar illustration" /></td>
<td><img src="image10" alt="Correct image" /></td>
</tr>
</tbody>
</table>

**Wrong!**

- ![Wrong image 1](image11)
- ![Wrong image 2](image12)
- ![Wrong image 3](image13)
- ![Wrong image 4](image14)
How to Attach an Original Sling to a Sling Bar with 4 Hooks
(Twin Bars and Cross Bars)

1. [Diagram showing attachment process]

2. [Diagram showing setup with loops]

3. [Diagram showing final attachment]

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

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 sling’s leg supports forward along the outside of the patient’s thighs. Place the palm of your hand between the patient’s body and the sling and push the leg support’s lower edge down towards the seat. Simultaneously, pull the leg support forward with the other hand to stretch it. Pull the leg supports forward to smooth out any creases in the back. Check that both leg supports protrude the same distance. Tip: A gentle hold under the knee-cap makes it easier to pull the leg supports forward.

Insert the leg supports under each thigh. Make sure the fabric lies flat and that it reaches properly around the leg. 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. 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 11.
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.

First connect the upper strap loops to the sling bar, then the leg support loops. See page 5-6 for instructions on how to attach the sling loops to different sling bars. Lift the patient.

Tip: Check that all suspension loops have the same length, i.e., are at an equal height when they are stretched prior to lifting. Adjust the position of the sling if they are not at an equal height.

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. If the sling has handles, these can be used to guide.

Do not use the handles to lift! Excessive force on the handles can cause the sling to tear.

Removing the Sling in a Chair/Wheelchair

We recommend removing the sling after the transfer. If for some reason it is preferable to leave the sling in the chair after transfer, we recommend using a Liko OriginalSling in net polyester.

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.

**Turn the patient toward 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**. Fold the sling so that its centre back strap corresponds to the patient’s spine when the patient is turned back again gently. Carefully pull the sling out from the other side.

**Lifting from the Floor**

When lifting from the floor, we recommend the Liko Original HighBack Sling, Mod. 200, 210 or Soft Original HighBack Sling, Mod. 26, which provides good head support.
Lifting to the Bed

We recommend removing the sling after the transfer. If for some reason it is preferable to leave the sling in the bed after transfer, we recommend using a Liko OriginalSling in net polyester.

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

Removing the Sling when the Patient is Sitting in Bed

Position the patient above the bed. Raise the head end of the bed for the patient’s comfort. 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 for the patient’s comfort. Lower the patient onto the bed. Lower the head end.

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

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.

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.

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

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 back to get insufficient 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 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™ OriginalSling, Mod 10, 11

<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 OriginalSling / TeddySling Original</td>
<td>3510 - 3</td>
<td>XS Extra Small</td>
<td>10-20 kg (22-44 lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling / TeddySling Original</td>
<td>3510 - 4</td>
<td>S Small (child)</td>
<td>20-30 kg (44-66 lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>3511 - 5</td>
<td>MS Medium Small (slim adult)</td>
<td>30-50 kg (66-110 lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>3510 - 5</td>
<td>M Medium</td>
<td>40-80 kg (88-176 lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>3510 - 6</td>
<td>L Large</td>
<td>70-120 kg (154-264 lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>35101 - 7</td>
<td>XL Extra Large</td>
<td>110- kg (240- lbs.)</td>
<td>300 kg (660 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>35103 - 7</td>
<td>XL Extra Large</td>
<td>110- kg (240- lbs.)</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko OriginalSling</td>
<td>35104 - 7</td>
<td>XL Extra Large</td>
<td>110- kg (240- lbs.)</td>
<td>300 kg (660 lbs.)</td>
</tr>
</tbody>
</table>

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

Recommended Combinations:

<table>
<thead>
<tr>
<th>Recommended combinations of the Liko OriginalSling and Liko's sling bars:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini 220</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>OriginalSling/TeddySling Original, XS</td>
</tr>
<tr>
<td>OriginalSling/TeddySling Original, S</td>
</tr>
<tr>
<td>OriginalSling, MS</td>
</tr>
<tr>
<td>OriginalSling, M</td>
</tr>
<tr>
<td>OriginalSling, L</td>
</tr>
<tr>
<td>OriginalSling, XL</td>
</tr>
</tbody>
</table>

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

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

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

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